



THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

April – June 2017

Issue No: 2/2017



Bird Trip Report, 11-12 March 2017 BIRDING IN BRASSO SECO



by Matt Kelly

Selwyn Gomes and I left Port of Spain at 7:30am on Saturday, March 11, 2017 and headed over the Northern Range for Brasso Seco. We meandered a bit along the way, first stopping at the Santa Rosa First Peoples'

Community Museum in Arima, which was very interesting. To do justice, an entire article needs to be devoted to that community.

(Continued on page 3)



Male tufted coquette Photo by Matt Kelly

Inside This Issue

- 1 BIRD TRIP REPORT
BRASSO SECO**
- Matt Kelly
- 5 50 YEARS OF AWNC**
- Johanne Ryan
- 8 IF YOU'VE GOT, IT FLAUNT IT**
-Christopher K. Starr
- 'NATURALIST IN' SERIES
9 BETWEEN ATLANTIC TIDES**
- Christopher K Starr
- 11 BIRD GROUP REPORT
GRAND COUVA**
- Matt Kelly
- 13 YOUR IDEAS AND OBSERVATIONS**
- 14 FIELD TRIP REPORT
COCOA ESTATE AT FISHING POND**
- Reynold Boyce
- 16 CONFERENCE REPORT
CELEBRATING CARIBBEAN BIRD DIVERSITY**
- Jessica Rozek
- 18 STRATEGIC PLAN UPDATE**
- Compiled by Amy Deacon
- 19 'YOU SHOULDN'T BE IN SCHOOL'**
Presentation of Elisha Tikasingh's Memoirs
- 20 NATURE IN THE NEWS**
Compiled by Kris Sookdeo
- 21 BIRD GROUP REPORT
TALPARO**
- Feroze Omardeen
- 22 MEMOIRS
BEGORRAT, BOURBON CANE, BREADFRUIT, AND
BAMBOO IN TRINIDAD**
- Hans Boos
- 27 Management Notices**

THE FIELD NATURALIST

Quarterly Bulletin of the
Trinidad and Tobago Field Naturalists' Club

April - June 2017

Editors

Amy Deacon, Renoir Auguste,
Associate Editor: Rupert Mendis

Contributing writers

Jessica Rozek, Christopher K. Starr, Hans Boos, Kris Sookdeo,
Renoir Auguste, Matt Kelly, Feroze Omardeen, Reynold Boyce,
Johanne Ryan

Photographs

Jessica Rozek, Aly Olliviere, Jeffrey Wong Sang,
Hans Boos, Kris Sookdeo, Christopher K. Starr, Renoir
Auguste, Matt Kelly, Faraaz Abdool, Feroze Omardeen, Asif
Khan, Kenneth Fournillier, Harold Diaz.

Design and Layout

Eddison Baptiste and Amy Deacon

The Trinidad and Tobago Field Naturalists' Club
is a non-profit, non-governmental organization

Management Committee 2017/2018

President	Darshan Narang	678-6291
Vice-President	Palaash Narase	751-3672
Treasurer.....	Selwyn Gomes	624-8017
Secretary	Amy Deacon	390-0826
Assist-Secretary	Renoir Auguste	761-9197
Committee members ...	Dan Jaggernauth	659-2795
	Kris Sookdeo	647-5556
	Danielle Morong	768-7666

Contact us!

Email: admin@ttfnc.org

Website: www.ttfnc.org

Facebook: www.facebook.com/ttfieldnaturalistsclub

YouTube: www.tinyurl.com/ttfnc

Postal: **The Secretary, TTFNC, c/o P.O. Box 642,
Port of Spain, Trinidad and Tobago**

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

BIRD TRIP REPORT - BRASSO SECO*(Continued from page 1)*

We took our time going up the Northern Range, stopping every so often to look for birds. We made a brief visit to Simla, and moved on to the Asa Wright Nature Centre. I have been trying to get a good photo of a male tufted coquette for many years. Would this be my chance?

Upon arrival at Asa Wright, I immediately staked out a patch of vervain, which I know these magical birds love. There, I found a female tufted coquette hanging out and visiting the light purple vervain flowers. Out of the blue, a male tufted coquette came zooming down and began aggressively dive-bombing the female. He appeared intent on driving her off. While he took a quick rest from his frantic activities, I got the shot!

At the TSTT Station at Morne Bleu, we found a very large, sluggish, male hercules beetle on the fence near the guard house, with a great horn projecting from his head. When I pointed him out to the guard, he brought out a female hercules beetle. To test their reactions, I placed the female near the male on the fence. The male acted as though he had been asleep, but immediately awoke. He was definitely interested in the Mrs. He perked right up, and went into action, attempting to mount her; audience or not! She was clearly not interested, and made off.

Selwyn has roots in Brasso Seco. His great-grandmother lived there, around the nineteen-teens. Upon arrival in Brasso Seco, we stopped at the

Visitor Centre to find it open and lunch being prepared for the “Veg Out” vegetarian group from UWI. Too bad we couldn’t stay! I spotted a great black hawk, which was confirmed later by Carl Fitzjames. The great black hawk is not at all common in Trinidad but Carl said they are seen regularly in Brasso. We needed to check into our quarters. The TTFNC group would be staying at the Cocoa Palace on Gomez Trace. Kay Hinkson had generously made all the arrangements. There were about 16 of us for the overnight.

We did not seem to have one cohesive group, but split off in to 2 or 3 wandering groups. Selwyn, Brian D'Abreau and I birded our way back down the hill to the village, where we met with Carl Fitzjames and Darshan Narang (who were not on the trip). We were met by the group with Faraaz Abdool, Shaun Baldeosingh and Devon Mulchansingh. Together, we were getting a decent list of birds. At the bottom of Gomez Trace, we had pale-breasted spintail in the nearby bush, along with black-tailed tityra and grayish saltator.

After dark, we went out owling with the mottled owl as our target. We initially came back disappointed. We set out alarms for a very early morning, and were rewarded with the call of a mottled owl. Faraaz found a pinkish-purple coloured velvet worm—a very unusual nocturnal invertebrate that immobilizes its prey by squirting slime on them.



It's not just about the birds! Left: A very sluggish hercules beetle suddenly becomes very active in the presence of a female at Morne Bleu; Right: This velvet worm was spotted on an owl patrol at Brasso Seco

By Matt Kelly & Faraaz Abdool

As daylight broke, we saw many lilac-tailed parrotlets fly from their roost, and a plumbeous kite stopped to pay us a visit in a nearby dead tree. I found a boat-billed flycatcher building a nest.

Throughout the day, we continued to rack up birds. Selwyn, Brian and I walked a good distance up Lalaja Trace, which was the old, original access over the mountain from Arima to Brasso Seco. I was intent on finding the swallow tanager, but had no luck. During the afternoon, we all drifted off, just as we had all drifted in. We wound up with 91 species of birds in about 24 hours! Thanks to Kay for organizing the trip. 



Plumbeous kite by Matt Kelly

Birds seen on the Brasso Seco Trip:

- | | | |
|--|-----------------------------------|------------------------------|
| 1. Little tinamou (heard in forest) | 33. Blue-headed parrot | 69. American redstart |
| 2. Magnificent frigatebird (one lone individual over forest) | 34. Orange-winged parrot | 70. White-shouldered tanager |
| 3. Black vulture | 35. Green-rumped parrotlet | 71. White-lined tanager |
| 4. Turkey vulture | 36. Great antshrike | 72. Silver-beaked tanager |
| 5. Gray-headed kite | 37. Barred antshrike | 73. Blue-grey tanager |
| 6. Plumbeous kite | 38. Cocoa woodcreeper | 74. Palm tanager |
| 7. Great black hawk | 39. Pale-breasted spinetail | 75. Speckled tanager |
| 8. Common black hawk | 40. Southern beardless-tyrannulet | 76. Turquoise tanager |
| 9. White hawk | 41. Forest elaenia | 77. Bay-headed tanager |
| 10. Zone-tailed hawk | 42. Yellow-headed elaenia | 78. Blue dacnis |
| 11. Pale-vented pigeon | 43. Yellow breasted flycatcher | 79. Purple honeycreeper |
| 12. Ruddy ground dove | 44. Tropical pewee | 80. Green honeycreeper |
| 13. White-tipped dove | 45. Pied water tyrant | 81. Blue-back grassquit |
| 14. Smooth-billed ani | 46. Bright-rumped attila | 82. Bananaquit |
| 15. Striped cuckoo | 47. Great kiskadee | 83. Sooty grassquit |
| 16. Ferruginous pygmy owl | 48. Boat-billed flycatcher | 84. Grayish saltator |
| 17. Mottled owl | 49. Streaked flycatcher | 85. Shiny cowbird |
| 18. Short-tailed swift | 50. Piratic flycatcher | 86. Giant cowbird |
| 19. Gray-rumped swift | 51. Variegated flycatcher | 87. Yellow oriole |
| 20. White-necked jacobin | 52. Tropical kingbird | 88. Yellow-rumped cacique |
| 21. Rufous breasted hermit | 53. Bearded bellbird | 89. Crested oropendola |
| 22. Green hermit | 54. White-bearded manakin | 90. Trinidad euphonia |
| 23. Black-throated mango | 55. Golden-headed manakin | 91. Violaceous euphonia |
| 24. Blue-chinned sapphire | 56. Black-tailed tityra | |
| 25. White-chested emerald | 57. Rufous-browed peppershrike | |
| 26. Copper-rumped hummingbird | 58. Golden-fronted greenlet | |
| 27. Green-backed trogon | 59. Red-eyed vireo | |
| 28. Guianan trogon | 60. Southern rough-winged swallow | |
| 29. Channeled-billed toucan | 61. Gray-breasted martin | |
| 30. Golden-olive woodpecker | 62. White-winged swallow | |
| 31. Lineated woodpecker | 63. House wren | |
| 32. Lilac-tailed parrotlet | 64. Rufous-breasted wren | |
| | 65. Long-billed gnatwren | |
| | 66. Cocoa thrush | |
| | 67. Spectacled thrush | |
| | 68. Tropical mockingbird | |



ASA WRIGHT NATURE CENTRE

50 YEARS OF CONSERVATION AND EDUCATION
by Johanne Ryan



In 2017, Asa Wright Nature Centre (AWNC) celebrates its 50th Anniversary.

