

THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

October - December 2008

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Why Do Men Have Nipples?

Victor C. Quesnel

his question was put to me some months ago and I had no immediate reply. A lingering thought that Stephen Jay Gould had already provided an answer cautioned me to check that first. Having found that the article I was thinking of was on a somewhat different topic I can now go ahead with my answer and share it with the members of this Club. In fact there are two answers. The short answer is: men have nipples because they cannot avoid having them. The long answer seeks to explain why they can't avoid having them. For that we need a background in cell biology.

Every cell in the human body has instructions that are "written" in the deoxyribonucleic acid (DNA) and "tell" the cell what to do at any given time. A molecule of DNA may be as long as two metres and since it must fit into the cell's nucleus which may be only 20 micrometres in diameter it must be extremely thin (20 nm) and extremely well coiled. In each cell there are 46 of these coils when the cell divides the coils must divide too. To do so they coil up more tightly still and condense into somewhat X-shaped bodies called chromosomes. The name chromosome simply means "coloured body" (chromo = coloured, soma = body) and was given to it because it could be easily stained with a whole range of different dyes. When properly prepared, 22 of these chromosomes can be matched with another of the same size and pattern of staining. These are called autosomes. The remaining two are the sex chromosomes. They are not matched with each other. One is the same size as the larger autosomes; it is called the X chromosome. The other is much smaller and is called the Y chromosome. The combination XX specifies female; the combination XY specifies male.

Each chromosome carries many genes. "Ä gene is defined in the classical biological sense as a portion of a chromosome that determines or specifies a single character or phenotype, for example eye colour" (Lehninger, Principles of biochemistry). In the years following the discovery of DNA by Watson and Crick in 1953 it came to be realized that some genes were portions of the DNA with instructions for making specific proteins while other genes regulated the activation or deactivation of the first kind of gene. Thus several genes may be required for the making of a complex organ such as the eye. Likewise, several genes may be required for the making of a breast and the milk it secretes. I do not know how many are required. Neither do I know exactly where they are located. They must all be located on the autosomes or the X- chromosome since the breast is a character of females. However, it is clear from what was said above that the genes for making breasts are in the cells of males too since they also have autosomes and one X-chromosome. The nipples of the male are obvious and call attention to the fact that they have the genes re-

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Why Do Men Have Nipples?

Victor C. Quesnel

Feature

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quired for their making but they have as well all the other genes required for the making of breasts and milk. However, male nipples are not disadvantageous so evolution has not gotten rid of them.

Before puberty male and female breasts look alike; after puberty they are very different. They have responded to the hormones that become active at that time. Both ovary and testis are complex organs that do much more than make eggs and sperm respectively. The ovary produces the steroid sex hormones oestradiol and testosterone. The testis produces oestradiol, testosterone and dehydroepiandrosterone (DHEA) which, thankfully, is almost always written DHEA. The ovary produces lots of oestradiol and little testosterone whereas the testis produces lots of testosterone and little oestradiol. DHEA is a precursor of testosterone; its production decreases with advancing age. At puberty the female breast enlarges under the influence of oestradiol; the male breast remains the same as testosterone suppresses the action of oestradiol.

It is ironic that ovaries make oestradiol from testosterone but it is good physiology since the ovaries have to maintain high levels of the former and low levels of the latter. For those who know some chemistry there are two reactions, the reduction of the keto group at carbon 3 and the removal of the methyl group at carbon 10 as shown in the diagram.

Now it is time to put all of this into its evolutionary context for male nipples did not evolve about 7 million years ago when the human lineage diverged from the chimpanzee lineage. It happened about 240 million years ago when the mammals diverged from the other vertebrates. The next time your pet male dog turns on its back and begs you to stroke its belly have a good look at its underside and you will find two rows of nipples just

where the teats are in the female. My reading tells me that this is true of most other mammals but not all.

So now we must ask the question: did the steroidal sex hormones first appear at that time? My reading tells me that testosterone occurs in sharks and their relatives but I don't know if it was then acting as a hormone and I don't know if the invertebrates make testosterone or other steroids. There is plenty to learn here; enough for another story at another time.

