THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

April - June 2011 **Issue No: 2/2011**

Botany Field Trip Report, Sunday 27th March, 2011

Moruga Bouffe

Report by Mike G. Rutherford

Top centre on mount - **Reg Potter on top of the biggest mount at Moruga Bouffe giving an animated talk about mud volcanoes to a captivated audience of field naturalists.**

(full article on page 13)

photo: Eddison Baptiste

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Editor's note
Many thanks to all who contributed and assisted with articles and photographs.

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THE CONFLICTED NATURALIST

by Christopher K. Starr
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My house, like Victor Quesnel's, is a sort of wildlife sanctuary. Mosquitoes, non-native cockroaches and most termites are unwelcome, but just about everybody else is at least tolerated. Three species of geckos (and the occasional skink) leave their, uh, leavings on the floor, a small price to pay for the pleasure of their squeaking, scurrying company. For a time the house was home to a Cook's tree boa, whom I would encounter in unexpected corners. The snake was quite a bit messier than the unamused lizards, but I was sure he was worth it.

In some years house wrens nest inside. They are certainly prejudicial to good housekeeping, but so what? They are such delightfully lively little birds that one can forgive them all manner of sins.

A short-tailed fruit bat roosted in the bathroom for some months. The bat sometimes brought food items into the house, dropping the uneaten parts on the floor, so that I was able to see what it was eating. (I believe Victor once did a study of the feeding habits of bats roosting in his house.) My bat dropped a great many pwa-bwa (*Swartzia pinnata*) seeds after chewing off the sweet white ariloid. This corroborated my hypothesis that pwa-bwa seeds are bat-dispersed.

Tarantulas and web-building spiders are certainly present. Every now and then I clean old, disused silk from the ceiling, trying not to damage or even inconvenience the little eight-legged darlings. All arachnids are welcome in Obronikrom.

Many other beasts wander indoors for much shorter periods. I get nocturnal maribons at the lights. Whacking big robust cockroaches fly in the windows, skedaddle about and then depart. Moths often come in, stay at rest through the day, and fly back out when night returns.

Besides these, two social wasps nest inside from time to time, and these and several others nest on the outside of the house, along with mud-nesting solitary wasps, carpenter ants, stingless bees and the occasional orchid bee. Although I have never seen either of them inside the house, army ants raid across the patio a couple of times a year, and bachac columns walk along the edge every night.

On 6 April I awoke to notice three unaccustomed wasps clinging to the ceiling over my head. Now, that was interesting, so I did exactly what you would do. I picked up some plastic vials, collected the wasps, and then whipped out my hand lens. It was *Agelaia multipicta*. This widely-distributed maribon is far from common in Trinidad. I encounter a colony on average less than once a year, so I was happy to get specimens right at home.

When I came home that evening I noticed several more on the ceiling and flying about the lights. It struck me that there must be a new colony nearby. Not exactly. It wasn't near the house but right inside it. The next morning I happened to look into the spare bathroom and met a truly striking sight. There was a great mass of wasps hanging in clusters on the far wall, spread over the ceiling and especially dense in the angle between them, where they had already begun to build combs.

My immediate reaction was sharp delight. Hot damn! A real live *Agelaia* colony right there in my own house. And then, very quickly, I had misgivings. This and some other *Agelaia* species build huge colonies -- this founding swarm appeared to comprise several thousand individuals -- and they are not docile when disturbed. I have been stung by several species, and it is always painful. *A. multipicta* (and possibly most members of the genus) have barbs on the stinger, so that it remains fixed in the wound, where it keeps on

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Annoying and Blood Sucking Arthropods of Trinidad and Tobago

3. *Simulium* Black Flies

by Elisha S. Tikasingh
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Black flies, *Simulium*, are sometimes mistakenly called sand flies probably because they are small, usually less than 5.0 mm in length. While many members of this group are black, there are others that are grey, yellow or orange. The antennae and legs of a black fly are short, the thorax is somewhat arched giving it a hump-backed look, and their wings are clear.

These black flies are called buffalo gnats in the U.S.,cabouri or kabowra flies in Guyana, pium in Brazil and congo flies in Trinidad. Their bites are very painful and very more so than the sand flies. This is due to their mouth parts which contain blade-like lancets which macerate the skin at the bite site causing intense pain. The saliva introduced in the bites cause an allergic reaction with severe itching and swelling.)

Effects of Black Fly bites.
Initial bite may be accompanied by a red spot (shown in circles) and later by local swelling.
Photo: Elisha Tikasingh

***Simulium* Black Fly**
feeding on human arm
Photo: Elisha Tikasingh

Back Fly larva on vegetation.
Next to it is an empty pupal skin
Photo: Elisha Tikasingh

Black flies breed in fast running streams, creeks and rivers where the water is well aerated. They will not breed in ponds and stagnant water. Eggs are deposited in masses near rocks, aquatic vegetation and other objects in the water which the larvae cling to on hatching.

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The larvae undergo six moults and then spins a cocoon for pupal development. The pupa contains many filaments which are very diagnostic to the species level.

Back Fly cocoon stage
image found at:
ttp://www.bgsd.k12.wa.us/hml/jr_cam/macros/upper_efl_f05/up_efl_f05a.html

The adults are difficult to identify and generally one must have the associated pupal skin for definitive identification. The next time you are at a mountain stream where the water is not polluted, check the leaves of vegetation or sticks submerged in the water and you may find black fly larvae and pupae. The entire life cycle from egg to adult may take from two to three months depending on temperature the of the water. Black flies are very robust and are strong flyers and may be found far from their breeding sites. Adults are active during the day, and hardly enter homes.

Staff of the Trinidad Regional Virus Laboratory have collected and identified seven species mainly from the rivers of the Northern Range (CAREC unpublished data). Based mainly on adult morphology the following species were: *Simulium clarki, S. metallicum, S. placidum, S. incrustatum, S. sp. near incrustatum, S. samboni* and *S. subnigrum).*

In Trinidad and Tobago, black flies are not known to carry any disease, but elsewhere such as north America in the spring and summer months they emerge in such large numbers that they annoy animals preventing them from feeding resulting in emaciation and sometimes they may even enter the nostrils of the animals suffocating them causing their deaths. In Guyana, they also emerge in large numbers during the rainy season so that people are reluctant to go in the interior and thus preventing development of the area.

In West Africa, Central America and Venezuela species of *Simulium* carry a threadlike filarial worm, *Onchocerca volvulus* to people living near rivers. The adult worm live in subcutaneous nodules on the joints or trunk (Africa) and shoulders and head (Central America and Venezuela) from where they produce larvae called microfilariae which are released to other parts of the body. Some of the microfilariae may enter the eye causing blindness and the disease known as "river blindness" or onchocerciasis. When one sees pictures showing "the blind leading the blind" the blindness in these individuals is usually due to onchocerciasis.