The development of our Nature Centre began decades before our opening. Our story can be told through the people that have lived and worked there. It starts with Charles William Meyer, whose father bought him the then Spring Hill Estate, because of Charles' interest in agriculture. Meyer built the estate house using hardwood and 'tapia' from Spring Hill. The house was completed two years later, in 1908. The house that Charles built is the same one you walk into when you visit AWNC. You can sit on its verandah and observe a variety of colourful birds.

About a decade later, Joseph Holmes and his wife, Helen-Bruce, bought Spring Hill. Holmes was an engineer and made many structural additions to

the house. He employed workmen to repair the main house, he piped water to the house and brought electricity by setting up a small hydro-electric generator. The old generator can still be seen along the Bamboo Valley trail. Holmes also introduced new fruit trees (citrus and bananas) and other flowering plants to the estate.

Later, in 1947, Asa Gudmundsottir Wright and her husband, Henry Newcome Wright, moved from Cornwall, U.K. to Spring Hill, Trinidad. Their new retirement home was chosen not only to benefit Newcome's health but also to feed his interest in nature. The Wrights cultivated cocoa, coffee, citrus and bananas and sold the fruits.

Soon, Asa and Newcome befriended naturalist, adventurer and author, Dr. William Beebe, who



The iconic panorama from the verandah By Kenneth Fournillier

moved in four miles lower down in the Arima Valley. Beebe called his property, "Simla". Beebe could be described as the Jacques Cousteau of his time. Or rather, one could describe Jacques Cousteau as the William Beebe of his time, for Beebe first worked before Mr. Cousteau. Beebe became famous for a then record deep sea dive. He and friend, Otis Barton, reached 3028 feet under the sea, in his bathysphere.

Thanks to publications on the flora and fauna of the Arima Valley done by Beebe and his colleagues, the area became a popular attraction for U.S. visitors. Simla, which served as the Tropical Research Station of the New York Zoological Society, was later donated to AWNC. Researchers enjoyed studying the Trinidad rainforest and equally enjoyed the delicious chocolate cake that Asa served when they were invited to tea. Newcome passed away in 1955 and when Simla could not accommodate all its visitors, Asa Wright welcomed new guests. American bird artist, Don Eckelberry and his wife Virginia, were some of Asa's early guests.

Asa managed the estate on her own, but when her health declined her friends became concerned. What would become of Spring Hill? A group of interested persons, headed by Don Eckelberry, raised money to purchase the estate in order that the inhabiting wildlife could be conserved. The World Wildlife Fund contributed money towards the protection of the resident oilbirds that are monitored to this day. Erma 'Jonnie' Fisk was the largest individual financial contributor. The Trinidad and Tobago Field Naturalists' Club (TTFNC) also contributed to buying the estate.

Asa Wright Nature Centre was officially opened on the 5th of November, 1967. The estate was to be conserved in perpetuity, but our fledgling years were challenging. The Centre was run by a 16-member Board of Management and these members even gave money from their own pockets, so the Centre could meet its debt. AWNC was running on little advertising and therefore few guests. There was no telephone and poor postal service. When AWNC appointed a U.S. booking agent, its financial status improved. Today, we celebrate a 33-year partnership with our U.S. booking agent, Caligo

Ventures. AWNC also expanded to the U.K. market and regularly attends the British Birdwatching Fair.

Though the view of the Arima Valley from the verandah, may not have changed much since then, AWNC has grown as an organization. Once a two-room lodge, we can now house a maximum of fifty guests. We currently employ approximately fifty persons. We run a souvenir shop and restaurant which serves buffet-style lunch every day. We conserve approximately 1200 acres of land and maintain feeding stations and various food plants for wildlife. After additional ledges were constructed in the oilbird cave by John Dunston, Elliot Olton, Jogie Ramlal and Roodal Ramlal, our oilbird population grew from thirty-six birds in our opening year to over 160 in 2017. The cave was named Dunston Cave, in memory of John Dunston who did significant work with the oilbirds.

The wildlife and natural area at Spring Hill has attracted many persons, from far and near. We welcome thousands of visitors each year. Over 170 species of birds have been recorded on the property including the Trinidad motmot, ornate hawk-eagle, black hawk-eagle, amethyst woodstar, golden-headed and white-bearded manakins, channel-billed toucan, various trogons and hummingbirds. Regulars at the feeders include green and purple honeycreepers, various tanagers, agoutis and golden tegu lizards. Though less often seen on the



Looking back at AWNC by Harold Diaz

property, other mammals, reptiles and amphibians, such as tayra, silky anteaters, snakes and various frogs have been observed.

As part of our mission, we facilitate research and environmental education. This year, in celebration of our anniversary, we have hosted workshops by “Celebrity Birders” thanks to the work of Caligo Ventures. Workshops first started at AWNC in 1972. Edward Rooks and Dr. Janice Edgerly-Rooks, Scott and Amy Weidensaul, Keith Hansen and Patricia Briceno have already visited and carried out presentations and workshops. David Sibley will cap off the series in October 2017. We conduct the Valley Schools Outreach Programme for which weekly, interactive lessons on environmental science are given at schools. Funding from the Global Environment Facility’s Small Grants Programme supported our community workshops and the development of educational materials. We have facilitated camera trapping by Mike Rutherford of The University of the West Indies and the Trinidad Ocelot Project. Several species of mammals, including the ocelot, deer and crab-eating raccoon, were photographed. Through UWI and the U.S. Wildlife Conservation Agency, we monitored oilbirds via GPS.

Throughout the years, the TTFNC has supported Asa Wright Nature Centre in many of its

endeavours. Word has it that TTFNC members thought AWNC would be a suitable sanctuary, even before AWNC became a nature centre. TTFNC had a relationship with Simla and its founder William Beebe. Many Field Naturalists have had connections with AWNC, some even serving on the Board of Management. Ian Lambie, the first citizen of Trinidad and Tobago to hold the position of president of AWNC, was also president of the TTFNC. Former Chair, Carol James, was part of the TTFNC and our current chairman is TTFNC member, Graham White. These are just a few field naturalists who have served on the Centre’s board of management. Your club was even represented on our very first board. AWNC has also been a part of the coordinating team for the Christmas Bird Count, which sees TTFNC members coordinate and participate in annually. Many members would have participated in the 2013 Arima Valley Bioblitz, for which the base camp was AWNC.

As we celebrate 50 years, we thank everyone who has helped us through the years. We thank our staff, past and present, who serve as pillars of our continuously growing organization. We thank TTFNC for its continuous support. As the bearded bellbird calls at a distance in the Valley, it seems to herald a successful future.

IF YOU’VE GOT IT, FLAUNT IT

Hummingbirds about the house

By Christopher K. Starr



Hummingbirds, family Trochilidae, are a distinctive and rather spectacular group of exclusively New World birds, mostly found in the tropics. Of the estimated 338 species, 16 are regularly found in Trinidad and Tobago. Those who have always lived here may come to take these flashing, darting, iridescent, jewel-like creatures for granted, but I am immune to any such habituation. As a child in southern Ontario I knew just one species, which I can recall having seen on only a handful of summer days. Now I live where I can see several species about my house any day of the year.

Hummingbirds in flight have the highest metabolic rate of any vertebrate animal. As they require great quantities of energy food, they are specialist nectar feeders that can take in about twice their body weight in nectar per day. Variation in body size and beak shape tends to correlate with specialization on particular flowers.

The feathers have both pigments and physical colours, the latter accounting for their iridescence. When a hummingbird is hovering in the air, turning this way and that in such a way as to produce flashes

of brilliant colour, you may have the impression that it is showing off. Especially if it is a male, that is probably exactly what it is doing, orienting himself to the sun in such a way as to become maximally conspicuous. Hey there, look at me!

Some students visiting me at home recently were fascinated by the hummingbirds that came to my feeders in what seemed like a constant stream. Some of them sought my advice on attracting the little darlings to their own domiciles. It occurs to me that some of you might care to follow the recipe that I gave the students. This represents what I have found to work, drawing on advice from Theo Ferguson and Graham White:

1. Commercially-produced feeders from garden shops come in various forms, all based on a reservoir of artificial nectar that the birds access by way of small holes in simulated red or yellow flowers. As far as I know, there is no particular reason to prefer one design over another.

2. It is probably a good idea to start with just one feeder until the birds in your neighbourhood have a search image for it. I am quite happy with the two that I have going at any time. It may be a few days before the birds discover your feeder, so fill it no more than one-third full initially, as it will spoil after just a few days.