Caroni Swamp - April 14, 2007

Kathleen Hinkson

Birding Trip



he scheduled meeting time was 3:30 p.m. at the Caroni Swamp visitor's facility. By 4 p.m. participants, comprising 34 adults and 3 children, were gathered and invited to board a 40 seater vessel captained by Shawn Madoo. Within 15 minutes we departed the facility and headed west on the Number 9 Drain also known as the Blue River. Along the way the captain paused for a brief welcome and brief history to the swamp. He then went on to describe the foliage along the channel which consisted mainly of red (*Rhizophora mangle*), black (*Avicenna germinans*) and white (*Laguncularia racemosa*) mangrove trees. He also gave us an idea of what birds and reptiles we could expect on the trip.

The occasional Carib Grackle and Rudy Ground Dove flew over head and then, to the delight of the group, mere minutes into the trip, high in the canopy on either side appeared beautiful Scarlet lbis (*Eudocimus rubber*). As far as our eyes could see, fallen trees lined the channel on either side. When asked about it, Madoo informed us that the Ministry of Works and Transport Drainage Division cleared some of the trees to widen



Caroni Swamp Visitors Centre Photo courtesy Shane T. Ballah

the channel in an attempt to aid access and improve vision. A noted visual improvement but one wonders what level of damage was done to facilitate human comfort. In their exercise, the Ministry also dredged certain parts of the river.

A partly hidden shy Two Toed Sloth also known as the Silky Ant Eater or the Poor-me-one was perched roughly fifteen feet above the water in a tree. A few meters down stream, a magnificently camouflaged female Common Potoo (*Nyctibius griseus*) sat motionless at the top of a dried stump, guarding her eggs. As we were about to veer left into the North South Drain, two Green Throated Mango hummingbirds (which are indigenous to the swamp) were seen preening their feathers on a dry branch way above us. As most looked up at them others spotted a Striated Herron scurrying away on some nearby exposed roots as the boat approached.

The North South Drain produced Little Blue Herons, a Bicolored Conebill, a lone Anhinga commonly called the Snake Bird or Snake Duck and two Crested Oropendolas or yellow tails. We then went on to the Number Four Drain and Madoo scanned the trees for a recently seen Cooks Tree Boa also called the Cascabell but to no avail. In an area of the swamp called Nancy we saw Yellow Crowned Night Herons and in the nearby Bubble Hole area, Tricolored Herons and Snowy Egrets.

At 5:20 p.m. Madoo anchored the boat alongside four others and we sat waiting silently and patiently for the arrival of the Scarlet Ibis at their current highest populated roosting site in the swamp. A lone Osprey surveyed the area looking for dinner as migratory Neotropic Comerants flew in to roost. At 5:35 p.m. a spectacular show began. Flock after flock of Scarlet Ibis comprising of dull coloured juveniles to brilliantly coloured

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Caroni Swamp - April 14, 2007

Kathleen Hinkson

Birding Trip



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Caroni Swamp Photo courtesy Shane T. Ballah



Cooks Tree Boa in mangrove Photo courtesy Shane T. Ballah

adults flew overhead; others skimmed the water and some made grand entries from up high. Within minutes the roosting area looked like a Christmas tree adorned with red lights. Other sightings here included Greater and Lesser Yellowlegs Sandpipers, Great Egrets, Semipalmated Plovers and Wilson Plovers.

At 6:15 p.m. Madoo decided to head back to the visitors facility to avoid the onslaught of bugs. As if to bid us farewell, a solitary Cooks Tree Boa was seen tightly wrapped around a branch suspended over the water just minutes away from the facility. As the boat pulled in to the facility and we disembarked, "bug group specimens" were quite active. Despite that, attendees thanked young Captain Madoo and then bid each other farewell.

6:41 p.m. marked the end of another enjoyable and successful birding trip.



