# THE FIELD NATURALIST

BULLETIN OF THE TRINIDAD AND TOBAGO FIELD NATURALIST CLUB

*SECOND QUARTER OF 1994*

## LECTURES DURING THE FIRST QUARTER

10 February

Samuel C. Rawlins (Caribbean Epidemiology Centre), BIOLOGICAL AGENTS FOR THE FIGHT AGAINST DENGUE FEVER AND ITS VECTOR

A review was made of the history and current situation of dengue and dengue haemorrhagic fever (DHF) in the Caribbean. In 1993 dengue serotypes 1, 2 and 4 were isolated in Trinidad & Tobago, types 1 and 2 in Suriname, types 2 and 4 in St Vincent & the Grenadines, while type 4 was transmitted in Barbados. DHF is being encountered in the region with increasing frequency. The current dengue endemicity and mosquito vectors present in the Caribbean indicate that the control of *Aedes aegypti* merits everyone's attention.

The various options for management strategy were reviewed. These include:

i. Source reduction -- most important.
ii. Chemical control, i.e. larviciding.
iii. A community-awareness campaign for participation in the fight against *Ae. aegytpi*.
iv. Cultural control.
v. Biological control.
vi. Integrated control..

Three biological control systems were reviewed:

i. Predatory mosquitoes (*Toxorhynchites moctezuma*).
ii. Mosquito fish (*Gambusia* spp.) and guppies (*Poecilia reticulata*).
iii. Copepods (*Mesocyclops* spp.).

*T. moctezuma*, originally collected in tree holes, cut bamboo and other water containers in forested areas of Trinidad, had shown themselves to be efficient predators of *Ae. aegypti* larvae in the laboratory and in the field in rural areas. When assessed in urban areas, recovery of eggs from released adults was not very good. Data from eight release trials of *T. moctezuma* were presented. Released adults oviposited only in a smalll number of potential habitats capable of supporting *Ae. aegypti*.

Guppies were efficient predators and have been used with success, especially in cisterns. Data were presented on the efficacy of guppy predation on *Ae. aegypti* in drums. The fish, while consuming on average 550 + 35 larvae/day in drums, throve best in an initial density of 1 pair/drum, producing more offspring with less mortality than when introduced at higher densities.

The copepod colonies current held in CAREC labs for *Ae. aegypti* control were reviewed. Trials with *Mesocyclops* sp. nr. *aspericornis* from Chaguaramas were described. In 200-litre drums, copepod populations became effective in preventing *Ae. aegypti* survival after 12 weeks, while the current insecticide of choice (Temephos) had lost its efficacy by about 7-8 weeks. This combination might be a suitable regimen for *Ae. aegypti* management when source reduction is not feasible.

The economics of the three bio-control systems were discussed.

10 March

[The lecture by Christopher K. Starr (UWI - Zoology) on ISLAND BIOGEOGRAPHY OF SOUTHEAST ASIA] was pre-empted by a discussion of how the Club should respond to continued incursions into the Nariva Swamp.]

# FIELD TRIP REPORTS

1. MT ST BENEDICT TO TUNAPUNA, 28 November 1993

Beginning at the Boy Scouts' den, we took the steep trail up through the reforestation plantation of Caribbean pine. Stopping at Forestry lookout tower, we could see the Caroni Swamp and the Twin Tower, among other landmarks to the south and west. Continuing uphill, we reached the concrete benches, from which we could see the Maracas Valley as we rested. At the top of the hill we turned right and walked along the ridge to Mt Tabor. Atop Mt Tabor we encountered the ruins of the old monastery.

The ridge leading north from the ruins led through razor grass (*Scleria bracteata*),but in due time we reached Trig station 69, as indicated in the *Trail Guide*. We wanted to continue along the route and down to Tunapuna, but our efforts were frustrated by the badly overgrown trail. It seemed more prudent to turn back and take a different route back to our starting point.

On the return trip, Paul Christopher whistled a violaceus trogon (*Trogon violaceus*) closer to the group. As Paul whistled, the trogon hooted. Other naturalists tried to imitate the bird's call, as Paul had done, at which the bird flew off, its golden-yellow venter in glorious view.

