

THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

January - March 2015



VICTOR QUESNEL THE PASSING OF A LEGEND



by Yasmin S. Baksh-Comeau

The TTFNC was founded in 1891 but went into decline in the 1930/1940's. When Victor returned home from his studies abroad in 1953, he revived the club and the club's natural history journal - the Living World as we know it today. He served on the management committee as Honorary Secretary in

1954 until 1959 and again in 1980-1981, as President from 1986 – 1988 and periodically on the editorial committee of the *Living World* journal for over 24 years. He was the club's representative on numerous national and NGO committees.

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Issue No: 1/2015



On 22 December, 2014, Trinidad & Tobago lost an extraordinary individual with the passing of Dr Victor C. Quesnel.

Victor Quesnel (right) leads the line in Nariva Swamp (April 2003).

Photo: Graham White

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Editors' note:

Many thanks to all who contributed and assisted with articles and photographs.

Disclaimer:

The views expressed in this bulletin are those of the respective authors and do not necessarily reflect the opinion and views of the Trinidad and Tobago Field Naturalists' Club

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VICTOR QUESNEL THE PASSING OF A LEGEND

(Continued from page 1)

The Living World journal is one of the signature publications of the club, where Victor's legacy is branded *ad infinitum* with the insect on our logo which is the Inca beetle, *Inca clathrata*. The subspecies found in Trinidad is *Inca clathrata quesneli*, named after Dr Victor Quesnel.

To most members of the club, Victor was the consummate or quintessential naturalist par excellence. Dr. Elisha Tikasingh, one of the club's respected elders and a scientist, who also served until quite recently as Editor-in-Chief of LW provided me with this summary of Victor's publications and I quote:

"He has written at least one article in every issue of the journal from 1956 to 2008. He told me then he was not going to write anymore until he gets a computer. However, he did produce one more article in 2012 jointly with Dave Straddling which was actually initiated by Straddling. During this period he wrote some 62 articles on a wide variety of topics which included 9 articles on insects, 10 on birds, 2 on amphibians, 6 on lizards, 2 on crustaceans, 1 on snakes, 1 on bats and 5 on (flowering) plants. In addition, he produced 7 annual reports, wrote 3 biographies, 2 general topics, 7 book reviews, and 7 editorials in the Club's journal."

Allow me to take the above statistics and place them in context of the impact of his research captured by Prof. Adrian Hailey. It shows that Dr Victor Quesnel has consistently published over a sustained period of 55 years, in an extremely broad range of topics.

How many of us have ever bothered to look at a commonplace tadpole, far less look into its eyes? Dr Quesnel was the first in the world to recognise the phenomenon of cyclorotating eyes in tadpoles, based on observations of a local tree frog. This is one example of an internationally influential paper published in 1956 on tadpole eye movement.

Similarly his joint paper (2009) on Anolis lizards entitled "The persistence of *Anolis trinitatis* as a naturalized lizard in Trinidad against hybridization pressure with *Anolis aeneus*" is an astonishing example of

continuity in research efforts, as it refers back to the 1959 paper on two sibling species of anoles in Trinidad. Dr Quesnel must be one of very few researchers to have published on the same topic 50 years apart –an example of a rare continuity of research effort.

Here is another spin on Victor's research from Prof. Christopher Starr who never succeeded in ruffling Victor's feathers!

"He was a consummate amateur naturalist. Now, some of you might say 'But wait, how can you call someone with a PhD in science an amateur naturalist?' Victor's doctorate was in plant physiology and biochemistry, and [he] published 12 papers relating to the physiology and biochemistry of fermentation in cocoa beans, yet he was happy doing original research in topics far from his thesis, topics in which he had no more formal qualifications than any of us."

To illustrate this point Prof. Starr recalled "I was reading a paper on the behavioural ecology of mantises and noticed a citation of a paper by Quesnel (1967). Observations on the reproductive behaviour of the mantis, Acontiothespis multicolor. Living World 1967, 53-56. I was interested in it, so I looked in the references and found that the author was our own Victor."

Let us explore this consummate or quintessential naturalist further with reflections from the membership:

lan Lambie recalled: "Victor once told me that on one occasion (or two) he ingested charcoal to determine how long it took to pass through his system before excretion. Who else would think of doing that other than Victor Quesnel. He would also often taste many of the wild berries which birds eat. I never followed his lead even when he invited me to do so."

Kris Sookdeo: "In 1984 he studied the effects on the poisonous manchineel tree by systematically exposing his skin to and then consuming small quantities of this tree. A similar investigation into the toxicity of mora seeds led him to consume small quantities of cooked seeds."

Murray Guppy: "I had a lot of respect for his knowledge, especially about the forest and I benefited from chatting with him."

Peter Reis: "I knew Victor since the '40s when he attended St Mary's College. He was a sea scout then. To me, he was the flora expert of the forest."

Mala Guinness: "I have known Victor for many years as a field naturalist. Peter and I visited him several times at his then home in the Talparo area. His wooden home, open to the bats, geckos and tarantulas which visited it, spoke of his living in harmony with nature and his appreciation of its beauty and power."

Graham White: "Two interesting things about Victor that I was remembering during the Christmas Bird Count this year. First of all Victor was always late. Field trips or meetings, Victor would arrive precisely 30 minutes late. Richard ffrench used to say that you can set your watch by Victor, just add 30 minutes.

Secondly Victor was always cold. On the Christmas Bird Count we would meet at Asa Wright Nature Centre and head up to Morne Bleu (after waiting 30 minutes for Victor). Once we got there Victor would be shivering. I can still see Victor rubbing his arms, looking around and asking if no one else was cold."

Victor's publications are well-cited by the international research community and will continue to be so for posterity. It is not surprising that in order to be such a prolific writer Victor kept detailed field notes. These notes are compiled into 42 volumes of note books which in themselves are a valuable resource. These notebooks were handed over by Victor to me and my colleague Prof. Adrian Hailey, in the Dept. of Life Sciences at UWI with the understanding that they will be published in the near future with Victor Quesnel as the senior Author.

But what about Victor the gentleman? To the general membership of the club he was an inspiration and role model. He was deeply respected and held in high esteem for his passion to research, document and conserve the islands' rich biodiversity. He was a mentor who encouraged the younger members of the club to take up leadership positions, by serving on the management committee, contrib-

uting their observations to the *Living World* journal or leading special interest groups.

On a personal note I have known Victor since 1978. He persuaded me to join the Club in September 1980 and nominated me to become the first female President of the club in 1990. He was a true friend, a mentor and an integral part of my family, where he shared his love for reading and western classical music, in particular the violin which he mastered. He once coached our son in his violin exam pieces which earned him a distinction that year. He happily accompanied us to see our fledglings in concert. I believe, subject to correction, somewhere in his library there are sheets of music scores of his Unfinished Symphony.

He frequently teamed up with me and/or my late husband Paul Comeau on countless botany field trips in the company of a wide range of visiting scientist to the herbarium. His affable, soft-spoken, gentle, good natured, humble disposition made us all feel at ease in his company.

His strong Christian ethics would quicker 'turn the other cheek' than 'go for the jugular'. The nearest thing to an expletive I have ever heard from Victor was 'Oh shoots' and one of his most remarkable qualities for me was his ability to 'suffer some fools gladly'.



Two former LW Editors, Elisha Tikasingh

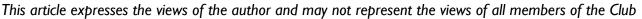
(left) and Victor Quesnel, (right)
 at Victor's brother's home
 in Talparo discussing a paper
 by Victor and Dave Straddling,
 The paper subsequently appeared
 in the 2012 LW journal.

Photo taken 11th January 2012 by Graham White



WHERE HAVE ALL THE FISH GONE?





On some mornings in this dry season when I awake and go for breakfast I look out at the Gulf of Paria and admire the beauty of the calm flat sea still unbroken by breezes that will surely start a little later in the morning and turn all that glassiness into waves that will sparkle in the sunlight.

In the calm however I see numerous darker patches that spread out seemingly forever, and clumsy pelicans flapping towards them. These are the ripples of shoals of juvenile fish swimming with no particular direction. There are literally millions of them, carite, I believe. Fish born of migratory parents who spawn in or near the calm gulf and promptly desert their offspring. The juveniles, and several species of small fishes then are available for the breakfasts of larger more mature fish. Later in the year the fishing boats will be out in their numbers to catch the young fish returning to the ocean. I have seen up to 36 boats at one time off Five Islands in June.