In Guyana and the Brazilian Amazon, *Simulium* species of the *amazonicum* group (now identified as *S. oyapockense*) are vectors of the filarial worm *Mansonella ozzardi* to humans (Nathan *et al.* 1982, Shelley *et al.* 1980, Shelley *et al.* 2004). Infection with *Mansonella ozzardi* may cause articular pain particularly in adults.

Control is by killing the larvae at its breeding sites. Fogging with an appropriate insecticide give temporary relief. Personal protection is by the use of insect repellents.

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Botany Field Trip Report, Saturday 8th March, 2008

Monos Island

Report by Lester W. Doodnath and Natasha A. Mohammed

Monos Island Group Shoot (Left to right) *photo: Natasha Mohammed*

Front row : **Winston Johnson, Stephen Smith, Esperanza Luengo, Shane Ballah, Nicholas See Wai, Juanita Henry, Jo-Anne Sewlal, Betsy Mendez, Lester Doodnath**

Second row: **Bobby Oumdath, BonnieTyler, Ray Martinez, Christopher Starr, Kayman Sagar**

Back row: **Richard Peterson, Sheldon Brown, Michael Green**

During early Spanish times the island of Monos was inhabited by Red Howler Monkeys (*Alouatta seniculus*) which even at that time would have led a precarious existence due to little food or water being present on the island (de Verteuil 2002). These monkeys were soon extirpated and cotton growing was practiced together with subsistence fishing.

The avid botanists of this group learnt that on Monos that dry vegetation was normally found. According to Beard (1946) the deciduous seasonal forest originally present would have been a fasciation of the *Bursera–Lonchocarpus* association

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Monos Island *Lester Doodnath, Natasha Mohammed*

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which would have been the *Protium-Tabebuia* ecotone.

Our objective was to look for *Bursera latifolia* which is the other species of Naked Indian (*B. simaruba* – with a papery, peeling bark). *B. latifolia* can be differentiated from *B. simaruba* by the leaves and flowers. However during this dry season visit all the leaves of these deciduous trees had fallen and telling the two species apart was not possible.

The first plant that caught our attention was the terrestrial *Anthurium genmanii* which has a normal presence here. Also terrestrial was *Bromelia plumeria* and *B. pitcairnia* seen growing on rocks.

Calliandra krugerii was seen growing as a stand of trees. Incense (*Protium guianense*) is part of the characteristic fasciation, when the leaves are crushed you get the characteristic smell of incense.

Balsam (*Copaifeira officinalis*) normally has smooth bark. Then we observed a fruiting Balsam tree with atypical bark that was not smooth. Why was this we wondered? Different island conditions? We saw that *Capparis hastate* has waxy shiny alternate leaves and that *Ouratea guildingi* has yellow flowers.

On the leaves of *Amyris simplicifolia* you see dots that indicate that it belongs in the citrus family, Rutaceae. You can tell this because when the leaves are crushed you get that characteristic smell.

Orchids observed included the Brown bee Orchid (*Oncidium altissimum), Oeceoclades maculata and Spiranthes sp.* The three-angled epiphytic cacti *Anthocereus pentagonus* has edible juicy fruit.

According to Hans Boos we were on the road that goes around Monos to an area that the Americans called "Saucey" which was a recreation location. We examined a Cat's Claw (*Macfadyena unguis-cati)* vine and flowers, whose leaves are glossy green with two leaflets per petiole and has a 3-pronged claw-like climbing appendage. The flowers are solitary, bright yellow, funnel-shaped, and have a short blooming during the dry season.

Indicative of the seaside vegetation of the western islands was Manchineel (*Hippomane mancinella*), Black mangrove (*Avicennia germinans*), White Mangrove (*Laguncularia racemosa*) and Button Mangrove (*Conocarpus erectus*). Button Mangrove can be told from the White Mangrove due to the striations on the bark.

Then we saw *Pithocellobium roseum* which has prickles on the bark. This was the first sighting for Monos and it was flowering in March. It had pink flowers and the pods were also observed.

Diospyros inconstans is indicative of dry forest and was in fruit. *Jacquinia sp* is coastal, together with *Hibiscus pernambucensis* (hairy leaves) and *Thespesia populnea* (smooth leaves). *Erythroxylum havanense* and *Citharexylum sp* were found by the jetty along the coast and indicative of the dry forest type.

We met Mr. Peter Tardieu in his garden near a former coconut estate where he grew various fruit crops. He spoke to us of issues of tenure for this area where before he had a lease for 20 years. Close by there is a marker by the US Engineer Department from the 1940's.

Non-avian fauna seen in and around this coconut estate were the Cracker (*Hamadryas sp*.) and Emperor butterflies (*Morpho peleides*). Ray Martinez collected specimens of the coastal mosquito (*Deinocerites magnus)* from crab holes. An Ameiva (*Ameiva ameiva*) lizard was observed here. The skull of a Caiman (*Caiman crocodilus*) was found by a colonial wall that the Siegert Family had built.

Conclusion

Quesnel (1996) reported a total of 34 plant species, as compared to a total of 47 species, in this brief, one-day, study (2008). Differences in number of species may be attributed to the length of time spent in the field, seasonal abundance, flowering species present, which would be attributed to stages of maturity and seasons- time of the year. The trails explored by parties on both occasions, may also

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Monos Island *Lester Doodnath, Natasha Mohammed*

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have differed and presented differences in composition. Although we did not find what we set out to for on this expedition, this present (2008) study revealed species indicative of Beard's *Protium-Tabebuia* ecotone.

Fruit of the Balsam Tree
Photo: Natasha A. Mohammed

Lester W. Doodnath next to Balsam Tree Trunk
Photo: Natasha A. Mohammed

Acknowledgments
The authors wish to express their deepest gratitude to Mr. Winston Johnson of the National Herbarium for both his field expertise, his knowledge in identifying the vegetation and his cooperative spirit with assisting with the spelling of such, during his vacation.

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For comparative species listing of plants found on Monos Island in 1996 and 2008 see Page 10

Botany Field Trip Report, Saturday 8th March, 2008

Bug Component - Monos Island

Report by Christopher K. Starr

The buggists present were Shane Ballah, JoAnne Sewlal, Christopher Starr and Danny Velez. As always, **we were on the lookout for novel instances of ants attending homopterans or extra-floral nectaries for sugars. On this trip we failed to find anything of the sort, but there was good success in another endeavour.**

Microcerotermes arboreus is a very common termite in both Trinidad and Tobago, where its characteristic hard, gray-brown nests are often seen on tree trunks. It has long been known that the bee *Centris derasa* nests in the nests of *A. arboreus*. The burrows made by the bee are often detectable at the termites' nest surface. *Microcerotermes indistinctus* is physically very similar to *M. arboreus*, such that the two are very hard to tell apart on the basis of the termites, themselves. However, their nests are readily distinguishable, first of all because *M. indistinctus* is only known to nest on the soil surface. These are, then, true "ethospecies", i.e. reproductively isolated species that can easily be told apart through behavioural characters but not or hardly through physical characters. We have found *M. indistinctus* on all three of the Bocas Islands and on the Chaguaramas Peninsula. It is especially abundant on Monos, and Shane and I had early taken data on nest structure and colony composition of the species there.