Chaguaramas - May 20, 2007

Michelle Lee

Birding Trip



he sound of a cocks crow pierced the silence as we entered the village of Carenage. Early morning sea bathers dotted the gently rippling coastal waters from as early as St. Peters Bay as we headed west to the scheduled 6 a.m. meeting place, the Police Post at Williams Bay. Peering out over the ocean, small flocks of egrets in synchronized flight were seen skimming the mass of water between Centipede Island and the distant Trinidad Yacht Club. As the group formed, the "early birds" were treated to a Yellow Headed Caracara and a flock of twenty plus Brown Pelicans flying low in formation over the Pier I facility. Orange-Winged Parrots, Ruddy Ground Doves, Cattle Egrets, Snowy Egrets, Palm Tanagers, Blue Gray Tanagers and the ever present and abundant Coragyps atratus, the Corbeau or Black Vulture also presented themselves for viewing.

Minutes after six, with a compliment of 15, we drove over the Causa River and turned right on to the Tucker Valley Road, commonly called the Maqueripe Stretch. Heading into Mt. Pleasant village, the sun beaten, water starved surrounding hills looked down on us as we drove past the rifle range, the archery range and the dilapidated Saint Chad's Church. On either side of the road, streams once filled with clear flowing water were now reduced to naked beds and mere trickles due to the harsh dry season. Between trying to avoid the occasional runner or cyclist and driving, some of us saw Smooth Bill Anis (Crotophaga ani), Southern Lapwings (Vanellus chilensis), Tropical Mockingbirds (Mimus gilvus) and a lone White Hawk (Leucopternis albicollis) perched on a Bois Canot (Cecropia peltata) tree surveying his surroundings.

The itinerary for the day originally included three stops; time permitted two. For our first leg we turned right into the road just before the beautiful Samaan Park. The road sign informed us that this route led to the "North Coast Trail", "The Arbo-

retum (landscaping designs)" and the "Covine River Trail". We drove for a few minutes then parked opposite a cordoned off road which leads to a military compound. With one spotting scope and quite a few binoculars in use we spent over an hour there sometimes busily facing east, west, north and south to view birds as members spotted them.

It was interesting to note just how many birds we covered in much less than a 1/4 mile of walking. These included Crested Oropendolas, Shiny Cowbirds, Giant Cowbirds, Yellow Orioles, Fork-tailed Flycatchers, a Squirrel Cuckoo, a Ruby-topaz Hummingbird, Copper-rumped Hummingbirds, White-chested Emralds, Black Throated Mangoes, a Rufous-breasted Hermit, a Green Hermit, Boat Billed Flycatchers, Yellow Bellied Elainas, a Rufousbreasted Wren, Barred Antshrikes, a Rufous Browed Peppershrike, a Tropical Pewee, Golden Fronted Greenlets, a White Tailed Trogan, Violacious Trogans, a Cocoa Thrush, Bananaquits, Palm Tanagers, Blue Gray Tanagers, Turquoise Tanagers, White Lined Tanagers, Silver-beaked Tanagers, Blue Dacnis, Green Honeycreeper, a Zone Tail Hawk and Orange-winged Parrots.

The second leg took us to the Cazabon Park. This route led to the "Bamboo Cathedral", the Tracking Station" and the "North Coast Trail". Though not as productive as the earlier route, it provided one of the most refreshing moments of the trip. Beneath the Bamboo Cathedral, as if the rustle of the leaves in the cool morning breeze and the melodious clashing of the overhead bamboo was not enough to uplift us, we were serenaded by a Sunday morning choir of relatively close but unseen Red Howler Monkeys (Alouatta seniculus insulanus). The efforts of our resident howler mimics in the group failed to draw them near and the unuttered decision was made to "stick to birding". Great Kiskades, White Flanked Ant Wrens, White

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Chaguaramas - May 20, 2007

Michelle Lee

Birding Trip



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Bearded Manekins, Golden Headed Manekins, Violacious Euphonias, a Zone Tail Hawk, Blue Black Grassquits, Turkey Vultures, Black Vultures, a Rufous Tailed Jacamar, Gray-breasted Martins and Band-rumped Swifts were seen here.