Further along, Eric Ignacio found a large snake coiled around a tree. It was identified by Ian Cross as a cascabel dormillon (*Corallus enydris*), a species with a lovely colour pattern.

2. MATELOT TO MADAMAS, 29-30 January 1994 (overnight camp)

After a drive of 2½ hours from the University through winding country roads, we reached Matelot. I checked in at the local police station to notify of our intended trip and overnight stay.

The challenging walk began at 10:00 at the Matelot sports ground and continued through plantations. Nutmeg trees (*Myristica fragans*) could be seen laden with fruits. Emperor butteflies (*Morpho peleides*) flew over the sun-swept valleys. We came upon a very attractive, unidentified ornamental plant. And black stick (*pachystachys coccinea*) grew in great profusion.

The journey continued across the Petite Rivière, after which the main path turned into a muddy logging trail. We found evidence of extensive damage to both the forest and trail by a logging operation. It took 1½ hour of difficult walking to get past this part of the trail. After a rest stop, our route gradually ascended, with good coastal views.

We reached Madamas at 16:45 and began to set up camp below a tropical almond tree (*Terminalia catappa*) and Balata tree (*Manilkara bidentata*). Eric Ignacio and your reported prepared a special menu for the participants. We were also pleased to share the food with one of the local Earth People, Shurland Joseph MacDonald, known as Cocorite.

Our interview with Cocorite was an arresting experience. He reported that his mother, Mother Earth, has 14 children and that Roland Littlewood of the University of London had come to study them. After spending more than a year with the Earth People, living naked as one of them, Littlewood had published a book in which he fully documented their way of life. I refilled Cocorite's bowl, and he complimented Eric and me on our cooking. Cocorite told us that he swims well and extracts coconut oil, which he sells to the villagers in Matelot. We parted on excellent terms and with the assurance that we are very much welcome among the Earth People.

After a good night's sleep, we explored and bathed in the Madamas River. We were thrilled by the beauty and purity of this river, drinking from it without fear. We then returned to camp and started the return journey at 10:00. Twice along the way we say an agouti.

Arriving back at Matelot, I again checked in at the police station to report on a safe and successful trip. I also asked the officer on duty about the logging activity at Madamas.

Driving back, we found a fair-sized road-killed macajuel snake (*Boa constrictor*). Edmund Charles preserved it as a specimen.

DAN JAGGERNAUTH

Editor's notes:

1. Club President Haroon Husain has written to newspapers, the Member of Parliament for Matelot, and relevant ministries to express concern over logging damage observed near Matelot and to urge investigation. To date his letter has been published by one newspaper and has been acknowledged by the Attorney General's office.
2. The book about the Earth People is *Pathology and Identity: Work of Mother Earth in Trinidad* by Roland Littlewood, 1993, Cambridge University Press 348 pp. I have suggested that the UWI Library get a copy. The Public Library in Port of Spain may already have it.

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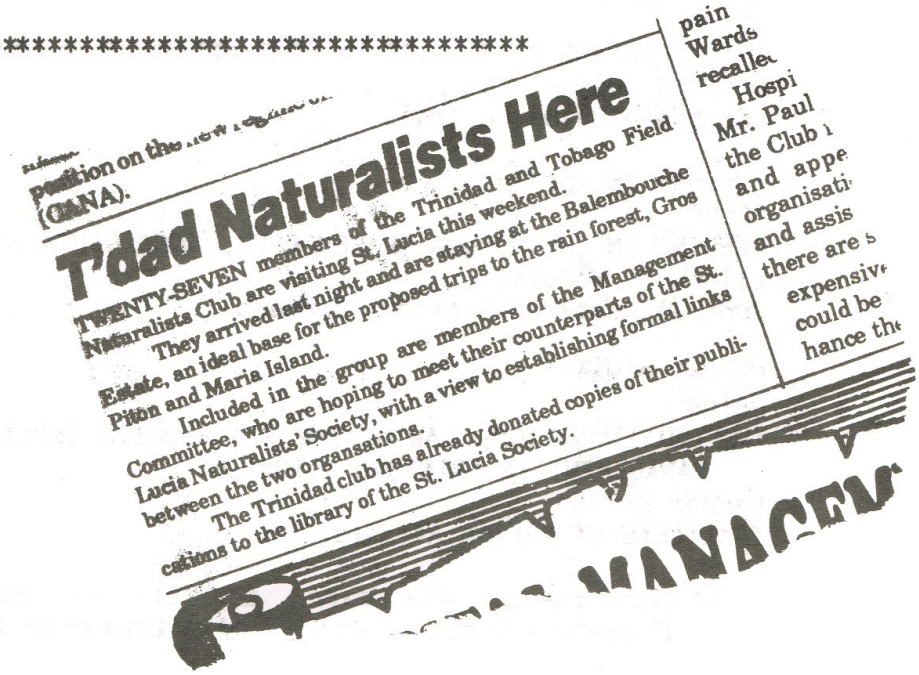
This clipping is from *The Weekend Voice* newspaper of St Lucia, published while the FNC group was still there. The next issue of this bulletin may include a full report on this very successful field trip. Or it may not. We make no promises.



