



ICACOS Bioblitz 2017

Final Report



UNIVERSITY OF THE WEST INDIES
ZOOLOGY MUSEUM



MINISTRY OF EDUCATION
ICACOS GOVERNMENT PRIMARY SCHOOL



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Report Credits

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Executive Summary

The sixth Trinidad & Tobago Bioblitz was conducted 4–5 November 2017, in the Icacos Peninsula, Trinidad. Around 120 volunteers helped observe, collect, and identify a diverse range of organisms: plants, fungi, birds, mammals, reptiles, amphibians, terrestrial invertebrates, and aquatic organisms. A variety of surveying methods were used, including direct observation, trapping, netting, and sampling. A total of 750 species of organisms were reported after 24 hours of surveying; this total was updated to 769 after further analysis of specimens and results.

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Introduction

The southwest peninsula of Trinidad is the home of mangroves, forests, coccolithophore plantations, mud volcanoes, gas seeps, long beaches, rivers, and swamp habitats that support a myriad of organisms. This made it an ideal setting for the sixth annual Trinidad & Tobago Bioblitz.

The area has been heavily impacted by humans, with a lot of the original forest replaced by coccolithophore plantations. The coastline has also seen a lot of erosion over the years, but despite this, there is still much to be discovered. Because of its close proximity to Venezuela—only 7 km away across the Columbus Channel—Icacos often has been the entry point for all sorts of species rafting across on mats of vegetation.

Mike G. Rutherford, Curator of the University of the West Indies Zoology Museum (UWIZM), organized the event, with help from members of the Trinidad & Tobago Field Naturalists' Club (TTFNC) and the University of the West Indies (UWI), Department of Life Sciences, St. Augustine, Trinidad. First Citizens Bank very generously sponsored the event through the TTFNC.

The base camp for the Bioblitz was the Icacos Government Primary School. The Ministry of Education and the principal of the school granted permission for the Bioblitz event to occupy almost the entire building. The main hall was used as the outreach area, where the UWIZM, TTFNC, UWI Microbiology Group, the Aquatic Group, and the Serpentarium all put on displays of live and preserved plants and animals, along with displaying information banners detailing past Bioblitz events. The cafeteria area was used by the Bioblitzers for refreshments, and the grounds and classrooms were used for tents and sleeping spaces.

The Bioblitz started at 12:00 noon on Saturday 4 November and finished at 12:00 noon on Sunday 5 November 2017. The final results were announced at around 13:00 on Sunday afternoon. The public were invited along to the base camp for all of Sunday, with the first enthusiastic children arriving at 08:00. By early afternoon, hundreds of visitors had come for a visit.

Although surveying at a Bioblitz usually is restricted to sites within the 5-km-radius circle, this year an exception was made to include Soldado Rock, which is 10 km off the coast of Trinidad. This tiny island (only 1 hectare) is a wildlife sanctuary in which several species of seabirds nest at different times of the year. A fishing boat was hired to take a small team out to the rock to survey. The team included three snorkelers, two birders, one member of the herpetology team, two members of the plant team, and one member of the terrestrial invertebrate group. They reached the island at around 12:50 and surveyed until 14:10.

Kerresha Khan set up temperature recorders (HOBO data loggers) during the event and took notes on the weather. Temperatures were recorded at base camp and seven additional sites throughout the sampling boundaries for approximately 24 hrs. The average temperature for the general Icacos area during the Bioblitz was 28.5°C. The sampling days were sunny to overcast, with major showers occurring at around 01:00 on Sunday morning, leaving many outdoor campers scampering for shelter inside the school.

Methods

Experts and volunteers grouped themselves together, and most had prepared a plan of action before the event.

Plants

Mike Oatham organised and led the Plant Group. The Icacos Bioblitz area was examined on the USDA Forest Service map of ecosystems and on a topographic map. All of the different ecosystem types were noted, as well as the access points (roads and trails marked on the maps and known to group members and Bioblitz organizers).

The group was split into three for the first day (12:00 to 18:00) in order to cover the maximum number of ecosystem types given the topography and availability of access points. One group walked Trail 3 to reach the Icacos Mud Volcano. Another group used a vehicle to access as many different ecosystem types as possible from the village of Icacos to Columbus Bay on the coast and then to Cedros and the old Coast Guard tracking station. They covered more ecosystem types than did the other groups, but they did not move away from the road. The Forestry Division, who formed the third group, visited the secondary forests to the south of the Cedros township, along Trail 4, and the southern coast of the Icacos peninsula.

Groups encountered active coconut estates, secondary vegetation (abandoned coconut estates, abandoned cocoa estates, and active estates) and also native vegetation communities (in various stages of degradation) around the coastline of the peninsular. Each group maintained a list of plant species (identification certain—mainly common species) and also collected specimens of plant species of which identifications they were unsure. In the evening of the first day and into the next morning, all specimens collected were examined and compared to keys and photographs from the literature for identification. New species were added to the list, and already listed species were confirmed. On the morning of the second day, a group revisited the mud volcano for interest and to keep an eye out for further species. Further species were also found on the grounds of the Icacos Government Primary School.

Birds

The Bird Group was organised by Elizabeth Seebaran and Darshan Narang. Surveying was conducted via driving, walking, and stationary observations. People carpoled and drove to various identified trails and swamp-viewing areas within the 5-km-radius circle. Observations were made whilst driving, as well as by making stops, for durations of around 30 minutes at the viewing areas, mangroves, and beaches, to around 1–2 hours on the trails. Sightings and identifications were made by use of binoculars and cameras to capture visual observations, as well as by listening and identifying birding calls for birds not in view. Data lists were kept per viewing location and/or per route taken, as applicable, and the date and time were noted (see Table 1).

Two birders, Sanjiv Parasram and Jo-Marie Westmaas, took part in the boat trip to Soldado Rock. Birds were observed during the trip to and from the rock and whilst on the rock.

Bird Banding was led by Darshan Narang, with help from Carl Fitzjames and Vishnu Debie. Mist nets were set up in an area of secondary forest just off the road at the beginning of Trail 1. Nets were open from 12:00 noon on Saturday until nightfall and then again on Sunday from dawn until 11:00.

For confirmation of species, the books by French (1991) and Kenefick et al. (2011) were used.

Table 1:

Time	Location	Method	Number of birders
Saturday 4 November 2017			
12:14 – 12:40	Trail 1, through coconut estate and 1st swamp (mangrove)	Driving	5
12:15 – 14:35	Soldado Rock	Boat Trip	2
12:40 – 13:20	Swamp lagoon with coconut trees in background	Stop and view	5
13:24 – 15:04	Trail 4 - St. Marie Road (forests)	Driving and walking	5
15:22 – 16:00	Columbus Bay and mangroves in river along road	Walking	5
15:45 – 17:30	Trail 1	Walking	1
16:04 – 16:30	Swamp lagoon with coconut trees in background	Driving	5
17:00	Icacos Government Primary School (basecamp) surroundings	Walking	1
From 12:00 noon all day	Bird banding station on Trail 1	Stationary birding	(Bird Banders)
Night	Trail 4 - St. Marie Road (forests)	Walking	1
Sunday 5 November 2017			
From 6:00 all day	Bird banding station on Trail 1	Stationary birding	(Bird Banders)
7:00	Bonasse Village/Cedros	Driving	1
6:00 – 8:30	Icacos village, coconut estates, swamp viewing points	Driving	5
7:05 – 8:30	Swamp lagoon with coconut trees in background	Driving	1
9:09 – 10:45	Trail 1	Walking	11

Mammals

This year's Mammal Group saw a change of leadership, with Laura Baboolal taking over from Luke Rostant. The team conducted bat trapping on Saturday and retrieval of camera traps on Sunday morning.

Bats

Trapping of bats by use of mist nets was carried out at the same site the birders used near the start of Trail 1. Two ground nets (12 metres long) were open on Saturday from 18:00 to 22:00. Bats were removed from the nets, identified, weighed and measured, and then released.

Camera Trapping

Mike Rutherford set up six trail cameras on 24 October, two weeks before the event. Two models of trail camera were used, both utilizing infra-red flash. They were all set to take three pictures per triggering, with a delay of 20 seconds between activations. Three cameras were placed along Trail 3 in the forest surrounding the mud volcano, and three were placed in the forest near the western end of Trail 4. Further cameras were placed, by other members of the group, near Trail 1 on 3 November.

All of the cameras were retrieved on 5 November. The photos were checked at the Bioblitz base camp by Laura and several other Mammal Group members.

Other Sightings

All other groups kept an eye out for mammals during their surveying and reported any sightings to the mammal group.

For confirmation of species, the books by Eisenberg (1989), Emmons & Feer (1997), and Gomes & Reid (2015) were used.

Reptiles and Amphibians

The herpetologists consisted of two groups: the TTFNC Herpetology Group, led by Renoir Auguste, and the Serpentarium group, led by Saiyaad Ali. Both teams actively searched for reptiles and amphibians along all trails and around the Grand Lagoon during both day and night. Visual searching, with torchlight at night, was conducted for reptiles, and both visual and acoustical searching was conducted for frogs both day and night. Some specimens were collected for closer study and display at the base camp before being released or preserved and added to the UWIZM collections if they were of scientific interest.

Peter Dickson represented the Herpetology Group on the trip to Soldado Rock. He searched the vegetation and rocky shoreline for reptiles.

For confirmation of species, Murphy's (1997) book was used.

Aquatic

The Aquatic Group was led by Ryan Mohammed, Amy Deacon, and Marianna Rampaul. Aquatic biota was surveyed across four primary locations within the Icacos peninsula. Freshwater and marine species were catalogued at various survey sites at Cedros, Grand Lagoon, Icacos, Bonasse, Galpha, and Soldado Rock (located approximately 10 km off the southwest coast between Trinidad and Venezuela). Three survey teams were deployed, one for Soldado Rock, one for the coastal marine habitats, and one for freshwater. Specimens were identified in situ, photographed, or retrieved for later identification at the base camp.

The marine survey at Soldado Rock was conducted via snorkelling and by walking along the rocky western shoreline between 12:30 and 14:00 on Saturday. Specimens encountered in the water were identified and recorded on a PVC slate or photographed using Sea Life DC2000 and Olympus Tough TG4 underwater cameras for ex situ identification. Samples of bivalves and gastropods were retrieved for further identification and display.

The coastal marine team surveyed five sites starting at 12:00 noon on Saturday (Bonasse Beach, Icacos, end of Southern Main Road, Galfa Point, and Columbus Bay). These sites were sampled by use of a 10-metre-long beach seine. Freshwater sampling followed later during the day, from 15:00 until 18:00. These sites included two streams draining the Grand Lagoon, the main Grand Lagoon, and one stream near the base camp that was influenced by the tides.

Additional surveying for coastal molluscs was conducted via beach walks at low tide during the afternoon and evening period on Saturday, at 15:00 and 20:00 at Icacos fish depot and Columbus Bay, respectively. A final coastal survey was conducted on Sunday at 10:00 at Cedros Bay.

For identifying freshwater fish, Phillip *et al.*'s (2013) paper was used. For identifying freshwater crustaceans, Rostant's (2005) thesis was used. For identifying marine shells, Abbott and Morris's (2001) book was used. For marine species, the books *Reef Fish* (2014), *Reef Creature* (2013), and *Reef Coral* (2013), *Identification - Florida Caribbean Bahamas*, by Humman & DeLoach, were used.

Terrestrial Invertebrates

The wide variety of terrestrial invertebrates to be found in and around Icacos resulted in the following independent groups conducting surveys:

Myriapods

Shane Manchouck searched for millipedes and centipedes. Surveying was conducted day and night, with visual searching of vegetation under rocks and logs and in leaf litter. Areas visited included Trail 1 and around base camp, Trail 3 to the mud volcanos, and Trail 4 in the forest. Soil samples were collected at the first three sites and then sieved and examined under a microscope at base camp.

Molluscs

Mike Rutherford surveyed for terrestrial molluscs along Trail 3 and at the western end of Trail 4. Both live molluscs and empty shells were collected by hand. This involved turning over rocks and logs, examining vegetation, and sifting leaf litter. Soil samples were taken, sifted at base camp, and then examined by microscope. Other participants also brought molluscs back to base camp for identification. The report by Robinson *et al.* (2004) was used as the main guide for identification.

Spiders

Jo-Anne Sewlal led a small group looking for spiders. From 12:00 noon to 16:00 on Saturday, they surveyed along Trail 1 using a mix of hand collecting and sweep netting. At base camp, a microscope was used to aid identification. Other Bioblitzers shared photos and specimens of spiders encountered during their surveys.