Two members made it to the dilapidated tracking station at the summit; some ventured just beyond the Bagatelle Trail entrance (which was hilariously marked with a sign pointing back down the hill which read "This Way Fool"); while others choose to remain on the flat portion of the trail. With over an hour and a half spent on this route the decision was made to postpone the final leg, Mount Saint Catherine.

In retrospect, quite a few bird groupings were encountered on the trails. These included Icterids, Cuckoos, Parrots, Manakins, Flycatchers, Tanagers, Trogons, Thrushes, Vireos, Euphonias, Honeycreepers, Hummingbirds, Jacamars, Raptors, Swifts, Martins, Wrens, Antbirds and Finches. Many eluded us due to their speed especially in

the Hummingbird grouping. We heard the call of a Blue-crowned Motmot, a Great Antshrike and a distant Raptor but it was just not our day to see them. Not limiting ourselves to birding, we appreciated the beautiful flowering Epiphytes and the different trees around us. Butterflies and moths including Skippers, Flambeaus, Buckeyes and a few others whose names eluded us were seen. This sent a strong signal to us that we needed to pack more than just bird identification books on our trips. On this beautiful island with such ecodiversity we must be prepared for anything.

Wrapping up the trip, some of us sat beneath the beautiful Bamboo Cathedral chatting and it did not take much to discover the source of Cazabon's inspiration and desire to capture this sight on canvas. We then bid our farewells and reminded each other about the up coming Mt. St. Benedict bird trip on June 17th.



Photo Corner

Shane T. Ballah













Photos (courtesy Shane T. Ballah)

- 1. Bill of a Toucan found on the forest floor, Arena Forest Reserve
 2. Open flower within a *Heliconia bihai*
- (Baliser) bract in the Northern RangeThe Bug Group explores the Arena Forest Reserve sand pits
 4. Shed snake skin in the Machupuro Hills,
- Central Range.
 5. A *Caligo* butterfly at rest in the forest of the Machupuro Hills

Chaguaramas - April 13, 2008

Michelle Lee

Birding Trip



he group assembled at Williams Bay in the vicinity of the police post. As we stood there enjoying the cool morning breeze and gazing up at the threatening overcast conditions we observed some Egrets nearby which bore noticeably different plumage to that commonly seen. Clayton Hull explained that it was simply a variation of breeding plumage which he had seen in his earlier study of this species. Leaving this location at approximately 6:30 a.m. we journeyed to the Tucker Valley Road a.k.a. The Macqueripe Stretch and then veered right just before the grand Samanea samans at Samaan Park. The vehicles were parked and secured, birding gear was outfitted and we were off.

As we slowly walked along the road beneath the towering, swaying bamboo and the brilliantly capped blooming Immortelle (Erythrina sp), the reason we visited these parts began to unfold. Stricken by the inability to identify many speeding hummingbirds on their way to the Vervine, Heliconia, Chaconia and a host of other offerings on the valley's breakfast table, we were humbled into identifying a range of slower moving feeders for the moment. Despite somewhat poor visibility due to the overcast conditions, we encountered and positively identified a Red-eyed vireo (Vireo chivi), Blue Dacnis (Dacnis cayana), Silver-beaked Tanagers (Ramphocelus carbo), Blue-grey Tanagers (Thraupis episcopus), Palm Tanagers (Thraupis palmarum), Crested Oropendolas (Psarocolius decumanus), Yellow Orioles (Icterus nigrogularis), Shiny Cowbirds (Molothrus bonariensis), a Giant Cowbird (Scaphidura oryzivora) who gazed at us with his beautiful red eyes, Tropical Kingbirds (Tyrannus melancholicus), Great Kiskadees (Pitangus sulphuratus), Fork-tailed Flycatchers (Tyrannus savana), Yellow-bellied Elaenias (Elaenia flavogaster), a Tropical Pewee (Contobus cinereus), Blue-black Grassquits (Volatinia jacarina), Bananaquits (Coereba flaveola), Golden-headed Manakins (Pipra erythroce-White-bearded hala), Manakins (Manacus manacus), Ruddy Ground Doves (Columbia talpacoti), Southern Rough-winged Swallows (Stelgidopteryx ruficollis), Green-rumped Parrotlets (Forpus passerinus), Orange-winged Parrots (Amazona amazonica) and countless Turkey (Cathartes aura) and Black (Coragyps atratus) Vultures circling overhead.