position on the
(GANA).

**T'dad Naturalists Here**

TWENTY-SEVEN members of the Trinidad and Tobago Field Naturalists Club are visiting St. Lucia this weekend.

They arrived last night and are staying at the Balembouche Estate, an ideal base for the proposed trips to the rain forest, Gros Piton and Maria Island.

Included in the group are members of the Management Committee, who are hoping to meet their counterparts of the St. Lucia Naturalists' Society, with a view to establishing formal links between the two organsations.

The Trinidad club has already donated copies of their publications to the library of the St. Lucia Society.

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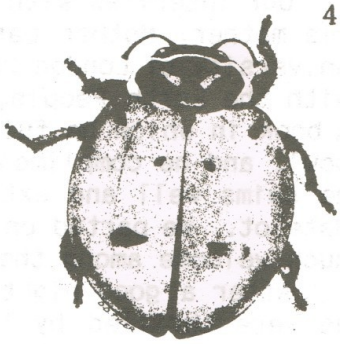


## *University of the West Indies*
## SCHOOL OF LIFE SCIENCES SEMINARS

Friday 15 April
Movie: VAMPIRES, DEVILBIRDS AND SPIRITS
12:00
A new BBC movie by Nick Upton about forest folklore of Trinidad & Tobago.

Tuesday 19 April
12:00
INTEGRATING FISHERIES AND AQUACULTURE: A MODEL FOR FOOD PRODUCTION
Gary Newkirk
Coastal Resources Research Network

Wednesday 20 April
12:00
ANTI-PREDATOR STRATEGIES IN POST-METAMORPHIC FROGS AND TOADS
Floyd E. Hayes
Caribbean Union College

Tuesday 26 April
12:00
FEEDING IN THE MORUGA GRASSHOPPER, *COSCINEUTA VIRENS*
Lilory D. McComie
Central Research Station, Centeno

Friday 9 May
09:00
THE UNITED NATIONS LAW OF THE SEA AND ITS IMPLICATIONS FOR COASTAL RESOURCES MANAGEMENT IN TRINIDAD & TOBAGO
Lennox Ballah
Institute of Marine Affairs