Fish sellers in Maracas

Photo: Amy Deacon

But I see no signs of those 'larger' fish. The ones that should be feasting on this abundant supply.

Now I am really not a fisherman. I don't have the patience. But in my time I have fished in many parts of our coastal waters, though what I prefer is spearfishing without an aqualung. (This used to be the 'sporting' way but nowadays spearfishing seems to be done with full sub agua breathing gear). My observations therefore are those of an impatient line fisher who quickly gets tired of getting no bites and wants to move elsewhere, or dive into the water and see what's going on down there. From this type of observation and stretching back over 60 years I have to say that our fish population in the 'free diving' range (that's down to about 30 feet for a rather unfit spearfisher) has been almost wiped out. For the line or net fisher it seems to be the same. I have watched people set a 'palang' in Chacachacare bay overnight and pull it next morning with nothing on the line and baits intact. I have dived the coasts of Five Islands, Gasparee, Monos, Huevos and Chacachacare and, from widely spaced in time observations, noticed the numbers diminishing, first in the Five Islands then moving westward with time, the fish have just disappeared. In my youth it was almost impossible to go spearfishing and not see a barracuda. Now to see one is a rare event. Even at Petit Gasparee there were always a few small grunts or pague to shoot if you didn't mind the current, then you could row back to the island home and have a 'cookup'. In my father's day it was even better. A holiday 'down the islands' was essentially a fishing expedition. The men would be up early in the morning and row or sail to their favourite bank, catch a reasonable amount of redfish or grunts and probably a couple of carite trolling on the way there and back. My grandfather lived for a while at the Brighton jetty. We have pictures of enormous grouper and shark caught almost literally on his door-

I remember clearly the excitement of seeing cavalli 'beating' as we called it. A whole bay would appear to boil and there was a roaring noise caused by the fish churning the surface as they chased and devoured little fish sheltering in the bay. The roar would either suddenly cease then start again, or fade as the beating cavalli chased their prey out to sea or

along the coast. It was an exciting sight, enough to make any boy or girl interested in fishing. In those days Gulf fishermen always had a bamboo pole with a non-barbed hook on a short line. This was known as a 'hoolikai' and used when they found themselves in a beating frothing feeding frenzy of carite or kingfish. A feather or white rag was good enough to attract a bite amid such chaos and the fish were quickly swung aboard where the absence of the barb meant a quicker return to the beating fish. Nobody carries a 'hoolikai' anymore. It has no use!



One of hundreds of dead mullet at Coffee

Beach after the 2014 oil spills Photo: Amy Deacon

From accounts of residents, the seas off Icacos used to be swarming with fish. At Mayaro there were always big seine boats on the beach and it was wonderful to help haul in the seine and see the shining cavalli, moonshine and the odd sting ray thrashing in the surf as the net was gradually beached. Normally fish vendors in pickups would drive down the beach and purchase the fish directly from the owner. Now there is scarcely a boat in working order and they seem to stay beached most of the time.

Even the small rivers crossing the road at Mayaro had a reasonable population of catfish seen from the bridge and it was not unknown to catch the occasional grouper in the '50s. What a different place Mayaro was then! Very few holiday houses and dense coconuts bending over the road, and virtually no traffic. It was a truly beautiful site and the re-

moteness of the area held a peculiar magic.

I fished the waters off Guayaguayare in the '70s and was seldom disappointed. We used to catch a different type of 'redfish' there sometimes getting a boatload. There was a reef called 'La Caille' in the middle of the bay and the water was frequently clear enough for some spearfishing after work in the evening. Once, a manta ray appeared suddenly beside me. I grabbed a wing and it shook me off easily with one hard 'flap' of its wings. We could rely on getting something most of the time and I remember getting a 50 lb grouper in a sunken wreck which turned out to be a joint effort as other divers took the gun from me as I desperately raced to the surface for breath. That day we left behind a much bigger grouper. That reef is no more. I'm told it was blasted below the waterline to make way for a pipeline.

Toco, Tacaribe, Paria, Blanchisseuse were all good spear fishing and I believe there are still a few fish to be seen. At Tacaribe in about 2003 I experienced what seemed to be a journey back in time when in the clear water I dived among cavalli, pague, and even a grouper. However returning after lunch the same day the water had become turbid and most of those fish had vanished.



Moruga fishing depot Photo: Amy Deacon

Now the evidence available is contradictory. The fishing (and total) population has grown enormously. In the major fishing bases like Moruga, Guayaguayare, Icacos, Otaheite, Couva, Cocorite and Carenage, there are 'artisanal' fishing boats in

the hundreds. And places like Las Cuevas, Blanchisseuse, Matelot and many other small beaches there are numerous boats. These boats are of expensive fibre glass construction and fitted with very large engines. These observations suggest that catches have actually increased. I don't have any statistics on numbers of fish caught and I am not aware of any real measurements taken to support anything put out by Fisheries Division. There are no Fisheries personnel recording amounts purchased by fish vendors at these remote locations so anything published must be regarded with the utmost suspicion. A paper from the Fisheries Division authored by Mohammed and Chan a Shin in 2003, and available on the web, uses Harry Vincent's excellent book of 1910 and 'reconstructed' figures in the absence of any real data. It shows a peak in total catch between 1987 and 2001, inclusive of trawlers and Venezuelan 'poaching' and a decline thereafter. But what is supporting these large numbers of fishing boats if not fish? It should be noted that bigger and bigger engines take fishing boats further and further away from shore, and the ready availability of ice and cold storage may result in catching the same amount of fish in 2015 as in 1930. This may simply mean that it takes many more boats to catch them and further out to sea. But a fisherman would only buy a big engine and travel a long way if he was dissatisfied with the catch nearer to base. Another development is the 'a la vive' fishing which is used by almost 100% of 'artisanal' fishermen and game fishers after learning this from the Venezuelans. We must also take some account of the widespread use of monofilament nets which are cheaper and available to all commercial fishers.

My sport fishing friends tell me that tarpon and wahoo and various billfish are still caught off the north coast. In fact I was recently told that tarpon are so plentiful that the narrator tried in vain for over 25 years to interest ministers in promoting the sport internationally to boost the tourism economy. I, however, seldom see tarpon now; but again, in my youth it was easy to see them at Point Courant on Monos where they always assembled. I have hooked them at Pointe-a-Pierre and there used to be a few in the Nariva river at Manzanilla, but not now. So are these fish scarce or are numbers reduced?

These being game fish are of little interest to commercial fishermen.

There are still deep 'banks' where fish can be caught in good numbers. I'm talking about 300 feet of water so well out of diving range. I have heard of a very recent catch of over 900 lbs of 'bottom' fish at a BG gas platform off the north coast. This required evading the security regulations and standby boat that try to enforce the 500 metre safety zone around hydrocarbon installations. The favourite locations for serious divers are also around the east coast platforms but again the safety regulations present a problem. Some old timers know of wreck locations and deep mud banks on the north coast where good catches are possible. But I with my 30 foot depth near shore limitation see just barren empty seas where only a few angel fish still live. Everything else has disappeared!

Another clue to this mystery is the fact that spear guns sales are very high. Almost everybody who dives seems now to have a very powerful spear gun and I have seen stacks of them at my friendly underwater shop in Chaguaramas.

So I must reluctantly conclude that spear fishers have decimated the shallow populations and have at least something to do with the current scarcity. I hate to think that with my little bit of snorkeling I have contributed to this demise, and when I think of the number of people who spear fish, mainly on weekends, and how few fish they are able to land, it is difficult to believe that we are more responsible for this extinction than normal fishermen who go out on all days and nights and catch enough to pay for those big fast boats. Deep down I believe that there is another explanation and laying the blame with spear fishers is too simple and possibly missing an important detail somewhere.

In my opinion, the claims put out by fishing groups about seismic surveys damaging fish populations can, I think, be dismissed as opportunism practiced by fishermen looking to take advantage of perceivably-rich oil companies. Even the claims about large-scale fish kills from oil pollution must be regarded with caution. In the early days when fishing populations were so abundant we had a young oil industry that caused enormous pollution with cable tool drilling that allowed oil to freely flow to the

sea. Nobody was short of fish then! Agricultural pollutants may well be part of the problem.