Dissection of nests had also shown the presence of cells closely resembling those of *C. derasas*, so it was evident that this or a closely related species is found in the nests of *M. indistinctus*. We collected 10 more colonies in order to augment our earlier dataset and to search for bees that could be identified to species. We did well in gaining new data on the termites, themselves. We found evidence of past *Centris* use in three of the nests and a single active cell with a late larva. We are now trying to rear this individual, in hopes of having an adult specimen.

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pumping venom. Al Hook would be coming to Trinidad for the summer, during which time that would be his bathroom. What kind of a host would leave a potentially dangerous colony of wasps to establish itself right there where a guest performs his ablutions?

So, very reluctantly, I concluded that the wasps had to go. It would have been so easy just to spray them, but it would also be dreadfully unprincipled. Whenever possible, a naturalist prefers to encourage unwelcome residents to move out unharmed by making the site less hospitable. For example, when asked how to rid a building of bats, my advice is to subject their roost to continuous light and a bothersome breeze from an electric fan. Bats, I find, get the point and decamp within days.

Dealing with it could not wait. A founding swarm has only a weak attachment to its chosen nest site, but as time passes and the colony builds a nest and fills it with developing brood the attachment will become much harder to break. Wasps with an investment to defend are ready to sting when it is threatened.

So, I left the bathroom light on, put a mosquito coil to burning, and went to work. I returned this evening to find the wasps gone, leaving intact their neat set of five parallel combs. The colony had absconded.

Maribons tend not to swarm very far, so the colony has probably refounded within a few hundred meters. I look forward to locating its new nest sites and paying my wasps a visit.

Christopher K. Starr

Botany Field Trip Report, Saturday 8th March, 2008

Comparative species listing of plants found on Monos Island in 1996 and 2008

Report by Lester W. Doodnath and Natasha A. Mohammed

Comparative species listing of plants found on Monos Island in 1996 and 2008				
Family	**Scientific name**	**Common name**	1996	2008
Anacardiaceae	*Spondias mombin*	Hog plum	Yes	Yes
Araceae	*Anthurium genmanii*			Yes
	Monstera adansonii			Yes
	Monstera sp.		Yes	
	Philodendron acutata			
	Philodendron sp.		Yes	
	Xanthosoma hilleborifolium		Yes	
Avicenniaceae	*Avicennia germinans*	Black mangrove		Yes
Bignoniaceae	*Crescentia cujete*	Calabash		Yes
	Lundia sp.	Liana	Yes	
	Macfadyena unguis-cati	Cat's Claw		Yes
Bombacaceae	*Ceiba pentandra*	Silk cotton	Yes	Yes
Bromeliaceae	*Bromelia plumeria* and *B. pitcairnia*			Yes
	Echemea auleatea			Yes
Burseraceae	*Protium guianense*	Incense	Yes	Yes
	Protium sagotianum	Gommier		Yes
	Bursera simaruba	Naked Indian		Yes
	Bursera latifolia	Naked Indian		Yes
Cactaceae	*Anthocereus pentagonus*			Yes
Caesalpiniaceae	*Copaifeira officinalis*			Yes
Capparaceae	*Capparis hastate*			Yes
Celastaraceae	*Maytenus sp.*			
Combretaceae	*Conocarpus erectus*		Yes	Yes
	Laguncularia racemosa	White mangrove	Yes	Yes
	Terminalia Amazonia	Olivier	Yes	
	Terminalia sp.			Yes
Ebenenaceae	*Diospyros inconstans*			Yes
Erythroxylaceae	*Erythroxylum havanense*			
Euphorbiaceae	*Hippomane mancinella*	Manchineel	Yes	Yes
Heliconiaceae	*Guazuma ulmifolia*	Bois b'Orme		Yes
Heliconiaceae	*Heliconia bihai*	Balisier	Yes	Yes
Heliconiaceae	*Heliconia hirsuta*		Yes	
Leguminosae	*Albizia niopiodes*	Tantakayo		Yes
	Albizia saman	Samaan		Yes
	Andira inermis	Angelin		Yes
	Brownea latifolia	Mountain rose	Yes	Yes
	Calliandra krugerii			Yes

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Comparative species listing of plants found on Monos Island in 1996 and 2008

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	Erythrina sp.	Mountain immortelle	Yes	
	Machaerium sp.	Saltfishwood		
	Pithocellobium roseum			Yes
	Swartzia pinnata	Bois pois	Yes	
	Lonchocarpus punctatus	Savonette	Yes	
Malpighiaceae	*Byrsonima spicata*	Serrette	Yes	
Malvaceae	*Hibiscus pernambucensis*	Seaside Mahoe		Yes
	Thespesia populnea			Yes
Moraceae or Cecropiaceae	*Cedrela odorata*	Cedar	Yes	
	Artocarpus lakoocha			Yes
	Artocarpus sp.			Yes
	Castilla elastic	Rubber		Yes
	Maclura tinctoria	Fustic		
	Ficus trigonata	White ficus		Yes
	Cecropia peltata	Bois canot	Yes	Yes
Nyctaginaceae	*Pisonia fragrans*	Jiggerwood		Yes
Ochnaceae	*Ouratea guildingi*			Yes
Orchidaceae	*Oeceoclades maculata*			Yes
	Oncidium altissimum	Brown Bee Orchid		Yes
	Spiranthes sp.			Yes
Palmae	*Bactris major*	Roseau	Yes	
	Desmoncus			
Piperaceae	*Piper aduncum*		Yes	
	Piper marginatum	Sweet bush	Yes	
	Piper tuberculatum	Candle bush	Yes	
Rubiaceae	*Morinda citrifolia*	Noni	Yes	Yes
	Rudgea hostmanniana	Bois tattoo	Yes	
	Warszewiczia coccina	Chaconia	Yes	
Rutaceae	*Amyris simplicifolia*			Yes
	Zanthoxylum martinicensis	L'epinet	Yes	
Samydaceae or Slacourtiaceae	*Casearia sp.*		Yes	
Sapindaceae	*Cupania americana*	Maraquil	Yes	Yes
Solygonaceae	*Coccoloba krugerii*			Yes
	Coccoloba latifolia			Yes
	Coccoloba sp.	Cuchape	Yes	
Sterculiaceae	*Theobroma cacao*	Cocoa		Yes
Theothrastaceae	*Jacquinia armillaris*			Yes
Tilliaceae	*Apeiba schomburghii*	Tobago sandbox	Yes	
Verbenaceae	*Citharexylum sp.*	Cutlet or Fiddlewood	Yes	Yes
	Stachytarpheta jamaicensis	Rat tail or Vervine	Yes	