Venue: Room 229 - Seminar Room
Faculty of Natural Sciences

# STILL MORE ANNOUNCEMENTS

## EARTHQUAKES

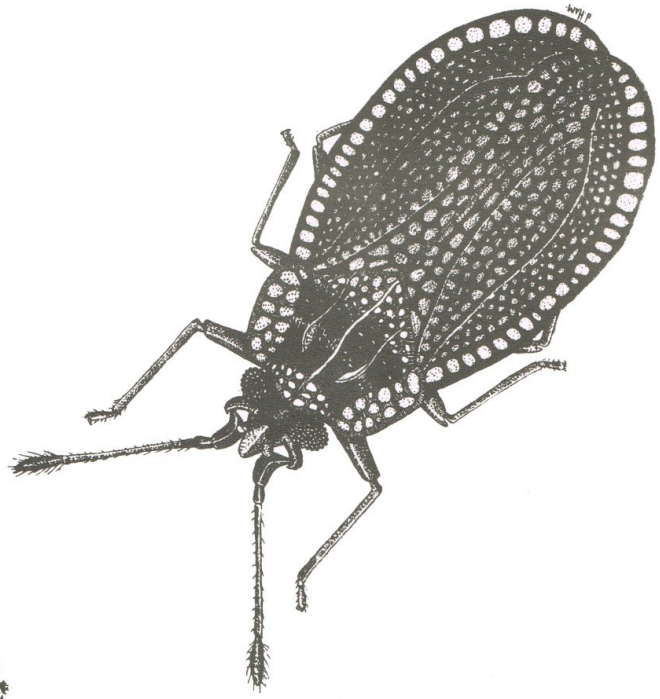
**! DO HAPPEN !**

*ARE YOU PREPARED ?*

*VISIT THE*

*SEISMIC RESEARCH UNIT*

## EARTHQUAKE AWARENESS EXPOSITION

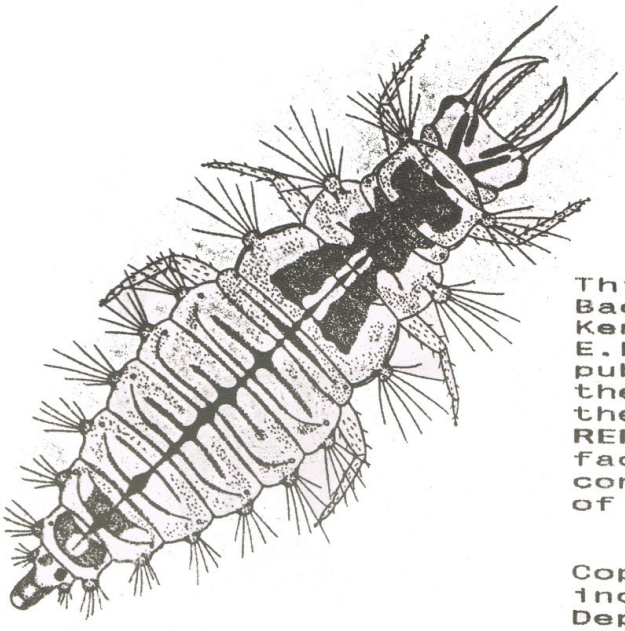


University of the West Indies
(opp. St. Augustine Senior Comprehensive)

**Apr 11th - May 6th 1994**
(Mon - Fri > 9:00-5:00, Sat > 1:00-5pm)

*Lots of Interesting and Informative Displays*

**DON'T MISS IT !!**
Tours only: 662-4659



## STUDIES ON THE BIOLOGICAL RESOURCES OF NARIVA SWAMP, TRINIDAD

This important report edited by P.R. Bacon, with contributions from J.S. Kenny, M.E. Alkins, S.N. Mootoosingh, E.K. Ramcharan and G.S. Seeberan, and published as Occasional Paper No. 4 of the Zoology Department, University of the West Indies in 1979 has been **REPRINTED** in a single volume in order to facilitate informed discussion on the conservation, development and management of Nariva Swamp.

Copies priced at TT$50.00 (US$10.00 includes postage) are available from the Department of Zoology, UWI, St. Augustine. Call (809) 662-2002 ext. 2047 or fax (809) 645-7132 or (809) 663-9684 to reserve your copy.

## CORRESPONDENCE FROM THE PHILIPPINES

[The 1993-94 issue of the *Living World* journal included an article by Paul L. Comeau on "The Vegetation Surrounding Mud Volcanoes in Trinidad". Having often visited the volcanic Mud Springs area of Mt Makiling in central Luzon, and knowing that Mt Makiling was the subject of an ongoing florisitic survey by the University of the Philippines at the foot of the mountain, I thought Paul's article might interest systematic botanists in UP and so sent a copy. The following is AN abbreviated version of the response.

MARVIN]

Dear Dr Starr,

This is to acknowledge with appreciation the receipt of the paper by Dr Comeau. It will be very useful in the biodiversity project that we are about to start this summer involving Mt Makiling. I am certainly interested in making an updated study of the flora around the Mud Springs area, and a general correlation with Dr Comeau's findings may be possible.

