



Nature's jottings Nature's jottings

Newsletter of the Natural History Society of Jamaica Dec 06

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**VERY BEST WISHES FOR THE CHRISTMAS
& 2007 TO YOU ALL**

UPCOMING ACTIVITIES

As it's that time of year again the New Year Get-together has been planned for **Sunday, January 21, 2007** in the verdant grounds of Frenchman's Cove in Portland. In addition to the beautiful beach and river facilities for bathing, there are cool, shady walks through the extensive grounds.

Departure will be from the SRC at 8:00 am. A bus will be provided.
For those going by bus, the cost is \$1,500 including entrance fee and meal.
For others, preferring to drive, the cost is \$1,000.

- * The Society has rented a one bedroom cottage for the convenience of those attending, which will afford private changing room and bathroom facilities, in addition to those publicly available.
- * The cost as mentioned includes lunch prepared by Frenchman's Cove.
- * Frenchman's Cove, as a policy, does not allow outside food to be brought in, but we will purchase jerk pork and chicken on the way home, if members wish.
- * Departure for home is expected to be at approximately 3:00 pm., in order not to return to Kingston too late.

Payment

Frenchman's Cove requires the payment of a deposit by the latest Sat Jan 6th, 2007. We therefore ask members to pay up by Wed. Jan. 3rd., 2007 so that we can complete all arrangements for bus, and Frenchman's Cove, either by mail or delivery to :

1. Trevor Yee
Natural Products Institute
6 Belmopan Close
UWI
Mona, Kingston 7
Tel: 970-2574, 512-3051

2. Annette Chin

2 Red Hills Road
Kingston 10.
Tel: 929-2245.

ACTIVITIES REPORT

Activities in the past few months have been many and varied. You will find member's reports on some of them in Your Jottings below.

In addition, we had the visit of Dr. Gary Rosenberg, the snail expert from Philadelphia, in October. After an address to the NHSJ several eager members joined in his snail hunt in the Good Hope area of St. Andrew. The hunt was more successful than expected. Not only were live specimens found of *Apoma diminuta* and *Colobostylus interruptus*, specimens of which had not been recorded in 100 years, but in addition, a new species was found. That means, that if this is confirmed, Jamaica now has 564 snail species, with more than 90% of them endemic to the island. We hope to have the full report from Dr. Rosenberg for our next Jottings.

We shall also carry a report on the most interesting presentation on bee keeping, by Mr. Hugh Smith of the Ministry of Agriculture, held in December, in the next Jottings.

HOT TOPIC

As you all are aware by now, the Cockpit Country Stakeholders, amongst whom the NHSJ and several individual members are listed, has won a minor victory. Minister of Agriculture and Lands, Roger Clark, has bowed to pressure and suspended the licenses permitting prospecting for bauxite and limestone within the Cockpit Country. He is to call a meeting with environmentalists shortly at which the environmentalists are expected to produce a map of the area for conservation.

The Cockpit Country Stakeholders were invited, by the Ministry of Agriculture and Lands, to a consultation workshop on the National Minerals Policy (Third Draft) at the Jamaica Conference Centre, Kingston on Thursday, December 14, 2006. The NHSJ's Herman Tobisch attended. Many Stakeholders left the meeting when it was discovered that renewal licenses had been signed some 2 weeks prior to the meeting.

Diana McCaulay of JET immediately called a Press Conference and Dr. Margaret Hodges and Anna Maria Hendriks attended.

The NHSJ requires that the government state clearly:

- 1) its position on commercial mining in the Cockpit Country
- 2) if it does not intend to grant mining licenses then why is it prepared to allow prospecting by mining companies when there are other agencies capable of assessing Jamaica's natural resources.
- 3) can it guarantee ecologically sustainable exploration with minimal disturbance of the natural habitat in accordance with regulatory policies?

If you are not on the Stakeholder list but feel you have a valuable suggestion or comment to contribute let us know and we can forward it.