Meanwhile, even without the sure knowledge of what the true problem is we should be trying to find a way to restore fish stocks. TTFNC recommended to the Harbourmaster sometime around 2005 that wrecks be dumped in the middle of the Gulf of Paria as an artificial 'reef' and marked with buoys as a fish sanctuary. The most we got was an acknowledgement of receipt. I have sent numerous messages to the current Minister of Transport begging him to dump the many vessels littering our coasts as a reef. The most I have seen in response is an announcement that several buses will be dumped offshore. Buses are made of aluminium and will quickly corrode to nothing. Meanwhile some wrecks are being towed to La Brea to be sold as scrap.

Wrecks are very good fish havens and according to National Geographic have been used extensively off Florida together with protection regulation to successfully rebuild the giant goliath grouper population. We should be doing this in the Gulf and around our shores. The wrecks themselves form a sure protection against destructive trawlers since their nets would become entangled. Dumped offshore oil platforms are also successful fish havens in the Gulf of Mexico. We are losing more and more mangrove shorelines which provide a nursery to so many species. I don't know how this features as an ingredient in the fish absence mystery since the Trinidadian mangroves are dwarfed by the enormous stretches of swamp in neighbouring Venezuela, but I hate to read of proposals to build a ship breaking yard in the Rousillac swamp.

I propose we must take this fish problem seriously and recommend sanctuaries to the government with assistance from serious researchers in the subject.



Art Group Trip Report, 20th November 2014

ART IN THE DARK

by Amy Deacon



Back in 2012, the UWI Zoology Museum was the venue for the Art Group's first ever outing. At the time, it was agreed by all that the museum contained sufficient inspiration in its hundreds of fascinating specimens to sustain many, many more trips.

On Sunday 20th November, eleven members finally returned for another morning of drawing and painting. Once again Mike Rutherford was extremely accommodating in allowing us access to the museum and helping us each select our desired specimens.

This time the process was complicated somewhat by a power cut, which left the entire University in the dark for the day, and meant that Mike had to guide us around his Aladdin's cave of treasures by torchlight. It also forced us to set up on the desks in the open-air undercroft outside the museum, which turned out to be very pleasant and in the end was probably an improvement to being inside the crowded display room, with its artificial lighting.



Artists outside the museum. L-R: Erik Blair, Annelise Randall, Sharon Vanderhyden, Nalini Ouditt, Amy Baksh, Ayodhya Ouditt, Greg and Rachael Frank.

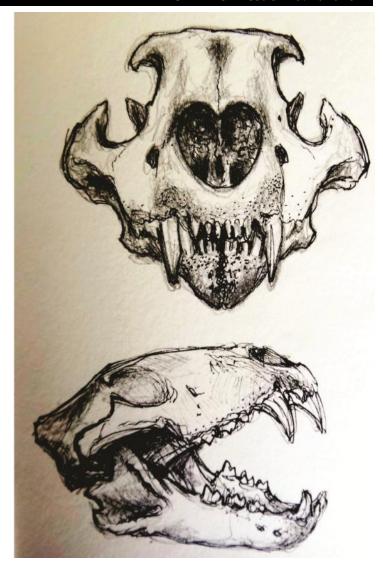
Perhaps the darkness caused by the power cut had put ghoulish thoughts in our minds, as our chosen specimens were decidedly spooky! They included a taxidermied vampire bat, a pickled frog, a giant longhorn beetle and a snake skeleton. Skulls also proved a popular choice; lion, howler monkey, deer and turtle skulls were all selected for sketching by different artists, with some very pleasing, if eerie, results.

The shape and form of skulls provides excellent drawing practice, as one can attempt to capture the three-dimensional, sculptural nature of the object, using shading to indicate depth and adjusting and readjusting lines on the paper until one is happy that the proportions are just right. This approach was exemplified by Ayodhya Ouditt who produced several pages of very successful skull sketches, from multiple angles, and using a combination of pencil and pen and ink to experiment with different techniques.

'Slightly less macabre subjects included a case of Trinidadian butterflies, which first-time members Annelise Randall and Sharon Vanderhyden portrayed using pastels and coloured pencil, respectively.

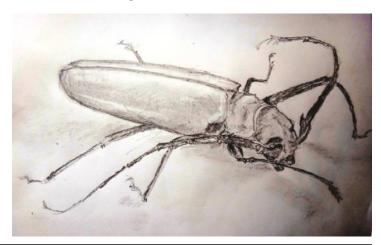
Time disappeared quickly, with everyone completely absorbed in their drawings from start to finish. Once again, the museum proved an extremely popular venue. Even after two trips I still feel that we have only capitalised on a tiny part of the great potential that the museum holds for our enthusiastic members; we will definitely be returning in the near future!

We would like to thank Mike Rutherford for accommodating us at the museum for the morning and generously giving up his time to show us around. Anyone who is interested in joining us on future trips should send an email to me at aed32@st-andrews.ac.uk, and you will be added to the mailing list. Anyone is welcome to join our very informal group — no experience necessary, just an enthusiasm for art and nature!



Lion skull studies - Ayodhya Ouditt







A CARONI SWAMP CHRISTMAS

Report by Shereen Ali



Like startling flames in a sea of swamp green, we saw five scarlet ibises roosting far above us, in the upper branches of a dense clump of tall mangroves. The ibises were one of many species spotted in a Christmas trip to the Caroni Swamp—part of the T&T Field Naturalists' Club annual Christmas gathering held on December 7th, 2015 at the Caroni Bird Sanctuary.

Sixteen field naturalists and assorted nature lovers boarded the boat captained by tour guide Shawn Madoo shortly after three that afternoon. We soon set off, eager to explore the swamp.

With almost 15,000 acres of biodiverse marsh-land, tidal lagoons, mangrove forests and intertidal mudflats, visiting the Caroni Swamp is always a wonderful experience for birdwatchers, lovers of wild-life, or those who like the peace of the wetlands. Located on Trinidad's northwest coast, this swamp is home to at least 20 endangered bird species, and is a wetland of global importance (a Ramsar site). It's not only a magnet for bird life — some 190 species of birds (nesting, resident and migrant) have been reported here—but it is also a valuable nursery for many freshwater and marine fish species.

Our boat trip departed at 3.16 pm as a gawky young grey and brown scarlet ibis, Eudocimus ruber and a dapper blue heron, Ardea herodias, both perched on a jetty railing at the Visitor Centre, eyed the water for tasty crabs—or perhaps a frog or two. We headed west on the Number 9 Drain or Blue River.

An early sighting was a non-venomous tree boa or 'cascabel dormillon', *Corallus ruschenbergerii*. His five-foot-long khaki-brown body looped like a Celtic knot around an overhead branch of mangrove. He seemed very at peace with his world; his sinuous curves looped around himself as he slept in the trees. Tree boas are mostly nocturnal, solitary, territorial animals, I discovered later. And they eat rats, birds, lizards and small birds' eggs.

Shawn was friendly, engaging, and seemed personally interested in the wildlife, telling tales of past experiences (he's been cruising the swamps for many years) and educating the newer field naturalists among us on the swamp's inhabitants.

At one point everyone on the left side of the boat had to duck as we passed beneath some low-



Club members on board the boat awaiting their tour

Photo: Jeffrey Wong Sang lying mangrove branches. We paused there to observe a tiny mangrove tree-climbing crab, *Aratus pisonii*. These humble little crabs are a great example of the delicate interrelationships of life systems in the swamp: they are a major food source for many species, including the scarlet ibis. The crabs' tiny bodies contain the red chemical pigment B carotene, which is what gives the scarlet ibis its beautiful, startling red colour.



Jeffrey and a mangrove crab Photo: Amy Deacon

Shawn's practiced ear recognised many bird calls, including the yellow-breasted flycatcher, *Tolmomyias flaviventris*, the northern waterthrush, *Parkesia noveboracensis*, and the straight-billed woodcreeper, *Dendroplex picus*.

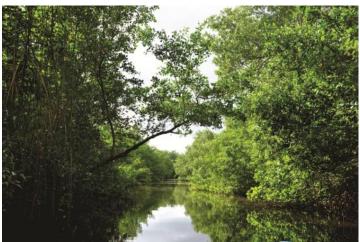
He told us about the wealth of fish species in the swamp, including sardines, grouper, snook, herring, tilapia, and catfish, not to mention mangrove oysters, mussels, clams and shrimp. At odd times we would hear a splash or a plunk, as fish would surface and quickly disappear.