General Arthropods

Starting at 12:00 noon on Saturday, the Bug Group, led by Rakesh Bhukal and equipped with sweep nets, collecting vials, notepads and other pieces of collecting and recording equipment, surveyed from base camp to the end of Trail 1.

At around 15:00, they surveyed the area around the Grand Lagoon for Odonata, accompanied by an additional group member, Romano Macfarlane, from the Wildlife Section of the Forestry Division. Specimens were identified primarily by observation in the field; however, macro photographs were also taken with a DSLR camera (Nikon D3300 with Sigma Macro-Telephoto lens 55-300mm). These photos helped in further identification of the specimens encountered. On Sunday morning, an inflatable kayak was used to get more coverage of the swamps and the Grand Lagoon. Emergent vegetation was searched thoroughly for perched dragonflies and damselflies.

Surveying for scorpions and other nocturnal arthropods was conducted between 20:00 and 01:00. Methods entailed walking through various habitat types and actively searching from ground level up to the canopies of trees with the use of handheld ultraviolet flashlights of wavelength 395 nm. All scorpion specimens were collected by use of forceps and then placed in collecting vials and taken back to base camp for identification.

Michalski's 1988 paper was used for identification of Odonata. Lourenço and Huber's 1999 paper and Prendini's 2001 paper were used for identification of scorpions.

Other Invertebrates

Throughout the Bioblitz, participants in every group encountered a variety of invertebrates. These organisms were either photographed or collected in plastic vials for later identification by the relevant expert(s) at the basecamp.

Fungi

Jeffrey Wong Sang led this group. Specimens were collected and preserved, and photographs were taken. These were then collated and identified to morphospecies, with further identification carried out after the event. Other participants also contributed photographs of fungi.

Microbiology

This group was led by Nikhella Winter. On 24 October, two weeks before the Bioblitz, Mike Rutherford collected water and soil samples from five sites in the survey area: (1) next to the Icacos Government Primary School, (2) alongside the main road approximately 0.5 km outside Icacos village, (3) in the forest between the two mud volcanos at the end of Trail 3, (4) alongside the road at the edge of the Grand Lagoon, and (5) on the southern coast at the end of St. Marie Road.

These samples were returned to the Mycology Laboratory in the Department of Life Sciences at UWI. By use of sterile techniques, samples were diluted and evenly spread onto nutrient agar for bacterial growth and potato dextrose agar for fungal growth. This resulted in an assortment of bacterial and fungal colonies of varying colours, sizes, textures, and other characteristics, signifying different species. Unique physical features were used to select strains that were then isolated into pure cultures for identification. The resulting cultures were then grouped to morphospecies level.

For more information about the locations of the sites mentioned above, see Appendix 1.

Results and Discussion

Plants

A final count of 272 species of plants were observed in the Bioblitz area around Icacos. This is a moderate number of species and reflects the relative uniformity of the habitats across the Bioblitz area and their human-disturbed nature. The vegetation communities included active coconut plantations over much of the Bioblitz area. The majority of the rest of the area was secondary forest, probably abandoned coconut plantation. The relief was flat, with no variation in habitats and with an elevation similar to that of Nariva Swamp and with similarly low numbers of species, and in contrast to Charlotteville and Arima Valley, both of which had high numbers of species for a Trinidad and Tobago Bioblitz.

As usual for a Bioblitz, no endemics and few rare species were found. The Bioblitz format does not seem to lend itself to finding plant species of conservation importance, probably because no area is looked at in any great detail and because the emphasis during the survey is to identify as many species as possible, which means that those species that cannot be identified immediately are often overlooked or ignored. The uncommon palm species *Astrocaryum aculeatum* was observed; however, not many individuals were found. The spikey Grey Nickernut was found to be well established and common along the seashore to the west and north of Icacos village. The Grey Nickernut is a common drift seed, so its presence was not surprising; however, it is surprising that the species is not more widespread along the coasts of Trinidad and Tobago. Another species that sets its seeds to drift on the oceans is the vine Manioc La Chapelle, which was found with its large orange flower spikes in the mangroves behind Columbus Bay beach.

The characteristic ferns of brackish water, *Acrostichum aureum* and *A. daneaefolium*, were very obvious in the swamps on the road to Icacos, but the most dominant species in the Bioblitz area was the coconut. The plant species found on Soldado Rock on previous surveys continue to persist with no obvious additions. Fat Pork is found in the area but does not seem to be anywhere common, unlike the abundance reported in historical accounts. It seems that the old Icacos Savannas, with all their fat pork shrubs, has been planted to coconut.

The moderate number of plant species picked up in this Bioblitz is a reflection of the relatively flat survey area, which was largely cleared by humans at some stage in the past. Hence the majority of natural ecosystems have been eliminated, and the only remaining ecosystems are those in the swamps and coastal littoral zones, which tend to have naturally restricted plant species richness. Methods for rapidly identifying plants and reducing the number of specimens that need to be collected has increased the ability of the plant group to record the maximum number of species during the 24 hours of the Bioblitz. However, this method relies heavily on the plant identification knowledge of a small group of people and in particular on that of Winston Johnson, recently retired from the National Herbarium of Trinidad and Tobago.

Birds

The Bird Group had a very successful Bioblitz with a record high number of sightings.

The nocturnal birds were well represented, with Common Potoo, Tropical Screech-Owl, and Common Parakeet all seen on Trail 4 during the night and with Barn Owls seen and heard by other Bioblitz groups. A Ferruginous Pygmy-Owl was heard calling by those at the Banding Station at Trail 1.

In the swampy areas, a Gray-necked Wood-Rail was seen on the roadway, and a Great Blue Heron and a Cooi Heron were seen further in the swamp, both being flushed when disturbed by passing cars. A Pinnated Bittern was seen in the waterlogged swampy grass area in the coconut plantations.

Nine species were seen on or around Soldado Rock. Male Magnificent Frigatebirds put on a great display of their inflated throat pouches, and Brown Pelicans fished from the rocky shoreline. The most unexpected species was a single Black-throated Mango hummingbird that briefly perched in the vegetation and then continuing flying towards Trinidad from Venezuela.

Birds of prey were plentiful, including Crested Caracaras with young, Common Black Hawk, Yellow-headed Caracaras, and Savanna Hawk all being seen inside the coconut estates. A Zone-tailed Hawk was seen in the vicinity of Trail 1. Closer to the coasts and swamps, Ospreys were seen. In the forested areas along Trail 4, a Gray-lined Hawk was seen and an Aplomado Falcon was heard.

There also were some unexpected sightings. Red-bellied Macaws were seen flying by near Trail 1, which, due to their specialization and association with the Moriche Palm was unusual as this species of palm was not recorded in the survey area. However, stands of it are known around Granville, a few kilometres to the east of Icacos, or they might have come across from Venezuela.

Species that were expected but not recorded included Rufescent Tiger-Heron and Least Bittern, both of which have been observed in Icacos on past birding trips.

Overall there was a general lack of seabirds and shorebirds such as plovers, sandpipers, Laughing Gulls, Willets, and Whimbrels on the beaches, and there was a general lack of species seen at both swamps, compared to species seen on previous birding trips. This was speculated to have resulted from the high water level in the swamp (from the recent rains) and the lack of visible mud flats.

The final count was 127 species in 46 families, roughly one quarter of the birds known from Trinidad, making the Icacos peninsula a must-visit site for any keen birder.

Mammals

Bats

More than 50 individuals belonging to eight species of bats were captured. The majority were fruit-eating species, along with one insectivorous and one carnivorous species. The highlight for the team was a Little Yellow-shouldered Bat.

Trail Cameras

Camera traps along Trail 3 recorded Red-rumped Agouti, and those along Trail 4 recorded both Common Opossum and agouti. Domestic dogs were recorded at both sites.

Other Sightings

An individual Tufted Capuchin was seen in the trees near Trail 1; it is possible that this non-native species of monkey was an escapee from the pet trade, as many animals are smuggled into Trinidad

from Venezuela through Icacos. Bioblitzers also located the shell of a Nine-banded Armadillo, looking like the remainders of a meal by hunters. Several bones from a Red-rumped Agouti were found along the edges of the Grand Lagoon, probably also left over from hunters' meals. There were many sightings of Red-tailed Squirrels, especially in the village of Icacos and near the base camp.

The Herpetology Group, led by Saiyyad Ali, captured by hand an Arboreal Rice Rat near Trail 4. It was identified by members of the Mammal Group and displayed at the base camp before being released where it had been collected.

In total, 14 species of mammals were found in the survey area, all of which had been recorded there before, except for the introduced Tufted Capuchin. This species is potentially invasive, and its presence should be monitored in the future.

Reptiles and Amphibians

The mix of swamp and forest habitats provided a bounty of frogs, snakes, and lizards. Around the base camp were many Beachrunner Lizards and Zandolies, and by evening frogs could be heard calling from the nearby marshy areas.

Peter Dickson had a surprising sighting of a Rain Lizard on Soldado Rock. This lizard prefers marshy areas, where it sleeps on vegetation alongside puddles and pools of water. What it was doing on the rather dry Soldado Rock, and how it got there, is anyone's guess. It may have been washed ashore after being trapped on debris from Venezuela. A large Green Iguana also was found sheltering amongst the rocks near the waterline on Soldado Rock, and two Green Turtles were seen coming up for air in the water just off the northeast side of the island.

A variety of frogs were seen and/or heard calling, including two species restricted to the southwest peninsula: Steffen's Thin-toed Frog and the Miniscule Tree Frog. Species that were seen or heard in abundance included the Small-headed Tree Frog and the Maracaibo Basin Tree Frog. The latter was first discovered on Trinidad in 2006 in the southwest of the island (after previously being known only from Venezuela and Colombia), and has since extended its range to the rest of Trinidad. A total of 17 frog species were recorded during this Bioblitz, more than during any other Trinidad and Tobago Bioblitz. This came as no surprise, as the region has a variety of habitats and close proximity to Venezuela for colonization.

Twenty-four species of reptiles were recorded during the Bioblitz: one species of turtle, one crocodilian, 12 species of lizards, and 10 species of snakes. Of the 10 species of snakes recorded, three were constrictors, but the expected Anaconda was not found. It is highly likely that the Anaconda is present in the area, but being largely aquatic it is rarely encountered in Trinidad. Perhaps the most significant snake sighting was of the rare Double-striped Water Snake. There have been less than a handful of sightings of this snake alive in Trinidad. Although most sightings have been in the southwest, it was good to obtain more records and close observations.

Overall, this Bioblitz was a very successful event for herpetology and showed that the Icacos peninsula is a rich site for further study of reptiles and amphibians.

Aquatic

The aquatic biodiversity recorded included algae, sponges, crustaceans, fishes, hydroids, molluscs, plants, and worms, all of which were similarly represented in the same area (southern coast of Trinidad) in previous studies and environmental impact assessments.

Invasive species were noted within the survey area, particularly within the Grand Lagoon: the fish Black Tilapia, the mollusc Red-rimmed Melania, and the plant Fox Tail Weed were documented at several sites on the lagoon.

Considering the significant influence on offshore waters of freshwater plumes from the Orinoco and Amazon rivers during the rainy season, which contributes to seasonally brackish water off the Trinidad south coast, it was anticipated that surveys would yield a diverse community of marine algae along the rocky shores rather than corals and gorgonians. This was borne out with recordings of six species of algae and only one cnidarian (a hydroid).

For future surveys, the addition of traps or baited pots in the intertidal zone may yield a greater diversity of mollusc specimens. Surveying within turbid waters limits visibility and efficiency of snorkel surveys; therefore, the addition of line or seine net fishing from a survey vessel may enhance the number of species captured offshore.

Freshwater diversity comprised typical fresh- and brackish water fauna. However, two specimens of the rare Elongate Hatchet Fish were documented near the base camp. This species has been noted for only three locations in Trinidad, all along the southern coast. Another unique find for this location was the freshwater gastropod *Neritina clenchi*.

In summary, the survey area boasts a rich aquatic flora and fauna that is facilitated by the marine and freshwater interface. The final totals were 33 species of fish from 24 families, four freshwater and 36 species of marine molluscs, 11 species of crustaceans, three species of sponges, one species of hydroid, two species of marine polychaete worms, one species of tunicate, and six species of marine algae.

Terrestrial Invertebrates

Myriapods

Nine species of Myriapods were found, consisting of three snake millipedes, one flat-backed millipede, two giant centipedes, and one scolopocryptopidae centipede found by hand collecting and one brush millipede and a symphalan found in the soil samples. The brush millipede and one of the giant centipedes were found on Soldado Rock.