NEW EFJ BOARD

Two from the following five NGO representatives will be selected by the Minister of Local Government and Environment as EFJ Board appointees:

Carole Narcisse (nominated by NJCA)

Franklin McDonald (nominated by JET)

Maureen Allgrove (nominated by CVSS)

James Rawle (retiring - automatically part of the slate)

Nicole Foga (retiring - automatically part of the slate)

Your Jottings

Report on trip to Hillside Reggae Falls – St. Thomas 23rd September, 2006 – by Vashti Chatoor

A relatively large group of 34 NHSJ members and friends, including a number of children, visited the Hillside Reggae Falls located on the Johnson River, St. Thomas, on the 23rd September 2006. The group left from the Scientific Research Council (SRC) at approx. 9:00 am, after a short talk by the president Dr. Trevor Yee on some of the History of the Falls and area and other details of the trip.

These beautiful Falls are presently the focus of an eco-tourism project instituted by the Hillside Community, of which Mr. Knightⁱ is the serving president (only one of the many hats that he wears) and who met and guided us to the base of the falls, driving in the river bed. In his talk to us he confirmed much of what we had unearthed from our own research, and fielded questions from the members.

The Falls

This approx. 12-15 metres high waterfall was constructed in 1920 as a dam for the generator used to supply electricity to the Serge Island Sugar Estate, originally established in the 17th Century, as well as to the homes of the estate management and staff. This data is confirmed by the Social Development Committee's (SDC) document,ⁱⁱ which indicates that after Hurricane Charlie in 1951, the Serge Island Factory and Garbon Hall estates which were supplied with Hydro Electric Power from the Falls, were probably the only areas in St. Thomas, with electricity immediately after the Hurricane. Incidentally, the Johnson and Negro rivers to the east and west respectively, form an "island", Serge Island, before merging to become the Morant River, and flowing into the sea.

This Hydro Electric Generator predates those on the White river and like the one previously on the Rio Cobre are amongst the oldest on the island. Brian Hudsonⁱⁱⁱ agrees with the above date for the Falls and mentions that the Colonial Reports of 1922 stated that 250Hp of electricity was produced by the generator at the Falls, for the Serge Island sugar factory and sawmills. Mr. Ainsley Henriques, former chairman of the Jamaica National Heritage Trust, who grew up on the estate indicated that the generator at the Falls was in operation until the 1960's when Serge Island converted to a Bunker C fired unit. In 1980's he indicated that the management at Serge Island took a decision to revert to a hydro powered generator, and for this, funding was obtained from CIDA. The assembly of the 'new' plant began but because of bureaucratic entanglements, completion of the plant was delayed. The intake system had become clogged with silt, with the lack of maintenance. However, before the assembly of the plant could be completed, Hurricane Gilbert in 1988 washed away all the equipment. On a previous scouting trip a young man from the community mentioned that this was in fact the case. Further flooding of the area in 1993 removed what was left.

Marble Mining

Mr. Knight indicated that the Elder family, after whom the Rudolph Elder Park in Morant Bay was named, had successfully mined and exported marble from the area. Mr. Henriques confirmed this and indicated that there is an extensive outcropping of marble to the west of the river near the falls. The factory which processed the marble now lay in ruins. A visit to the top of the falls

revealed scraps of marble, mined in the hills and transported by rail, the remnants of both scraps of marble and the rail lines were observed. The last operator of the factory it seems used blasting, for reasons best known to him, and this resulted in rubble and not marketable slabs. There is another outcrop of marble reported near the town of Bath, St. Thomas, which was mined by the Gore family for the manufacture of terrazzo tiles. With the increase in demand for ceramic tiles, and the decrease for terrazzo tiles, marble mining in this area also ceased. These marble deposits are well documented in the National Atlas of Jamaica, where it is mentioned that the deposits near Bath is at Friendship Gap and the estate beside Serge Island is spelt, "Garbrand Hall."^{iv}

Vegetation/Flora observed

The vegetation in the area consist of steep secondary forest on the right side of the Falls, and primary forest further back, but too far back from the river to be reached easily. The reforestation with Caribbean Pine can be seen in the nearby hills.

Among the plants observed in the forest and surroundings are:

Erythrina poeppigiana, Mountain Immortelle
Zanthoxylum martinicense, Prickly Yellow
Tabebuia sp., a local Poui
Simarouba glauca, Bitter Damson
Pithecellobium arboreum in fruit, Wild Tamarind
Clusia flava, Card Gum Tree
Ipomoea sp, a Red Morning Glory vine
Ficus sp, Wild Fig
Bursera simaruba, Red Birch
Comocladia sp. Maiden Plum
Coccoloba sp., Mountain Grape
Piscidia piscipula, Dogwood
Stachytarpheta jamaicensis, Blue Vervain
Asclepias curassavica, Red Head
Rytidophyllum tomentosum, Search-me-heart
Inga vera, in full flowering beside the river. Panchock, River Koko
Ceiba pentandra, Silk Cotton Tree
Bambusa vulgaris, Bamboo, an invasive
Thevetia peruviana, Lucky Bean Tree, an invasive
Many Bromeliads and Ferns.