Mangrove forests with massive arching roots surrounded either side of us as we motored slowly up the peaceful channel. We learned about the three main species of mangrove: red, black and white. The first kind we saw was the black mangrove, Avicennia germinans, with strange little aerial roots growing straight up, like colonies of otherworldly fingers groping for the sky; these roots can breathe even when submerged. Later we saw red mangroves, Rhizophora mangle, with their complex

networks of tall stilt roots that grow down into the water like giant tentacles. Red mangrove is more common further down the river, and at the seaward edge of the swamp, where saline water mixes with fresh; and these red mangrove roots are where the oysters like to live, said our guide. All the mangrove species work together to help stabilise the shoreline, trap tidal debris and provide feeding, breeding, and nursery grounds for a great variety of fish, shell-fish, birds, and other wildlife.

We almost missed spotting a little four-foot spectacled caiman, *Caiman crocodilus*, so well did his leathery ridged back blend in with the surrounding roots.

Bird sightings included a boat-billed heron, *Cochlearius cochlearius*, a yellow-crowned night heron, *Nyctanassa violacea*, a tricoloured heron, *Egretta tricolor* with his S-shaped neck, a grey heron, *Ardea cinerea*, many blue herons, *Egretta caerulea*, a belted kingfisher, *Megaceryle alcyon* and a solid, rugged looking common black hawk, *Buteogallus anthracinus* perched quietly on a branch. We also saw keen black and white ospreys or fish hawk, *Pandion haliaetus*, which are fish-eating birds of prey. Ospreys have such good eyesight that they can see fish underwater from 100 feet in the air.



Exploring the peaceful mangrove canals

As sunlight glinted off the rippling river water, the channel widened as we approached the expansive horizon of the sea, with the sun straight in our eyes. We went out into the Gulf of Paria, with the smell of salt air and a spectacular view of Trinidad's western coastline. In the distance we could see mainland mountains. Seawards, ospreys swooped.

A special surprise was the sight of a huge pelican party. Some were swimming along the bay, but they all flew up into the mangrove on our approach. Perhaps 50 or more brown pelicans, *Pelecanus occidentalis* then peered down at us from their high roosts, keeping a wary eye on us, their white heads and fantastically long bills swiveling as they tracked our location. One lone pelican remained in the water; when we approached, we realised why: it had a damaged left wing.



Brown pelicans at the seaward Edge of the swamp

On our return to the swamp, we saw a merlin, which is a small species of falcon also known as a pigeon hawk, *Falco columbarius*, and a happy osprey with dinner in his beak—something with a wriggling tail.

By 5.09 pm, Shawn had moored our boat facing a large island in the middle of the swamp. Soon,



three other boats joined us.

Then, from all directions in the swamp, flocks of scarlet ibis began arriving, intermittently at first, and then picking up the pace. Some neotropical cormorants, *Phalacrocorax brasilianus* and tricoloured herons, *Egretta tricolor* also flew in. As sunset shaded into hints of dusk, over the short time of 20 to 30 minutes, hundreds more ibises arrived, long lines of flapping red flocks arrowing in on their favourite roosting spot on the mangrove island. It was a breathtaking display of one of nature's beautiful rituals. Each new flock haggled for its spot on the island in a cacophony of bedtime bird talk.

Shortly before dusk, there suddenly appeared very long lines of white egrets, almost skimming the water in low-flying acts of grace, like spirits flying home. They mostly roosted below the ibises.

The green mangrove island soon looked like a beautiful Christmas forest—our own indigenous Christmas beauty: not one of vertical fir trees, but rather a sprawling, green, vibrant space, jewelled with living red and white.

Anyone interested in taking a tour with Shawn or his equally-qualified brother, Darren, can call Madoo's on 663 0658 or email madoobirdtours@yahoo.com.



As we awaited the flocks, our guide Shawn Madoo (left) told us about the life history of the scarlet ibis (above)

All photos taken by Jeffrey Wong Sang unless otherwise indicated.



At one of our monthly meetings last year, Hans Boos encouraged the members present to share their natural history interests and observations with other members of the Club at meetings. These, alongside other useful observations and ideas raised at these meetings, need to be shared with all of the membership. As such, from this issue onwards, a space in the bulletin will be dedicated to documenting and sharing these.

- On the bird group's February 2014 trip to Gran Couva, members encountered a ficus tree in fruit. The tree, one of the stranger figs, was attracting numerous forest birds which came to eat the small fruits. A sample of the tree was taken and was tentatively identified by staff of the National Herbarium as Ficus schumacheri. The tree is located at the Tortuga Short Cut. Another specimen grows at the entrance to the nearby La Peyrouse Estate.
- Yvette Adams expressed concern for the dam-

age being done to the Gasparee Cave by visitors, even in the presence of tour guides. She was also concerned that the "wrong" message was being sent by a poster (featuring a model posing atop a limestone feature) that is displayed in the lodge. Management sent a letter to the CDA outlining these concerns which, after an initial acknowledgement, were not addressed by the authority.

The need for the Club to set about a project, in the spirit of past projects such as the turtle tagging and Aripo Savannahs projects, was discussed at the November 2014 meeting. Christopher Starr suggested selecting an area and doing an in-depth, long-term natural history study of it. He also suggested developing and connecting existing nature trails in the Northern Range to form an integrated trail along most of its length, possibly modelled on the Appalachian Trail in the USA. Hans Boos indicated that a survey could be done of the Bocas Islands and Jalaludin Khan suggested that this could be extended to mainland Chaguaramas.

If you have any interesting ideas or observations to share, but are unable to attend the monthly meetings, we'd still be interested to hear from you at admin@ttfnc.org.

Dan Jaggernauth mans the TTFNC booth at Toyota Day 2014





FLOODING IN MANZANILLA

Another expensive man-made disaster



Opinion Piece by Ian Lambie

This article expresses the views of the author and may not represent the views of all members of the Club

The sixty square kilometres known as the Nariva Swamp, the largest fresh-water wetland in Trinidad and Tobago, was declared to be a Forest Reserve in 1954 and a wetland of international importance under the Ramsar Convention in April 1993. The Ramsar Convention on Wetlands is an intergovernmental treaty adopted on 2nd February, 1971 in the Iranian city of Ramsar. There are 2,186 Ramsar sites in the 168 signatory countries.

There are two areas of high ground in the Swamp, Bush Bush and Bois Neuf. Bush Bush was declared a Wildlife Sanctuary in 1968 and a Prohib-

ited Area in 1989. In the 1950s, the Regional Virus Laboratory had established a Field Station in Bush Bush and many significant discoveries were made including the role of the red howler monkey and the Aedes aegypti mosquito as a vector in the transmission of yellow fever. One of the scientists who worked there, Dr Charles Brooke Worth wrote a book "A Naturalist in Trinidad" about his experiences while resident in Bush Bush.

The major wetland vegetation types are three species of mangroves, palm forests, swamp forests,



Kernahan village just before the worst floods

Photo: Mike Rutherford

swamp wetlands and freshwater marsh.

The swamp provides habitat for a variety of wildlife including red howler and white-fronted capuchin monkeys, anteaters, manatee, ocelot, brocket deer, lappe, agouti, caiman, anacondas, blue and yellow macaws, red bellied macaws, parrots, as well as several species of wetland birds, orioles and finches. It has been reported that years ago the magnificent horned screamer, now extirpated, was resident in the swamp. The cascadura, tilapia, blue crabs, oysters and black conch provide a source of protein for residents of the five main human settlements in the vicinity of the swamp: Plum Mitan, Biche, Brigand Hill, Cocal/Kernahan and Cascadoo. Small-scale farmers cultivate watermelons, cucumbers, tomatoes, pumpkins, sweet peppers, callaloo bush and other vegetables for the market.