Molluscs

Terrestrial molluscs were well represented in Icacos. Empty shells were very abundant at sites in the forests near the mud volcanos on Trail 3 and at the end of Trail 4. The majority of these were the larger, widespread species *Megalobulimus oblongus*, *Plecocheilus glaber*, *Subulina octona*, and *Helicina dysoni*. Soil samples from these sites provided several species of micro-snails (shells less than 5 mm wide). On Soldado Rock, two tiny species were found in a soil sample. In total there were 12 species from 10 families.

Spiders

Nineteen species of spiders were observed and/or collected during the Bioblitz. Larger ones such as the Pink-toed Tarantula and Golden Silk Orbweaver were identified easily, but smaller ones required microscopic examination. The spider diversity in the area is undoubtedly much higher than what was observed during the Bioblitz, but as a result of the limited time and scope of the survey, only a fraction of the species present were recorded.

General Arthropods

The Bug Group had a fruitful event, setting a new Trinidad and Tobago Bioblitz record for Odonata, with 13 species from two families. The swampy habitats and the proximity to Venezuela meant that the potential for diversity of dragonflies and damselflies was high. The nighttime surveys found three species of scorpions.

Other insects observed included four species of orthopterans (crickets and grasshoppers), 10 species of hemipterans (true bugs), 12 species of coleopterans (beetles), two species of cockroaches, two species of stick insects, two species of mantids, five species of dipterans (true flies), one species of webspinner, and 10 species of hymenopterans (ants, bees, and wasps).

Lauren Ali collated all of the butterfly and moth photographs and specimens and reported a total of 25 species at the end of the event. Of particular note was the sighting of the erebid moth *Feigeria mycerina* on Soldado Rock by Mike Rutherford; this species had not been recorded in Trinidad since the 19th century. Jerome Foster went one better, with a new record for Trinidad, when he photographed the large sphingid moth *Eudocima apta*; this species had been recorded from Tobago but not previously for Trinidad. After the Bioblitz, Mike Rutherford gathered a few more photographs and passed them to Matthew Cock for identification/confirmation. The final total was 31 species of butterflies from five families and 11 species of moths from six families for a total of 42 species of Lepidoptera.

Overall, 103 species of insects were recorded. Again this must represent only a tiny fraction of the number of arthropod species to be found in the Icacos area, but lack of expertise in many groups meant that a more detailed account was not possible.

Other Invertebrates

In the soil samples that were collected by Mike Rutherford and Shane Manchouck, as well as the target groups of molluscs and myriapods, there were many other species. Six morphospecies of soil mites were found, along with three species of woodlice. Other finds included two species of ticks, including one from Soldado Rock.

Fungi

The fungi group found and photographed many different species, but because of the lack of taxonomic expertise, most of these could be identified only to the morphospecies level during the Bioblitz. A rough estimate of 21 species was made for the day's surveying. After the Bioblitz, the few photographs available were studied by Mike Rutherford, who identified two of the photographed fungi to species level. One of these was the Splitgill Mushroom found on Soldado Rock growing on a bamboo flag pole

that had been placed on the rock. This species is found on every continent except Antarctica. The other identified species was the well known Veiled Lady Fungus. The final count was 21 kinds of fungi, two identified to species and the rest to the morphospecies level.

Microbiology

A total of 35 unique microorganisms was detected. There were 16 morphospecies of bacteria and 19 morphospecies of microfungi. Further analysis may be conducted to identify specific morphospecies, but at the time of writing, no further identifications were available.

For a full list of all species recorded see Appendix 2.

Public Participation

One of the best aspects of the Icacos Bioblitz was the warm welcome by the villagers of Icacos. The primary school staff had spread the word about the event and from early on Sunday morning groups of kids turned up to see the displays by the UWIZM, TTFNC, Serpentarium and UWI. Soon families were turning up and eventually a whole class of 6th formers from Northgate College came along too. Amy Deacon, UWI lecturer and TTFNC secretary, took the lead in showing the kids all the activities they could do and encouraging them go out and see what wildlife they could find for themselves. Marianna Rampaul had a variety of marine based activities and Renoir Auguste showed visitors the variety of live animals that had been collected by the teams. Other Bioblitzers took turns to speak with visitors, show them how to use microscopes, and other equipment, and encourage their enthusiasm for nature.

As well as a great turnout from the local population the event was also visited by Mr. Shankar Teelucksingh, the councillor for Cedros, and by The Right Honourable Mr. Clarence Rambharat, MP Minister of Agriculture, Land and Fisheries. Both stayed for several hours meeting with the public and the surveying teams and learning more about the biodiversity in the region.

Conclusion

The total number of species announced at the conclusion of the Bioblitz was 213 vertebrates (127 birds, 14 mammals, 22 reptiles, 17 amphibians, 33 fish), 163 invertebrates (33 molluscs, 26 arachnids, 11 myriapods, 74 insects, 13 crustaceans, seven other invertebrates), 21 macrofungi, 19 microfungi, 16 bacteria, six bryophytes, six algae, and 306 plants, for a total of 750 species found in Icacos.

After the Bioblitz, several groups continued to analyse their results and identify specimens and photographs, so some of the totals changed. This resulted in the following final counts:

Vertebrates – 215 (127 birds, 14 mammals, 24 reptiles, 17 amphibians, 33 fish)

Invertebrates – 214 (52 molluscs, 30 arachnids, 9 myriapods, 103 insects, 13 crustaceans, seven from minor phyla)

Plants – 283 (272 terrestrial species, five bryophytes, six algae)

Fungus – 40 (21 macrofungi, 19 microfungi)

Bacteria – 16

Grand Total = 769 species

The Icacos peninsula proved to be a very interesting site for a Bioblitz, with high numbers of birds, amphibians, and certain insects. This is despite the area having been heavily altered, with the loss of much of the original habitat. The remaining swamps and forests still provide a refuge for many species, and the peninsula's proximity to the Venezuelan coast means it is still a first foothold for new species naturally spreading from the mainland.

For more details and photographs of the event see the TTFNC magazine *The Field Naturalist Quarterly Bulletin* 2017/4 at <http://tffnc.org/photojournals/2017-4.pdf>

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Plant Group

Coordinator: Mike Oatham

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Reptile & Amphibian Group

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Microbiology Group

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Appendix 1 - Location of the survey and the main sampling sites



Red circle is the 5 km-radius extent of the sampling area for the Bioblitz

Site	#	Decimal Lat. & Long.	Altitude (m)
Base Camp – Icacos Government Primary School	1	10.047°, -61.917°	11
Trail 1	2	10.043°, -61.907°	10
Trail 2	3	10.086°, -61.906°	8
Trail 3	4	10.073°, -61.882°	36
Trail 4	5	10.073°, -61.854°	22
Cedros	6	10.093°, -61.865°	0
Grand Lagoon	7	10.070°, -61.896°	5
Columbus Bay	8	10.084°, -61.908°	0
Soldado Rock (not on map)	9	10.077°, -62.015°	0-15

Appendix 2 - Species Lists

Notes:

- In Location, if no specific information was provided by the survey team, then Icacos was used as default. This could mean that the species was found anywhere within the 5-km-radius circle
- Although every effort was taken to confirm the identity of species, in certain invertebrate groups caution must be taken as an expert opinion was not available
- Where the species name is followed by a "?" or represented by "Sp. A", etc., the species was identified only to genus, family, or order level
- Specimens collected by some groups were deposited in the University of the West Indies Zoology Museum, St. Augustine, Trinidad, under accession number UWIZM.2017.53; for further details, refer to the museum database

Birds – 127 species from 46 families

Common Name	Scientific Name	Family	Location
Zone-tailed Hawk	<i>Buteo albonotatus</i>	Accipitridae	Trail 1
Short-tailed Hawk	<i>Buteo brachyurus</i>	Accipitridae	Icacos
Gray-lined Hawk	<i>Buteo nitidus</i>	Accipitridae	Trail 4
Broad-winged Hawk	<i>Buteo platypterus antillarum</i>	Accipitridae	Icacos
Common Black Hawk	<i>Buteogallus anthracinus</i>	Accipitridae	Icacos
Savanna Hawk	<i>Buteogallus meridionalis</i>	Accipitridae	Icacos
American Pygmy Kingfisher	<i>Chloroceryle aenea</i>	Alcedinidae	Trail 1
Black-bellied Whistling-Duck	<i>Dendrocygna autumnalis discolor</i>	Anatidae	Icacos
Anhinga	<i>Anhinga anhinga</i>	Anhingidae	Icacos
Fork-tailed Palm-Swift	<i>Tachornis squamata</i>	Apodidae	Trail 1
Great Egret	<i>Ardea alba</i>	Ardeidae	Icacos
Cocoi Heron	<i>Ardea cocoi</i>	Ardeidae	Icacos
Great Blue Heron	<i>Ardea herodias</i>	Ardeidae	Icacos
Pinnated Bittern	<i>Botaurus pinnatus</i>	Ardeidae	Icacos
Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	Icacos
Striated Heron	<i>Butorides striata</i>	Ardeidae	Icacos
Little Blue Heron	<i>Egretta caerulea</i>	Ardeidae	Icacos
Snowy Egret	<i>Egretta thula</i>	Ardeidae	Icacos
Yellow-crowned Night-Heron	<i>Nyctanassa violacea</i>	Ardeidae	Soldado Rock
White-tailed Nightjar	<i>Hydopsalis cayennensis</i>	Caprimulgidae	Icacos
Common Pauraque	<i>Nyctidromus albicollis</i>	Caprimulgidae	Trail 4
Grayish Saltator	<i>Saltator coerulescens</i>	Cardinalidae	Icacos
Turkey Vulture	<i>Cathartes aura</i>	Cathartidae	Icacos
Black Vulture	<i>Coragyps atratus</i>	Cathartidae	Icacos
Southern Lapwing	<i>Vanellus chilensis</i>	Charadriidae	Icacos

Bananaquit	<i>Coereba flaveola</i>	Coerebidae	Trail 1
Feral Rock Pigeon	<i>Columba livia domestica</i>	Columbidae	Icacos
Scaled Dove	<i>Columbina squammata</i>	Columbidae	Trail 1
Ruddy Ground Dove	<i>Columbina talpacoti</i>	Columbidae	Icacos
White-tipped Dove	<i>Leptotila verreauxi</i>	Columbidae	Icacos
Pale-vented Pigeon	<i>Patagioenas cayennensis</i>	Columbidae	Icacos
Scaled Pigeon	<i>Patagioenas speciosa</i>	Columbidae	Icacos
Smooth-billed Ani	<i>Crotophaga ani</i>	Cuculidae	Icacos
Greater Ani	<i>Crotophaga major</i>	Cuculidae	Trail 1
Squirrel Cuckoo	<i>Piaya cayana</i>	Cuculidae	Trail 1
Striped Cuckoo	<i>Tapera naevia</i>	Cuculidae	Icacos
Saffron Finch	<i>Sicalis flaveola</i>	Emberizidae	Icacos
Crested Caracara	<i>Caracara cheriway</i>	Falconidae	Icacos
Aplomado Falcon	<i>Falco femoralis</i>	Falconidae	Icacos
Peregrine Falcon	<i>Falco peregrinus</i>	Falconidae	Soldado Rock
Bat Falcon	<i>Falco ruficularis</i>	Falconidae	Icacos
Yellow-headed Caracara	<i>Milvago chimachima</i>	Falconidae	Icacos
Magnificent Frigatebird	<i>Fregata magnificens</i>	Fregatidae	Icacos, Soldado Rock
Trinidad Euphonia	<i>Euphonia trinitatis</i>	Fringillidae	Icacos
Yellow-chinned Spinetail	<i>Certhiaxis cinnamomea</i>	Furnariidae	Icacos
Plain-brown Woodcreeper	<i>Dendrocicla fuliginosa</i>	Furnariidae	Trail 1
Streak-headed Woodcreeper	<i>Lepidocolaptes souleyetii</i>	Furnariidae	Trail 4
Pale-breasted Spinetail	<i>Synallaxis albescens</i>	Furnariidae	Icacos
Cocoa Woodcreeper	<i>Xiphorhynchus susurrans</i>	Furnariidae	Trail 1
Rufous-tailed Jacamar	<i>Galbula ruficauda</i>	Galbulidae	Trail 1
Gray-breasted Martin	<i>Progne chalybea</i>	Hirundinidae	Base camp
Southern Rough-winged Swallow	<i>Stelgidopteryx ruficollis</i>	Hirundinidae	Icacos
White-winged Swallow	<i>Tachycineta albiventer</i>	Hirundinidae	Icacos
Yellow-hooded Blackbird	<i>Agelaius icterocephalus</i>	Icteridae	Icacos
Yellow-rumped Cacique	<i>Cacicus cela</i>	Icteridae	Icacos
Yellow Oriole	<i>Icterus nigrogularis</i>	Icteridae	Icacos
Shiny Cowbird	<i>Molothrus bonariensis</i>	Icteridae	Trail 1
Giant Cowbird	<i>Molothrus oryzivorus</i>	Icteridae	Icacos
Crested Oropendola	<i>Psarocolius decumanus</i>	Icteridae	Icacos
Carib Grackle	<i>Quiscalus lugubris</i>	Icteridae	Icacos
Wattled Jacana	<i>Jacana jacana</i>	Jacanidae	Icacos
Laughing Gull	<i>Leucophaeus atricilla</i>	Laridae	Soldado Rock
Common Tern	<i>Sterna hirundo</i>	Laridae	Soldado Rock
Tropical Mockingbird	<i>Mimus gilvus</i>	Mimidae	Base camp
Common Potoo	<i>Nyctibius griseus</i>	Nyctibiidae	Trail 4
Osprey	<i>Pandion haliaetus</i>	Pandionidae	Icacos