One of the highlights of this trail was the sighting of a perched flock of Scaled Pigeons (Columba speciosa); seventeen in number. This was a record number gathering for all of us. Our determination to see a skillfully camouflaged Ferruginous Pygmy-Owl (Glaucidium brasilianum) a.k.a. the Jumbie Bird whose call seemed to follow us at ever step came to an end when a fearless group of hummingbirds chased him and disclosed his position. On this trail we also heard Rufous-brested Wrens (Thryothorus rutilus), Barred Antshrikes (Thamnophilus doliatus), White-tipped Doves (Leptotila verreauxi) and a distant Little Tinamou (Crypturellus soui). Being not quite defeated by Trochilidea family, we recorded male and female Black-throated Mango (Anthracothorax nigricollis), two White-chested Emeralds (Amazlia chionopectus) and numerous Copper-rumped hummingbirds (Amazilia tobaci).

Wanting to explore the area some more we headed to the base of Morne Catherine. The road here was flanked by fairly high grasses and though close in proximity to our previous destination, the surroundings were noticeably drier. A regular visitor to the area, Feroze Omardeen, drew our attention to a bamboo patch where he often saw White-faced Capuchin Monkeys (Cebus Capucinus) in the early hours of the morning and to a trail where we were sure to see Blue-crowned Motmots (Momotus momota) if we were patient enough to track them. Our list for this area included a Rufous-browed Peppreshrike (Cyclarnis gujanensis), a Grayish Saltator (Saltator coerulescens), Ruddy Ground Doves (Columbia talpacoti), a

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Chaguaramas - April 13 2008

Michelle Lee

Birding Trip



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male and female White-lined Tanager (*Tachyphonus rufus*) as well as a few hovering Magnificent Frigate birds (*Frigata magnificens*) gliding and enjoying the wind currents. As we were about to leave this trail and head off to another destination where flycatchers abound, Point Gourde, we were captivated for a few minutes by a delightful little Rufous-tailed Jacamar (*Galbula ruficauda*) who belted out an occasional high pitched call of pee-pee-pee as he leaped from his perch to catch unsuspecting insects passing by. His precision was remarkable.

En route to Point Gourde, we noticed that the often drab backdrop of the yachts in the bay as they lazily bob in the water was outstandingly transformed into a breathtaking brilliant burst of yellow. The Yellow Poui trees (Tabebuia serratifolia) on the mountain side were in full bloom. Our hunger for more bird sightings blinded us to the approaching rain clouds as we made our way to the point. The dried out trees and vines on the trail permitted the occasional view of the bay below where we saw Brown Pelicans (Pelecanus occidentalis) balancing on the bows of scattered yachts. Silence was our friend for a few minutes on the trail, then, concentrated in one area we saw Violaceous Euphonias (Euphonia violaceous), a Goldencrowned Warbler (Basileuterus culicivorus) and Golden-fronted Greenlets (Hylophilus aurantiifrons). This welcomed sighting was followed by droplets of rain which signaled the end of our ascent.

Heading back down the trail, Feroze drew our attention to the Saltfish Wood trees (Machaerium robinifolium) around us and ushered us to view the vicious looking double horns that existed beneath each leaf. We heard the call of Black-crested Antshrikes (Sakeshorus canadensis) as we neared the vehicles; and upon reaching the cleared area where the vehicles were parked we were treated to two Ospreys (Pandion haliaetus) a.k.a. Fish Hawks with wingspans clearly over one meter, circling the bay in search of lunch (a meal that we also began thinking about). The consensus at that moment was that Point Gourde definitely had potential and it is an area that we should consider for detailed birding exploration in the near future.