At one time there was illegal grazing of cattle on Bush Bush, but the greatest threat of negative impact on the Swamp has been the illegal squatting by large-scale rice farmers using heavy machinery to remove the natural vegetation and to cut channels to facilitate the draining of the swamp. These illegal activities were first detected in 1986 but no attempt was made by the Government to stop the destruction and to remove the farmers. The parliamentary representative for the area compounded the situation by inviting farmers to grow more rice in the swamp. The Agriculture Development Bank provided low-interest loans to these farmers without verifying the status of the land on which the rice was being grown. It is quite possible that the politics of the day determined such decisions by these stateowned companies. In my opinion, a decision by the National Flour Mills to stop purchasing the rice would have immediately brought these illegal activities to an end.

A 1996 survey conducted by the Lands and Surveys Division identified some 945 hectares (2,334 acres - an area equivalent to 10 times that of the Queens Park Savannah) as being cultivated illegally and occupied by eight farmers. A significant development was a large drain cut from Plum Mitan to the Nariva River for the transportation of rice to the Manzanilla/Mayaro Road.

By the mid-1990s the removal of vegetation, the diversion of natural water courses and the cutting of

new channels had resulted in considerable damage and major ecological changes. This resulted in many small-scale farmers having to abandon their farms, which they had cultivated for more than three generations, due to the reduction in their water supply. In 1996 the large-scale rice farmers were forced to stop operations and to move their equipment out of the swamp. Unfortunately the laws of Trinidad and Tobago do not provide for the payment of compensation for the damage and destruction of state lands.

Following the development of an Environmental Impact Assessment (EIA) and the formulation of a management plan, the Government began filling in the channels which had been dug by the rice farmers. In mid-1999 a work plan for the implementation of some of the recommendations made in the Management Plan and the EIA which had been developed by the Institute of Marine Affairs. These were to concentrate on the restoration of the hydrology and the aquatic vegetation of approximately 3600 hectares. In 2002 rice farmers were allocated suitable lands in Plum Mitan, Caroni, Felicity, Orange Grove, Penal and Barrackpore.

More than twenty five years after the first incursions were detected, we experienced the results of the illegal activities of these rice farmers in the removal of vegetation, the diversion of natural water courses, and the cutting of new channels resulting in rapid runoff and flooding during a period of heavy rainfall in November 2014. A section of the Manzanilla/Mayaro Road was destroyed, and parts of the beach were washed into the sea. Unfortunately many home-owners along the Manzanilla/Mayaro Road lost their properties and their livestock.

The extent of damage to the rehabilitated areas and the loss of and present status of aquatic wildlife are yet to be determined. Taxpayers have had to meet the cost of rehabilitation and not the perpetrators of the destruction. Have these rice farmers repaid their loans to the Agriculture Development Bank?



- A Tribute to -WILLIAM H. PAYNE



by Ian Lambie

William "Will" Payne was born in Barbados on the 19th of September, 1917 and came to Trinidad with his parents at the age of nine months. He spent all of his early years in San Fernando where his British-born father was a Minister of the London Baptist Church.

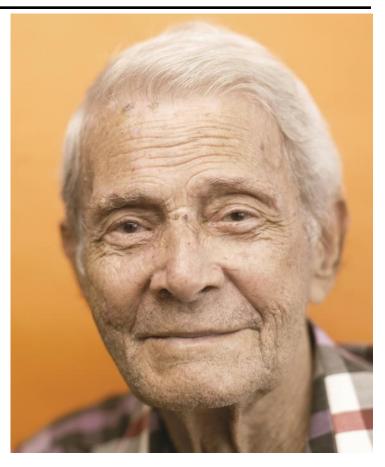
Will attended the Naparima Boys High School in San Fernando where he was the captain of both the cricket and football teams. In 1935, while still being a student of Naparima Boys, he was selected to be a member of the Trinidad Football Team on a tour to Venezuela, Ecuador, Colombia and Jamaica. He played in the left-wing position and in the game against Jamaica, he scored the first and the third goals in a 3-2 victory for Trinidad.

The next year he was again selected to represent Trinidad, on this occasion to tour Surinam and British Guiana, as Guyana was then known.

At 18 years of age Will Payne was, at that time, the youngest football player to represent Trinidad. He was a multi-talented person and he also excelled at table tennis and was the champion player of Trinidad for seven consecutive years, from 1937 to 1944, when he retired as the undefeated champion.

He played the guitar, was an avid stamp collector, and was an accomplished maker of wine using local fruit, but was himself a teetotaller.

Before relocating to Port of Spain, he played football for Spitfire Club and cricket for Promenade Club, excelling with both bat and ball. Once in Port of Spain he played



William Payne
Photo portrait taken in 2012
by photo artist and club member
Richard Acosta

football, first for Casuals and later for Shamrock Club. For many years, he played cricket for the Queens Park Cricket Club and was made an Honorary Life member of this prestigious club.

During the period 1939 to 1946, Eric M. Legge was the Comptroller of Customs and Excise and during those years Legge recruited young sportsmen with the necessary

academic qualifications to become Customs and Excise Officers. Will Payne was employed as a junior clerk at the Education Department and Legge arranged with the Director of Education, J. O. Cutteridge, for Will to be transferred to the Customs and Excise Department.

Other than a short period at the refinery at Pointe-a-Pierre and later at the Education Department, Will served as a Customs and Excise Officer for his entire working career until his retirement in 1977, at which time he held the position of Comptroller of Customs and Excise (Acting). For most of those forty years he was stationed in the Excise Branch and in the Preventive Branch of the Department.

Will Payne was one of my mentors and my friend. It was he who in 1958 invited me to become a member of the Trinidad and Tobago Field Naturalists' Club. He nominated me and the nomination was seconded by Frank Ambard, who incidentally was also the goalkeeper of the Trinidad football team and

also served in the Customs and Excise Department.

On Sunday 26th October, 2014, Will Payne, my mentor and my friend, passed away after a brief period of illness. At the celebration of his life, his brother-in-law described him in the eulogy as a man of many parts. He was of impeccable character, honest, the consummate gentleman, and I agree.

My interest in and appreciation of Natural History, in Wildlife Conservation and in Natural Resource Management began nearly 60 years ago with my introduction to the Trinidad and Tobago Field Naturalists' Club by Will Payne, and I have always been grateful to him for his contribution to my lifetime's interest.

Our heartfelt condolences go out to the family and friends Of



Louis Guy



Louis Guy was a member of The Trinidad and Tobago Field Naturalists' Club (TTFNC) and was committed to conservation of the environment and to the general welfare and development of young people.

The unique contribution of this treasured individual and member of the Club will be explored in upcoming TTFNC publications.



NIDIFUGY AND THE LIMITS OF COMPUTATION



by Christopher K. Starr

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There is something about clutch size in birds that has long puzzled me. This varies widely, from just one egg in some penguins and large birds of prey to as many as 22 in some game birds. David Lack (1954) long ago showed that when clutch size is very small it is not a case of the adult birds limiting their reproduction as a means of avoiding disastrous overpopulation. Rather, if they typically lay just one or two eggs in a season, that is the maximum number of young that they can rear.

Birds in which the young remain in the nest and receive all food from the parents until they are ready to fly -- such as virtually all song birds, birds of prey and sea birds -- are termed "nidicolous". These usually have quite small clutches, no more than three.

In contrast, those in which the still flightless chicks go out foraging with a parent -- such as ducks, quail and pheasants -- are termed "nidifugous". These typically have larger clutches, often a dozen or more.

On the one hand, this makes very good sense, since parents can provide for many more offspring if they can lead them out to forage, instead of having to bring all food back to the nest. We have all seen a mother hen scratching away leaf litter to expose bugs for her many eager chicks. She has to lead them to good sites and show them how it's done, but they do their own pecking, and it all seems quite efficient.

The bothersome question is: How does the hen keep track of all those chicks? As far as is known, no animal can count beyond seven (Miller 1956). That is, none can reliably tell the difference between seven and eight, or between eight and nine. The same applies to humans if we don't have a chance to count things one by one, giving the quantities names. If you quickly flash two panels on a screen, one with four dots and the other with five, and then ask your test subject which had more dots, she will pick the panel with five. If, however, the numbers are 11 and 12, the choice becomes unreliable.

If the hen is out with her 12 or 13 chicks, then, and one of them has wandered off when it is time to go home, she is presumably quite unaware that any-

one is missing. So, how do they avoid unnoticed losses? Does everyone stay so close together as they walk and search that no one ever gets parted from the group? From my observation, this is unlikely. Chicks are inquisitive, especially as they get larger, and are often out of sight of the group. Perhaps they are careful always to stay within hearing, so that they never miss the hen's clucking that says "Okay, dears, let's assemble, because it's time to move along together", but I wouldn't count on it. Does the hen take her brood only into areas they already know, so that any stray can find its way home on its own? This seems quite out of the question.

