

Nature's

jottings

Newsletter of the Natural History Society of Jamaica March '09

The Natural History Society of Jamaica dedicates this edition of Nature's Jottings to the late Sonia Serrant, who passed away in 2008 having been a dedicated NHSJ member for sixty six years.

Below is a copy of the citation presented to her when she became an honorary member of the NHSJ in 1996.

CITATION IN HONOUR OF

SONIA SERRANT

For fifty six years you have been a faithful, enthusiastic member of the Natural History Society of Jamaica. You joined the Society in 1942 when you were fourteen years of age – the youngest member then.

1942 was the year you were awarded second prize for your age group in the Matley Essay Competition promoted by the Institute of Jamaica. You were attending St. Hugh's High School then. In 1945, when you were an A- Level student at Wolmer's Girls School, your entry for the Matley Essay Competition gained first prize. This essay was on Ferns, Wild Plants and Trees in Westmoreland and St. Elizabeth.

You have participated in most of the field trips organized by the Society since you were twenty one years of age. Through these you have seen much of the Island's flora and fauna.

Your love of plants and your acute memory allows you to have at the tip of your tongue the scientific names of numerous trees, shrubs, grasses and weeds which most people do not know but here you identify with some amusement tinged with hidden envy.

You have been a member of the NHSJ's Education Committee from its inception in 1992. The valuable knowledge you acquired through study, through the field trips you attended and through teaching Botany at the high school level for thirty five years have

made you an asset to the Education Committee. Through your illustrated articles for the Children's Own Magazine you have been sharing your knowledge with Jamaica's primary school children.

At the request of the President of the Natural History Society, Dr. Eric Garr away, you are writing an account of your fifty six years as a member of the Society.

The Natural History Society salutes you as a remarkable person and a dedicated member.

It is a great pleasure to be able to include in this Nature's Jottings Sylvia Barber's memories of Sonia: Sylvia herself being greatly respected and acclaimed as a dedicated Science teacher at Kingston College.

SYLVIA BARBER'S MEMORIES OF SONIA

One morning many years ago, shortly after I was transferred from Irvine Hall to Mary Seacole Hall, I met Sonia's voice before I'd actually seen her in person. I heard someone singing from a room across the quadrangle, clear and melodious. I inquired who was singing, "Sonia. She likes to sing when she is happy," someone said.

When I did meet her, I thought her appearance matched her singing. She sported a fashionable dress, had a becoming hairdo with a scarf tied around her head, her accessories were matching, she was freshly made up, manicured and pedicured. Sonia was always well-groomed. I think she had quite a bit of male admiration at the time. I graduated from UWI that year.

Years passed, then Sonia and I met again at Kingston College. She taught Biology to adoring students. I set out to find out the secret to this homage they paid her. Essentially, it was that nothing sweetens labour like success. She made sure that the topics on which the tests were set were well understood, and answers to similar questions were well rehearsed. I followed her method to some extent, but did not manage to get the same level of success, as I rather liked to spring a few surprises on my complacent students.

Sonia was a great saleslady. She always copped the prize for selling the largest number of magazines published by the Kingston College Science Club. She never missed our Annual Awards Functions. Her enthusiasm was contagious, her encouragement fulsome.

Sonia was the person who invited me to join the NHSJ Education Committee, thereby providing me with an opportunity to help children with environmental studies. Her memory for the scientific names of plants never failed to impress us. She was prompt in handing in her assignments, complete with her own illustrations for publication in the Children's Own Magazine. She always greeted us warmly at Committee meetings. She regarded us as a part of her family. Once she gave each of us a Christmas gift of a cologne with a lovely fragrance. Generous in her appreciation of others, she made us feel worthwhile and special.

As Wordsworth wrote,

“But yet I know, where'er I go,
That there hath past away a glory from the earth.”

We hope to have some of Sonia Serrant's papers on display at the forth coming AGM.