Northern Waterthrush	<i>Parkesia noveboracensis</i>	Parulidae	Icacos
Yellow Warbler	<i>Setophaga petechia</i>	Parulidae	Trail 4
Brown Pelican	<i>Pelecanus occidentalis</i>	Pelecanidae	Trail 1, Soldado Rock
Crimson-crested Woodpecker	<i>Campephilus melanoleucos</i>	Picidae	Icacos
Lineated Woodpecker	<i>Dryocopus lineatus</i>	Picidae	Trail 1
White-bearded Manakin	<i>Manacus manacus</i>	Pipridae	Icacos
Golden-headed Manakin	<i>Pipra erythrocephala</i>	Pipridae	Icacos
Long-billed Gnatwren	<i>Ramphocaenus melanurus</i>	Poliopitidae	Icacos
Orange-winged Parrot	<i>Amazona amazonica</i>	Psittacidae	Icacos
Yellow-crowned Parrot	<i>Amazona ochrocephala</i>	Psittacidae	Icacos
Red-and-green Macaw	<i>Ara chloropterus</i>	Psittacidae	Icacos
Green-rumped Parrotlet	<i>Forpus passerinus</i>	Psittacidae	Trail 1
Red-bellied Macaw	<i>Orthopsittaca manilata</i>	Psittacidae	Icacos
Gray-necked Wood-Rail	<i>Aramides cajanea</i>	Rallidae	Base camp
Common Gallinule	<i>Gallinula galeata</i>	Rallidae	Icacos
Purple Gallinule	<i>Porphyrio martinica</i>	Rallidae	Icacos
Spotted Sandpiper	<i>Actitis macularia</i>	Scolopacidae	Soldado Rock
Lesser Yellowlegs	<i>Tringa flavipes</i>	Scolopacidae	Icacos
Solitary Sandpiper	<i>Tringa solitaria</i>	Scolopacidae	Icacos, Soldado Rock
Ferruginous Pygmy-Owl	<i>Glaucidium brasilianum</i>	Strigidae	Icacos
Tropical Screech-Owl	<i>Megascops choliba</i>	Strigidae	Trail 4
Black-crested Antshrike	<i>Sakesphorus canadensis</i>	Thamnophilidae	Base camp
Barred Antshrike	<i>Thamnophilus doliatus</i>	Thamnophilidae	Icacos
Blue Dacnis	<i>Dacnis cayana</i>	Thraupidae	Trail 1
Silver-beaked Tanager	<i>Ramphocelus carbo</i>	Thraupidae	Icacos
Turquoise Tanager	<i>Tangara mexicana</i>	Thraupidae	Trail 1
Blue-gray Tanager	<i>Thraupis episcopus</i>	Thraupidae	Icacos
Palm Tanager	<i>Thraupis palmarum</i>	Thraupidae	Trail 4
Blue-black Grassquit	<i>Volatinia jacarina</i>	Thraupidae	Icacos
Scarlet Ibis	<i>Eudocimus ruber</i>	Threskiornithidae	Icacos
Little Tinamou	<i>Crypturellus soui</i>	Tinamidae	Icacos
White-winged Becard	<i>Pachyramphus polychopterus</i>	Tityridae	Icacos
White-chested Emerald	<i>Agyrtria brevirostris</i>	Trochilidae	Trail 1
Copper-rumped Hummingbird	<i>Amazilia tobaci</i>	Trochilidae	Icacos
Black-throated Mango	<i>Anthracothorax nigricollis</i>	Trochilidae	Soldado Rock
Green-throated Mango	<i>Anthracothorax viridigula</i>	Trochilidae	Icacos
Blue-chinned Sapphire	<i>Chlorestes notatus</i>	Trochilidae	Trail 1
Ruby-topaz Hummingbird	<i>Chrysolampis mosquitus</i>	Trochilidae	Trail 1
Rufous-breasted Hermit	<i>Glaucis hirsutus</i>	Trochilidae	Trail 1
Long-billed Starthroat	<i>Helimaster longirostris</i>	Trochilidae	Trail 4

Little Hermit	<i>Phaethornis longuemareus</i>	Trochilidae	Trail 1
House Wren	<i>Troglodytes aedon</i>	Troglodytidae	Icacos
Cocoa Thrush	<i>Turdus fumigatus</i>	Turdidae	Trail 1
Spectacled Thrush	<i>Turdus nudigenis</i>	Turdidae	Base camp
White-headed Marsh Tyrant	<i>Arundinicola leucocephala</i>	Tyrannidae	Icacos
Southern Beardless Tyrannulet	<i>Camptostoma obsoletum</i>	Tyrannidae	Icacos
Yellow-bellied Elaenia	<i>Elaenia flavogaster</i>	Tyrannidae	Trail 1
Pied Water-Tyrant	<i>Fluvicola pica</i>	Tyrannidae	Base camp
Brown-crested Flycatcher	<i>Myiarchus tyrannulus</i>	Tyrannidae	Trail 1
Streaked Flycatcher	<i>Myiodynastes maculatus</i>	Tyrannidae	Trail 1
Forest Elaenia	<i>Myiopagis gaimardii</i>	Tyrannidae	Icacos
Short-tailed Pygmy-Tyrant	<i>Myiornis ecaudatus</i>	Tyrannidae	Icacos
Great Kiskadee	<i>Pitangus sulphuratus</i>	Tyrannidae	Icacos
Spotted Tody-Flycatcher	<i>Todirostrum maculatum</i>	Tyrannidae	Icacos
Yellow-breasted Flycatcher	<i>Tolmomyias flaviventris</i>	Tyrannidae	Trail 1
Gray Kingbird	<i>Tyrannus dominicensis vorax</i>	Tyrannidae	Icacos
Tropical Kingbird	<i>Tyrannus melancholicus</i>	Tyrannidae	Icacos
Barn Owl	<i>Tyto alba</i>	Tytonidae	Icacos
Rufous-browed Peppershrike	<i>Cyclarhis gujanensis</i>	Vireonidae	Trail 1
Golden-fronted Greenlet	<i>Pachysylvia aurantiifrons</i>	Vireonidae	Trail 1
Red-eyed Vireo	<i>Vireo olivaceus</i>	Vireonidae	Trail 1

Mammals – 14 species from 8 families

Common Name	Scientific Name	Family	Location
Tufted Capuchin	<i>Sapajus apella</i>	Cebidae	Icacos village
Nine-banded Armadillo	<i>Dasybus novemcinctus</i>	Dasyproctidae	Icacos village
Red-rumped Agouti	<i>Dasyprocta agouti</i>	Dasyproctidae	Trail 4
Common Opossum	<i>Didelphis marsupialis</i>	Didelphidae	Trail 4
Greater White-lined Bat	<i>Saccopteryx bilineata</i>	Emballonuridae	Icacos village
Arboreal Rice Rat	<i>Oecomys paricola</i>	Muridae	Icacos
Gervais's Fruit-eating Bat	<i>Artibeus cinereus</i>	Phyllostomidae	Icacos village
Jamaican Fruit-eating Bat	<i>Artibeus jamaicensis</i>	Phyllostomidae	Icacos village
Great Fruit-eating Bat	<i>Artibeus lituratus</i>	Phyllostomidae	Icacos village
Seba's Short-tailed Fruit Bat	<i>Carollia perspicillata</i>	Phyllostomidae	Icacos village
Brown-bellied Broad-nosed Bat	<i>Platyrrhinus fusciventris</i>	Phyllostomidae	Icacos village
Little Yellow-shouldered Bat	<i>Sturnira lilium</i>	Phyllostomidae	Icacos village
Striped-headed Round-eared Bat	<i>Tonatia saurophila</i>	Phyllostomidae	Icacos village
Red-tailed Squirrel	<i>Sciurus granatensis</i>	Sciuridae	Icacos village

Reptiles - 24 species from 12 families

Common Name	Scientific Name	Family	Location
Spectacled Caiman	<i>Caiman crocodilus</i>	Alligatoridae	Icacos
Macajuel	<i>Boa constrictor</i>	Boidae	Icacos
Cascabel	<i>Corallus ruschenbergerii</i>	Boidae	Icacos
Rainbow Boa	<i>Epicrates maurus</i>	Boidae	Icacos
Green Turtle	<i>Chelonia mydas</i>	Cheloniidae	Soldado Rock
Brown Vine Snake	<i>Oxybelis aeneus</i>	Colubridae	Trail 1
Black-headed Snake	<i>Tantilla melanocephala</i>	Colubridae	Icacos
Jungle Anole	<i>Anolis planiceps</i>	Dactyloidae	Trail 4
Cat-eyed Snake	<i>Leptodeira annulata</i>	Dipsadidae	Trail 1
False Coral	<i>Oxyrhopus petolarius</i>	Dipsadidae	Icacos
Ratonel	<i>Pseudoboa neuweidii</i>	Dipsadidae	Trail 1
Slug-eating Snake	<i>Sibon nebulata</i>	Dipsadidae	Icacos
Double-striped Swamp Snake	<i>Thamnodynastes ramonriveroi</i>	Dipsadidae	Icacos
African House Gecko	<i>Hemidactylus mabouia</i>	Gekkonidae	Icacos
Turnip-tailed Gecko	<i>Thecadactylus rapicauda</i>	Gekkonidae	Trail 1
Audubon's Multicoloured Lizard	<i>Polychrus auduboni</i>	Hoplocercidae	Icacos
Green Iguana	<i>Iguana iguana</i>	Iguanidae	Icacos, Soldado Rock
Greater Windward Skink	<i>Copeglossum aurae</i>	Scincidae	Trail 1
Spot-nose Gecko	<i>Gonatodes humeralis</i>	Sphaerodactylidae	Trail 3
Streak Lizard	<i>Gonatodes vittatus</i>	Sphaerodactylidae	Trail 1
Zandolie	<i>Ameiva atrigularis</i>	Teiidae	Icacos
Beachrunner	<i>Cnemidophorus lemniscatus</i>	Teiidae	Icacos
Rain Lizard	<i>Kentropyx striata</i>	Teiidae	Soldado Rock
Matte/Tegu	<i>Tupinambis cryptus</i>	Teiidae	Trail 4

Amphibians – 17 species from 4 families

Common Name	Scientific Name	Family	Location
Marine Toad	<i>Rhinella marina</i>	Bufonidae	Trail 4
Minute Tree Frog	<i>Dendrosophus goughi</i>	Hylidae	Trail 4
Small-headed Tree Frog	<i>Dendrosophus microcephalus</i>	Hylidae	Trail 4
Miniscule Tree Frog	<i>Dendrosophus minusculus</i>	Hylidae	Icacos
Leaf-nesting Frog	<i>Phyllomedusa trinitatis</i>	Hylidae	Icacos
Paradox Frog	<i>Pseudis paradoxa</i>	Hylidae	Icacos
Maracaibo Basin Tree Frog	<i>Scarthyla vigilans</i>	Hylidae	Trail 4
Lesser Brown Tree Frog	<i>Scinax ruber</i>	Hylidae	Icacos
Lime Tree Frog	<i>Sphaenorhynchus lacteus</i>	Hylidae	Icacos
Milky Tree Frog	<i>Trachycephalus typhonius</i>	Hylidae	Icacos

Tungara Frog	<i>Engystomops pustulosus</i>	Leptodactylidae	Icacos
Whistling Frog	<i>Leptodactylus fuscus</i>	Leptodactylidae	Trail 1
Barbour's Thin-toed Frog	<i>Leptodactylus insularum</i>	Leptodactylidae	Trail 1
Steffen's Thin-toed Frog	<i>Leptodactylus latrans</i>	Leptodactylidae	Trail 1
Trinidad Thin-toed Frog	<i>Leptodactylus nesiotus</i>	Leptodactylidae	Icacos
Garman's Thin-toed Frog	<i>Leptodactylus validus</i>	Leptodactylidae	Icacos
Narrow-mouth Frog	<i>Elachistocleis ovalis</i>	Microhylidae	Icacos