So, the many offspring of nidifugous birds is something of a poser. The answer may simply be that they do occasionally lose a stray, and this is just part of the cost of their fowl business.

References

Lack, D. 1954. The Natural Regulation of Animal Numbers. Oxford: Clarendon 343 pp.

Miller, G.A. 1956. The magic number seven, plus or minus two: some limits on our capacity for processing information. *Psychological Review* 63:81-97. Online at http://psychclassics.yorku.ca/Miller/



These nidicolous herons, seen on a club trip to Lagoon Bouffe, will stay on the nest until they can fly. Photo: Amy Deacon



ENCOUNTERS WITH BOTHROPS.

by Hans Boos Part 3 of 5 (Part 2 in QB3/2014)



ENCOUNTERS TOO CLOSE FOR COMFORT

It takes some experience to safely handle *Bothrops* and indeed any venomous snake, for with each encounter when one has to handle the snake, the chances of a mishap and a bite, perhaps fatal are increased enormously.

It is my contention that any person who handles venomous snakes can be judged a "good snakeman", not by the number of bites and survivals experienced, but by the fact that though there have been many occasions where handling of a venomous snake is unavoidable, there have been no bites. But for every person who has handled venomous snakes and ones as unpredictable and bad tempered as *Bothrops atrox* and its relatives, there will be occasions where the fact they were not bitten may be due to sheer fortune or just plain stupid luck.

I have to admit that I have had a few close calls. the first of which was with the snake I had caught in the heights of Aripo, as related above. From the onset this snake was a nervous and aggressive specimen. I kept it in a locked and covered aquarium in the Emperor Valley Zoo office, where I was monitoring its progress after it had lost one of its fangs during its capture. As I approached the aquarium one day, it saw me and immediately went into a defensive coil and rattled its tail. I passed my hand over the mesh cover of the top of the cage to ascertain the sensory distances of the snake, when without warning it struck at my hand which it could either see through the fine wire mesh, or it felt the radiant heat of my body in my hand. I heard the strike make contact with the mesh and the fangs must have penetrated to some extent, for I felt the wetness of the venom on my hand and saw droplets that had missed sprayed on the wall behind the cage. Venom on unbroken skin is harmless so I was not endangered, but I was a lot more careful in approaching this snake or any others in the future, and I could point to the dried pattern of venom on the wall for several years until the room was converted to a library and the wall repainted.

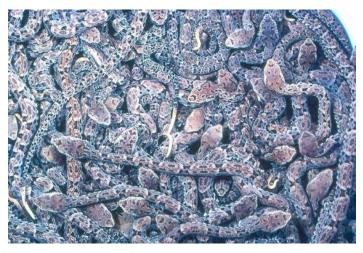
Often in captivity, due to oversight or lack of observation, whenever a snake begins its regular sloughing process, the scale over the eyes goes opaque and the entire snake changes colour as the old skin is being prepared for shedding. At this time, if the cage or terrarium is not kept moister than ordinarily, the skin often is not sloughed off in one complete piece but comes off in tatters, and some pieces are often left in dry shards on the new skin. In some cases the eye-cap scale is left behind and can lead to bacterial build-up between the old and new scale and therefore the old scale has to be removed. To do this it is necessary to immobilize the snake's head and physically work the outer dry scale loose. The best way to do this is by picking at the surrounding soft skin of the eye with an elongated fingernail of the hand that is not holding the head. I have found that this is safer for the snake for if one were to use a pointed forceps to attempt to pick away the scale, the snake's eye is super sensitive and at times, despite the firm hold of the hand on the head, a writhing shake of the head will drive the point of the forceps into the eye or the head, doing serious damage to the snake. Gloves worn during this process impair the sensitivity of your hand to feel the reactions of the snake and to thus accommodate any contingencies.

But there was one contingency I had overlooked while carrying out this procedure on a very large female mapepire balsain. I had a firm grip on the back of the snake with my left hand (a keeper was holding the body) and I began to gently work the dried scale loose, when suddenly the snake twisted its head, gaped its jaws slightly and extended one large fang out the side of its mouth and before I could react, the tip of the fang hooked into the elongated nail of my thumb and the yellow venom poured out of the slit in the tip of the fang and swamped my entire thumb-nail. There was luckily no puncture, but I learned a very important lesson about the ability of some snakes and the mobility of

their fangs to, in some circumstances, puncture their tormentors without fully opening their mouths. Being extra careful, I completed the delicate and dangerous operation.

One of the most important lessons a keeper of venomous snakes must learn and adhere to, with no relaxation due to routine or complacency, is that if there are more than one snake in a cage, especially venomous snakes, every time you go into the cage, for any reason, the snakes must be counted and their location in the cage noted, before any procedure is attempted.

One large mapepire in the Zoo collection gave birth to about fifty young ones (Photo I) and it seemed like a good opportunity to utilize these surplus little snakes as food for a rather finicky and nervous black cribo (Clelia clelia) which had been giving us a bit of trouble to feed, for suitable prey was becoming harder and harder to get for this almost exclusively snake-eating snake. It was also an important experiment to confirm what had been written about these snakes. This was their ability to sustain bites from their food items that were sure to try to defend themselves from being consumed.



Immature mapepire balsain, *B. atrox* Emperor Valley Zoo

So we began to feed the youngsters to the Black Cribo, which lived up to its reputation and polished off the young mapepires without any trouble. I was the one doing the feeding and I passed the glassed front of the cage housing the young ones, where I thought there were only about a half dozen left to feed off. I had counted them the last time I had taken some out and when I went to repeat this

operation I could see six small snakes distributed about the cage. Seeing six, I could not precisely recall whether it was six or seven when I had serviced the cage a week before, but seeing six and having to deal with the original fifty, I decided that it must have been six, and needing to change their water, which needed replenishing, I picked up the waterbowl by grasping the rim, for it was small enough for me to lift it in one hand, when as I lifted it, I saw to my shock, that there was a seventh snake that had curled around the base of the bowl and out of sight due to the curvature of the overhang of the bowl. I suppose the snake was as surprised as I was, and it made no attempt to bite but just slithered off to another hiding place in the cage. But it is out of such carelessness that bites happen.

Some years later two gravid females in the collection gave birth to about seventy young ones, and after photographing the writhing mass in the bottom of a container I made a trip into the Northern Range and released them in a remote river valley where they would either survive or provide fodder in the natural food chain.

These events occurred during the years that I was the curator of the Emperor Valley Zoo, and I had had no occasion since my retirement in 1988 to handle any more mapepire balsains. But I had moved into a house in Blue Basin Gardens in the depths of the Diego Martin Valley, where outside my perimeter fence the forest presses close to the little seasonal stream that runs along the boundary to my property.

And the expected snakes came. I recorded several loras, Leptophis ahaetulla, dos cocorites, Pseustes poecilonotus, false mapepires (Leptodeira annulata), Ratonels, Pseudoboa neuwiedii, and beh belle chemins (Leimadophis melanotus). There was a full complement of the expected lizards and frogs and especially toads (Rhinella marina) that fed under the outside lights when the winged adults of the termites and batchacs swarmed after heavy rains.

I fully expected to one day find a mapepire in the yard as the environment seemed perfect, but having dogs and experiencing a fatal bite to a friend's dog (as related below), I hoped that I would not ever find one in the yard.

My two Jack Russell terriers proved intelligent enough not to bite into any of the toads that they

encountered in the yard, but would either nudge them into action with their noses, and in the case of very large females, would let me know that they had found one, by barking in a shrill distinctive way. I would usually go and toss the hapless toad over the fence into the river outside. Within a day or two and sometimes within hours the toad would home in to the yard and be there again.

One night about 2 am, the female dog, Lilly, began barking in her "I have found a toad" bark, and would not let up. It had woken me up, so I went out in the yard and found the dog confronting a large toad; I picked it up, tossed it carefully over the fence and went back to bed. Within minutes the barking resumed and I tried to ignore it, but eventually relenting, I went back out. This time Lilly was barking at a patch of dark shadow in the drain outside my bedroom, and saying to myself, "Another toad," I reached down into the shadows to pick it up. In retrospect, a very stupid thing to do. As soon as I touched what I thought she was barking at, I knew it was a snake, but closing my fingers gently on the outer stiff coils, I picked it up very gingerly, placed it on the palm of my left hand and walked onto the veranda where there was some light spilling out from my bedroom.