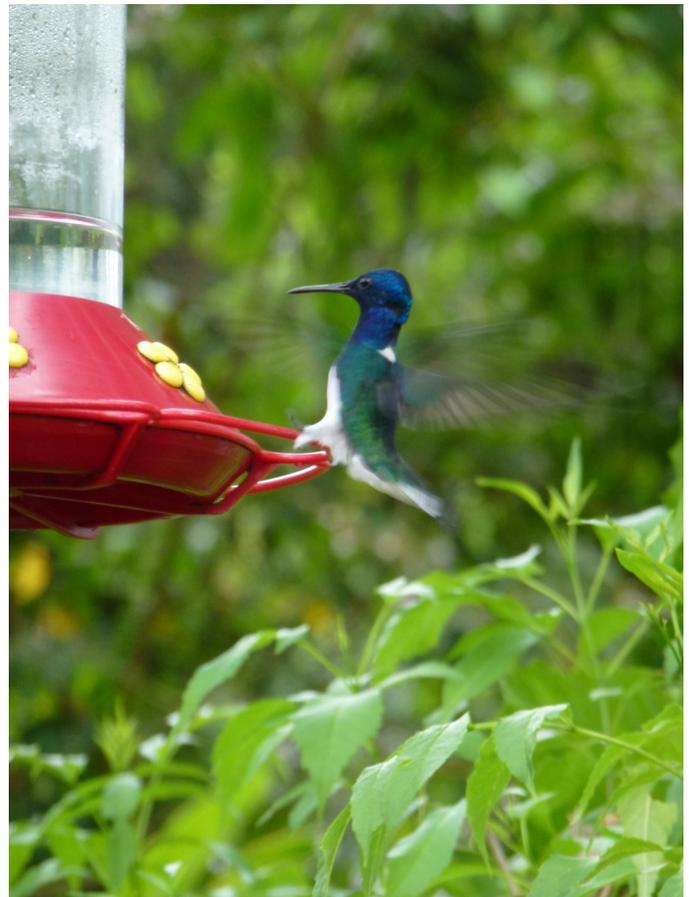
3. The composition of your artificial nectar is critical. Put white sugar and water in a 1:4 volume ratio in a pot and bring the solution to a soft boil. Then let it cool to near room temperature, pour it into a bottle and keep it in the refrigerator. **USE WHITE SUGAR.** I know, I know, your mother always told you that brown sugar is better for you, and she was right, but the iron in it isn't good for the hummingbirds.

4. I doubt that it matters whether the feeder is under shelter from rain, as the holes are very narrow. However, I prefer that mine are not exposed to direct sunlight for much of the day, just to help the solution stay fresh longer. If there are plenty of hummingbirds about, yet the level in your feeder is now the same as it was yesterday, it probably means the nectar has gone bad and needs to be discarded.

5. I suspend the feeder from a wire or line that stays in place, using the hook that comes with the feeder. That way, if ants discover the feeder—which they will in time—they can be discouraged by spraying the top of the line with ordinary household insecticide. Obviously, ensure that no insecticide falls on the feeder.

6. After about a week, you will notice that the feeding holes are becoming dark and fouled. Take the feeder down, disassemble it, and leave the components overnight in a pail with a 5% bleach solution. This should clean it nicely. It is best not to leave it in the solution for more than two days, as over a long period the artificial flowers lose colour. After it is clean, leave it in a pail or water overnight or longer before re-assembling it for use again. I keep two sets of feeders, so that there is always one set in operation.

And now you are ready to make plans to have hummingbirds around your house throughout the day every day. And when your relatives visit from Canada you and your birds can bask in their frost-bitten admiration. 



A white-necked jacobin at a typical feeder



'Naturalist In' Series
BETWEEN ATLANTIC TIDES
 A Review by Christopher K. Starr



Review of: Philip Henry Gosse 1853. *A Naturalist's Rambles on the Devonsire Coast*. London: J. Van Voorst 451 pp. (Online at the Internet Archive) and Philip Henry Gosse 1865. *A Year at the Shore*. London: A. Strahan 327 pp. (Online at Project Gutenberg and the Internet Archive.) 43rd in a series on 'naturalist-in' books; see www.ckstarr.net

We met Philip Henry Gosse in the previous review. He was a zoological all-rounder (much less a botanist), who studied reef and littoral animals with much detail in Jamaica alongside his main attention to terrestrial vertebrates and arthropods. It is remarkable that one naturalist should write with such knowledge and insight about both land and sea habitats and animals.

Devonshire is in the southwest corner of England just east of Cornwall, with shores on both the Bristol Channel to the north and English Channel to the south. It was quite a wild place in the 1850s, with both cliffs and sand beaches along its two coasts. Seascapes are in constant change with the tides and other motions, which Gosse never got tired of watching. The limestone shores are replete with tide pools, a happy and constantly renewing hunting ground for those interested in intertidal invertebrates. As Gosse put it, "*The tiny pools that lie in the hollows, renewed twice every day by the influx of the sea, are perfect nurseries of plants and animals of the most curious forms, and of the most interesting structure.*" In these books he gives some attention to fishes and algae, but the main foci are such creatures as echinoderms, mollusks, coelenterates (especially medusae), and polychaetes.

In true naturalist-in mode, the author is very much present in these books. The preface of *A Naturalist's Rambles* opens with "*I have endeavoured, as far as possible, to make [these pages] a mirror of the thoughts and feelings that have occupied my mind during a nine months' residence on the charming shores of North and South Devon.*" And in chapter 8, "*What a delight it is to scramble among the rough rocks that*

gird this stern iron-bound coast, and peer into one after another of the thousand tide-pools that lie in their cavities." In chapter after chapter, one can feel a shiver of expectation as Gosse starts out on a day's excursion.

An outstanding feature of tide pools is the high diversity of species that can often occupy a restricted space. Gosse illustrates this in a section on "A Populous Stone" by enumerating all the species—including animals and other plants growing directly on plants—that he found on the rough surfaces of a single intertidal rock.

In Jamaica Gosse frequently took animals into captivity in order to study them up close and throughout the day. He later developed this practice to a high degree with respect to shore animals and was a pioneer in the design and use of aquaria at a time when almost no one else was making the attempt. Among other things, he reasoned that if he could keep algae, they would oxygenate the water for the animals. *A Naturalist's Rambles* includes an appendix on methods with marine aquaria.

Aquaria did much to advance Gosse's study of how marine invertebrates feed, breathe, reproduce, develop and locomote (or not). He undertook quick experiments to determine the functions of particular organs. After all, he was dealing with animals very different from anything found on land.

As noted in the previous review, Gosse's entire life in natural history was a protest against the contemporary emphasis on the study of dead museum specimens, to the neglect of the living animal. In treating *Cypraea europaea*, the only cowrie in those waters, for example, he noted that the empty shell was well known to all beach combers, while very few had seen the living animal.

A larger illustration of this point from *A Year at the Shore* is his treatment of "*that unaccountable association of diverse and unrelated creatures ... the companionship of the Hermit-crab and the beautiful Cloak-anemone.*" He noted that the sea-anemone

(*Adamsia* sp.) was never found apart from the crab (*Pagurus bernhardus*) and didn't believe the crab could even live without the sea-anemone. As they grow, both partners a new shell from time to time, but how to unify their action? His aquarium trials were consistent with the hypothesis that the crab finds a new shell, moves into it, and then moves the sea-anemone onto the new shell. The examination of dead specimens, by itself, would have contributed nothing to this problem.

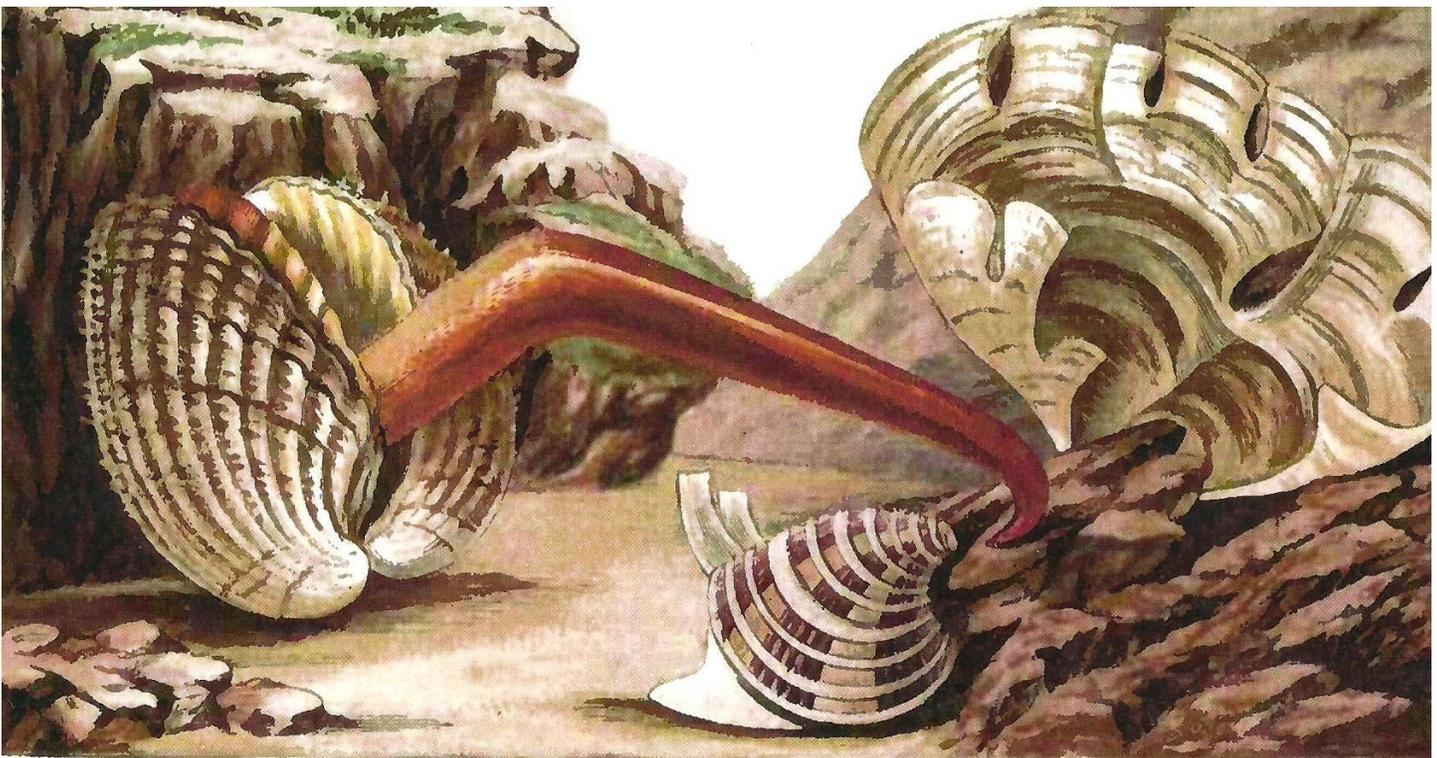
The human element is apparent only in peripheral vision in these books. Devonshire's land and villages are appreciated, although just as a backdrop to the sea. Similarly, the chapter opening "And now for a paragraph of cooking" is not at all about the villagers' customs. Rather, it is about cooking and eating a certain sea-anemone, an experiment recommended by another biologist. Gosse was not a warm and sociable man (E. Gosse

1890, 1907). After he had become well known, he almost never accepted social invitations except to what were effectively scientific events.