Botany Field Trip Report, Saturday 8th March, 2008

Bird list of botany trip to Monos Island

Report by Matt Kelly

Family	Scientific name	Common name
Cathartidae	*Coragyps atratus*	Black Vulture
Cerylidae	*Megaceryle torquata*	Ringed Kingfisher
Falconidae	*Milvago chimachima*	Yellow-headed Caracara
Icteridae	*Psarocolius decumanus*	Crested Oropandola
Pelecanidae	*Pelecanus occidentalis*	Brown Pelican
Scolopacidae	*Actitis macularius*	Spotted Sandpiper
Thamnophilidae	*Sakesphorus Canadensis*	Black-crested Antshrike
Thraupidae	*Coereba flaveola*	Bananaquit
	Tachyphonus rufus	White-lined Tanager
Trochilidae	*Amazilia tobaci*	Copper-rumped Hummingbird
Tyrannidae	*Elaenia flavogaster*	Yellow-bellied Elainia
	Myiarchus tyrannulus	Brown Crested Flycatcher
	Pitangus sulphuratus	Great Kiskadee

Left to right
Dan Jaggernauth and Winston Johnson

Standing next to an Albesia Tree Trunk

Photo: Natasha A. Mohammed

Simulium Black Flies *(Continued from page 5)*

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Field Trip Report, Sunday 27th March, 2011

Moruga Bouffe

Report by Mike G. Rutherford

The usual early start on Sunday morning saw several carloads of people assemble outside the south gate of UWI. There was some debate about which route we were to take with most people assuming that we would head south to San Fernando then past Princes Town and on to Moruga. However, it was announced that we would all head east to Sangre Grande and then down Manzanilla way, past Galeota Point and then through the Petrotrin checkpoint to access the road to Moruga Bouffe from the eastern side. We arrived at our destination just after 10am.

After the approximately 30 people had put their boots on and slapped on sunscreen and bug repellent we assembled at 10:20am. Dan Jaggernauth and Reginald Potter gave a brief talk about the walk and the destination. **We were going to see the Moruga Bouffe, a mud volcano in the middle of the forest. A mud volcano happens when gas and mud rise up through a fault in the earth's surface, when one occurs in a tropical forest it forms what is called a tassik – an open area surrounded by forest. In the tassik, which can be several acres across, gas bubbles up through craters of different sizes and shapes. On the way we were also going to see one of the biggest trees in Trinidad.**

The group started the walk by heading along a partly overgrown road, on the way there were several old oil pumps which seemed to be a bit worse for wear but were still slowly bringing up the precious black liquid.

Soon Dan had called his first halt, in the vegetation at the side of the road he had found some Zeb-a-pik (*Neurolaena lobata*) a shrub about 2 metres high with long pointed leaves and clusters of small yellow flowers. The leaves and flowers can be used to make a bitter tasting tea for the treatment of fever and menstrual pains, Bonnie Tyler tasted the flowers and confirmed they were bitter.

Meanwhile Stevland Charles was looking into a roadside ditch trying to locate the appropriately named Windward Ditch Frog (*Leptodactylus validus*) which could be heard calling but was keeping itself well hidden. Up above several people spotted a Plumbeous Kite (*Ictinia plumbea*). This is a fairly easy bird of prey to identify with its grey colouring and long wings projecting well beyond the tail. It has the habit of perching on dead branches and feeding on flying insects caught on the wing. As we were surrounded by butterflies, dragonflies and damselflies along the road I'm sure there was no shortage of feeding options for the kite.

Just as we came to the end of the old road we had one last exciting find before starting on the forest path. In a shallow puddle covered in algae and rotting leaves I saw a slight movement which could only have been made by an animal. Treading carefully I probed gently with my machete and was pleasantly surprised to find a small Common Galap (*Rhinoclemmys punctularia*). I picked it up and called out for people to come and get a look and soon the wee terrapin was being photographed from all angles. Stevland gave everyone a quick talk about the animal and its habits and we debated whether we should take it down to the nearby stream rather than leave it in a murky puddle. However, after deciding that it may have just spent the last few days getting up from the stream I put it back where I found it.

Almost as soon as we entered the forest the path became very muddy and slippy and several members of the walk started to find it hard going. There was a metal sign put up by the Forestry Division saying, "Our forest is valuable. Two different forest types can be seen on this trail Mora-Crappo and Fineleaf Carat. Look, Listen and Learn". As seems to be the fate of signs the world over wherever there are people with guns this one had been used as target practice with the forestry logo having been neatly blasted out of the sign. Nearby in a rotting log I

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Moruga Bouffe *Mike G. Rutherford*

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found a couple of harvestmen, a type of arachnid with very long legs. I took them back to the UWI Zoology Museum to look at them under the microscope, I was amazed by their appearance, like miniature triceratops they had three large spines coming out the top of their bodies and this helped me to identify them as a male and female *Stygnoplus clavotibialis*.

The next botanical pause came when Dan found some fruits of the Toporite tree (*Hernandia sonora)*. This tree, which was often grown as a shade tree for cocoa, produces small fruits which when dried out have a small hole in the top allowing them to be used as a whistle hence its other common name of whistling fruit. The timber from the tree was often used for housing due to its strength and durability.
Beside the edge of the path I observed some used shotgun shells, the first of many we would find on the walk. Although Petrotrin has attempted to impose a hunting ban in the area, the evidence seemed to suggest that it is not enforced. The path continued over a very overgrown metal bridge which if it hadn't been for the stream underneath would have been easy to mistake for just another part of the forest.

Further along the trail Dan was showing everyone the fruits of the Prickly Palm (*Bactris major*) which grows to around 4 metres high. From the same family as the coconut this tree produces small white fruits which can be used to make an alcoholic drink, a juice and also processed to make oil.

At this point a light rain started which did nothing for the already treacherous mud. After a bit more slipping and sliding and trying not to grab onto more prickly palms and then scrambling across some fallen logs to get past a very muddy part we suddenly heard the cry of "snake, snake" up ahead. Racing forward to get a look I found Stevland using a long stick to move a juvenile Mapepire Balsain (*Bothrops atrox*) from off the path to behind a rotting log. Pausing to allow people to take photographs, from a safe distance of course, Stevland and I put the venomous snake down on the ground in order to get some close up shots and to observe its behaviour. The snake was quite easy going and allowed us to get several close up photographs.

Juvenile Mapepire Balsain
Photo: Mike Rutherford

When I had satiated my curiosity I looked up and realised that we were already at our first destination. Partly hidden by the vegetation but still very impressive I could see the huge trunk of the largest Silk Cotton Tree (*Ceiba pentandra)* in Trinidad. This tree is over 56 metres tall and has a circumference of 10.3 metres above the buttresses. For a full account of its measurement see the 2003 issue of Living World. Everyone wandered around the base of the tree looking at the huge buttress roots and trying to peer between the branches of the smaller surrounding trees to see the top. The sides of the tree reminded me more of a cliff face rather than a living organism and the lianas hanging down certainly tempted me to climb up for a better look. However, common sense and being wet and muddy put a halt to any tree climbing plans.