There on my left palm was coiled an immature mapepire balsain. No more than ten or twelve inches long, not much bigger that the ones that I had fed to the cribo so many years ago. I could see it was looking intently at me and its little yellow tail was shaking rapidly in that distinct quiver that I knew so well.

I said to myself, "You dammed fool. You should know better. Tonight you dodged the bullet," and I tipped the little fellow into a small aquarium that I had on a table on the veranda. I photographed it the following day and taking it deep into the bush of the Northern Range released it, perhaps to atone for the others I had sacrificed.

Within a month one of my neighbours next door, brought me a second one about the same size that he had captured under a pile of lumber. There must have been a birth in the bush nearby and two of the babies had made their way into our yards as they dispersed after being born.

Though I never saw the snake that did the deed, I surmise that it was a mapepire balsain that was re-

sponsible for the first death, within a short time, that I experienced. I was bird watching with a friend on the mountain road that runs down to the north coast from Para Grande. This road is quite close to the house built on the top of the ridge by my cousin Paul Duval, and on that day as we walked along the sloping road below the house, Paul's two dogs ran down to us and after at first barking at us, soon joined us in a friendly and joyous romp. They were little more than pups, less than a year old at most.

We had just walked back to the car when we heard a sharp yelp that came from down the hillside to our west and the larger of the two dogs raced into the cleared area at the side of the road, and she was spinning around and trying to bite at a spot on its shoulder and obviously in great distress. Going to her and trying to calm her we could see blood on the fur where she was trying to bite and it seemed fairly obvious that she had been bitten by a snake. With Paul's permission we took her to a vet where, despite all treatment, she succumbed several hours later. We could not be sure which of the vipers had bitten her, as both species have been reported from this area, but it is most likely to have been a large mapepire balsain that was responsible for the bite and her subsequent death.

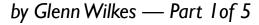
Several months before, in October of 1992, I had led a reconnoitering trip up the Grande Riviere River which flows out of the north eastern part of the Northern Range out to the north coast near the village of Grande Riviere. With several members of the Field Naturalists' Club we had hiked and climbed along the banks of this river for several hours and paused in what was an old nutmeg plantation. Nutmeg trees tend to be densely foliated and block out much sunlight from penetrating to the jungle floor below, and under this particular tree where we rested there in the root-rutted bare space, were many fallen nutmegs, some still encapsulated in their yellow jackets and some with the bright scarlet mace wrapping the rich mahogany coloured nuts within.

Some of us began to forage about, choosing and collecting fresh nutmegs, while a couple others of our party relaxed, squatting in the cool shade of the tree above, on the clear ground covered by fallen leaves, twigs and jungle detritus.



Memoirs of a two week paddle around Trinidad in a canoe in 1985

IN THE WAKE OF THE CARIBS





Shadow sang "Columbus lie," because our "discoverer," in his anxiety to make claims for himself, disregarded the Indian. The newspaper report of our trip said, "it is believed they are the first to paddle around the island in a canoe." My own conviction is that we had merely travelled "in the wake of the Caribs."

The first canoe I paddled was an open wood and canvas boat built by Rene Ache. This was way back in the fifties. In the sixties I was, for a few years, co-owner of a "runabout" that did little to inspire any confidence in boats with engines. But I guess when you buy a second-hand outboard from someone nicknamed "Mingpilling" you should expect the worst. Subsequent limes with Reggie in "St. Peter" strengthened my distrust!

In the early eighties after years of hiking, I had a sudden urge to explore the rivers and swamps of Trinidad, and decided to buy an open "Canadian" canoe. A friend, who had done kayaking in the R.A.F., convinced me that it would be a more versatile craft, so I bought a D.I.Y. kit and built my first double. Foots was a natural choice for a paddling partner, having grown up in Carenage, breaking Biche and swimming across to Five Islands. With absolutely no knowledge or skills, we launched that first kayak, and found we could only paddle in circles! Incredibly, for two strong swimmers, we also tired very quickly. But we were hooked, and persisted until we slowly became more proficient. As we ventured into open waters, we were treated as two madmen. Somewhere along the line our response to "All you going Paria in THAT?" became

"Yes, and one of these days we'll go 'round Trinidad too!" After a while we realised that the idea wasn't so far-fetched, since it was really just a matter of stringing together a dozen trips similar to those we regularly made. I began poring over maps and mak-



Glenn building his first double canoe

ing plans.

(Continued on page 24)

ENCOUNTERS WITH BOTHROPS.

(Part 3 of 5 Continued from page 22)

We had been at this activity for several minutes when one of the party suddenly remarked that he had seen a snake near the bole of the tree and over which area we had all walked or stepped without seeing it. I peered closely at where he was pointing and sure enough there was a small coiled mapepire, completely camouflaged against the brown leafy sub-

strate. We must have almost brushed against it several times or stepped over it in out ignorance of its presence there, but it never struck at any of us or made its presence known by the characteristic warning tail rattling. I captured it and took it back to the Zoo where it was on display for many months.

To be continued....

IN THE WAKE OF THE CARIBS

(Part 1 of 5 Continued from page 23)

AUGUST 1985

Friday 9th [7 miles]

At 4 p.m. we said goodbye to the small group of friends who had come to see us off. "See you in two weeks time!" we shouted, and paddled off into a light drizzle. I didn't know what was going through Foots' mind, but I said the first of my daily prayers that we would return safely.

Earlier, when I had gone to meet him, his mother had taken one look at the boat and said apprehensively "black and white!" It was the first time she'd seen the kayak since I'd repainted it.

My planning for the trip had taken me in some odd directions, and the kayak was now disguised as a killer whale. Shark expert Angel Castro had given a very interesting lecture to the Field Naturalists Club, and I had found two of his observations relevant to our trip. The first was that shark activity in the Toco area peaked around the same time that we had determined the seas would be most favourable for the circumnavigation. The second related to the colours that attracted sharks. Protective and warning coloration was a well-documented fact of nature, and I decided to go for the distinctive look of the dreaded orca in my quest for 'sharkrepellent'. As we rounded Pt. Gourde, we never imagined that an authentic orca might well have been checking us out. Our biggest fear were powerboats, and for that reason we seldom went to Scotland Bay. But it was Friday, and there were few of the maniacs around, so we were able to enjoy the trip down. As we turned into Scotland Bay, the swells entering the First Bocas gave an exciting preview of what we would be encountering on the north. We beached on the first strip of sand on the northern end of the bay, a campsite I was familiar with. We prepared soup for dinner and went down to the water's edge. As darkness fell we were treated to an unforgettable light show, as every movement of the water triggered the phosphorescence. The small ripples breaking on the shore sent shafts along the sand, while the crumbs we tossed in the sea produced implosions of fish and light. We strung up the hammocks and bedded down for the night. Almost immediately, Foots crashed to the ground as his rope broke. Half an hour later, a sixth sense triggered a warning, and I awoke in time to get a leg down and prevent the same thing happening to me. It was an embarrassing start for someone who had prided himself on his pre-trip planning.

Saturday 10th [22 miles]

Another of my grand plans became unstuck that morning and every other morning for the duration of our trip. It proved to be almost impossible to get on the water as early as I had hoped. Breaking fast and breaking camp proved to be more time-consuming than expected, while the limited space on board required careful and lengthy packing. We had the first of our Quaker's oats and condensed milk, and believe me, the people who make them can get a free endorsement whenever they want. They and anyone who ever planted a coconut tree.