Fish - 33 species from 24 families

Common Name	Scientific Name	Family	Location
Four-eyed Fish	<i>Anableps anableps</i>	Anablepidae	Icacos
Pemecou Sea Catfish	<i>Sciades herzbergii</i>	Ariidae	Icacos
none (silverside)	<i>Menidia</i> sp.	Atherinopsidae	Soldado Rock
Molly Miller	<i>Scartella cristata</i>	Blenniidae	Soldado Rock
none (sapat)	<i>Oligoplites</i> sp.	Carangidae	Cedros
none (snook)	<i>Centropomus</i> sp.	Centropomidae	Grand Lagoon
Elongate Hatchetfish	<i>Triportheus elongatus</i>	Characidae	Base camp
Black Tilapia	<i>Oreochromis mossambicus</i>	Cichlidae	Grand Lagoon
Fat Sleeper	<i>Dormitator maculatus</i>	Eleotridae	Columbus Bay
none (anchoa)	<i>Anchoa</i> sp.	Engraulidae	Icacos
Atlantic Spadefish	<i>Chaetodipterus faber</i>	Ephippidae	Soldado Rock
Common Mojarra	<i>Eucinostomus gula</i>	Gerreidae	Icacos
Flagfin Mojarra	<i>Eucinostomus melanopterus</i>	Gerreidae	Columbus Bay
none (goby)	Sp. A	Gobiesocidae	Soldado Rock
Black Margate	<i>Anisotremus surinamensis</i>	Haemulidae	Soldado Rock
Barred Grunt	<i>Conodon nobilis</i>	Haemulidae	Icacos
Black Grunt	<i>Haemulon bonariense</i>	Haemulidae	Soldado Rock
Striped Grunt	<i>Haemulon striatum</i>	Haemulidae	Soldado Rock
Grey Snapper	<i>Lutjanus griseus</i>	Lutjanidae	Soldado Rock
Dog Snapper	<i>Lutjanus jocu</i>	Lutjanidae	Columbus Bay
Mahogany Snapper	<i>Lutjanus mahogoni</i>	Lutjanidae	Soldado Rock
Tarpon	<i>Megalops atlanticus</i>	Megalopidae	Grand Lagoon
none (mullet)	<i>Mugil</i> sp.	Mugilidae	Icacos
Swamp Guppy	<i>Micropoecilia picta</i>	Poeciliidae	Grand Lagoon
Southern Molly	<i>Poecilia vivipara</i>	Poeciliidae	Icacos
Leaf Fish	<i>Polycentrus</i> sp.	Polycentridae	Grand Lagoon
Threadfin	<i>Polidactylus</i> sp.	Polynemidae	Icacos
Sergeant Major	<i>Abudefduf saxatilis</i>	Pomacentridae	Soldado Rock
Night Sergeant	<i>Abudefduf taurus</i>	Pomacentridae	Soldado Rock
Sand Croaker	<i>Larimus breviceps</i>	Sciaenidae	Icacos
Croaker	<i>Menticirrhus</i> sp.	Sciaenidae	Icacos
Harlequin Bass	<i>Serranus tigrinus</i>	Serranidae	Soldado Rock
Banded Puffer	<i>Colomesus psittacus</i>	Tetraodontidae	Icacos

Molluscs - 52 species from 34 families

Common Name	Scientific Name	Family	Location
none (land snail)	<i>Allopeas micra</i>	Achatinidae	Soldado Rock
none (land snail)	<i>Beckianum beckianum</i>	Achatinidae	Trail 3
Miniature Awlsnail	<i>Subulina octona</i>	Achatinidae	Trail 3
Apple Snail	<i>Pomacea glauca</i>	Ampullariidae	Grand Lagoon
Eared Ark	<i>Anadara notables</i>	Arcidae	Icacos
Antique Ark	<i>Anadora antiquata</i>	Arcidae	Icacos
Princess Venus	<i>Periglypta listeri</i>	Cardiidae	Icacos
Storky Cerith	<i>Certhium litteratum</i>	Cerithidae	Icacos
Red-rimmed Melania	<i>Melanoides tuberculata</i>	Cerithioidea	Grand Lagoon
Chip Chip	<i>Donax denticulatus</i>	Donacidae	Columbus Bay
Rugose Donax	<i>Donax rugosus</i>	Donacidae	Cedros Bay
Striate Coquina	<i>Donax striatus</i>	Donacidae	Cedros Bay
Coquina	<i>Donax variabilis</i>	Donacidae	Cedros Bay
none (land snail)	<i>Guppya gundlachi</i>	Euconulidae	Trail 3
none (land snail)	<i>Karolus consobrinus</i>	Ferussaciidae	Trail 3
none (land snail)	<i>Gastrocopta servilis</i>	Gastrocoptidae	Soldado Rock
none (land snail)	<i>Striatura umbratilis</i>	Gastrodontidae	Trail 3
none (land snail)	<i>Helicina dysoni</i>	Helicinidae	Trail 3
Lobster Purse Oyster	<i>Isognomon radiatus</i>	Isognomonidae	Soldado Rock
Cloudy Periwinkle	<i>Littoraria nebulosa</i>	Littorinidae	Soldado Rock
Augulate Periwinkle	<i>Littorina augulifera</i>	Littorinidae	Soldado Rock
Lineolate Periwinkle	<i>Littorina lineolata</i>	Littorinidae	Soldado Rock
Plum Marginela	<i>Prunum prunum</i>	Marginellidae	Columbus Bay
Giant South American Land Snail	<i>Megalobulimus oblongus</i>	Megalobulimidae	Trail 3
Giant Hairy Melongena	<i>Pugilina morio</i>	Melongenidae	Soldado Rock
West Indian Murex	<i>Chicoreus brevifrons</i>	Muricidae	Columbus Bay
Florida Rock Snail	<i>Stramonita haemastoma</i>	Muricidae	Columbus Bay
Woodring's Murex	<i>Vokesimurex woodringi</i>	Muricidae	Columbus Bay
Ribbed Mussel	<i>Geukensia demissa</i>	Mytilidae	Soldado Rock
Mangrove Mussel	<i>Mytella guyanensis</i>	Mytilidae	Cedros Bay
Blue Mussel	<i>Mytilus edulis</i>	Mytilidae	Icacos
Asian Green Mussel	<i>Perna viridis</i>	Mytilidae	Cedros Bay
Nessa Mudsnail	<i>Phrontis polygonata</i>	Nassariidae	Columbus Bay
Colorful Atlantic Natica	<i>Natica canrena</i>	Naticidae	Columbus Bay
Bleeding Tooth Nerite	<i>Nerita peloronta</i>	Neritidae	Columbus Bay
Checkered Nerite	<i>Nerita tessellata</i>	Neritidae	Soldado Rock
Clench's Nerite	<i>Neritina clenchi</i>	Neritidae	Base camp
none (land snail)	<i>Pleckocheilus glaber</i>	Orthalicidae	Trail 3
Caribbean Oyster	<i>Crassostrea praia</i>	Ostreidae	Cedros Bay
Common Atlantic Oyster	<i>Crassostrea virginica</i>	Ostreidae	Soldado Rock

Dwarf Olive	<i>Olivella kifos</i>	Ovulidae	Columbus Bay
False Angelwing	<i>Petricola pholadiformis</i>	Petricolidae	Columbus Bay
none (slug)	<i>Pallifera sp.</i>	Philomycidae	Icacos
none (freshwater snail)	<i>Physella acuta</i>	Physidae	Grand Lagoon
none (land snail)	<i>Streptartemon glaber</i>	Streptaxidae	Trail 3
West Indian Fighting Conch	<i>Strombus pugilis</i>	Strombidae	Columbus Bay
Turban Snail	<i>Tegula viridula</i>	Tequidae	Soldado Rock
Variagate Turretsnail	<i>Turritella varegata</i>	Turritellidae	Columbus Bay
Royal Comb Venus	<i>Hysterocon chadione</i>	Veneridae	Cedros Bay
King Venus	<i>Lirophora paphia</i>	Veneridae	Cedros Bay
Scaly Worm Snail	<i>Thylacodes squamigerus</i>	Vermetidae	Icacos
Knorr's Worm Snail	<i>Vermicularia knorri</i>	Vermetidae	Soldado Rock

Insects – 103 species from 43 families consisting of the following: -

Lepidoptera (Butterflies and Moths) – 42 species from 11 families

Common Name	Scientific Name	Family	Location
Orange-spotted Flower Moth	<i>Syngamia florella</i>	Crambidae	Icacos
none (moth)	<i>Feigeria mycerina</i>	Erebidae	Soldado Rock
none (moth)	<i>Tachyphyle allineata</i>	Geometridae	Icacos
Barcastus Firetip	<i>Mysoria barcastus alta</i>	Hesperiidae	Icacos
Nikko Skipper	<i>Niconiades nikko</i>	Hesperiidae	Icacos
Orcus Checkered-Skipper	<i>Pyrgus orcus</i>	Hesperiidae	Icacos
Staphylus Skipper	<i>Staphylus kayei</i>	Hesperiidae	Icacos
Plain Longtail	<i>Urbanus simpliciis</i>	Hesperiidae	Icacos
none (butterfly)	<i>Vehilius celeus</i>	Hesperiidae	Icacos
Hanno Blue	<i>Hemiargus hanno hanno</i>	Lycaenidae	Icacos
Gulf Fritillary	<i>Agraulis vanillae vanillae</i>	Nymphalidae	Icacos
Scarlet Peacock	<i>Anartia amathea</i>	Nymphalidae	Icacos
White Peacock	<i>Anartia jatrophae jatrophae</i>	Nymphalidae	Icacos
Red Rim	<i>Biblis hyperia hyperia</i>	Nymphalidae	Icacos
Queen	<i>Danaus gilippus xanthippus</i>	Nymphalidae	Trail 3
Juno Longwing	<i>Dione juno juno</i>	Nymphalidae	Icacos
Flambeau	<i>Dryas iulia</i>	Nymphalidae	Icacos
Juliette	<i>Eueides aliphera aliphera</i>	Nymphalidae	Icacos
Isabella's Longwing	<i>Eueides isabella isabella</i>	Nymphalidae	Icacos
Variable Cracker	<i>Hamadryas feronia feronia</i>	Nymphalidae	Icacos
Red Postman	<i>Heliconius erato</i>	Nymphalidae	Icacos
Ricini Longwing	<i>Heliconius ricini insulanus</i>	Nymphalidae	Icacos
Hermes Satyr	<i>Hermeuptychia hermes</i>	Nymphalidae	Icacos
Tropical Buckeye	<i>Junonia zonalis</i>	Nymphalidae	Icacos
Blue Morpho	<i>Morpho helenor insularis</i>	Nymphalidae	Icacos
Banded Banner	<i>Pyrrhogyra nearea</i>	Nymphalidae	Soldado Rock

Rusty-tipped Page	<i>Siproeta epaphus epaphus</i>	Nymphalidae	Icacos
Malachite	<i>Siproeta stelenes</i>	Nymphalidae	Icacos
none (butterfly)	Species of Satyrini	Nymphalidae	Icacos
Gold Rim Swallowtail	<i>Battus polydamas</i>	Papilionidae	Icacos
Cattle Heart	<i>Parides anchises</i>	Papilionidae	Icacos
Crossbarred White	<i>Itaballia demophile calydonia</i>	Pieridae	Icacos
Cloudless Sulphur	<i>Phoebis sennae</i>	Pieridae	Icacos
Pale Yellow	<i>Pyrisitia venusta venusta</i>	Pieridae	Icacos
none (moth)	<i>Automeris zurobara zurobara</i>	Saturniidae	Icacos
Hummingbird Moth	<i>Aellopos</i> sp.	Sphingidae	Icacos
Apta Fruit-piercing Moth	<i>Eudocima apta</i>	Sphingidae	Icacos
none (moth)	<i>Hypercompe trinitatis</i>	Sphingidae	Icacos
Fig Sphinx	<i>Pachylia ficus</i>	Sphingidae	Icacos
Streaked Sphinx	<i>Protambulyx strigilis</i>	Sphingidae	Icacos
Bella Moth	<i>Utetheisa ornatrix</i>	Sphingidae	Icacos
Green-banded Urania	<i>Urania leilus</i>	Uraniidae	Icacos