As in his other works, Gosse's prose is colourful (or over-the-top, depending on how you look at it). He occasionally quotes from lyric poetry when he gets really enthusiastic. This is harmless enough, I suppose.

On the other hand, he ends *A Year at the Shore* with "my solemn and deliberate protest against the infidelity with which, to a very painful extent, modern physical science is associated." Unless I misunderstand, this is a statement of allegiance to creationism and a repudiation of the new theory of evolution by natural selection. If he had started the book like that, it might have done some real damage.

A rather breath-taking feature of these books is the full-colour plates (28 in the first book, 36 in the second) drawn from living animals. Here, let me show you one:



F. M. GOSSE, del.

LEIGHTON, ERCS.

SPINOUS COCKLE.

BANDED VENUS.

References

- Gosse, E. 1890. *The Life of Philip Henry Gosse F.R.S.* London: Kegan, Paul, Trench, Trübner 387 pp.
 Gosse, E. 1907. *Father and Son: Biographical Reflections.* New York: Charles Scribner 355 pp.



Bird Group Trip, February 12, 2017

GRAND COUVA

by Matt Kelly



I got my ride today from Gerard and Ann Williams. As we headed down the Uriah Butler Highway at sunrise, a very dark and nasty cloud cover was working its way across the land. As we exited the highway, and made our way along the Gran Couva Main Road, we were headed for a collision course with the weather. We arrived at Preysal School at 6:30am, just as the jet black heavens opened up on us.

A long line of field naturalists' cars lined the roadside, while everyone safely hunkered down inside. Someone with a lot of foresight had selected this rendezvous location, as we were parked right next to a lone doubles stand with a tarp covering. While the sequestered group wondered if this deluge would last, two of us ventured out. Our trip leader, Nigel Lalsingh and I ordered up the traditional Trini hot breakfast of doubles and aloo pies. Life is good. Soon, the skies started to clear. We were off!

By the time we reached the Gran Couva Estate, the rain had completely stopped. Nigel must have done some kind of site preparation in advance of our arrival, as he had us park next to a large ficus tree that was actively teeming with probably the most birds we had ever seen in one tree. Many of us thought Nigel must have staged this!

Our group consisted of 34 people in 18 cars. Maybe next time, we could be more efficient? We birded mainly on the road, which provided excellent avian activity. Some highlights were; yellow-olive flycatcher, dusky-capped flycatcher, white-winged becard, black-whiskered vireo, and summer tanager.

During the time we were near the *ficus* tree, we were able to identify 24 different species of birds in this same tree. Almost all were feeding on the berries. Mario Russo and I sampled some of these berries. They were actually quite sweet and tasty! I took some ripe berries with me, to see if I could



Channel-billed toucan in a *Ficus schumachari* tree Photo by Mario Russo

propagate a tree in Tobago. Selwyn Gomes later queried Yasmin Baksh-Comeau at the Herbarium at UWI, and received a response from Winston Johnson stating that this ficus tree is a *Ficus schumacheri*.

I had always thought that the fruiting Trema Tree (*Trema micranthum*), which is not a member of

the ficus genus, was the best attraction for forest birds. But with the explosion of birds we saw in this tree, the fruiting *Ficus schumacheri* has certainly given the Trema some heavy competition.

Some of the group later travelled to Chicklands to try and catch sight of a few more birds. Overall, the day turned out to be a great one. 

58 Species were identified and reported by group members:

- | | |
|---------------------------------|---------------------------------|
| 1. Black vulture | 22. Yellow-breasted flycatcher* |
| 2. Turkey vulture | 23. Tropical peewee* |
| 3. Gray-headed kite | 24. Dusky-capped flycatcher |
| 4. White hawk | 25. Great kiskadee* |
| 5. Broad-winged hawk | 26. Boat-billed flycatcher |
| 6. Ferruginous pygmy owl | 27. Streaked flycatcher* |
| 7. Little hermit | 28. White-bearded manakin* |
| 8. Blue-chinned sapphire | 29. Golden-headed manakin |
| 9. White-chested emerald | 30. White-winged manakin |
| 10. Copper-rumped hummingbird * | 31. White-winged becard |
| 11. Rufous-tailed jacamar | 32. Rufous-bowed peppershrike* |
| 12. Channel-billed toucan* | 33. Golden-fronted greenlet* |
| 13. Golden-olive woodpecker* | 34. Black-whiskered vireo |
| 14. Orange-winged parrot | 35. House wren |
| 15. Barred antshrike | 36. Rufous-breasted wren |
| 16. White-flanked antwren | 37. Long-billed gnatwren |
| 17. Streak-headed woodcreeper* | 38. Cocoa thrush* |
| 18. Streaked xenops | 39. Spectacled thrush* |
| 19. Forest elaenia | 40. American redstart |
| 20. Ochre-bellied flycatcher | 41. Tropical parula |
| 21. Yellow-olive flycatcher | 42. Yellow warbler |
| | 43. Blackpoll warbler |
| | 44. Golden-crowned warbler* |

- | |
|------------------------------|
| 45. White-shouldered tanager |
| 46. White-lined tanager* |
| 47. Silver-beak tanager* |
| 48. Blue-gray tanager* |
| 49. Palm tanager* |
| 50. Turquoise tanager* |
| 51. Nay-headed tanager* |
| 52. Blue dacnis* |
| 53. Green honey creeper |
| 54. Blue-black grassquit |
| 55. Bananaquit* |
| 56. Summer tanager |
| 57. Crested oropendola* |
| 58. Violaceous euphonia* |

* seen in the *Ficus schumacheri* tree



Our heartfelt condolences go out to the family and friends of

Luisa Zuniaga

(1932-2017)



Luisa Zuniaga served with distinction as TTFNC Secretary between the years 1982-1992

She was passionate about promoting the interests of the club by increasing membership, and was an active member of the Botany Group during her time with the club, conducting research in the Aripo Savannah. She also contributed to projects to protect the scarlet ibis, song birds and turtles. She felt strongly that children should be taught to protect the environment from a young age, both at home and at school. Fellow members recall that she always remained in the last group on field trips, so as to ensure that no one was left behind or lost.



Your
Ideas and Observations
A Quarterly Update

Ruschenberger's tree boa colour variation

The Ruschenberger's tree boa (*Corallus ruschenbergerii*) formerly known as the Cook's tree boa, or locally known as Cascabel can be commonly found across Trinidad and Tobago. This constricting snake is arboreal and can be readily seen at night by searching for eye shine with the aid of a flashlight. They typically have a uniform khaki-brown to yellow-brown dorsum. However, some specimens can be mottled or have a pattern of reticulations, as seen in the photograph below. The specimen in the photograph was seen at the Main Ridge Forest Reserve on Tobago. Specimens with this pattern, have to my knowledge, not been reported before on Trinidad or Tobago. The Main Ridge is known to be cooler than other parts of the country and the dark pattern may help it stay warmer, compared to the plain yellow-brown colouration at lower elevations. It would be interesting if other Cascabels with this mottled pattern are spotted across the country as one can further investigate the probable cause for this morphological variation. It may have implications for species and habitat conservation management.

Renoir Auguste



Ruschenberger's tree boa (*Corallus ruschenbergerii*)

Photo by Renoir Auguste



What could it be? This mystery wildlife sighting was soon cleared up thanks to the TTFNC forum

Photo by Asif Khan

Mating moths

This rather strange sight was photographed in June by member Asif Khan on a car in south Orange Grove. Asif posted his mystery photos on the TTFNC Members' Forum, where Lepidoptera expert Matthew Cock identified this 'creature' as a mating pair of limacodid moths *Natada debella* Dyar (Limacodidae). The female is the one holding onto the car using four legs, and both are positioned with the ventral side up. Matthew explained that this is a widespread and common species in Trinidad in both disturbed (suburban) and forested areas up to 700m in the Northern Range, and added "I don't know if this is normal orientation, but I have seen another limacodid pair in a similar posture in the Philippines, i.e. with the female holding onto a palm frond and the male hanging below."

The forum is open to all members, but you need to send a request to be added to admin@ttfnc.org if you wish to post and respond to others.





Club Trip Report, 30th July 2017 COCOA ESTATE AT FISHING POND by Reynold Boyce



On July 30, 2017, the Field Naturalist Club had a rather unusual monthly field trip. This was not the first time the club had visited Fishing Pond, Sangre Grande, but on previous occasions we traversed the lagoon area either north to the Tobago Hill windbelt forest or east to the beach via “Nature Trail”. However, on this occasion the group decided to explore Panchoo Road in search of an unoccupied “Cocoa-House” that was in existence since the 1930s but was still visible on Google Earth website. Because I live on Panchoo Road itself, Dan visited me a month earlier to present his plans to unearth this “mystery” house. So I had adequate time to alert the owner of the property along with neighbours close by.