Animal Life/ Fauna observed

On our scouting trip, some young men had been seen catching American eel, sandfish, black Talipia, and crayfish, that they spear fished and caught with a great deal of dexterity, below the dam. On this visit by the Society, young men from the community came with nets and fished next to the falls itself, and caught almost exclusively mullet and a similar looking fish they called a grunt. What was remarkable is that they threw back many fish that were deemed too small. A member, prior to the trip, had inquired if the fish caught were below or above the dam, given the

height of the Falls it would preclude fish migration. Mr. Knight in his talk to the group, answered this by advising that no fish can now be found above the falls, only crayfish.

Mr. Knight also indicated that there was a swinging/hanging bridge to facilitate workers at the HEP plant crossing from one side of the river to the other, when the river was in spate. This bridge no longer exists. Other roads too that crossed the river have also been washed away. He indicated that flooding in the area was exacerbated by the removal of the existing vegetation during the planting of Pine trees by the Forestry Department in the 1990's and which led to soil erosion and land slides, with a resulting decrease in agricultural activities by the small farmers in the community.^v

The day was an enjoyable one, with the family atmosphere BBQ, the swimming and walking in the river, swimming under the falls, hiking up to the top of the dam and the collecting of scraps of marble from the old mining operations. The barbecue was expertly prepared by our Treasurer Hermann Tobisch, with help by several members.

If you wish to visit these Falls before it becomes to commercialized, you can use the following directions :

1. Drive through the town of Seaforth in St. Thomas and continue until you get to the Bridgeview Drinking Saloon, where you turn right. A left turn onto the bridge takes you the Serge Island Estate instead.
2. Continue until you see a sign which reads, "Welcome to Hillsude Reggae Falls", where you turn left.
3. Continue until you reach a T-junction, with the sign "Serge Island Dairy Cooling Station No. 1," where you turn right until you get to the "Hillside Methodist Church". The roads to the left and right of the church will take you to the Falls, the one on the left allowing you to drive right in the riverbed up to the Falls. The right road, ends near the gazebo being constructed by the Hillside Development Committee, where you will need to park and walk to the Falls.

- i. President- Hillside Development Committee; Chief of the Morant Bay Fire Brigade; Chairman of the Serge Island Small Farmers Scheme; Justice of the Peace St. Thoma
- ii Social Development Commission (SDC) Time Line of Information on Hillside, available from the SDC.
- iii The Waterfalls of Jamaica. Sublime and Beautiful Objects. Brian J. Hudson. 2001. UWI Press.
- iv National Atlas of Jamaica. 1989. Town Planning Department.
- v. Info sheet compiled on the Hillside Community, available on request from the NHSJ.

Report on the get-together at Bellevue Great House, on Sun. Oct. 22nd, 2006, to designate Dr. Eric Garraway and the Long Serving members of the Education Committee as Honorary Members, and to bid Farewell to Prof. Ivan and Mrs. Charlotte Goodbody.

An enthusiastic group of approx. 30 NHSJ members and friends, including George and Monica Warner who were visiting from England, drove to the University's Bellevue Great House at Guava Ridge on Sun. 22nd October, 2006.

The rains that were threatening to fall the entire weekend, stayed away that Sunday, so that the usual walk that many members enjoy after NHSJ functions, was taken up by various groups in several directions in the area.

In his welcome, President Trevor informed the gathering of how the idea of the get-together came into being. Prof. and Mrs. Goodbody who had been very involved in the activities of the Society were returning to reside in the U. K. in 2006. The Executive Committee then also decided unanimously to accept a nomination, from Prof. Goodbody, received earlier that Dr. Eric Gararway be made an honorary member, for his years of service to the Society, and the committee decided in addition, to honour similarly, the long serving members of the Education Committee: Mrs. Cynthia Powell, Ms. Sonia Serrant, Mrs. Sylvia Barber, Ms. Anna-Maria Hendricks, and Dr. Joy Royes. Trevor mentioned the concern of one member, who he said shall be nameless, who took the time to endorse the idea of the get-together but was concerned about the choice of the asylum as the chosen location for the function. With more than one location bearing the name, Bellevue, the reason for the misunderstanding became obvious.