Your Jottings

NHSJ Seminar on the Bowden Shell Bed

December 4th, 2008

Presenter: Dr. Thomas Steman

Venue: Life Science Lecture Theatre

Dr. Thomas Steman has been teaching geology and palaeontology since 1999.

Bowden: it is the most famous place in Jamaica among geologists.

Lucas Barrett. 1856, was head of the geologists and knew of Bowden.

Nowadays the site is completely covered by bush and has been an integral part of many published papers. It is known for its molluscs, snails and gastropods. It is a shell y conglomerate

and has corals and micro fauna. There are 600 plus species of molluscs. The age has been controversial. It is about 2.5 million years old. The environment is also controversial.

The depth is greater than 100 m.

The map of Jamaica shoes the following ages.

Cretaceous (135 +/- million years) cent re and upland.

Paleocene:

Yellow Eocene yellow limestone group

White Eocene white limestone group

Blue Neogene Pleistocene Coastal group Bowden and Buff Bay

Gray area:

Bowden Formation

generally massive, marl stone, mud rocks, and not well exposed.

Macro fossils are not common. Shell beds with shallow waters. Marine fossils occur as well.

Bowden Flora minifera

Single-celled animals, like amoebas, 2 microns in width. Bored bivalves-snails bore their way

into the shells.

Free living corals are quite common as well. These are not found anywhere else in the Caribbean.

The Pliocene is an exciting time in the Caribbean.

Isthmus of Panama

There was plenty of turnover in marine fauna. 50% more reef coral species in the late Pliocene.

Modern Climate Patterns?

Project Associated with Smithsonian Tropical Research Institute in Panama and Scripps Institute of

Oceanography led by Jeremy Jackson.

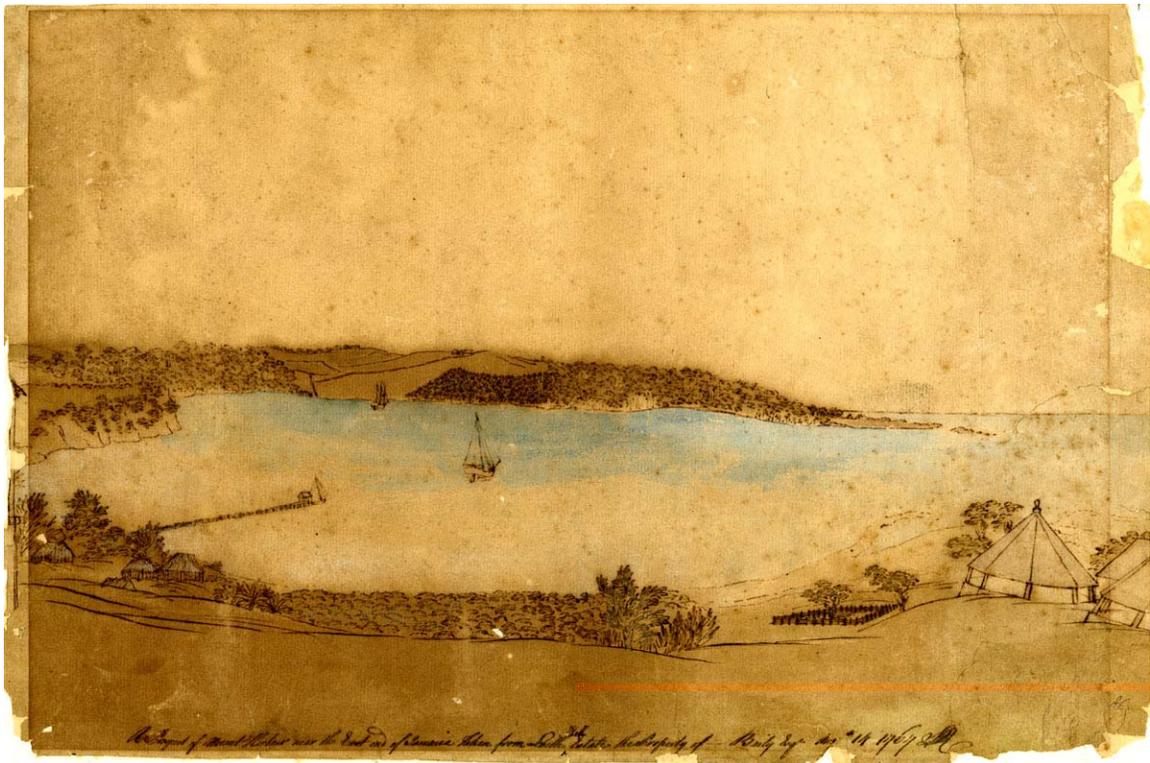
Sampling took place at Bowden with an excavator. Thirty bulk 60 kg bags were collected.