Odonata (Dragonflies and Damselflies) – 13 species from 2 families

Common Name	Scientific Name	Family	Location
Rambus's Forktail	<i>Ischnura ramburii</i>	Coenagrionidae	Icacos
Claret Pond Hawk	<i>Erythemis mithroides</i>	Libellulidae	Icacos
Flame-tailed Pond Hawk	<i>Erythemis peruviana</i>	Libellulidae	Icacos
Pin-tailed Pond Hawk	<i>Erythemis plebeja</i>	Libellulidae	Base camp
Great Pond Hawk	<i>Erythemis vesiculosa</i>	Libellulidae	Base camp
Band-winged Dragonlet	<i>Erythrodiplax umbrata</i>	Libellulidae	Base camp
White-tailed Dragonlet	<i>Erythrodiplax unimaculata</i>	Libellulidae	Base camp
Dasher	<i>Micrathyria</i> sp	Libellulidae	Icacos
Red tailed Skimmer	<i>Orthemis schmidtii</i>	Libellulidae	Icacos
Carmine Skimmer	<i>Orthemis viscolor</i>	Libellulidae	Icacos
none (dragonfly)	Sp. A	Libellulidae	Icacos
Vermillion Saddlebags	<i>Tamea abdominalis</i>	Libellulidae	Base camp
Striped Saddlebags	<i>Tamea calverti</i>	Libellulidae	Base camp

Other Insects – 48 species from 30 families

Common Name	Scientific Name	Family	Location
none (shield bug)	Sp. A	Acanthosomatidae	Icacos
none (cricket)	<i>Schistocerca</i> sp.	Acrididae	Trail 1
none (tropical flatbug)	<i>Dysodius</i> sp.	Aradidae	Icacos
none (waterbug)	<i>Belostoma malkini</i>	Belostomatidae	Icacos
Zebra Cockroach	<i>Eurycotis decipiens</i>	Blattidae	Trail 1

none (cockroach)	<i>Periplaneta</i> sp.	Blattidae	Icacos
none (beetle)	<i>Enceladus gigas</i>	Carabidae	Icacos
none (beetle)	<i>Pheropsophus aequinoctialis</i>	Carabidae	Icacos
none (tortoise beetle)	<i>Charidotella</i> sp.	Chrysomelidae	Trail 1
none (soldier beetle)	<i>Homophoeta aequinoctialis</i>	Chrysomelidae	Trail 1
none (leafhopper)	<i>Hortensia</i> sp.?	Cicadellidae	Soldado Rock
none (leafhopper)	Sp. A	Cicadellidae	Soldado Rock
none (leafhopper)	Sp. B	Cicadellidae	Soldado Rock
none (cicada)	Sp. A	Cicadidae	Trail 1
none (cicada)	<i>Proarna hilaris</i>	Cicadidae	Icacos
none (webspinner)	Sp. A	Clothodidae	Trail 1
none (bug)	Sp. A	Corediae	Trail 1
none (mosquito)	<i>Aedes</i> sp.	Culicidae	Icacos
none (mosquito)	<i>Anopheles</i> sp.	Culicidae	Icacos
South American Palm Weevil	<i>Rhynchophorus palmarum</i>	Curculionidae	Trail 1
none (stick insect)	<i>Caribbiopheromera trinitatis</i>	Diapheromeridae	Trail 1
Trinidad Miniature Stick Insect	<i>Ocnophiloidea regularis</i>	Diapheromeridae	Trail 1
none (water beetle)	<i>Cybister</i> sp.	Dytiscidae	Icacos
none (ant)	<i>Camponotus</i> sp.	Formicidae	Icacos
Gliding Ant	<i>Cephalotes clypeatus</i>	Formicidae	Icacos
none (trapjaw ant)	<i>Odontomachus</i> sp.	Formicidae	Trail 1
none (ant)	<i>Pachycondyla</i> sp.	Formicidae	Icacos
none (firefly)	<i>Aspidosoma ignitum</i>	Lampryidae	Icacos
Trinidad Bark Mantis	<i>Liturgusa trinidadensis</i>	Liturgusidae	Trail 1
none (beetle)	<i>Calopteron</i> sp.	Lycidae	Icacos
none (mantis)	<i>Vates lobata</i>	Mantidae	Icacos
none (velvet ant)	<i>Ephuta parallela</i>	Mutillidae	Icacos
none (shield bug)	Sp. A	Pentatomidae?	Icacos
none (flesh fly)	Sp. A	Sarcophagidae	Soldado Rock
none (beetle)	<i>Cyclocephala</i> sp.	Scarabaeidae	Icacos
none (beetle)	<i>Dyscinetus</i> sp.	Scarabaeidae	Icacos
none (beetle)	<i>Strategus</i> sp.	Scarabaeidae	Icacos
none (digger wasp)	<i>Sphex</i> sp.	Sphecidae	Base camp
none (beetle)	Sp. A	Tenebrionoidea	Icacos
none (conehead cricket)	<i>Conocephalus</i> sp.	Tettigoniidae	Trail 1
none (katydid)	Sp. A	Tettigoniidae	Soldado Rock
none (katydid)	Sp. B	Tettigoniidae	Soldado Rock
none (crane fly)	Sp. A	Tipulidae	Trail 1
none (wing-waving fly)	Sp. A	Uliidiidae	Icacos
none (wasp)	<i>Polistes</i> sp.	Vespidae	Icacos
none (wasp)	<i>Polybia</i> sp.	Vespidae	Icacos

none (wasp)	Sp. A	Vespidae	Base camp
Jep Tatu	<i>Synoeca surinamensis</i>	Vespidae	Icacos

Crustaceans – 14 species from 11 families

Common Name	Scientific Name	Family	Location
none (woodlouse)	<i>Venezillo</i> sp. A	Armadillidae	Soldado Rock
none (woodlouse)	<i>Venezillo</i> sp. B	Armadillidae	Icacos
Caribbean Barnacle	<i>Chthamalus proteus</i>	Chthamalidae	Soldado Rock
Land Crab	<i>Cardisoma guanhumi</i>	Gecarcinidae	Icacos
Sally Lightfoot Crab	<i>Grapsus grapsus</i>	Grapsidae	Soldado Rock
Grapsid Crab	Sp. A	Grapsidae	Base camp
Tidal Spray Crab	<i>Plagusia depressa</i>	Plagusiidae	Soldado Rock
Porcelain Crab	<i>Petrolisthes</i> sp.	Porcellanidae	Soldado Rock
none (woodlouse)	Sp. A	Porcellionidae	Soldado Rock
Swimming Crab	<i>Callinectes bocourti</i>	Portunidae	Base camp
Atlantic Blue Crab	<i>Callinectes sapidus</i>	Portunidae	Base camp
none (sandhopper)	Sp. A	Talitridae	Icacos
Ribbed Barnacle	<i>Tetraclita squamosa</i>	Tetraclitidae	Soldado Rock
Hairy Mangrove Crab	<i>Ucides cordatus</i>	Ucididae	Icacos

Arachnids – 30 species from 18 families/orders

Common Name	Scientific Name	Family/Order	Location
none (soil mite)	Sp. A	Acariformes	Soldado Rock
none (soil mite)	Sp. B	Acariformes	Soldado Rock
none (soil mite)	Sp. C	Acariformes	Soldado Rock
none (soil mite)	Sp. D	Acariformes	Soldado Rock
none (soil mite)	Sp. E	Acariformes	Soldado Rock
none (soil mite)	Sp. F	Acariformes	Soldado Rock
none (orb weaver)	<i>Araneus</i> sp.	Araenidae	Icacos
Silver Argiope	<i>Argiope argentata</i>	Araenidae	Icacos
Trashline Orbweaver	<i>Cyclosa caroli</i>	Araneidae	Icacos
none (orb weaver)	<i>Mangora amchickeringi</i>	Araneidae	Icacos
none (orb weaver)	<i>Metepeira compsa</i>	Araneidae	Icacos
none (scorpion)	<i>Ananteris cussinii</i>	Buthidae	Icacos
none (scorpion)	<i>Tityus melanostichus</i>	Buthidae	Icacos
none (scorpion)	<i>Tityus trinitatis</i>	Buthidae	Icacos
none (wandering spider)	<i>Ancylometes bogotensis</i>	Ctenidae	Icacos
none (funnel web spider)	<i>Ischnothele caudata</i>	Dipluridae	Icacos
none (tick)	<i>Amblyomma</i> sp. A	Ixodidae	Soldado Rock
none (tick)	<i>Amblyomma</i> sp. B	Ixodidae	Icacos
none (money spider)	Sp. A	Linyphiidae	Icacos
none (wolf spider)	Sp. A	Lycosidae	Icacos

none (pirate spider)	Sp. A	Mimetidae	Icacos
Golden Silk Orbweaver	<i>Nephila clavipes</i>	Nephilidae	Icacos
none (wall spider)	<i>Oecobius</i> sp.	Oecobiidae	Icacos
none (cellar spider)	<i>Coryssocnemis</i> sp.	Pholcidae	Icacos
none (fishing spider)	<i>Dolomedes</i> sp.	Pisauridae	Icacos
none (jumping spider)	Sp. A	Salticidae	Icacos
none (giant crab spider)	<i>Olios</i> sp.	Sparassidae	Icacos
none (orchard orbweaver)	<i>Leucauge argyra</i>	Tetragnathidae	Icacos
Pink-toed Tarantula	<i>Avicularia avicularia</i>	Theraphosidae	Icacos
none (dewdrop spider)	<i>Argyrodes elevatus</i>	Theridiidae	Icacos

Myriapods (Centipedes, Millipedes) – 9 species from 8 families

Common Name	Scientific Name	Family	Location
none (flat-backed millipede)	<i>Orthomorpha coarctata</i>	Paradoxosomatidae	Icacos
none (brush millipede)	<i>Lophoproctus</i> sp.	Polyxenidae	Soldado Rock
Yellow-banded Millipede	<i>Anadenobolus monilicornis</i>	Rhinocricidae	Trail 3
none (symphylan)	Sp. A	Scolopendrellidae	Trail 1
none (giant centipede)	<i>Scolopendra gigantea</i>	Scolopendridae	Icacos
none (giant centipede)	<i>Scolopendra morsitans</i>	Scolopendridae	Soldado Rock
none (centipede)	<i>Newportia</i> sp.	Scolopocryptopidae	Trail 4
none (snake millipede)	<i>Siphonocybe</i> sp.	Siphonophoridae	Icacos
none (snake millipede)	Sp. A	Spirobolellidae	Trail 1

Porifera (Sponges) – 3 species from 3 families

Common Name	Scientific Name	Family	Location
Orange Boring Sponge	<i>Ciona</i> sp.	Clionidae	Soldado Rock
High-veined Encrusting Sponge	<i>Spirastrella hartmani</i>	Spirastrellidae	Soldado Rock
Black Encrusting Sponge	<i>Artemisina melana</i>	Microcionidae	Soldado Rock

Hydroids – 1 species from 1 family

Common Name	Scientific Name	Family	Location
none (hydroid)	Sp. A	Sertulariidae	Soldado Rock

Annelids – 2 species from 2 families

Common Name	Scientific Name	Family	Location
none (feather duster worm)	Sp. A	Sabellidae	Soldado Rock
none (tube worm)	Sp. A	Serpulidae	Soldado Rock

Tunicates – 1 species from 1 family

Common Name	Scientific Name	Family	Location
none (sea squirt)	<i>Clavelina oblonga</i>	Clavelinidae	Soldado Rock

Fungus – 2 species from 2 families and 19 morphospecies

Common Name	Scientific Name	Family	Location
Splitgill Mushroom	<i>Schizophyllum commune</i>	Schizophyllaceae	Soldado Rock
Veiled Lady Fungus	<i>Phallus indusiatus</i>	Phallaceae	Icacos
none (bracket fungus)	Morphospecies 1	unknown	Icacos
none (bracket fungus)	Morphospecies 2	unknown	Icacos
none (coral fungus)	Morphospecies 3	unknown	Icacos
none (fungus)	Morphospecies 4	unknown	Icacos
none (fungus)	Morphospecies 5	unknown	Icacos
none (bracket fungus)	Morphospecies 6	unknown	Icacos
none (bracket fungus)	Morphospecies 7	unknown	Icacos
none (bracket fungus)	Morphospecies 8	unknown	Icacos
none (bracket fungus)	Morphospecies 9	unknown	Icacos
none (bracket fungus)	Morphospecies 10	unknown	Icacos
none (bracket fungus)	Morphospecies 11	unknown	Icacos
none (fungus)	Morphospecies 12	unknown	Icacos
none (fungus)	Morphospecies 13	unknown	Icacos
none (fungus)	Morphospecies 14	unknown	Icacos
none (fungus)	Morphospecies 15	unknown	Icacos
none (fungus)	Morphospecies 16	unknown	Icacos
none (fungus)	Morphospecies 17	unknown	Icacos
none (fungus)	Morphospecies 18	unknown	Icacos
none (fungus)	Morphospecies 19	unknown	Icacos