While the formalities were proceeding, Chef Hermann was busily preparing his barbecue, using his now tried and proven recipes. This was supplemented by a large assortment of other goodies such as rice and peas, salads, juices, delicious cakes, and a selection of wine and beer provided by the members. The Society is extremely grateful to Hermann and to all those who contributed so generously with the many dishes and for the carrying out of so many tasks needed to make such a function a success.

Beautifully prepared citations were read on the contributions of those designated as Honorary Members made to the Society. Various members participated in reading the citations, and making presentations. Very attractive ceramic pieces done by artist, Philip Supersad, were presented to all the awardees. The citations were also read on Prof. and Mrs. Goodbody and presentations likewise made to them. One of these was a photograph taken by Dr. Klaus Wolf of Prof. and Mrs. Goodbody on the grounds of the Dept. of Life Sciences. One of Prof.'s former students, Prof. Ronald Young, Dean of the Faculty of Pure and Applied Sciences then gave a brief appreciation of Prof's tutoring of him, and another former student, Mr. Stuart Lacey, presented Prof. with one of his bird photographs.

All of the newly designated Honorary Members expressed their appreciation for the function to honour them and for the citations read on their contributions to the Society. Both Prof. and Mrs. Goodbody remarked how ideal was the choice of Bellevue, for this send off for them, since they had so many memorable visits there, with their family, over the many years of their involvement with the Society, the Department and the University. Both expressed then and afterwards in a written thank you, their thanks to the Society for holding the get-together.

Even after the ceremony and walks, several members stayed considerably afterwards to enjoy a glass of wine or beer, savouring the occasion and seemingly reluctant for it to end. An enjoyable time was had by all.

NHSJ Field Trip to Spring Plain Vegetable Farm and Farquhar's Beach Saturday, November 25th 2006

by Andrew Gordon

Spring Plain

A group of approx. 20 eager members, including the Hagermans and Dr. Gerald Hollar from Mandeville, braved the uncertain weather that had threatened for nearly the entire week and set out for Spring Plain. After miles of beautiful roads on Highway 2000, we turned off at Toll Gate to miles of pot-holed, swampy roads before we arrived at Mr. Sammy Wong Chew Onn's farm, where he met us and addressed the group at the entrance to the offices of what was the packing house. Sammy explained to us that he has leased what was formerly the Spring Plain Winter Vegetable Farm previously run by an Israeli, a Mr. Eli Tisona. Aside

from making unfavourable press from time to time – this project fell victim primarily to mismanagement. Sammy thought that the concept was a good and still viable one.

He went on to say that he did not care what anyone else has to say but that the saving grace for this country in his opinion, was not tourism, or bauxite, but agriculture. My sentiments exactly! Agriculture as commerce is a tricky business, especially when you get into the financing of sizable projects. Time is of the essence in a farming environment as produce begins to wither and die, as soon as it is reaped, and has a very limited shelf life.

The present farm consists of approx. 250 acres of Mangoes (Keith, Nelson, Tommy Atkin), as well as 30 to 50 acres set aside for the growing of vegetables (Pak Choy, particularly the Shanghai variety, Chinese Lettuce, Cabbage, Mustard, Greens, etc.). After the propagation of seedlings, the vegetables are transplanted into long elevated beds, about 5' wide with furrows for access, on either side of each bed. Irrigation is done by both drip and spray.

In answer to a question why he got into farming, Sammy advised that his family was initially into the importing and distribution business of primarily food commodities. Later he became an industrialist and manufactured a wide range of steel based products at his company, General Industry Ltd. With the decline of industry, he thought that he would venture into agriculture and applied as much business knowledge as he had, although he had no previous experience in large scaled agriculture. He thought that the most difficult task in all this was controlling the growing environment. The solution he thought was to build greenhouses in which conditions can be set and controlled, and the farm is run almost like a factory. In such a scenario, control over irrigation, fertilization, and pest control is much more managed, and not left to the vagaries of rainfall, pest infestations and nutritional deficiencies. He thought that he might be able to secure assistance from Chinese sources to erect such a large greenhouse. He advised that water for irrigation was not a problem at Spring Plain as the Milk River runs through the property and flows downward (by gravity) through the farm, and that he has water year-round. Pumps are used to power the spray irrigation.