After people had taken photos and admired the giant tree we set off again. Paul Christopher sighted a male White-shouldered Tanager (*Tachyphonus luctuosus flaviventris*) flying through the forest, whilst lower down Bonnie Tyler found a beautiful spider crawling across the leaf litter. I took some photos and later identified it as a male Trinidad Dwarf Tarantula (*Cyriocosmus elegans*). With silvery legs and orange colouring on its cephalothorax and part of its abdomen it is probably the most striking

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Below left
Tricky stream Crossing
(Dan Jaggernauth assisting)
Photo: Mike Rutherford

(above) left to right - **Paula Smith, Bonnie Tyler, and Mike Rutherford**
Cradled in the huge buttress roots at the base of the largest Silk Cotton Tree *(Ceiba pentandra)* in Trinidad.
Photo: Eddison Baptiste

Right
Dos Cocorite or liana snake
(Pseustes poecilonotus polylepis)
pretending to be a piece of vegetation.
Photo: Mike Rutherford

Moruga Bouffe *Mike G. Rutherford*

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tarantula I've ever seen. Not much further along Amy Deacon found a striped tree snail (*Drymaeus broadwayi*) nestled amongst the spines on a prickly palm trunk.

Throughout the day many orchids were discovered attached to trees, on rotting logs and on the ground. Bede Rajahram listed the various species he found including the epiphytic *Ionopsis utricularioides,* the white *Maxillaria camaridii* and the pink *Epidendrum stenopetalum.*

The first sign we were getting near to our second destination was the sight of a small pile of mud in the forest, people were stopping to look and take pictures but Dan encouraged everyone to keep moving as we were very near to the main event. The vegetation thinned out and soon everyone was standing in a muddy clearing with the hot midday sun beating down on us. Another, rather out of place, metal Forestry Division sign welcomed us "Outstanding Features – Mud cones and flows are typical of the impressive mud volcanoes on the site. You will hear it before you see it." Again the sign was peppered with bullet holes.

There was a second sighting of a Common Galap, this time an adult, hiding in the vegetation just next to the mud flats. Scattered over the mud I found several empty shells from two of Trinidad's commonest land snails, the long, pointy, striped *Plekocheilus glaber* and the brown, coiled *Cyclohidalgoa translucidum trinitense*. The mud had also provided us with signs of other animals passing through with footprints all over the bouffe. Some were easy to identify, with an iguana leaving an unmistakable large, scaly, reptilian footprint and a brocket deer leaving a line of cloven hoof prints but there were a few other mammal prints that had us all guessing - racoon, tyra or just a dog?

Reg Potter gave a talk about the volcanoes, which I recorded with my camera. Here is a partial transcript as the wind kept muffling the microphone. "Mud volcanoes are normally formed on geological anticlines. That's when the sediment folded up and over (gesturing with his hands). It's also quite interesting that oil accumulates in anticlines as well but you don't always find oil where mud volcanoes are because mud volcanoes let the liquid in the earth escape and get squeezed out and there they are lying all round the place. Sometimes you get traces of oil and frequently the bubbles you see are methane gas and if you try and light it with a match you'll see it burst into flames as the bubble pops. And that's a sure sign of hydrocarbons... It's usually also on a fault along the anticline or crossing the anticline, whatever it takes to provide an escape route for liquid under pressure and this pressure is caused by tectonic forces and it squeezes up and flows out at the surface." At this point Dan pointed out that the cone Reg was standing on had bubbled up at the exact moment he had said the word pressure, Reg noted what dangers he put himself under just to give us all a lecture. Dan then wondered if Reg was related to Manning's Prophetess due to his ability to predict the bubbling, Richard Peterson was convinced there was a link. Anyway I digress, Reg continued his talk, "This is the biggest area of any mud volcano except maybe Piparo... there are some such as Erin that have pools that you can get into and bathe and because the mud is of a higher density than water you tend to float rather high in it."

After the talk people spread out to find somewhere to eat their lunches, some found shady spots on the edge of the mud whilst others just collapsed where they stood. Once we had all eaten we started the walk back to the cars. Initially we headed back the way we had come but eventually we took a different route allowing us to see more of the forest.

The forest floor at one point was covered in large flat seeds from a Bloodwood tree; I took some seeds with me back to UWI where Winston Johnson from the Herbarium identified them as being from *Pterocarpus rohrii.* There were also many calabash trees around with their large distinctive fruits and lots of seedling Mora trees. Further ahead a second juvenile Mapepire Balsain was found and again moved to a safe distance away from the path.

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Moruga Bouffe *Mike G. Rutherford*

(Continued from page 16)

On the route back we encountered a rather tricky obstacle as we had to get across a wide stream with steep, muddy banks at either side. Dan stood in the middle and helped many to wade across, some of the more limber decided to walk along a narrow fallen log and then swing to the far bank on a tree branch.

We were all waiting around on the bank for everyone to cross when someone called out "snake!" again. I moved towards the call wondering where the reptile was but didn't see anything; it was only when someone said it was right in front of me that I noticed the cryptic critter. On the side of a tree, which I had already walked past, there was a Dos Cocorite or liana snake (*Pseustes poecilonotus polylepis*) pretending to be a piece of vegetation. Its body was kinked and bent just like a vine and it was only when I traced the body to the end and found the head did I realise what it was. The snake stayed frozen whilst people came for a closer look. I was curious to see how far its deception would go so once everyone had taken their photos and moved on I touched the snake on the tail and to my surprise it did nothing but sway slightly as though the vine it was pretending to be had been caught in a breeze.

Not much further on we came out of the forest into an empty hunters camp and had a quick rest in the shade, poking around under the discarded sheets of corrugated iron that lay scattered around the site we found a fairly large Tailless Whip Scorpion *(Heterophrynus sp.)*. A very long legged arachnid with large spiked pedipalps, they look rather scary but are actually harmless (to humans at least).

It was only a short walk now along an old road past a few more empty camps where we saw a Crapaud or Cane Toad (*Rhinella marina*) in a hole and a Striped Gecko (*Gonatodes vittatus*) on a post. The last animal encounter for me was a pleasant surprise, Amy Deacon and Aidan Farrell had found something on the road so cheekily called for me to come quick. I dashed over expecting to see something fast disappearing into the bush but instead was greeted with a very slow moving snail crossing the road, it was a live *Plekocheilus glaber* and it was great to be able to see what the snail itself looked like rather than just an empty shell.

All the walkers were back at the cars and accounted for by 2:30pm. After everyone had said their goodbye's two car loads of walkers decided to add in a quick visit to another mud attraction. Reg Potter led the way on a short drive to the Lagoon Bouffe, a mud volcano that had taken the shape of a lake of mud rather than a cone. On the drive several more animals were added to the list of sightings for the day – two Tegu lizards *(Tupinambis teguixin),* one Giant Ameiva lizard *(Ameiva ameiva) and a* Channel-billed Toucan *(Ramphastos vitellinus).*

Thankfully it was only a short walk to Lagoon Bouffe along a slippy path through thick forest. On the way Stevland spotted a skink (*Mabuya sp.)* but was unable to catch it for a closer look. After five minutes the forest opened up and we were greeted with the sight of a large expanse of liquid mud stretching about 100 metres across. We stood on the edge and watched several birds flying around including some plovers, but as the group had all neglected to bring binoculars we could not identify them any further. There were several places where you could see the bubbles coming up but it looked a bit treacherous to head out any further to investigate. Around the edge of the lake there were the remains of many snake millipedes and flat backed millipedes, seemingly they had become stuck in the mud and perished.