But finally we were on our way, through the Bocas and into the open waters of the "north." My mind went back to the Easter weekend Foots, Reggie, Horse and I had gone up to Cyril's Bay to camp. We had to bail "St. Peter" continuously, but we were all water-polo players, and travelling in a leaking boat was just part of the fun. Reggie, being Reggie, had to overdo things, and on the return trip we spent a hairy hour just inside First Bocas near Pt. Rouge, pulling up his fish pot, bailing, trying to kill the moray eel in the pot, bailing, and generally pushing our luck. Age had brought a certain amount of reason, and I was a lot more cautious when at sea. Of course, many people would regard our undertaking as the antithesis of caution, but the sea was generally safer than the highway. We made our first stop at Macqueripe, and enjoyed a dip with the Saturday morning regulars. Then we were off again, into a steadily increasing wind, the bane of paddlers. Saut D'eau island was ahead and seemed to be matching speed with us, but slowly we overhauled it and gratefully pulled into its namesake bay to go and cool off under the waterfall. Foots, the perennial almond-cracker, had a field day next to the statue of St Peter. I asked the "Big Fisherman" to put in a word for us.



One of the many stops on the trip was the statue of St Peter at St Cion Bay, opposite Saut D'Eau island (seen to the left).

Photo taken in 2015 by Amy Deacon

We left Saut D'Eau and as we cleared the point were once again buffeted by the wind. All the bays ahead, Mal D'Estomac, Cyril, Balata, Maracas and Tyrico, were deep, and there seemed little point in making such long detours to get the protection of the hills, so we paddled "point to point" until we got to Charasca, a tiny cove on the headland between Maracas and Las Cuevas. We cooled off under another small waterfall then continued to Las Cuevas, where we arrived weary but satisfied at having done more than our allotted daily 20 miles. As the sun went down we had two visitors, Bobby and Barbara, who treated us to an unusual but welcome dinner of soup and parata. They limed for a while and then left us to organise an early night's rest. Las Cuevas unfortunately has a reputation for beach thieves, and we decided to spend the night up in the lifeguard's hut. Luckily, the only disturbance that night was a villager with a cuatro, anxious to prove that for a Cocopanyol, parang have no season.

Sunday | | th [16 miles]

We left Las Cuevas and, as we rounded the point with the old fort, were pleased to find the

breeze a lot lighter than the previous day's. We headed straight for Chupara Point, and laughed when a nervous Panyol fishing boat scooted out of the La Fillette hole. We had never paddled between Las Cuevas and Blanchisseuse, and were a little nervous going around the point, but the seas were calm and there was no problem. Off Yara we took the precaution of speeding up as we went through the shoals. We debated whether cold drinks were worth the hassle of landing at either the upper or lower bays in Blanchisseuse, and decided not. Instead, we beached at the mouth of the Marianne, taking advantage of the calm sea to go ashore at a place we normally would have avoided. We relaxed in the river for a while, then continued on to Paria to pay a ritual visit to the old people on the hill. I've known them since 1959, when our sixth form Maths group did a Rampanalagas-Blanchisseuse "ketch-ass" hike. They gave us some mangos that fuelled us for a straight run to Madamas, where Reggie, Rudy and Bob had promised to rendezvous with us. They had hiked over from Matelot that morning, and as we came ashore they were fishing in the river. Soon we were feasting on roast bake and fried fish. They had even raided a few eggs from a turtle nest, and though they claimed to have taken only the infertile ones, I refused to partake. We camped at the mouth of the river and had a couple good laughs, once when Rudy slipped off the makeshift bridge and went fully clothed into the river, and later when Reggie announced that the pile of flat stones that he was neatly packing was his bed! Later that night we walked up the beach, and in the dark I felt something like a spider scurry across my foot. In alarm, I flashed my torch and saw a leatherback hatchling, the first I'd ever seen, even though I've seen adults nesting since 1960. We backtracked to the nest, and saw the rest of them emerge and make their way to the sea.

Those who know Madamas will understand why we were tempted to stay there for a couple days. Instead, we vowed to return after the circumnavigation.

To be continued....



WHERE HAVE THE FROGS GONE?

by Hans Boos



I moved into my house in Blue Basin gardens in 1998. It is an ideal place for me and my way of life as I am surrounded by lush secondary forest on my western and northern borders, and a small tributary of the Blue Basin river runs outside my fence. In this environment there are many reptiles and amphibians which are a normal presence at all times. Upon moving in, I was aware that there was a rich community of amphibians which I could identify by their calls.

I identified thirteen species within the first year as the seasons changed.

Besides the cane toad, the rest of the frogs identified from their distinctive calls were the following:

- I. Rhinella marina, (cane toad)
- 2. Mannophryne trinitatis (Trinidad stream frog)
- 3. Hypsiboas boans (giant tree frog)
- 4. Hypsiboas crepitans (rattle-voiced tree frog)
- 5. Phyllomedusa trinitatis (Trinidad leaf frog)
- 6. Dendropsophus microcephalus (small headed tree frog)
- 7. Pristimantis urichi (Urich's litter frog)
- 8. Trachycephalus typhonius (milky tree frog/warty tree frog)
- **9**. Elachistocleis sp.(narrow-mouthed frog/siren frog)
- 10. Leptodactylus validus (Garman's thin-toed frog)
- 11. Leptodactylus fuscus (whistling frog)
- 12. Engystomops pustulosus (tungara frog)
- 13. Scinax ruber (lesser brown tree frog)

By 2014 the only toads or frogs that are calling are nos. 1, 2, 3 and 7.

The introduced *Eleutherodactylus johnstonei* (Johnstone's litter frog) has moved into the neighborhood, and I recently identified the species *Flectonotus fitzgeraldi* (Trinidad and Tobago marsupial tree frog) in the bracts of large *Diffenbachia* plants in my yard.

Hans E.A. Boos. 12 Blue Basin Gardens, Diego Martin, Feb 16th 2014.

Downie, J.R. (2013) What Common Names Should We Use For Trinidad And Tobago's Frogs? Living World: Journal of the Trinidad and Tobago Field Naturalists' Club, 2013: 32-37



E. johnstonei



H. crepitans



P. trinitatis



T. typhonius



Dear Fellow Members, on 10th July, 2016 TTFNC will be Celebrating its 125th Birthday.

We therefore invite all to help create a special birthday experience with a lead up week of activities to commemorate this auspicious occasion.

We need volunteers to help plan and coordinate these upcoming activities.

Let's make our 125th birthday one that will be remembered for the next 125 years.

E-mail admin@ttfnc.org

if you would like to help plan the event

THE TRINIDAD AND TOBAGO FIELD NATURALISTS' CLUB



OPEN FOR SUBMISSIONS!

Please email admin@ttfnc.org with your untouched photos of landscapes and wildlife for our 2016 calendar!

Photos must have been taken in Trinidad and Tobago. Action shots/photos of animals engaged in 'dramatic activity' are especially welcome. No people, manmade features or added watermarks.

Please also indicate where the photo was taken and any scientific names of the subject, if known, along with a short description of each picture.

Deadline for submissions is 30th June, 2015. See Club's website http://ttfnc.org/ or e-mail admin@ttfnc.org for further details.



TTFNC QUARTERLY BULLETINS & INDEX ONLINE LINK:



http://ttfnc.org/publication/field-naturalist/

Management Notices

New members; Volunteers; Publications

New Members

The Club warmly welcomes the following new members: Ordinary members: Amelia Swift,

Anand Hanuman, Doon Ramsaroop, Gayle Miller, Jameel Emamdee, Marlene Maynard,

Merle Reynold, Nadeem Hydal, Nigel Pawan, Sharon Vanderhyden, Satish Rampersad, and

Shari Wellington. New life members: Mario Young Family members: Claudia Tietze

NOTICE FROM THE EDITORS: Do you have any natural history articles, anecdotes or trip reports that could be published in The Field Naturalist? We welcome contributions from members.

Please email your ideas or finished pieces to admin@ttfnc.org. We look forward to hearing from you!

Trinidad and Tobago Fie P.O. Box 642, Port of S _l	ld Naturalists' Club pain, Trinidad and Tobago	

PUBLICATIONS

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



The TTFNC Trail Guide Members : TT\$160.00



The Native Trees of T&T 2nd Edition

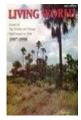
Members : TT\$80.00



Living World Journal 1892-1896 CD Members : TT\$95.00



LIVING WORLD





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

Living World 2012 supplement

Due to limited supply Living World 2012 supplements are \$20.00 each.

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 the 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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Submission of articles and field trip reports:

- I. All articles must reach the editors by the eighth week of each quarter.
- 2. Electronic copies can be submitted to the editors at: admin@ttfnc.org
 or directly to the editors or any member of Management. Please include the code QB2015 in the email subject label.