On the morning of the trip the weather was inclement and I was concerned about the success of the venture, as portions of the road were often swampy requiring passers-by to climb a bank or two to navigate from being stuck in the mud. However, the 16 people who turned up were not in-the-least deterred by the weather and were eager to proceed even though many were not wearing tall rubber boots. We started with a briefing by Mr Kenneth Baptiste, a son of the deceased house owner. Kenneth resides obliquely opposite my

house at present, so we were both able to provide parking and shelter from the elements. After a brief history of the crops planted and the general work activity on the estate we set off along Panchoo Road to visit the ‘House’. The pathway started off as a paved road but soon degenerated into a dirt track with remnants of original asphalt: a testimony of the viability of the older manually-spread, paving material which allowed vehicles to drive directly to the Cocoa House.

The walk itself was comfortable as the rains had stopped. We passed through an extensive timber estate recently acquired and seeded with mahogany, teak, apamate and cedar. These were intensively planted on the eastern side of the road while mango, plums and assorted fruit and wild trees graced the western side. We then passed two side tracks used by bee-keepers for the upkeep of their hives. But the group was in no mood for deviation as the end result of the cocoa house was squarely in mind. After passing through one active estate, and being greeted by its owner, we proceeded along the final strip to our destination. This was done without the hindrance of the dreaded swamp as one of the estate owners had recently opened-up the road with a bulldozer.

The Cocoa House itself was arrived at in less than an hour’s walk. It was primarily a one-story board house built on 2-foot pillars with the board flooring badly devastated by termite action. The wall, made from traditional *tapia* material, was damaged in many places by local thieves to force entry. The old galvanised roof was devastated by rust over the years but a newer aluzinc portion, which was part of the Cocoa House’s *sliding-roof*, was still mainly intact. The amazing feature of the structure was the large population of bats it housed. One only had to peep inside to awaken a flurry of flight activity of the active mammals, mainly *Saccopteryx bilineata*, an insect-feeding species which hooks on to vertical walls of derelict/unoccupied buildings. I, too, have a sizable population of this



Trip leaders, Reynold Boyce, Dan Jaggernaut and Kenneth Baptiste brief the group Photo by Jeffrey Wong Sang



The group on the trail and view of the Cocoa House itself Photos by Jeffrey Wong Sang

species living in an old out-house of mine. A second species, *Molossus molossus*, whose size, colour and shape mimic the first, is possibly also present - residing in the roof beneath the “galvanise.” Almost every dwelling in Fishing Pond is plagued by this species whose faecal droppings can be hazardous to the health of householders. Kenneth, who lived in the house for a year and a half – on his return to Fishing Pond – claims that there is a third, fruit-eating species, that frequently regurgitates its diet on the walls. But their residence in the house remains undetermined.

Beneath the floor boards was a paraphernalia of ancient objects. One such item, a blue bottle, caused a jostle among members as a possible mantle-piece ornament. I called on Kenneth to hold an on-the-spot auction to decide the ultimate owner but the first capturer seem to prevail.

On the way back the sky opened up once more just as we reached the estate home of Ms Zenobia Baksh, who had been alerted to our visit and greeted us as we went pass earlier. She willingly opened her front gate to allow us to shelter the torrential downpour. This was a blessing in disguise as the elderly lady, who was born and bred in that very area, proved herself a veritable historian. In fact, she was only too willing to answer all questions concerning the various estate owners (past and present) of the area. What was especially insightful was that our sought-after Cocoa House was really part of a much larger estate complex owned by the

Panchoo family after whom the road was named. Asked about wildlife in the area, Ms Baksh lamented the decimation of many species over the years by hunters and their dogs. She claimed that almost every sizable mammal (and some reptiles) was regularly seen in the area at one time. She gave a very interesting story about the fact that (as a goat and sheep farmer) she remembered seeing a group of deer mixing among her goats on the grazing ground not far from her house. As evening drew near and her ruminants were led home to their pens the deer would recede to their forested dwelling only to join their domesticated friends the next day to continue foraging.

As the rains receded, the group hustled back to their cars to slip into a change of clothes. Refreshments were provided by my wife, Laura, for those interested in partaking of our hospitality which included viewing my little natural history cabinet collection. Unfortunately, conditions were too damp to enjoy fruit-picking and viewing some peculiar, native wasp and ant nests that inhabit my orchard trees. All-in-all, though, the trip provided an interesting educational experience. 



Conference Report

CELEBRATING CARIBBEAN BIRD DIVERSITY

by Jessica Rozek



The 21st International BirdsCaribbean Conference was held in Topes de Collantes, Cuba from 13-17 July 2017. Students, researchers and other professionals from 30 countries and islands traveled to Cuba, resulting in one of the largest meetings in the history of the organization, with 240 delegates in attendance.

Trinidad and Tobago was well-represented with nine Trinbagonians attending the conference, five of whom are TTFNC members, and one TTFNC member living in the USA. These delegates included Raqib Abdul, Laura Baboolal, Aliya Hosein, Keshan Mahabir, Darshan Narang, Dianne Phillips-Morris, Dr. Howard Nelson, Candace Radgman, Sharmila Tolan and me, Jessica Rozek.

The theme of the conference was “Celebrating Caribbean Diversity”, which was manifested in the nearly 150 sessions, roundtable discussions, and workshops offered over the 5-day event. With wide-ranging topics such as Caribbean forest endemics, the promotion of bird tourism and the ecology of migrants, there were plenty of opportunities to find exciting talks, share knowledge and network. In addition, each morning the day began with incredible keynote speeches from professional ornithologists who were an inspiration to new and old delegates alike. As an example, Dr. David Winkler of Cornell University presented ‘Combining community and technology to explore new frontiers in bird movement studies’. The talk focused on the movement ecology of *Tachycineta* swallows and



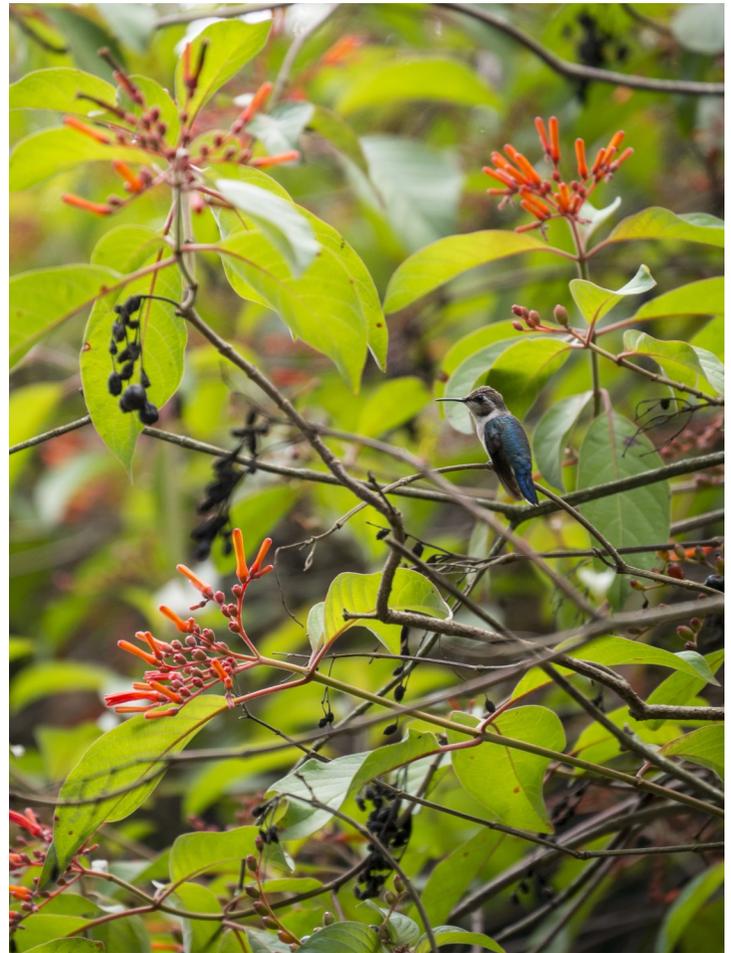
Conference delegates (including TTFNC President Darshan Narang and member Laura Baboolal on the right of the picture) explore Cuba’s birding opportunities Photo by Aly Ollivere

emerging tools to track them across the globe, including his collaboration with engineers to develop new lightweight radio tags.

Several TTFNC members and Trinbagonians contributed to the conference by delivering talks or presenting scientific posters. TTFNC member Laura Baboolal (TT), representing CAWS (Caribbean Against Wildlife Smuggling), co-presented a talk entitled *Working to curb wildlife trafficking in The Bahamas and Trinidad and Tobago — that's our CAWS*. Aliya Hosein (TT) presented *A knowledge, attitudes, and practice study of people-Blue and Gold Macaw interactions on Trinidad*. Sharmila Tolan (TT) discussed her research with the talk *An assessment of heavy metal levels in the Brown Pelican (Pelecanus occidentalis)*. Candace Radgman (TT) presented her research on Tobago with *Population assessment of the Cocrico and the Orange-winged Parrot in four agricultural regions in Tobago: Roxborough, MT St. George, Plymouth, and Bethel*. I presented the results of my pilot study *Human-wetland-bird interactions in Trinidad and Tobago* and served as a moderator for the session "Shorebirds and Waterbirds in the Caribbean." Raqib Abdul (TT) submitted a poster about his research *Investigating the Bananaquit (Coereba flaveola) in the Aripo Savannas, Trinidad*. Keshan Mahabir (TT) also presented a poster, *An assessment of the Oilbird colony at the Dunston Cave in Trinidad*.

In addition to these oral presentations and posters at the conference, Aliya Hosein and Jessica Rozek both wrote follow-up blog articles for BirdsCaribbean which were featured in the July-August Newsletter and are available on the organization's website. Ms. Hosein's article *Coffee, Cave, and a Shot of Espresso* can be found [here](http://www.birdscaribbean.org/2017/08/coffee-cave-and-a-shot-of-espresso/) (<http://www.birdscaribbean.org/2017/08/coffee-cave-and-a-shot-of-espresso/>). My article *Commitment to Conservation (and Adventure) Create an Unforgettable BirdsCaribbean Conference* can be found at <http://www.birdscaribbean.org/2017/08/commitment-to-conservation-and-adventure-create-an-unforgettable-birdscaribbean-conference>.