Bulk samples were treated by freeze thaw. Samples were sieved to 0.5 mm.

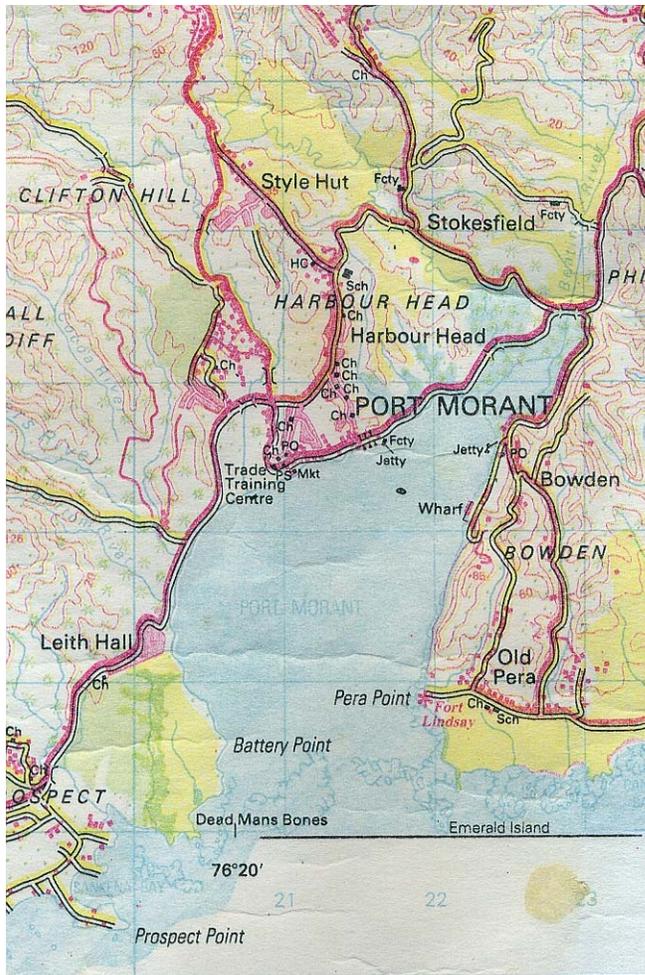
600 lbs/272 kg were shipped to Panama. Material will be distributed to specialists in molluscs,

fish etc. A major statistical work will be done.

Prepared by Cicely Tobisch



(1764), looking across to Old Pera Point.



Map showing situation of Bowden wharf

NHSJ Field Trip to Bowden, St. Thomas
December 13th, 2008

Leader: Dr. Thomas Steman

On December 13th. Members of the society met with Dr. Thomas Steman and some of his geology students at the Department of Geology, U.W.I and left for a field trip to Dead Man's Bone, the western shore of Port Morant and the area of Bowden Wharf at the eastern shore of the bay.

Before reaching Leith Hall we turned right and followed the parochial road to Dead Man's Bone, a grassy plateau with new housing schemes scattered across to Prospect Point.