We headed back to the cars and started the long drive home. Overall this trip was a great day out and allowed club members and visitors to see some of Trinidad's biggest mud volcanoes, its tallest tree and some of its most interesting wildlife. Of particular note was the range of reptiles and amphibians that were encountered, I sincerely hope that the newly formed TTFNC Herpetology Group have as much luck in their future trips.

Book Notice

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DeVerteuil, L.A.A. 1858. *Trinidad: Its Geography, natural Resources, Administration, Present Condition, and Prospects.* London: Ward & Lock 508 pp. Free download at the Open Library, http://openlibrary.org/books/OL14046198M/ .

This substantial book covers a broad range of topics, with two substantial chapters on plants and animals. Others that may be of interest to readers of these pages are on climate, topography, and timber and other natural resources.

The emphasis is very much on utility, and the plants are treated almost entirely in terms of economic value. Not surprisingly, much of the treatment of land vertebrates has to do with those that are hunted. This gives rise to some eye-catching statements. For example, the agouti is characterized as "Very common, well known, and easily domesticated." (p116) Similarly, "The Deer is very common in all parts of the island, but particularly in the neighbourhood of plantations ...." (p118). And the opossum (manicou) is abundant as well.

I have no doubt that he was right about the commonness of these three native species at that time, but it is obviously not true today. In 20 years of Trinidad, I have never seen a wild brocket deer and seldom either of the other two. The reason for this change is not obscure. They have been hunted to a fraction of their former numbers. Apologists for the hunters blame habitat destruction for the decline, but this is purest hypocrisy, as suitable habitat is still very extensive in Trinidad.

DeVerteuil suggested that two species of peccaries were present here, and his characterizations certainly match the white-collared and white-lipped peccaries, *Pecari tajacu* and *Tayassu pecari*, respectively. The former is our familiar -- i.e. in the zoo; I have never seen it alive in the wild, for the usual reason -- quenk. There seems no good evidence of the other in Trinidad during historical times.

Three of his notes on insects deserve mention. He comments (p132) that the large larva of the palm weevil, *Rhynchophorus palmarum*, known as groo-groo worm is "much esteemed by our gourmets." This accords well with a comment by the Canadian naturalist Léon Provancher, who visited Trinidad later in the century. Provancher's informants emphasized that the groo-groo worm was not food for the poor, as it fetched a high price from English gourmets. It is curious that the habit of eating this insect seems to have disappeared entirely.

On the next page, DeVerteuil notes that "Locusts visit the shores at long intervals, and make ravages similar to those in other countries." Almost certainly he is referring to *Schistocerca gregaria*, the migratory locust of Africa and the Mideast, swarms of which -- so I am told -- have at times been blown clear across the Atlantic with the Sahara dust. I wonder if this still occurs on occasion or if changes in agriculture in Africa have altered the pattern.

And he remarks (p136) on the swarming of termites and ants in great numbers after rain. The correlation between weather and the appearance of these "rainflies" was plain to DeVerteuil, but "How to account for this influence of rain? Really, I cannot discover any satisfactory explanation: they are not forced out by inundations, since many live in houses; they do not come forth in search of food, not even, I think, with a view to breeding." In fact, breeding and founding new colonies is exactly what it is all about, and rain -- especially at the start of the rainy season -- provides good conditions for this, so that the timing is by no means a mystery.

I thank Adrian Hailey for bringing this book to my attention.

WE GO TO GRENADA 1975

Feature Serial by Hans Boos

(Part 1b)

As we rounded the light, fixed on a rock on the western tip of Trinidad, we saw the First Boca open out, giving us our first view of the Caribbean Sea beyond, and we felt the first billowing surge of the Atlantic rollers as they chased through this gap between mainland Trinidad and the first island to the west, Monos.

The wind too, freshened, becoming a cool northeasterly, and prompted by this, the crew swiftly loosened the ties on the sails with expert precision, and with a maximum of shouts and bawling back and forth between them and the captain, the canvas sails were hauled up. Immediately "Starlight V" listed to port as the sails filled and boomed overhead and we felt the headway increase. The bow rose over the first waves that were now increasing in size as they swept past Point Rouge on the northwestern tip of Trinidad and the singers found it difficult to keep their feet or their beat in the now alive schooner.

As we cleared Trinidad and headed northeast, on a tack that would take us, distance wise, away from Grenada, we ran into the cross-waves that were being reflected off the north coast, and travelling at right angles to the ones coming in out of the deep Atlantic. With each rise of the schooner there was an added shudder as she traversed these crossing furrows in the ever darkening sea.

I had begun to feel queasy sitting in the stern, which, in addition to the up and down motion, the boat had a peculiar slewing motion from side to side. I am very prone to motion sickness on boats and though I had not been affected during the long years of fishing in many small open pirogues with my father and his brothers, I had been very seasick on both crossings of the Atlantic on my way to and from England for my abortive attempt to become a veterinarian — a tale perhaps told elsewhere. Australia-bound too, I had terrible episodes of sickness which had either confined me to my bunk, deep in the bowels of the immigration liner "Southern Cross," or surviving up on the foredeck, binoculars in hand, and the wind in my face. There, both on the "Golfito" and the "Camito" — the ships of my Atlantic crossings — and on the "Southern Cross" I was able to spend as many hours as hunger and fatigue would allow, scanning the skies and surface of the ocean for the unexpectedly rich mid-ocean bird life, or marvelling at the ocean life below the bows or sweeping past. Sharks, dolphins, a whale or two, I had spotted, and flying fish spraying outward, from the curling bow-wave, gliding like large blue and silver marine dragonflies, propelled onward by their tails when they once more touched the wave-tops over which they were skimming; and giant sunfish, Mola mola, desperately, their dorsal and ventral fins flapping like mad, seeking to get out of the path, get some depth between their slow cruising misshapen un-fish-like bodies and the oncoming steel juggernaut.

I would have to make a mad dash up the swaying and heaving corridors from my cabin up to the fresh air on the deck, where the motion forward with the salty fresh air in my face, and deep in my lungs, dampened the rising gorge, and quelled the back-of-the throat bitterness, signalling a bout of seasickness which was aptly described by my father as fear in the first hour that you were going to die, and then, fear in the second that you were not.

But I had survived such bouts and now I suggested to Julius that we go forward to join the singers, where I felt I could better quell the rising uneasiness, and where we might have to spend the night anyway, as there was little room where we were ensconced in the stern, so that we could watch over our goods.