Of course, between conference sessions there was plenty of time to go birding and hiking in the surrounding mountains of Topes de Collantes Nature Reserve and experience the unique biodiversity of the host country. Some TTFNC members were lucky enough to add several of



A bee hummingbird: the smallest bird in the world!

By Jessica Rozek

Cuba's 26 endemic bird species to their life lists such as the Cuban tody, Cuban trogon, Cuban pewee, Cuban pygmy owl, and the smallest bird in the world, the bee hummingbird.

One of the highlights of the meeting included an announcement from author and conservationist Herbert Raffaele that he would be updating the *Birds of the West Indies* field guide. The new version will include revised information about ranges, changes in taxonomy, and some new illustrations. This announcement is especially exciting because the project is fully supported by Princeton University Press.

Trinidad and Tobago and BirdsCaribbean have a long history of collaborating with each other. BirdsCaribbean has presented programmes in the country such as the West Indian Whistling-Duck and Wetlands Conservation Workshop and has financially supported Trinbagonian researchers with

grants to conduct studies on local avian ecology. Trinidad and Tobago is consistently highlighted by BirdsCaribbean for dominating Global Big Day, an effort to count as many bird species as possible in one day. Trinidadian and UWI graduate, Dr. Howard Nelson, currently serves on the Leadership Board and has also served as former BirdsCaribbean President. In 1997, Trinidad hosted the BirdsCaribbean Conference and Tobago was the host in 2003.

BirdsCaribbean was founded in 1988 with a mission to conserve wild birds and their habitats throughout the Caribbean. The nonprofit organization supports many diverse and successful community education and capacity-building programmes such as the Caribbean Birding Trail and the Caribbean Endemic Bird Festival. It also directly contributes to research in the region by sponsoring events like the Caribbean Waterbird Census and managing the peer reviewed, open access publication the [Journal of Caribbean Ornithology](#).

The next BirdsCaribbean conference will be held in Guadeloupe in 2019 and is open to anyone interested in attending. For more information about the organization, please visit www.birdscaribbean.org. To access the full 2017 conference program, please visit the meeting website [here](https://sites.google.com/site/birdscaribbeanconference2017/home): <https://sites.google.com/site/birdscaribbeanconference2017/home>.



Laura Baboolal meets two of the authors of *A Guide to the Birds of the West Indies*: Orlando Garrido (left) and Herbert Raphael

Photo courtesy
Laura Baboolal



April - June 2017
STRATEGIC PLAN UPDATE
by Amy Deacon



Short Term Goals

Outreach

This quarter the club was represented at a number of events including the EMA's World Environment Day event on 5th June. The club was presented with a Silver Award for Environmental Education by the Orchid Society. We also had part of our Anniversary Display positioned in National Archives and UWI's Alma Jordan Library during May.

The club was contracted by the EMA to lead a group of secondary school children on a hike to Rio Seco. Dan Jaggernaut, Edmund Charles and Jeffrey Wong Sang led the group on a successful adventure. Students were provided with a laminated fact sheet each.

Publications

A committee was established to begin compiling a new edition of *Native Trees*.

Work began on receiving and selecting photos for the 2018 Calendar.

Medium and Long Term Goals

Land Acquisition

Management are actively pursuing the potential purchase of plots of land. Members are encouraged to let Management know if they become aware of any promising possibilities.

Membership

The club welcomed 10 new members this quarter.

The ability to make online payments for membership has been restored.

A copy of the full strategic plan can be requested by email to admin@ttfnc.org. Constructive comments and suggestions from members of ways to work towards these goals are always welcome.



‘YOU SHOULDN’T BE IN SCHOOL’



Dr Elisha Tikasingh celebrates his 90th year
with the publication of his memoirs

Distinguished club member Elisha Tikasingh will be 90 years old on December 1st 2017.

In July, the club was honoured to be presented with a hardback, fully illustrated copy of his memoirs “*You Shouldn’t Be in School*”.

This book is a fascinating account of an extraordinary life. We follow Elisha from his early life in rural Trinidad, to his days as a scholar abroad in the USA, and then to his significant contributions on his return to the Caribbean. As well as historical insights and personal highs and lows, Elisha also

documents the scientific discoveries he was involved in making along the way in the field of entomology, parasitology and virology.

As a lifetime member of the TTFNC, he served as a member of our Management Committee for many years and was the editor of *Living World, Journal of the Trinidad and Tobago Field Naturalists’ Club* for more than a decade.

Although not currently available for sale, interested members may borrow the club’s copy on request. 



Club Secretary Amy Deacon receives a copy of Elisha Tikasingh’s book on behalf of the club at July’s Member’s Evening by Kumar Mahabir



NATURE IN THE NEWS

A quarterly summary of local environmental news

by Kris Sookdeo



APRIL

Iguana poachers charged

Two men one of Sangre Grande and the other of Sangre Chiquito, were arrested and charged after they were found to be in possession of three live iguanas.

Illegal excavators impounded

In April, police and officials of the Ministry of Energy and Energy Industries (MEEI) seized two excavators at an illegal quarry site along Orosco Road, Matura. A similar exercise in May was carried out at an illegal quarry at Agua Santa Road, Block #5, Wallerfield which saw three excavators impounded

Grasshopper pests

Large swarms of the Moruga grasshopper, *Coscineuta virens* have been observed in south east Trinidad, affecting agricultural land in Rio Claro, Moruga and Barrackpore. According to the Ministry of Agriculture, Propoxur, the main insecticide being used in the locust spraying exercise, degrades rapidly in the environment but it is harmful to insects such as bees. To limit the impact of these toxic chemicals on the wider environment, the ministry has opted, at this time, for ground spraying rather than aerial spraying to control the swarms.



Moruga grasshopper Photo by Mike Rutherford

Anaconda

A male green anaconda was found in a dasheen field on a gardener's property in Wallerfield.

Petrotrin oil spill

On 23rd April the rupture of Petrotrin's storage tank #70 resulted in the release of oil into the sea. While initially reported by the MEEI at 200 gallons of RMG380 centistokes fuel oil, subsequent media reports indicated the volume of the spill was actually over 500 barrels. The spill eventually spread to Venezuela and was alleged to have spread as far as Bonaire.

Tree planting initiative

The Minister of Agriculture, Land and Fisheries has carried out a mandate from the Prime Minister to have a million saplings available for planting in time for the rainy season. The tree types included mango, avocado, citrus, softwood and hardwood. The Prime Minister previously indicated that he was very concerned about the wanton slashing and burning of the Northern Range for farming purposes. There is no indication of whether the government would actually undertake the reforestation itself or leave it up to the public.

MAY

Green turtle slaughter

The remains of at least 25 juvenile green turtles washed ashore at Kilgwyn, Tobago, in May. While condemned widely, no one has been charged with the offence. Meanwhile, in June, a resident of Moruga who had been charged in 2016 for the possession of a green turtle carcass, was committed to stand trial, making him the first person to be prosecuted on a charge of possession of an environmentally sensitive species.





Bird Group Trip, June 11, 2017

TALPARO

by Feroze Omardeen



We were expecting the early morning downpour, so we reached the Forestry station hut on Tamana Road in time to get some shelter. The rains were heavy but short lived, and the weather improved progressively through the rest of the morning, an enjoyable short morning with nature in Talparo. Walking up the dirt road toward the reservoir we saw the flycatchers wake up to catch the post rain insects. These included the streaked flycatcher, the tropical pewee, and plenty of forest elaenias. Nesting is in full swing, and the birds were often in pairs. The pewees had built a nest near the Forestry hut.

Three antbird species were calling. Brian was able to call out an inquisitive and rather indignant silvered antbird using playback from his cell phone. (Birds get upset when others of their species appear in their territory). Remarkably, we were all able to get fairly good views despite the darkness over the stream. That was pretty exciting stuff!

The other large neotropical family, the hummingbirds, was also around, in particular the black-throated mango, many hawking for tiny insects around the trees. There were six tanager species on that road, even though it was a fairly quiet morning. The road is through highly disturbed and replanted forests, on the edge of a Caribbean pine plantation, which is presumably logged. Haynes and Samad studied the avian biodiversity in these pine forests and found them to be reduced in diversity, with a predominance of forest edge species.

Flyovers from the now ubiquitous channel billed toucan and the seasonally common plumbeous kite livened up the morning, and we passed what sounded like a lek area of the white-bearded manakin.

On the roads leading back toward Hacienda Jacana, the most obvious feature of the forest was the flowering of the bloodwood, *Pterocarpus rohrii*. The profuse flowers were of a dark saffron-amber yellow in contrast to the better known yellow poui, whose flowering season is now past. I am often struck by the number of individuals of a tree species that suddenly become visible when

flowering occurs. Also on the ground were flowers of a fiddlewood (*Vitex*) species. The common Pois Doux *Inga Ingaoides* was in flower everywhere. This is an important hummingbird flower but today the flowers were soggy from the rains.

A pair of nesting black-tailed tityras was found at the Quemado Road junction, nesting in an old woodpecker hole on a tall dead palm trunk. The insect-like call of these birds always intrigues us. The other conspicuous call throughout the morning was that of the red-eyed vireo and, presumably, the resident subspecies is nesting, like everyone else, at present.

In the Hacienda Jacana area, a variegated flycatcher was seen; previously considered rare, there are now regular sightings in Talparo and several other areas. Jeffrey found mushrooms everywhere, but would not allow us to taste his specimens. We strongly suspect he cooks them for dinner (it would explain so many things). Victor Quesnel's old house is still there, surrounded by his beloved trees, many of whose pictures may have found their way into the book on Native Trees. In one way or another, nature will probably outlive us. But it is our love for nature that transcends all this and reminds us of our connection with the timeless. 