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http://www.geocities.com/ttrbc/ttrbcLst.html http://www.chagdev.com/Pages/Chag-WildLife-Birds.html



Hans E.A. Boos

Feature



he second part in this interesting submission by Hans E.A. Boos.

Day 3: Sunday, 21st May 2000

Rising early, we all had breakfast, excited to be all together, and with the thought of what lay ahead that day. First, Joep led us through his private reserve at the back of the house, where the other plant freaks were astonished at the amount and variety of rare and beautiful plants that were lovingly cultivated there. Almost in their natural habitat, Joep has propagated them for easy access and viewing, and even experimentation with cross breeding. Here, for the first time in cultivation, many species of Aroid and Bromeliad has bloomed.

Then it was off on our first trip; the van prepared with all we would need for the day of collecting in the field. We drove for about an hour, Joep pointing out special growths of plants high up in the trees, until we came to an area of the road that was no longer paved, and had been a bit eroded. We stopped at the top of a hill, where the road dipped down to a stream crossing. Here a culvert had been put in to allow the road to cross the seasonal flood from this stream, but this too small conduit had created a back-up of the waters on both sides, and had resulted in the swampy growing conditions needed for one of the Aroids sought. But these conditions had had the effect of drowning the large jungle trees that were originally established there, and their stark leafless skeletons probed the surprisingly blue sky. rain had threatened us yet. But not for long! As we made our way into the swampy ground, to attempt to collect the first of the plants (a species of Anaphyllopsis had been spotted,) the sky darkened and light drizzle began to filter down. Undeterred, Julius and the two ladies sloshed through the mud and water and began to dig down, sometimes as deep as a meter, to wrest the delicate corms out of the ooze. They were triumphant, for to collect these plants, personally, in the wild, is a great thrill to botanists. I dutifully took shot after shot of this effort, but getting more and more soaked, eventually retreated back up the hill to the van to seek shelter. As I walked up the hill I vainly sought a familiar plant in the wild growth at the side the road. The only one I could recognize seemed to be a tall variety of the "sensitive plant" known to me as "ti-marie" Mimosa pudica. All the others were strange to me and some of them were extremely beautiful. A strand of vine festooned with bright, lantern-like, red flowers lay along the top of this tangle of grasses and shrubs. It was a wild species of Passiflora, the Passion Fruit.

I found the van was locked, but there was a small, corrugated-metal-covered shed off the side of the road where I decided I could shelter. As soon as I got inside, I noticed some movement in a corner at ground level. I thought it could be a lizard, but as I approached, the swift disappearance of a tail told me it was a small snake. One does not make foolhardy grabs after snakes in an unfamiliar country, so the moment's hesitation cost me the capture, as the light green tail disappeared in the tall weeds inside the shack. I had no idea what species it was, but can only guess possibly a species of *Mastigodryas* or *Liophis*.

When we had exhausted the collecting possibilities in this area, we drove back on to the road, and then to the junction where one arm goes to the town of Regina and the other to Cacao. But both of these roads were closed due to landslides.

So we began collecting there, netting a few gems for the botanists. Other fantastic growths of the plant *Dracontium* were noted for future collecting. I had grown the species of *Dracontium* found on Trinidad, where it is known as the "Mapepire Tan-

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Hans E.A. Boos

Feature

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nia." so it would be interesting to propagate this species to see how it differed from the one I knew.

Intermittent rain showers kept us pretty wet and uncomfortable, but happy to be getting all those beautiful plants. I tried to photograph each new thing I saw or was requested to record.

Back at the house, the task of washing and preparing the plants began, while I began to take photographs of the reptiles and amphibians available. As I was photographing the little *Bufo typhonius* I had collected the day before, Julius called out that there was a lizard, *Polychrus marmoratus* on the clump of *Heliconias* next to where they were washing the plants. So there was another readymade record of a reptile, though it seemed identical to the ones that are found on Trinidad.