Micro fungi – 19 morphospecies

Bacteria – 16 morphospecies

Bryophytes (Mosses and Lichens) – 5 species from 5 families

Common Name	Scientific Name	Family	Location
none (moss)	<i>Bryum</i> sp.	Bryaceae	Trail 1
none (moss)	<i>Calymperes palisotii</i>	Calymperaceae	Trail 1 and 4
none (moss)	<i>Fissidens</i> c.f. <i>flaccidus</i>	Fissidentaceae	Trail 3
none (liverwort)	<i>Lejeunea</i> sp.	Lejeuneaceae	Trail 1 and 4
none (moss)	<i>Taxithelium</i> sp.	Sematophyllaceae	Trail 4

Algae – 6 species from 4 families/orders

Common Name	Scientific Name	Family/Order	Location
Serrated Strap Algae	<i>Dictyota ciliolata</i>	Dictyotaceae	Soldado Rock
"Y-branched Algae"	<i>Dictyota</i> sp.	Dictyotaceae	Soldado Rock
White Scroll Algae	<i>Padina sanctae-crucis</i>	Dictyotaceae	Soldado Rock
"Turf Algae"	Sp. A	Chlorophyta	Soldado Rock
"Crustose Coralline Algae"	Sp. A	Corallinales	Soldado Rock
Flat Twig Algae	<i>Amphiroa tribulus</i>	Corallinaceae	Soldado Rock

Terrestrial Plants – 272 species from 78 families

Common Name	Scientific Name	Family	Location
Minnie Root	<i>Ruellia tuberosa</i>	Acanthaceae	Icacos
Rayo	<i>Cordyline fruticosa</i>	Agavaceae	Icacos
Shoreline Seapurslane	<i>Sesuvium portulacastrum</i>	Aizoaceae	Icacos
Witchweed	<i>Achyranthes aspera</i>	Amaranthaceae	Icacos
Spinach/Bhagi	<i>Amaranthus dubius</i>	Amaranthaceae	Icacos
Silverhead	<i>Blutaparon vermiculare</i>	Amaranthaceae	Icacos
Prostrate Globe Amaranth	<i>Gomphrena serrata</i>	Amaranthaceae	Icacos
Crinum	<i>Crinum americanum</i>	Amaryllidaceae	Icacos
Mango	<i>Mangifera indica</i>	Anacardiaceae	Icacos
Pommecythere	<i>Spondias dulcis</i>	Anacardiaceae	Icacos
Hogplum	<i>Spondias mombin</i>	Anacardiaceae	Icacos
Common Plum	<i>Spondias purpurea</i>	Anacardiaceae	Icacos
Sour Sop	<i>Annona muricata</i>	Annonaceae	Icacos
Ashoka	<i>Polyalthia longifolia</i>	Annonaceae	Icacos
Wild Cashima	<i>Rollinia exsucca</i>	Annonaceae	Icacos
Pennywort	<i>Hydrocotyle</i> sp.	Apiaceae	Icacos
Desert Rose	<i>Adenium obesum</i>	Apocynaceae	Icacos
Allamanda	<i>Allamanda cathartica</i>	Apocynaceae	Icacos
Red Head	<i>Asclepias curassavica</i>	Apocynaceae	Icacos
Madar	<i>Calotropis procera</i>	Apocynaceae	Icacos
Lucky Nut	<i>Thevetia peruviana</i>	Apocynaceae	Icacos
Corazon de Jesu	<i>Caladium bicolor</i>	Araceae	Icacos
Dasheen	<i>Colocasia esculenta</i>	Araceae	Icacos
Duck Weed	<i>Lemna</i> sp.	Araceae	Icacos
Monstera	<i>Monstera</i> sp.	Araceae	Icacos
Hog Tannia	<i>Xanthosoma undipes</i>	Araceae	Icacos
Jereton	<i>Schefflera morototoni</i>	Araliaceae	Icacos
Norfolk Island Pine	<i>Araucaria heterophylla</i>	Araucariaceae	Icacos
Gru-Gru Palm	<i>Acrocomia aculeata</i>	Arecaceae	Icacos
Manila Palm	<i>Adonidia merrillii</i>	Arecaceae	Icacos
Tucum Palm	<i>Astrocaryum aculeatum</i>	Arecaceae	Icacos
Roseau	<i>Bactris major</i>	Arecaceae	Icacos

none (spiny palm)	<i>Bactris sp.</i>	Arecaceae	Icacos
Coconut	<i>Cocos nucifera</i>	Arecaceae	Icacos
Camwell	<i>Desmoncus orthacanthos</i>	Arecaceae	Icacos
none (fan palm)	<i>Licuala sp.</i>	Arecaceae	Icacos
Chinese Fan Palm	<i>Livistona chinensis</i>	Arecaceae	Icacos
Date Palm	<i>Phoenix dactylifera</i>	Arecaceae	Icacos
Royal Palm	<i>Roystonea oleracea</i>	Arecaceae	Icacos
Snake tongue	<i>Sansevieria hyacinthoides</i>	Asparagaceae	Icacos
Aloe Vera	<i>Aloe vera</i>	Asphodelaceae	Icacos
Railway Daisy	<i>Bidens pilosa</i>	Asteraceae	Icacos
Gainder	<i>Cosmos bipinnatus</i>	Asteraceae	Icacos
Iron Weed	<i>Cyanthillium cinereum</i>	Asteraceae	Icacos
Wild Patchouli	<i>Cyrtocymura scorpioides</i>	Asteraceae	Icacos
Bhangra	<i>Eclipta prostrata</i>	Asteraceae	Icacos
Christmas Bush	<i>Chromolaena odorata</i>	Asteraceae	Icacos
Bitter Vine	<i>Mikania micrantha</i>	Asteraceae	Icacos
Tropical Cinchweed	<i>Pectis elongata</i>	Asteraceae	Icacos
none (cereal bush)	<i>Pluchea sp.</i>	Asteraceae	Icacos
Carpet Daisy	<i>Sphagneticola trilobata</i>	Asteraceae	Icacos
Man Information Bush	<i>Vernonia remotiflora</i>	Asteraceae	Icacos
Cats Claw Vine	<i>Bignoniaceae</i>	Bignoniaceae	Icacos
Calabash	<i>Crescentia cujete</i>	Bignoniaceae	Icacos
Apamate	<i>Tabebuia rosea</i>	Bignoniaceae	Icacos
Cypre	<i>Cordia alliodora</i>	Boraginaceae	Icacos
Bois Lay Lay	<i>Cordia collococca</i>	Boraginaceae	Icacos
Black Sage	<i>Cordia curassavica</i>	Boraginaceae	Icacos
Bromeliad	<i>Aechmea aquilega</i>	Bromeliaceae	Icacos
Wild Pine	<i>Tillandsia flexuosa</i>	Bromeliaceae	Icacos
Rachette Cactus	<i>Opuntia sp.</i>	Cactaceae	Icacos
Old Man's Beard	<i>Rhipsalis baccifera</i>	Cactaceae	Icacos
Hackleberry	<i>Celtis iguaneus</i>	Cannabaceae	Icacos
White Sage	<i>Trema micrantha</i>	Cannabaceae	Icacos
Canna Lily	<i>Canna indica</i>	Cannaceae	Icacos
Caperbush	<i>Capparis sp.</i>	Capparaceae	Icacos
Paw Paw	<i>Carica papaya</i>	Caricaceae	Icacos
Fat Pork	<i>Chrysobalanus icaco</i>	Chrysobalanaceae	Icacos
Button Mangrove	<i>Conocarpus erectus</i>	Combretaceae	Icacos
White Mangrove	<i>Laguncularia racemosa</i>	Combretaceae	Icacos
Indian Almond	<i>Terminalia catappa</i>	Combretaceae	Icacos
Climbing Dayflower	<i>Commelina diffusa</i>	Commelinaceae	Icacos
Water Grass	<i>Commelina erecta</i>	Commelinaceae	Icacos
Beach morning-glory	<i>Ipomoea imperati</i>	Convolvulaceae	Icacos
Bayhops	<i>Ipomoea pes-caprae</i>	Convolvulaceae	Icacos

none (vine)	<i>Ipomoea</i> sp.	Convolvulaceae	Icacos
Crêpe Ginger	<i>Cheilocostus speciosus</i>	Costaceae	Icacos
Wild Ginger	<i>Costus scaber</i>	Costaceae	Icacos
Wild Karile	<i>Momordica charantia</i>	Cucurbitaceae	Icacos
Swamp Flatsedge	<i>Cyperus ligularis</i>	Cyperaceae	Icacos
Nut Grass	<i>Cyperus rotundus</i>	Cyperaceae	Icacos
Suriname Sedge	<i>Cyperus surinamensis</i>	Cyperaceae	Icacos
Scallion Grass	<i>Eleocharis mutata</i>	Cyperaceae	Icacos
Fimbry	<i>Fimbristylis spadicea</i>	Cyperaceae	Icacos
none (herb)	<i>Scleria melaleuca</i>	Cyperaceae	Icacos
Butterwood	<i>Diospyros inconstans</i>	Ebenaceae	Icacos
none (tree)	<i>Diospyros</i> sp. (exotic)	Ebenaceae	Icacos
Ironwood	<i>Erythroxylum havanense</i>	Erythroxylaceae	Icacos
Acalypha	<i>Acalypha arvensis</i>	Euphorbiaceae	Icacos
Chaya	<i>Cnidocolus aconitifolius</i>	Euphorbiaceae	Icacos
Croton	<i>Codiaeum variegatum</i>	Euphorbiaceae	Icacos
Grassleaf Spurge	<i>Euphorbia graminea</i>	Euphorbiaceae	Icacos
Manchineel	<i>Hippomane mancinella</i>	Euphorbiaceae	Icacos
Cassava	<i>Manihot esculenta</i>	Euphorbiaceae	Icacos
Milkwood	<i>Sapium glandulosum</i>	Euphorbiaceae	Icacos
none (herb)	Sp. A	Euphorbiaceae	Icacos
Jumbie Bead	<i>Abrus precatorius</i>	Fabaceae	Icacos
Acacia	<i>Acacia</i> sp.	Fabaceae	Icacos
Tantakayo	<i>Albizia niopoides</i> var. <i>niopoides</i>	Fabaceae	Icacos
Alyce Clover	<i>Alysicarpus vaginalis</i>	Fabaceae	Icacos
Andira	<i>Andira inermis</i> ssp. <i>inermis</i>	Fabaceae	Icacos
none (tree)	<i>Bauhinia</i> sp.	Fabaceae	Icacos
Gray Nickernut	<i>Caesalpinia bonduc</i>	Fabaceae	Icacos
Pigeon Pea	<i>Cajanus cajan</i>	Fabaceae	Icacos
Niauré	<i>Calliandra guildingii</i>	Fabaceae	Icacos
Rattlepod	<i>Crotolaria retusa</i>	Fabaceae	Icacos
Coinvine	<i>Dalbergia ecastaphyllum</i>	Fabaceae	Icacos
Three-flower Beggarweed	<i>Desmodium triflorum</i>	Fabaceae	Icacos
Manioc La Chapelle	<i>Entada polystachya</i>	Fabaceae	Icacos
Water Immortelle	<i>Erythrina fusca</i>	Fabaceae	Icacos
Jumbie Bead	<i>Erythrina pallida</i>	Fabaceae	Icacos
Wild Hops	<i>Flemingia strobilifera</i>	Fabaceae	Icacos
Glory Cedar	<i>Gliricidia sepium</i>	Fabaceae	Icacos
Pois Doux	<i>Inga ingoides</i>	Fabaceae	Icacos
Blood Root	<i>Machaerium isadelphum</i>	Fabaceae	Icacos
none (tree)	<i>Machaerium lunatum</i>	Fabaceae	Icacos
Saltfish Wood	<i>Machaerium robinifolium</i>	Fabaceae	Icacos