We parked close to a cliff approx. 30 ft above sea level. From this vantage point one could look over the bay to the shore line from Bowden to Old Pera, the site of Fort Lindsay and the ruin of the wind mill clearly visible further inland, emerging from cane fields.

From the edge of the cliff a steep, rocky trail lead down to the narrow, sandy shore line where numerous storms over generations eroded the cliff, where we studied the bordering formation of silt and rocks with fossils interspersed.

The rocks of this site are of the late Pleistocene (less than one million years ago).

The rocks and reefs formed in the interglacial melt when the Plantain Garden River flowed south to Port Morant, flushing deposits into this area at a time when sea level was higher. In the course of time the river re-routed in eastern direction to Holland Bay near Holland House.

Dr. Steman gave a briefing on the corals as follows:

Growth rings are seen in the corals. The temperature and ocean chemistry can be analyzed from the corals. Temperature information is yielded from the isotopes in the water and usually are C_{13} and O_{18} . C_{16} is trapped in the glaciers. When the glaciers melt C_{16} is released. The coral is sliced and x-rayed for examination. Corals do not like sediment stress. The fossils found at this site were as follows:

Barnacles

Snail shells

Crab claws were found in this sediment and wasp nests. (live black wasp belong to the spheridae
bulla)

Some shrimp make burrows in the sand.

Some plants seen at the site were the sea side mahoe, *impooea* sp. *Mimosea*, sp. *Croton*,
sp

Crocodiles had been sited in the area.

We returned to the main road proceeding from there to the site of Bowden Formation, shortly before reaching Bowden Wharf, formerly a shipping point for bananas and sugar and now a JDF out post.

From the road we had direct access to the excavated section where we studied the Bowden Formation. Many shells could be seen compacted in the silt and these were roughly three million years old. Plants and corals were found here. Microfossils show up the age of the shells. There were gastropods and scaphropods.

We then proceeded to Old Pera over the hill with a view down the bay where the remains of the oyster farm are located.

NHSJ FT / Bowden Formation

Old Pera is younger than Bowden as late Pleistocene, 1.8 million years old. It has grassy flats, beach sand, cobbles and deltaic stuff. There is an old canyon jutting from the coast line into the sea. The little Island of Esmeralda south of Old Pera Point has the same formation as Old Pera, with the horizontal bed. Sea and wind have eroded the coast as on the opposite shores at Dead Man Point. At the base the sand is cemented with $CaCO_3$.

Old Pera is a compact conglomerate.

Mandala remains and Pacific corals are found here. Gastropods and bicameral may be seen.

Before the isthmus of Panama came into existence, the Pacific flowed into the Caribbean. Evidence of this is the Pacific coral which is found in the Caribbean. Observed along the road from Old Pera.

A group of members who missed the turn to Dead Man's Point, went there to the end of the road

passing the geological site where some of Dr. Steman's students stayed on for further studies.

There a photo was taken from the foundations of a sea side fort opposite to Fort Lindsay and part of the defense system of Port Morant.
This field trip followed the earlier seminar.

Prepared by Cicely Tobisch

REMEMBER THE UPCOMING AGM

Date: Saturday March 21, 2009

Venue: Biology Lecture Theatre, UWI

Presentation by Eric Garraway:

**"JAMAICA'S SWALLOWTAIL BUTTERFLIES: conserving the endemics,
managing the invasives"**

1. Welcome and Meeting called to order
2. Apologies for Absence
3. Address by Dr. Eric Garraway, Dept of Life Sciences, UWI.
4. Reading, Amendments and Confirmation of Minutes from last AGM
5. Matters Arising from the Minutes
6. Presentation of Reports for 2008/2009
- 6 Election of Officers for 2009/2010
- 7 Any Other Business
- 8 Adjournment

Membership fees are now due.

Adult: \$750

Student/Retiree: \$500

Family: \$1000

Life: Adult x 10

Prepared by Jill Byles 27/2/09