Silvered antbird

Photo by D. Mulchansingh



Memoirs

BEGORRAT, BOURBON CANE, BREADFRUIT AND BAMBOO IN TRINIDAD

by Hans Boos



Quite often I am asked by visitors to Trinidad about the origins of the huge groves of bamboo that are a common sight over the entire island. This bamboo, *Bambusa vulgaris*, is not originally a local plant but is native to the Asian tropics, and must have been introduced to Trinidad a considerable time ago, possibly in the latter part of the eighteenth century. But no one I spoke to seemed to be quite sure as to how it came in, who, if anyone, specifically brought it, when it was imported, and for what purpose.

Yet there are historic documents and publications that give us clues, if not informing us directly, about the answers to all these questions. I first got some inkling that these documents existed when I read the end-notes to an unpublished

historical novel, set in the late 1700s. Here it was stated that the bamboo was brought to Trinidad by no less a person than one of the early French settlers lured to Trinidad by the Cedula of Population initiated by Roume de St Laurent in 1783. He was Saint-Hilaire Begorrat.

Unfortunately, as with so many similar works, there was no comprehensive bibliography to trace this assertion. However, in a search of *Begorrat and Brunton: The History of Diego Martin* (De Verteuil 1987, p. 10.) there it was again. Begorrat arrived in Trinidad on the 22nd of April 1784, from his native island of Martinique. Quoting from an earlier French publication by Borde (1883), De Verteuil, using the modern translation into English by Mavrogordato



Sugar cane arrows by Hans Boos

(1961), and adding comments in parentheses, published the following excerpt:

"Sugar cane which was grown in the island (of Trinidad)...was no more than the violet-coloured cane called 'creole', which was brought in by the Spaniards in 1506 from the Canary Islands to Santo Domingo. The yellow sugar cane came from Tahiti and was introduced into the French islands by the celebrated navigator Bougainville (after whom the colourful bougainvillia [sic] is named). It was brought from Martinique to Trinidad by St. Hilaire Begorrat, together with the breadfruit tree, also originating in Tahiti, and the bamboo of Bourbon". (Borde 1883 II, p. 317)

De Verteuil speculates that Begorrat brought breadfruit plants for sale to other planters, for at that time (according to a *Port of Spain Gazette* newspaper report of the 30th of January 1828) back in 1784, Begorrat had "no thought of any agricultural speculation" and was busy setting up his trading business in Port of Spain (De Verteuil 1987, p. 10). Begorrat at first operated a trading house in Port of Spain and only after there were serious downturns in the trading, a fire that burnt down both his business place and house, and a clamp-down on the illegal smuggling of exports of cotton from Trinidad, did he begin searching out and purchasing lands in the Diego Martin valley to begin a new venture as an agriculturist, growing cocoa and sugar cane on the fertile hillsides of the western slopes of the valley and on the flatlands that were suitable for cane cultivation.

Borde based his assertion of Begorrat's role on information from an even earlier publication, that of Daniel Hart (1866). In his chronicle of historical events (p. 197), Hart says that in 1782, Begorrat brought Otaheite cane, breadfruit plants and bamboo to Trinidad. This pre-dates the dates given in De Verteuil's 1848 essay by two years.

To further confuse matters, in an essay by E.E. Cheesman, published in the Public Lecture series held by the Trinidad Historical Society, 1938-39, it is stated that Begorrat brought the Bourbon cane to Trinidad in 1792, the same year it was established on the island of Martinique. However, this is ten years after the date given by Hart.

Whichever is the correct date of Begorrat's arrival in Trinidad, the information is plainly stated

that he brought with him three important items to influence and affect the agriculture and the environment in his adopted home.

Bourbon Cane

The first important import was the Otaheite sugar cane. Purseglove (1985, p. 287) states that the "Otaheite", also known as 'Bourbon cane', quickly replaced the thinner 'Creole' cane then being grown in the West Indies." This new cultivar of the sugar cane was to have far-reaching effects on the sugar production of not only the West Indies in general but Trinidad in particular.

This variety of cane was collected by the explorer and navigator Bougainville from the Pacific islands, more than probably Tahiti, when he circumnavigated the world during the years 1766-1768, and he introduced it to Réunion and Mauritius Islands, today referred to as the Mascarene Islands, in the Indian Ocean. At that time Réunion was known as Île Bourbon and the canes originating there were called the Bourbon variety (Purseglove 1985, p. 287). It was the standard cane cultivated in the West Indies until disease almost wiped it out in the years between 1890 and 1895, when it had to be replaced by more hardy and resistant cultivars of cane.

L.A.A. De Verteuil (1848, p. 13), quoting Begorrat(1800), states, "In 1792, I myself brought from Martinique a stool of the same (the Otaheite cane) which propagated to such an extent, as to serve in planting our valley (Diego Martin) and also a great part of the Island."

Breadfruit

The second of Begorrat's imports was breadfruit. Powell (1977) chronicles the urgency behind the import of the breadfruit trees to the British West Indies. Pouliquen (2001) gives a concise history of the earlier transfer of breadfruit to the French West Indies. First, why was it so urgent a mission to bring this specific food-source all the way from the central Pacific islands to the French and British colonies in the Caribbean?

These colonies were set up primarily to grow the money crop that produced sugar for the sweet-toothed Europeans, and molasses, a byproduct of the refining of sugar, from which the popular alcoholic beverage, rum, was distilled. Sugar was

(Continued on page 24)

grown on large estates, the labour supplied by African, transported slaves. These slaves, as well as all the other support population that ran the estates and the government of each island, had to be fed, mainly on imported food, for these islands were certainly not self-sufficient in foodstuff produced on the island. Every major food commodity had to be imported.

One of the biggest and most important food commodities was salted codfish, caught on the Grand Banks off Nova Scotia, salted down in the Eastern seaboard colonies of the British Empire on the East coast of North America. With the hostilities of the War for American Independence, the ports from which the cod was shipped were blockaded and all shipping south to the Caribbean was curtailed.

The supply of the main protein to feed the hungry islands dried up, and, according to Kurlandsky (1998, p. 100), “Between 1789 and 1787, 15,000 slaves died of hunger in Jamaica.” No mention is made of the other slave islands, but the situation must have been equally grave in the large French island of San Domingue, and the smaller Martinique and Guadeloupe. Thus, the need for new, cheap food staples for slave economies was very pressing. A key to determining the pathway of breadfruit in Trinidad is understanding the differences between the British and French colonial strategies for food importation.

It is generally accepted that breadfruit was taken from Tahiti by Captain Bligh on his second voyage to the Pacific, after his first voyage to get the plants ended in disaster due to the infamous mutiny of his crew. This **ill fated** voyage of the “Bounty” was started from England on the 23rd of December 1787; Bligh arrived at Tahiti on the 26th of October 1788, taking almost a year of sailing to get there. He collected the plants he had come for and sailed away on the 4th of April 1789. He never got to his intended destination, the West Indian British colonies. Set adrift in an open boat by the mutineers, he and eighteen other loyal men managed to cross the Pacific and finally land on the island of Timor after sailing 3,618 miles. By 1890, he was back in England.

Undaunted by the first mishap, Bligh returned to

Tahiti in 1792 and successfully transported breadfruit plants to St. Vincent and Jamaica. According to Purseglove (1988, p. 380), “The original breadfruit tree planted by Bligh in 1793 still stands in the Botanic Gardens in St. Vincent and in 1966 H.M. Queen Elizabeth II planted a scion from it nearby.”

It has always been surmised, and even accepted, that the breadfruit plants growing on Trinidad were offshoots from the Bligh transplants. In all probability some plants were probably brought to Trinidad during the setting up of the Royal Botanic Gardens in Port of Spain in 1818 (Deane 1937), though no specimens of the breadfruit tree, *Artocarpus altilis*, are listed for these Gardens.

Transplants from St. Vincent may have been propagated and given or sold to people and farmers in Trinidad, for today there is no shortage of these trees here. It is speculated that the introduced anole lizard, *Anolis trinitatis*, which is native to St. Vincent, was inadvertently introduced some time before 1863 when it was collected on Trinidad and described as *Anolis trinitatis* by Reinhardt and Lutken (1863), perhaps on breadfruit saplings from St. Vincent (Lazell 1973; Boos 1996).

In any event, if Hart is to be believed, the breadfruit tree owes its initial introduction to Trinidad in 1782 or in 1784 by none other than Saint-Hilaire Begorrat, several years before Bligh collected his trees on Tahiti.

But the French went about getting breadfruit plants to the western hemisphere in a totally different way than the British. For the two expeditions undertaken by Bligh in 1789 and 1792, the plan was to take the plants around the southern cape of Africa in the warm months between November and March, carrying enough fresh water to irrigate the saplings and so hopefully get them to an established botanical garden in either Jamaica, where they were needed most, or in St. Vincent. The failure of the first and the eventual success of the second expedition are well known.

However, the French established botanical gardens on the Indian Ocean islands of Mauritius and Réunion, and in their colony of La Guyane on the northeast shoulder of South America. They then transshipped plants after they had been successfully grown and propagated on each station to minimize

(Continued on page 25)

loss during transshipment, when the dangers of weather, war and pirates were always present. By this strategy, the plants were successfully transplanted from Guyane to Martinique and other French colonies in the Antilles.

The French certainly had a head start; since the voyages of Bougainville in 1766-1769, they had made every effort to get breadfruit trees established in their colonies in the New World, which resulted ultimately in the plants being brought, via Martinique and Begorrat, to Trinidad, some years before Bligh made his second, successful, attempt.