As we made our way forward between stacks of freight, large biscuit tins, cartons of packaged goods, lashed down propane and oxygen cylinders, bales of P.V.C. plastic pipes, the singing up ahead faltered and petered out to a silence. We would have the bow

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WE GO TO GRENADA 1975 *Hans Boos*

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to ourselves, sharing it with the occasionally complaining goats.

I felt better immediately as we found a place on the forward hatch cover, and as the sky darkened into night we forged into the increasing sea and wind. Then I was torn with indecision and doubt that though we had quit what little space we had in the stern, because of my very real fear of impending sea sickness, we might have exchanged it for a night of being soaked by the spray that was now being blown by the wind over the heaving bow.

I looked wryly at Julius and he shrugged his shoulders, saying, "We may have to spend the night with the goats in the lee of the bow."

The thought of actually doing this was not in my imagination, for the smell of these animals, as well as their copious pelletized droppings around them where they were tethered, would deter even the most crazed soul. We sat as far back as possible to escape the spray and settled as best we could amongst the boxes and bales. The "Starlight V" heeled over, as gusts of wind seemed to grip her and push her violently forward, angled against the oncoming forces. The sail above us would slacken for a second and then with a great cracking "thwack" would refill, shaking down spray that had accumulated on the canvas. We were getting wet anyway. Becoming colder and more cramped by the minute, and it was only about half past nine. The trip to Grenada would take all night. We were expecting to sail into St Georges Harbour at dawn. It was going to be a long night. Grim at this prospect, and questioning our decision to travel by schooner, we tried to make the best of it. Then, to make matters worse, it suddenly began to rain. Silver curtains of water were added to the spray from each wave. "See if there is a place to keep dry," I asked Julius, who struggled aft. He came back to tell me that it was drier in the stern and there was a small space behind the cook house where there seemed to be a little shelter for our bags. Fearing the worst and resigned to what I knew would happen if I went aft, I nevertheless had no choice. So with rising gorge I made my way sternward, passing people already in the throes of their misery. Seated between two stacks of square Crix biscuit tins, where he had wedged himself, sat Michael St John. His normally healthy shiny black face looked gray in the dim light of the tossing light bulbs that lit this passageway. "You alright, St John?" I managed to ask. His eyes were stark as he could only gasp out, "Oh Gord, Mr Boos," before he pitched forward, and I barely got out of the way as he added the contents of his stomach to the swill — a mixture of sea, rain, and untold ejecta — that, I noted, was now flowing down the passageway, and out the scuppers. I barely made it to the side and added mine to the greenly passing ocean. It had started. I passed through the area where the traffickers still slept on top of the engine hatch, Terry was there, a smile on his face, unaffected. I made it to the back of the cook house, and barely had time to pull the packs away and lean over the gunwale. Those who have been sea-sick will understand what I was going through. For those who have not, no description will suffice.

I lay on top of the jumble of pots and pans, and hung my head over the stern. Here at least I was dry, but any effort to open my eyes which let in the view of the field of the waves and the tossing horizon — for the delineation between the starry sky and the dark sea was clearly visible — I was wracked with a fresh series of spasms that had long since emptied me of any and all food I had eaten earlier, until my beard and moustache were encrusted, and I no longer had any desire or will to wipe them clean.

In between episodes, I managed to reach my packages and unroll a pallet of vinyl-covered foam-rubber and lay it over the pots and pans. On this I lay, and it was only a short roll over to once more hang my head over the stern. There I lay in what I remember as the most abject misery and desperation in my life. I was pressed up against the two cold propane gas cylinders boring into my lower back and the pots and pans below me were no softer than a jumble of sharp, quarried, bucket-sized rocks.

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WE GO TO GRENADA 1975 *Hans Boos*

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It must have been about midnight, and I had stopped counting the times I had rolled to the rail, at a dozen. The mainsail above me quivered and snapped and with each snap a small shower of drops of water fell to dampen me anyway. I looked up at the stretched canvas and saw the boom cross the sky, and the "Starlight V" stood upright for a second or two, the masts swinging in a wide arc. The captain had swung the helm over, changing course now to the northwest, to make the run into Grenada. Now the diesel kicked in, adding its roar, and the schooner once more heeled over to port, the sails close hauled, the boom almost directly over the center of the stern, and the raindrops now became a steady drip on the place where I lay.

But I did not care anymore. I was prepared to die. Being wet did not matter. By keeping my eyes closed I could suppress the urge to heave. But I was so uncomfortable, in pain even, that every now and again I would be forced to change my position, to open my eyes, and I would be forced to try to consign to the ocean, what I no longer had to give. Unbelievably, I must have slept, out of pure exhaustion. At one point I decided that, rather than endure any more, I would jump overboard and swim to Grenada. In my delirium this was eminently reasonable.

A full bladder impelled me to the bog-house on the port stern. Groping my way there, I met Julius coming out. He was ashen in the darkness. He admitted that, in there, in the enclosed space, he, for the first time in his life, had succumbed too. I came out and looked into the engine-hatch area. There was Terry. I had forgotten him in my misery. There he was, holding a large basin, while the traffickers vomited into it. Terry of the iron stomach was unmoved by this. He moved on with the basin to another moaning woman. A rope crossed the space like a clothes line, from which hung a young man, by one hand. He swayed with the movement of the ship, hanging onto the rope, his eyes closed, his other hand clapped to the side of his head, a small red transistor radio trapped there. He spent the rest of the trip there, oscillating and lurching to every heave and dip of the afterdeck beneath his wide-planted feet.

Making his way around this man on the clothes line, Terry emptied the basin over the side, only to return to the frantic gesturing of another stricken trafficker, holding her palm clamped to her bulging mouth. I barely made it to my pallet on top of the pots and pans, but I had no more to give to the passing ocean but sour driblets of bitter bile. Sometime in the pre-dawn hours, I was aware of Julius lying nearby with his head resting on my legs, as I must have slept fitfully. A change in the frantic diesel- and sail-powered rushing through the waves and starred darkness woke me, and looking out over the stern gunwale I saw the sea was smooth and it stretched away in a lead-gray plain, tinged with the pinks of dawn. Above the "clunk-clunk" of the diesel, I could hear, coming plainly over the still water and quiet of the morning, the high-pitched whistlings and two-tiered pipings of the frogs on mainland Grenada.

I pushed myself upright and, looking ahead, saw that we were entering St George's harbour, Point Saline passing on our starboard, and the multi-coloured stacks of the buildings and houses of St George's, which circled the harbour, and climbed away up the surrounding hills that ringed the city. Julius stirred too, and listening intently, said, "Hear the frogs." I certainly heard them. It was incredible that so tiny a creature — not more than 1 cm from nose to hind end — could put out such a sound that could carry the half mile or so to where we were slowly motoring in. Elutherodactylus johnstonei, a tiny, highly successful colonizer of many other Caribbean Islands and mainland South America as well — I later heard them, or a related species, in the leafy atrium of an hotel in downtown Maracaibo in Venezuela — had kept me awake with their incredibly loud chorus outside my windows as I vacationed in Barbados during my teenage years. They were everywhere in Grenada and continued their calling even during the day in areas where it was shaded, or where the weather grew dark with rain.