With best wishes,

William S. Gruezo
Director,
Museum of Natural History

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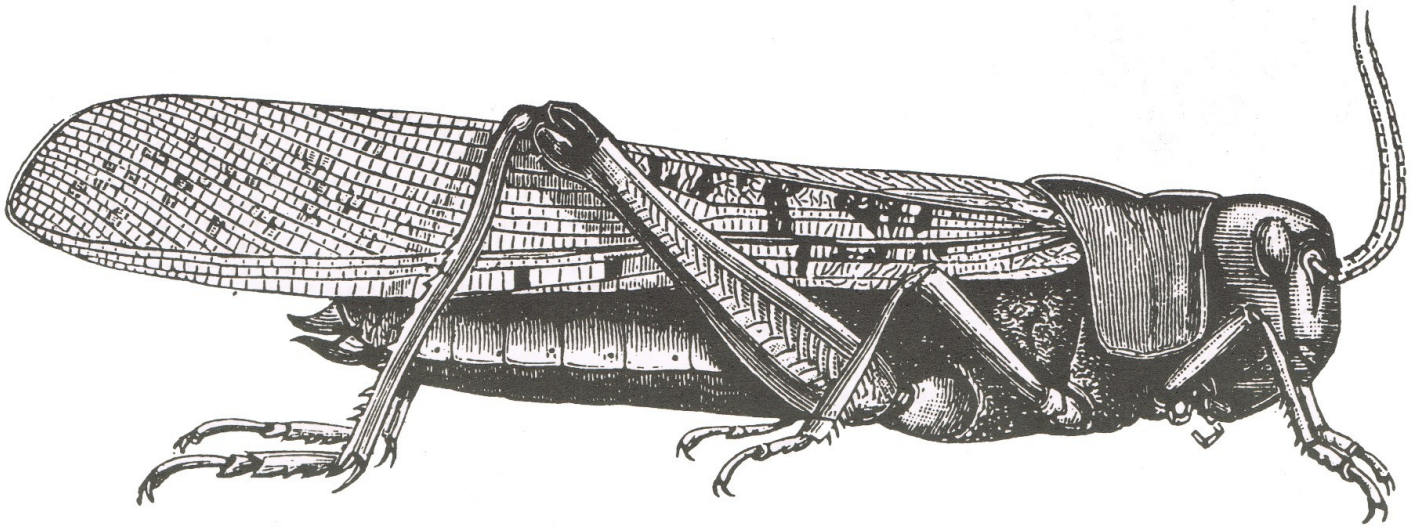
## HAVE YOU PAID YOUR DUES FOR 1994?

Look at your address label. If it has a red dot beside your name, then our records indicate that you have not yet paid your 1994 dues. That means you are in arrears, and your membership will lapse unless it is brought up to date. Please direct your dues (still $30) to:

The Treasurer
Trinidad & Tobago Field Naturalists' Club
P.O. Box 642
Port of Spain.

SELWYN GOMES



## OVERSEAS VISITS

Prior to the Club's visit to St Lucia on 1-4th April 1994, the last official overseas visit was to Guyana on 10-15th April 1974. It is the intention to have more frequent visits to the Caribbean and South American mainland to study the diverse flora and fauna. Possibilities include Grenada, Barbados, Dominica, Jamaica, Guyana and Venezuela.

However, this will be dependant on the Club being able to establish contacts with similar organisations in these territories. Any member who can assist in this regard should contact the Secretary.

## ANNOUNCEMENTS

1)At the Club's last AGM, a one time subscription fee of $500 for Life Membership was approved.

2)The 1993-94 issue of the **Living World Journal** is available at $20 each to members.

3)Back issues of the **Living World Journal (1981-1991)** can also be purchased.

4)Copies of **The Trinidad and Tobago Field Naturalists' Club Trail Guide** are available at $60 each.

5)Club T-shirts are available at $40 each.

TRINIDAD & TOBAGO FIELD NATURALISTS' CLUB
P.O. Box 642
Port of Spain, TRINIDAD & TOBAGO

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