Bamboo

As mentioned above, Hart stated that it was Begorrat who brought bamboo to Trinidad in 1782. Borde (1883) elaborated on this, stating that

Begorrat had brought with him, “*the bamboo of Bourbon*”. I puzzled over this for quite some time, as I had never seen a reference to any kind of bamboo called Bourbon bamboo. Then the solution was simple. Translating Borde from the French, Mavrogordato merely translated the French ‘de’ as the English ‘of’ instead of ‘from’, and since Réunion Island was once known as Île de Bourbon (Purseglove 1985), the translation would now read, “*the Bamboo from Bourbon*”. Bougainville must have introduced bamboo to those islands, or it was growing there before European colonization. Its usefulness being known, it was natural for the French colonies in the Antilles, Martinique and Guadeloupe and other islands then under French domination, to be planted with this giant of grasses. Useful for shoring up eroding riverbanks and



Bamboo patch by Hans Boos

landslips; it is still pressed into service today as building scaffolding, props, and general purpose timber for temporary buildings.

Bamboo was to play an important part in the successful cultivation of the sugar cane, as it was soon realized that in an island where the flatlands could become flooded and the soil supersaturated, the sugar cane fields would have to be properly drained so that the water would not settle and affect the roots or young plants.

Open drains to contain the runoff were fairly straightforward, but in the days when carts carried cut canes from the fields to the factories, carts could easily get bogged down in the soft, often clinging mud of the central plains or valleys of Trinidad.

Covered drains to allow easy and safe crossings of these drainage canals were what De Verteuil (1848, p. 40) calls “*cheap subsoil drains made of faggots and bamboos*”. Logs of small trees and bamboo stalks laid along the drain and covered with a layer of soil and gravel would allow for the easy passage of carts while letting the flow of drainage water pass unimpeded below this makeshift and cheap bridge.

In addition to the bamboo brought by Begorrat, other arriving immigrants, setting up estates on granted land, must have also brought plants that were familiar and useful to them. One of these plants was also a bamboo. A photograph in a sidebar in *Great Estates of Trinidad* (De Verteuil 2000, p. 301) showing what he calls ‘De Lapeyrouse Bamboo’, which was “*specially brought to Trinidad*” by that family for the making of “rods” used in the cultivation and reaping of the crop of cocoa.

This cultivar, or perhaps a different species of bamboo than the common *Bambusa vulgaris*, is characterized by being very slender from the point of emergence from the soil and of only a slightly gradual diminishing slenderness all the way to the end of each strand. This thin, flexible and extremely strong stalk makes an excellent light rod for the pruning of trees by the means of a sharp cutting tool affixed to the thin end, and picking of fruit high in a tree out of reach of someone climbing. Stands of this bamboo still grow along the road into the golf course in Tucker Valley.

Conclusion

When Saint-Hilaire Begorrat had to leave Martinique due to his republican ideas and agitations (De Verteuil 1987), choosing to come to Trinidad as part of the wave of French planters and businessmen that seized the opportunity offered by the Cedula of Population, he little knew how his bringing the plants of bamboo, Bourbon cane and breadfruit would influence the future agriculture of his newly chosen home.

Today the vast sugar cane fields are gone, the yearly burnoffs in the dry season are no more, the fields lie abandoned or converted to short crop production of vegetables. It would be a rarity to ever again see a field of sugar cane, in full “arrow”, the silver seed plumes backlit by a westering sun, or for children to chase after the falling slivers of blackened cane ash that would fall downwind from the blazing and crackling fires in the cane pieces.

The cocoa estates that made millionaires of a select few are mainly a thing of the past, with a few holdouts or revivalists who try to maintain the



Breadfruit tree in Port of Spain By Hans Boos

products of some of the best flavoured beans in the world.

Tall breadfruit trees are, however, a familiar sight throughout the city of Port of Spain and the countryside, and the cannonball-sized fruits are regularly sold in supermarkets and by vendors on the roadside. To those who have a template in their minds of the distinctive leaf shapes of a breadfruit tree, it is good to recognize them, a pleasing thought that these strangers from far-off Pacific Oceania find a welcome place in our landscape and on our palates.

And bamboo is everywhere. Wherever you travel through the island you are never far from a stool of lush bamboo. Its uses are multitudinous. From temporary scaffolding, to elaborate constructs to hold the flaming deyas for the Hindu festival of Divali, the versatile bamboo is pressed into service.

The local expression of being “thrown in the bamboo” is equivalent of Brer Rabbit’s briar patch. Without further explanation, every Trinidadian citizen knows exactly where to go to get spare and second hand automobile parts: “in the Bamboo”, a reference to the two settlements (Bamboo 1 and 2) that are east and west of the Churchill-Roosevelt Highway and the Solomon Hochoy Highway junction. And many Hindu marriages are still held “under bamboo” as a tradition that lends colour and history to our multicultural population.

And it all began more than two centuries ago with a man of vision, Saint- Hilaire Begorrat. 

References

- Boos, H.E.A. (1996). Some recent reptilian introductions to Trinidad. *Living World. Journal of the Trinidad and Tobago Field Naturalists' Club. 1995-1996:* 17-19.
- Borde, P.G.L. (1883). *The History of Trinidad under the Spanish Government.* 2 vols. Paris: Maisonneuve et Cie. Reprinted (1961) (translated by A.S. Mavrogordato,) Port of Spain. Paria Publishing.
- Deane, R.E. (1937). *Guide to the Royal Botanic Gardens, Trinidad.* Trinidad and Tobago: J.D. Corrie. Gov't. Printer.
- De Verteuil L. A. A. (1848). Essay on the Cultivation of the Sugar Cane in Trinidad. &c. in Three Essays on the Cultivation of Sugar-Cane in Trinidad, with remarks on the processes at present in the use in the Manufacture of Sugar. Port-of-Spain: Office of the “Standard”.
- De Verteuil, A. C. (1987). *Begorrat and Brunton. A History of Diego Martin.* Port of Spain: Paria Publishing Co. Ltd.
- De Verteuil, A. C. (2000). *Great estates of Trinidad.* Port of Spain, Trinidad: Litho Press.
- Hart, D. (1866). *Trinidad and the other West Indian Islands and Colonies.* 2nd ed. Trinidad: The “Chronicle” Pub. Office.
- Kurlandsky, M. (1998). *Cod: A Biography of the Fish that Changed the World.* Penguin Books.
- Lazell, J.D. Jr. 1972. *The Anoles (Sauria; Iguanidae) of the Lesser Antilles.* Bulletin of the Museum of Comparative Zoology 143(1), 1-115.
- Pouliquen, M. (2001). *Les voyages de Jean-Baptiste Leblond, médecin naturaliste du roi 1767-1802. Antilles, Amériques espagnole, Guyane.* Paris: C.T.H.S., Paris.
- Powell, D. (1977). The voyage of the plant nursery, H.M.S. Providence, 1791-1793. *Economic Botany* 31 (Oct.-Nov.). 387-431.
- Purseglove, J.W. (1985). *Tropical Crops: Monocotyledons.* Volumes 1 and 2 combined. ELBS Longmans. Singapore.
- Purseglove, J.W. (1988). *Tropical Crops: Dicotyledons.* ELBS Longmans. Singapore.
- Reinhardt F.T. and C.T. Lutken. 1862. *Medd.Naturhist. Foren. Kjobenhavn.*



TTFNC QUARTERLY BULLETINS & INDEX ONLINE LINK :

<http://tfn.org/publication/field-naturalist/>



Management Notices

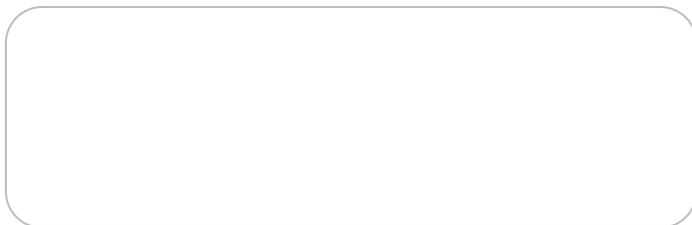
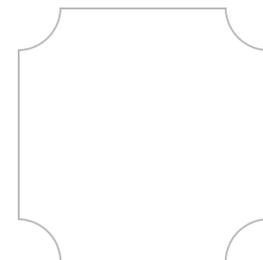
New Members

The Club warmly welcomes the following new members:

Thierry Huitdeniers, Jo Marie Westmaas Nadia Hosein, Denise Claverie-Duke, Darryl Ramlochansingh, Delezia Singh, Johanne Ryan and Paulette Jules

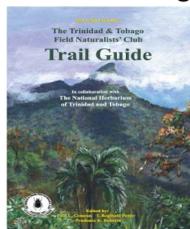
NOTICE FROM THE EDITORS: *Do you have any natural history articles, anecdotes or trip reports that could be published in The Field Naturalist? We welcome contributions from members. Please email your ideas or finished pieces to admin@tfn.org. We look forward to hearing from you!*

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

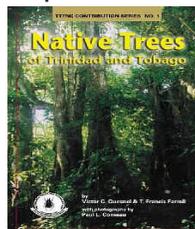


PUBLICATIONS

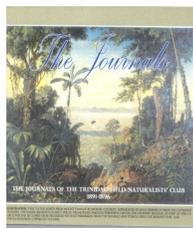
The following Club publications are available to members and non-members:



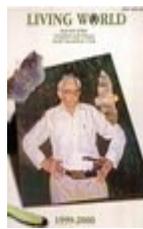
The TTFNC
Trail Guide
Members :
TT\$160.00



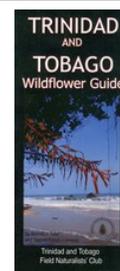
The Native Trees
of T&T 2nd Edition
Members :
TT\$80.00



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



Living World Journal back issues
Members price : free



Laminated wildflower
guide
Members : TT\$50.00 each

MISCELLANEOUS

Your 2017 Annual Membership Fees are Due:

Please view bottom right of the mailing label to check if your subscription has been paid.

Submission of articles and field trip reports:

1. 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 'QB2017' in the email subject label.