As the afternoon wore on, and we relaxed with a much-needed cup of tea, another alarm was raised, for a small snake was seen hunting amongst the Bromeliad garden loep had created outside the dining room. It was nosing amongst the bracts of the plants, probably seeking the small frogs that we had heard there the night before. By their calls, they were Scinax rubra, and probably provide the right sized prey for many snakes. This specimen too was caught, not before it had bitten me several times, its tiny teeth only barely drawing blood from the tender skin of my knuckles. It was a nonvenomous Chironius, the species of which I am uncertain, as the colours were unfamiliar to me. I recorded the necessary data to try to key it out later, but later, when I did, it turned out that the data falls squarely between that of at least three species found in the area. It posed very well for photographs, and then it was released to continue its hunt.

We turned in that night well satisfied with the

day's activities and successes.

DAY 4: Monday, 22nd May 2000

The next morning it was off with the smaller of the two boats, the "Mataroni," in tow, and Joep told us that we were going up the Creek Gabrielle. We launched at a convenient slipway and began to speed up the wide brown expanse of the river, swollen by the rains that had been falling all month. Joep said that in one day's period, 30 centimeters of rain had fallen. That's a lot of rain in a twenty-four hour period. Red mangrove Rhizophora mangle lined the riverbank, as there, the river is still tidal. Rope-like aerial and stilt roots hung down from the branches and trailed in the water. We turned into Creek Gabrielle and soon the trees were different and more varied. Tall Moriche Palms, Mauritia setigera, and beautiful feathery stands of Euterpe Palms, Euterpe sp, were thick between other swamp-forest trees, whose roots formed fantastic buttress castles in the brown, swiftly flowing water. Montrichardia arborescens, an Aroid that grows in brackish water, poked arrowhead-shaped leaves out of the shallow water on both sides of the river, as our wake made them dance and guiver.

Joep pulled the boat to the side to show us a large clump of Philodendron when I saw a large lizard lying calmly on a horizontal branch below the leaves. I pointed it out to them and Joep immediately identified it as a Crocodile Lizard, *Crocodilurus lacertinus*, a highly aquatic lizard related to the Zandolis, the Teiids, so familiar in Trinidad.

It lay on the branch calmly as the boat was maneuvered against the swift current to give me time to take the pictures, and to change lenses, for to come too close was to have it dive off the branch into the water below, much like the Snake Bird or

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Hans E.A. Boos

Feature |

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Anhinga, Anhinga anhinga would do on a later trip. It posed there, unconcerned, sure in its confidence in an easy escape if we posed it any threat.

Pictures taken, we boated on.

As we rounded a curve in the river, a clearing on the bank appeared, and we could see that there was a house there. We pulled in to where there was once a dock, but this was now under water, and we could see the boards and pilings under the semi-transparent water. In the shallow water, where it was transparent enough, we could see tiny fish, swimming in swarms, Tetras mainly, and a Cichlid.

We tied up and began to explore the surroundings, Julius immediately locating the second of their sought prizes. This was a beautiful, single leaf of the Aroid, *Urospatha*, which had uncharacteristic pink spots on its arrowhead-shaped leaf. But collecting it was impossible, as it was growing between the matted roots of palms and other trees, and we had forgotten to bring along the digging spade to get down deep enough to collect the corm. But there were others to be collected, scattered amongst the other plants on the soft river bank, and they set about digging them out with dispatch.

I wandered up to the house and, search as I might, there was little in the way of reptile life to be seen. Just a sighting of a female gecko, *Gonatodes*, and later as we were about to leave, lizards of the family Teiidae, *Ameiva ameiva* and *Kentropyx calcarata*.

Amazingly, the rain held off and the day was blazingly beautiful. We had lunch at another holidayhouse up river where a lot more plants were collected. I was amazed that we saw so few birds. On a similar trip in Trinidad bird life is very abun-

dant for the swamps and rivers provide havens for many species.

Here we saw only one pair of Jacanas, Jacana jacana, and a single little Heron, possibly a Little Blue, Florida caerulia. It was the shooting and hunting, Joep said.

We headed back down the river spotting, collecting where possible, and photographing plants as we went. Orchids and Bromeliads were rescued from fallen trees in the middle of the river, to be added to Joep's gardens, for to be left there at the mercy of the river, they would die.