The Farm presently employs about 20 persons. 15 are Jamaicans while the remaining 5 are Chinese Nationals. The produce grown is sold to Supermarkets, and Hotels. Improper cooling or storage of vegetables along the distribution chain, he felt was a major problem, though he thought the prospects for the future market seemed good, due to the large number of hotel rooms being built to accommodate an increasing inflow of tourists. Sammy expressed the desire to acquire the lands on the other side of the river presently being operated by the Government as sugar cane lands. These adjoining lands had a large lake, and he thought of the sightseeing/recreational possibilities for his envisioned expanded operations.

There was much old equipment (obsolete, inoperable, irreparable), along with large warehouses blown down and twisted in the recent hurricanes and I recommended that these were possibly redeemable as scrap, that could be converted to cash to finance farm projects (Green Houses, Tractors, etc.) Whether these were still owned by the Government, and therefore their permission would be needed to dispose of them was not explored by the group. We all took pictures with Sammy and thanked him for his most informative and interesting tour.

Farquhar's Beach

From the farm we headed for Farquhar's Beach, passing the Milk River Spa and Hotel on the way to the beach at the end of the mountain to explore both the fossilized cliffs of large, prehistoric oyster shells (5-8" in length.) in some instances overhanging the narrow seashore, and the Iron Oxide- Magnetite that is deposited along the shore and carried by the Rio Minho River.

Trevor circulated an information sheet which he compiled from a conversation with Prof. Simon Mitchell of the Dept. of Geography and Geology, UWI.

Black Sand

The black, dense, glistening substance originate as sediments carried by the Rio Minho in Clarendon, and deposited along several beaches of the South Coast. The Black Sands originate from inland areas such as Chapelton and Frankfield in the Central Inlier region of the island, and consist primarily of iron oxides,

such as Magnetite, Fe_3O_4 , and is magnetic. In addition to the iron, primarily contained in the Sands, other metals such as Titanium are also contained in them. Surveys have been done to examine the possibility of extracting these deposits as e.g. a source of Titanium and other metals, but the conclusion was that they do not exist in sufficient quantities to warrant active mining and processing. Over time, significant deposits of Black Sand have, however, built up in such areas of the island as e.g. the dunes behind the beach at Alligator Pond.

I recalled that in some cases, in other parts of the world, the magnetic force of deposits such as these has been utilized to draw a vehicle uphill without the engine being on.

Fossilized Oysters

These are believed to have originated in the Pliocene Geological era, about 6-8 million years ago. It is believed that the oysters thrived in a hyper-saline, nutrient rich tidal channel behind a lagoon.

The oysters have been classified as *Crassostrea virginica*, but DNA analyses done more recently, have shown that they are the same species as the local Mangrove Cup Oysters, *Crassostrea rhizophorae*, seen growing on the roots of the Red Mangrove, *Rhizophora mangle* (Rhizophoraceae). Clearly, these are far larger than the present day specimens and if they are the same species as has been confirmed by DNA evidence, then they must have existed at a time when conditions were far more favourable for their growth and development. Fossilised barnacles could also been seen on some of these giant oysters, but alas, although mother of pearl could be observed, as hard as we tried, we could not find any 6-8 million year old pearls.

Farquhar's Beach consists of basically a poor but vibrant community of friendly fisherfolk. We were very fortunate that it was only after we had done all our exploring and sightseeing of Black Sands deposits and Fossilized Oysters, when some members were enjoying a swim in the late afternoon, that the rains that had kept away all day came down heavily. By then, we had already placed our orders of fried fish, and these were ready and waiting for us, at the right time when the rains started. We could then enjoy our fried fish and crackers and Red Stripe beer and other drinks on the patio and inside Dian's Three Star, Seafood Restaurant. This we did until it was time to make our way back home, and our departure was done more hastily after enjoying our fish, when Trevor advised that one year the water had reached the roofs of the Milk River Bath Hotel and the patrons and staff, who were by then marooned on the top floor, had to be rescued by helicopter. The assurance of the fisherfolk that such marooning requires several days rains, fell on deaf ears, as we then left in a group.

Prepared by Jill Byles 13/12/06