Washing the crust of my night's ordeal from my face, I felt like a zombie, an appearance confirmed by

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WE GO TO GRENADA 1975 *Hans Boos*

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Julius and Terry when I joined them up on the bow. St John, too, looked much the worse for wear as I enquired how he had spent the night, and even the pair of capuchin monkeys were subdued, sitting like little, hairy, pitiful dwarfs in their cages. They too must have had a terrifying night in an alien surrounding, filled with strange sounds, smells and movement.

We tied up at the dock not long after and the passengers, including us, swarmed ashore, and the bustle we had seen in Trinidad was repeated in reverse, as the "Starlight V" was relieved of her burden. We sought out the Immigration and Customs officers, and presenting our documents explained to them our mission. That we were bringing animals to bolster the badly depleted ones in the Grenada Zoo, bought us some more than usual assistance, and the natural curiosity to see animals, especially monkeys, gave us the slight advantage of clearing through the dock-side red tape that would normally apply to such oddly out-of-place passengers on an inter-island schooner.

The zoo was within walking distance, and we shouldered our packs and between us, we began to carry the monkeys to their new home. From among the crowd waiting on the dock-side, sorting out the baggage coming ashore, and greeting returning relatives and envoys of the religious group, shouts of "Doon-dan, Doon-dan" rang out. St John broke away from us and ran towards the two or three young men who greeted him with elaborate hand shaking and back patting, and with repeated greetings all interspersed with the ecstatic "Doon-dan."

St John brought the three men over to us, saying, as introductions were done, that I was his "Bossman," and a jumbled, tumbling-out of details of what we had come to do, poured from him. In the broad Grenadian accents of their animated exchange which we tried our best to understand and reply to, the only concrete facts that we were able to glean were that "Doon-dan" was St John's Grenadian "pet name," that one of the other men's name was "Dr. Bones," and that they were eager to assist us in locating any monkeys and catching any snakes that might exist on Grenada.

"Doon-dan", which St John had become as his feet met his native soil, and by which name we referred to him during our brief contacts for the remainder of our expedition, suggested that he go off with his friends to make arrangements and contacts up in the north of the island. A two-pronged attack would benefit the expedition much better than if we all stuck together to enquire and search in the same areas.

It seemed the best course of action, and in any event, Doon-dan had become a Grenadian the moment he landed. We were strangers. He would assist us as a local of the island, and could do that better in the company of his friends who were assuring us that everything had been arranged and prepared for our arrival and stay, up in the town of Sauteurs in the north of the island. Doon-dan had obviously communicated with his friends prior to his coming, and they had greeted him like a returning hero. So we told him to get on with it, and I gave him an advance in cash to cover any contingencies he might meet. He jumped into the battered blue jitney with his friends and in a smoky, muffler-less roar, they disappeared along the curving harbour road.

We looked after the departing jitney, glad in a way to be rid of the man who had been transformed from the St John we knew into the Doon-dan we did not. We trudged into the zoo, and finding the superintendent, we turned over our charges to him. The veterinarian would be in later, so, ensuring that the monkeys had access to water and some fruit and greens from a nearby hibiscus hedge, we set off to rent a car, and get something into our stomachs. At least Julius' and mine. Terry was fine, none the worse for wear from the voyage. We found coffee and snacks at a nearby shop and never did warm coffee taste better as it went down. I could feel the colour come back to my face and the ringing in my ears go away as it untangled itself from the incessant creaking of the frogs that was now everywhere around us.

(to be continued)

Management Notices

New members; Volunteers; Publications

New Members

The Club warmly welcomes the following new members:

Ordinary member:

Fiona Cooper, Nikoki Forbes, Timothy Maynard

New life members:

Kris Sookdeo, Richard Farrell

Now life members:

Jalaludin Khan, Martyn Kenefick, Shane T. Ballah

New Website

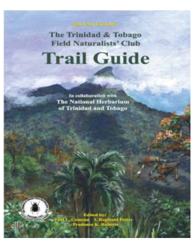
The Club has transferred to a new domain name and email address. The change allows us more space and greater control to reach out to the public and stay in touch with members.

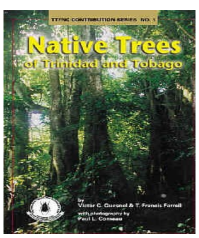
Website: www.ttfnc.org **Email:** admin@ttfnc.org

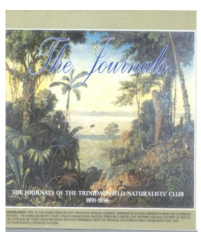
facebook http://www.facebook.com/pages/Trinidad-Tobago-Field-Naturalists-Club/68651412196?v=info

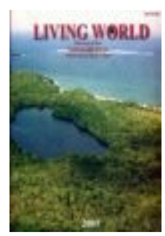
PUBLICATIONS

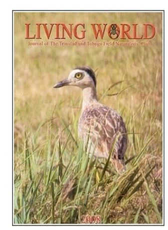
The following Club publications are available to members and non-members:











The TTFNC Trail Guide
Members = TT$200.00

The Native Trees of T&T 2nd Edition
Members = TT$100.00

Living world Journal 1892-1896 CD
Members = TT$175.00

Living World Journal 2008
Living World Journal back issues
Members price = free

MISCELLANEOUS

The Greenhall Trust

Started in 2005, in memory of Elizabeth and Arthur Greenhall, dedicated artist and zoologist respectively, the Trust offers financial assistance to aspiring artists and biologists (in areas of flora and fauna) in Trinidad and Tobago. Full details are available on their website: http://www.greenhallstrust-wi.org/link.htm

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Trinidad and Tobago Field Naturalists' Club
P.O. Box 642, Port of Spain, Trinidad and Tobago

NOTES TO CONTRIBUTORS

Guidelines for Articles and Field trip reports:

Contributors and authors are asked to take note of the following guidelines when submitting articles for inclusion in the newsletter

1. Articles must be well written (structure/style), and be interesting and fun to read.
3. Articles must have a sound scientific base.
4. Articles submitted must be finished works. Please no drafts.
5. Articles should generally not exceed 3000 words. Longer articles, if interesting enough, will be broken up and published as separate parts.
6. Articles should be submitted as a text file, word or text in an e-mail.
7. Field trip reports may include a separate table listing the scientific names, common names and families of plants and animals identified within the body of the report.
8. Photographs can be in any of the following formats JPEG, BMP, PICT, TIFF, GIF. They must not be embedded into the word processing files. Information on the image content including names of individuals shown must be provided.
9. Acceptable formats for electronic submissions are doc and txt.
10. **All articles must reach the editor by the eight week of each quarter. Submission deadline for the 3rd Quarter 2011 issue is August 31st 2011.**
11. **Electronic copies can be submitted to the 'Editor' at:** admin@ttfnc.org **Please include the code QB2011-3 in the email subject label.**
12. Hard copies along with CD softcopy can be delivered to the editor or any member of Management.