High up on the branches of a dead tree we spotted three large vultures. They were the Lesser Yellow-Headed Vultures, *Cathartes burrovianus*.

As we sped around one bend, running with the current of the swollen river, off to our right, in a shaft of afternoon sun, there on a striated buttress of a swamp-tree, was one of the most beautiful snakes I had ever seen. Coiled there in the warmth was the golden-brown length of a large *Chironius* snake. It must have been all of one and a half meters long, and the paler belly scales stood out in contrast to the warm tones of the dorsal surface.

What species it was does not matter, for there, sunning its golden coils, it was the supreme lord of the swamp. Excitedly I asked Joep to turn so could get a shot of it. It was an opportunity of a lifetime. I fumbled with the telephoto lens as we turned in a swift arc, the boat battling with the current as we breasted it. But we had been seen, or perhaps it was the vibration of the motor through the water, or the wake as we passed, washing against the roots where it lay perched. In any event, up came the beautiful head, the eye bright, and before I could get off more than two hastily exposed and focussed shots, the snake had disappeared off the root and into the swamp be-

(Continued on page 14)

Hans E.A. Boos

Feature (

(Continued from page 13)

yond, slithering off as if by magic. It was gone, and the memory will always be with me, hopefully refreshed by those hurried exposures.

As we motored home we played a game as to who could spot the *Urospathas* amongst the *Montrichardias*, for their leaves are remarkably similar.

We arrived at the slipway and the washing of the plants and the boat took us a while before we all piled in the van for a satisfied trip back to the house. It was not long after dinner that we all retired to bed.

Part II in the next issue of the QB.





Insect Guide





Photos
Top: Crematogaster tricolor (courtesy http://
www.smugmug.com/community/Macro/
keyword/)

Bottom: Crematogaster acuta (copyright 2003 Alex Wild)

Acrobat Ant (Crematogaster Lund 1831.)

Identification: Very small reddish brown to black ant with a characteristic heart shaped abdomen.

Interesting Facts: This an ecologically diverse group distributed worldwide. Approximately 420 species are know. The Genus is the only one of the tribe **Crematogastrini**. They are known as acrobat ants because of the ability of thir ability to rotate the abdomen over 90 degrees.

For more information you can visit the following: http://www.myrmecos.net/myrmicinae/crematogaster.html http://tolweb.org/Crematogastrini/22444 http://species.wikimedia.org/wiki/Crematogaster

New members / Volunteers / Publications

Management Notices



New and Returning Members

The Club warmly welcomes the following new members:

Ordinary members:

Maria Chan Chow, Michael Lau, Denyssa David, Kayman Sagar, Simone Diffentaller

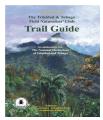
VOLUNTEERS/ASSISTANCE

Volunteers are required to assist in the following:

 Assisting the Club in finding a permanent location to conduct our business and house our historic records and materials

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 2007 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

Club Polo Jerseys

Available Sizes: medium Colours: Kahki and green Costs: TT\$50.00

Trinidad and Tobag P.O. Box 642, Port		go	
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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

T	Font Type:	Times New Roman
2	Font Size:	• 12 point
3	Maximum Length:	1,750 words (approx. 3 pages unformatted)
4	Content	• Field trip reports should include a separate table listing the scientific names, common names and families of plants and animals already identified within the body of the report.
5	Photographs	 Provide images in the following format JPEG, BMP, PICT, TIFF, GIF Images <u>must</u> not be embedded into the word processing files. Information on the image content including names of individuals shown <u>must</u> be provided.
6	Format	Acceptable formats for electronic submissions are doc and txt.
7	Deadline	 All articles <u>must</u> reach the editor by the ninth week of each quarter. Submission deadline for the 1st Quarter 2009 issue is March 09 2009.
8	Email	Electronic copies can be submitted to the editor at shane.ballah@gmail.com or to ttfnc@wow.net.tt locked the code OR2009 Lip the email subject label.
9	Hard copies	 Include the code QB2009-I in the email subject label. Hard copies can be delivered to the editor or any member of the Management Committee.