Findigo	<i>Mimosa pigra</i>	Fabaceae	Icacos
Sensitive Plant	<i>Mimosa pudica</i>	Fabaceae	Icacos
Kudzu	<i>Pueraria phaseoloides</i>	Fabaceae	Icacos
Saman	<i>Samanea saman</i>	Fabaceae	Icacos
Worm Bush	<i>Senna alata</i>	Fabaceae	Icacos
Whitebark Senna	<i>Senna bacillaris</i>	Fabaceae	Icacos
none (shrub)	<i>Senna sp.</i>	Fabaceae	Icacos
Tamarind	<i>Tamarindus indica</i>	Fabaceae	Icacos
Sweet Acacia	<i>Vachellia farnesiana</i>	Fabaceae	Icacos
none (climber)	<i>Vigna luteola</i>	Fabaceae	Icacos
none (string bean)	<i>Vigna sp.</i>	Fabaceae	Icacos
Balisier	<i>Heliconia bihai</i>	Heliconiaceae	Icacos
Canal Lily	<i>Heliconia psittacorum</i>	Heliconiaceae	Icacos
none (herb)	<i>Heliconia spathocircinata</i>	Heliconiaceae	Icacos
none (tree)	<i>Aegiphila integrifolia</i>	Lamiaceae	Icacos
Chandler Bush	<i>Leonotis nepetifolia</i>	Lamiaceae	Icacos
Teak	<i>Tectona grandis</i>	Lamiaceae	Icacos
Fine Leaf Thyme	<i>Thymus vulgaris</i>	Lamiaceae	Icacos
Love Vine	<i>Cassytha filiformis</i>	Lauraceae	Icacos
Avocado	<i>Persea americana</i>	Lauraceae	Icacos
Guatacare	<i>Eschweilera subglandulosa</i>	Lecythidaceae	Icacos
none (herb)	<i>Lindernia sp.</i>	Linderniaceae	Icacos
none (herb)	<i>Huperzia sp.</i>	Lycopodiaceae	Icacos
Pomegranate	<i>Punica granatum</i>	Lythraceae	Icacos
Butterfly Vine	<i>Mascagnia ovatifolia</i>	Malpighiaceae	Icacos
none (herb)	<i>Stigmaphyllon sp.</i>	Malpighiaceae	Icacos
Musk Mallow	<i>Abelmoschus moschatus</i>	Malvaceae	Icacos
Silk Cotton	<i>Ceiba pentandra</i>	Malvaceae	Icacos
Cotton	<i>Gossypium barbadense</i>	Malvaceae	Icacos
Bois d'Orme	<i>Guazuma ulmifolia</i>	Malvaceae	Icacos
Hibiscus	<i>Hibiscus mutabilis</i>	Malvaceae	Icacos
Gimauve	<i>Malachra alceifolia</i>	Malvaceae	Icacos
Bois Flow	<i>Ochroma pyramidale</i>	Malvaceae	Icacos
Common Wireweed	<i>Sida acuta</i>	Malvaceae	Icacos
Coolie Pistache	<i>Sterculia apetala</i>	Malvaceae	Icacos
Seaside Mahoe	<i>Thespesia populnea</i>	Malvaceae	Icacos
Burbark	<i>Triumfetta sp.</i>	Malvaceae	Icacos
Indian Mallow	<i>Urena lobata</i>	Malvaceae	Icacos
Soharee	<i>Calathea lutea</i>	Marantaceae	Icacos
Arrowroot	<i>Thalia geniculata</i>	Marantaceae	Icacos
Neem	<i>Azadirachta indica</i>	Meliaceae	Icacos
Spanish Cedar	<i>Cedrela odorata</i>	Meliaceae	Icacos
Redwood	<i>Guarea guidonia</i>	Meliaceae	Icacos

Mahogany	<i>Swietenia macrophylla</i>	Meliaceae	Icacos
Breadfruit	<i>Artocarpus altilis</i>	Moraceae	Icacos
none (tree)	<i>Ficus amazonica</i>	Moraceae	Icacos
Weeping Fig	<i>Ficus benjamina</i>	Moraceae	Icacos
none (tree)	<i>Ficus maxima</i>	Moraceae	Icacos
Strangler Fig	<i>Ficus nymphaeifolia</i>	Moraceae	Icacos
Sacred Fig	<i>Ficus religiosa</i>	Moraceae	Icacos
Fustic	<i>Maclura tinctoria</i>	Moraceae	Icacos
none (banana)	<i>Musa</i> sp.	Musaceae	Icacos
none (shrub)	<i>Eugenia</i> sp.	Myrtaceae	Icacos
Guava	<i>Psidium guajava</i>	Myrtaceae	Icacos
Jamoon	<i>Syzygium cumani</i>	Myrtaceae	Icacos
Pomerac	<i>Syzygium malaccense</i>	Myrtaceae	Icacos
none (bougainvillea)	<i>Bougainvillea</i> sp.	Nyctaginaceae	Icacos
none (shrub)	<i>Guapira fragrans</i>	Nyctaginaceae	Icacos
none (tree)	<i>Guapira salicifolia</i>	Nyctaginaceae	Icacos
none (herb)	<i>Sauvagesia rubiginosa</i>	Ochnaceae	Icacos
Mexican Primrose-willow	<i>Ludwigia octovalvis</i>	Onagraceae	Icacos
none (orchid)	<i>Dendrobium</i> sp.	Orchidaceae	Icacos
Cockleshell Orchid	<i>Encyclia cochleata</i>	Orchidaceae	Icacos
Monk Orchid	<i>Oeceoclades maculata</i>	Orchidaceae	Icacos
none (orchid)	<i>Orchidaceae</i> sp.	Orchidaceae	Icacos
none (orchid)	<i>Phalaenopsis</i> sp.	Orchidaceae	Icacos
none (orchid)	<i>Vanda</i> sp.	Orchidaceae	Icacos
Five Finger	<i>Averrhoa carambola</i>	Oxalidaceae	Icacos
Passion Fruit Vine	<i>Passiflora cyanea</i>	Passifloraceae	Icacos
Pitted Stripeseed	<i>Piriqueta cistoides</i>	Passifloraceae	Icacos
Sour Cherry	<i>Phyllanthus acidus</i>	Phyllanthaceae	Icacos
none (shrub)	<i>Phyllanthus elsiae</i>	Phyllanthaceae	Icacos
none (shrub)	<i>Phyllanthus juglandifolius</i>	Phyllanthaceae	Icacos
none (shrub)	<i>Phyllanthus</i> sp.	Phyllanthaceae	Icacos
Caribbean Pine	<i>Pinus caribaea</i>	Pinaceae	Icacos
Cake Bush	<i>Piper marginatum</i>	Piperaceae	Icacos
Balie Doux	<i>Scorparia dulcis</i>	Plantaginaceae	Icacos
White Twinevine	<i>Funastrum clausum</i>	Plumbaginaceae	Icacos
White White Plumbago	<i>Plumbago scandens</i>	Plumbaginaceae	Icacos
Mangrove Rubber Vine	<i>Rhabdadenia biflora</i>	Plumbaginaceae	Icacos
Carpet Grass	<i>Axonopus compressus</i>	Poaceae	Icacos
Bamboo	<i>Bambusa vulgaris</i>	Poaceae	Icacos
Southern Sandspur	<i>Cenchrus echinatus</i>	Poaceae	Icacos
Bahama Grass	<i>Cynodon bacylon</i>	Poaceae	Icacos
Crows Foot Grass	<i>Dactyloctenium aegyptium</i>	Poaceae	Icacos
Jungle Rice	<i>Echinochloa colonum</i>	Poaceae	Icacos

Fowl Foot Grass	<i>Eleusine indica</i>	Poaceae	Icacos
none (grass)	<i>Homolepis aturensis</i>	Poaceae	Icacos
Bamboo Grass	<i>Lasiacis anomala</i>	Poaceae	Icacos
none (grass)	<i>Lasiacis</i> sp.	Poaceae	Icacos
none (grass)	<i>Olyra latifolia</i>	Poaceae	Icacos
Guinea Grass	<i>Panicum maximum</i>	Poaceae	Icacos
Bull Grass	<i>Paspalum fasciculatum</i>	Poaceae	Icacos
Silt Grass	<i>Paspalum vaginatum</i>	Poaceae	Icacos
none (dwarf corn grass)	<i>Poaceae</i> sp.	Poaceae	Icacos
Corn Grass	<i>Rottboellia cochinchinensis</i>	Poaceae	Icacos
Sugar Cane	<i>Saccharum officinarum</i>	Poaceae	Icacos
Knotroot Foxtail	<i>Setaria parviflora</i>	Poaceae	Icacos
Signal Grass	<i>Urochloa distachya</i>	Poaceae	Icacos
Coralita Vine	<i>Antigonon leptopus</i>	Polygonaceae	Icacos
Cuchape	<i>Coccoloba latifolia</i>	Polygonaceae	Icacos
Sea Grape	<i>Coccoloba uvifora</i>	Polygonaceae	Icacos
Small Leaf Grape	<i>Coccoloba venosa</i>	Polygonaceae	Icacos
none (fern)	<i>Nephrolepis biserrata</i>	Polypodiaceae	Icacos
Golden Leather Fern	<i>Acrostichum aureum</i>	Pteridaceae	Icacos
none (fern)	<i>Acrostichum daneaefolium</i>	Pteridaceae	Icacos
none (fern)	<i>Ceratopteris thalictroides</i>	Pteridaceae	Icacos
Fat Bush	<i>Gouania polygama</i>	Rhamnaceae	Icacos
none (shrub)	<i>Gouania velutina</i>	Rhamnaceae	Icacos
Donks	<i>Ziziphus mauritiana</i>	Rhamnaceae	Icacos
Red Mangrove	<i>Rhizophora mangle</i>	Rhizophoraceae	Icacos
Mapepire Root	<i>Chiococca alba</i>	Rubiaceae	Icacos
Slender Buttonweed	<i>Diodia ocymifolia</i>	Rubiaceae	Icacos
Monkey Apple	<i>Genipa americana</i>	Rubiaceae	Icacos
none (tree)	<i>Guettarda odorata</i>	Rubiaceae	Icacos
Monkey Bone	<i>Hamelia patens</i>	Rubiaceae	Icacos
none (shrub)	<i>Hamelia</i> sp.	Rubiaceae	Icacos
Ixora	<i>Ixora coccinea</i>	Rubiaceae	Icacos
Noni	<i>Morinda citrifolia</i>	Rubiaceae	Icacos
Indigo Berry	<i>Randia aculeata</i>	Rubiaceae	Icacos
Chinee Tambran	<i>Vangueria madagascariensis</i>	Rubiaceae	Icacos
Chaconia	<i>Warszewiczia coccinea</i>	Rubiaceae	Icacos
none (citrus)	<i>Citrus</i> sp.	Rutaceae	Icacos
none (herb)	Sp. A	Rutaceae	Icacos
Wild Lime	<i>Zanthoxylum fagara</i>	Rutaceae	Icacos
L'Epinet	<i>Zanthoxylum martinicense</i>	Rutaceae	Icacos
Pipewood	<i>Casearia decandra</i>	Salicaceae	Icacos
Clean Teeth	<i>Casearia guianensis</i>	Salicaceae	Icacos
none (shrub)	<i>Casearia spinescens</i>	Salicaceae	Icacos

Wild Coffee	<i>Casearia sylvestris</i>	Salicaceae	Icacos
Ceres	<i>Flacourtia indica</i>	Salicaceae	Icacos
Maraqil	<i>Cupania americana</i>	Sapindaceae	Icacos
Supple Jack	<i>Paullinia pinnata</i>	Sapindaceae	Icacos
Soap Seed	<i>Sapindus saponaria</i>	Sapindaceae	Icacos
Caimate	<i>Chrysophyllum cainito</i>	Sapotaceae	Icacos
Sapodilla	<i>Manilkara zapota</i>	Sapotaceae	Icacos
none (sweet fruit)	Sp. A	Sapotaceae	Icacos
Goatweed	<i>Capraria bifolia</i>	Scrophulariaceae	Icacos
Bitterwood	<i>Quassia amara</i>	Simaroubaceae	Icacos
none (pepper)	<i>Capsicum annuum</i>	Solanaceae	Icacos
Hot Pepper	<i>Capsicum chinense</i>	Solanaceae	Icacos
Jamaican Nightshade	<i>Solanum jamaicense</i>	Solanaceae	Icacos
Dog Teeth	<i>Solanum stramonifolium</i>	Solanaceae	Icacos
none (herb)	Sp. A	Solanaceae	Icacos
Cat Tail	<i>Typha domingensis</i>	Typhaceae	Icacos
Bois Canon	<i>Cecropia peltata</i>	Urticaceae	Icacos
Red Stinging Nettle	<i>Laportea aestuans</i>	Urticaceae	Icacos
Cutlet	<i>Citharexylum spinosum</i>	Verbenaceae	Icacos
Golden Dewdrop	<i>Duranta erecta</i>	Verbenaceae	Icacos
Black Sage	<i>Lantana camara</i>	Verbenaceae	Icacos
Sage	<i>Lantana sp.</i>	Verbenaceae	Icacos
False Thyme	<i>Lippia micromera</i>	Verbenaceae	Icacos
Frog Fruit	<i>Phyla nodiflora</i>	Verbenaceae	Icacos
Vervine	<i>Stachytarpheta jamaicensis</i>	Verbenaceae	Icacos
Blister Bush	<i>Cissus verticillata</i>	Vitaceae	Icacos