

# Nepsetter

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National Environment and Planning Agency

## WATER PAYMENT SYSTEM – APPLIED ENVIRONMENTAL ECONOMICS

The Fifth American Dialogue on Water Management was held in Montego Bay between October 9 and 14, 2005. The Dialogue brought together water management systems special-



ists, regulators and their affiliates from Latin America and the Caribbean primarily, as well as participants from the United States of America and Canada and other interested persons. Their purpose was to discuss problems, present updates on policies and practices as well as provide a glimpse into the near future on matters affecting potable water, waste disposal and the attendant issues as well as options for financing the

myriad water related problems that affect the lives of

millions, not only in this hemisphere but also across the globe. On display was a cross section of products and informational material on water related matters and NEPA was there.

The presenter from the World Bank, Mr. Sunar Platais shared a practice in which the Bank was involved using an environmental payment system that appeared to hold great promise for some of Jamaica's "mountain to sea" environmental challenges.

I thought that the system was worthy of being shared with our readers and invite you to comment on its relevance here.

It was this presenter's opinion that the purpose for which land was used needed to be tied to a compensation scheme that

would pay for well needed bio conservation. This was so since the use to which land is put up stream, has hydrological effects downstream as well as an effect upon those upstream in a cyclical kind of way. The scheme is called Payment for Environmental Services (PES) and includes a variety of arrangements wherein the beneficiaries of environmental services VOLUNTARILY compensate the providers of those

services and those affected by the misuse of the resource.

Further research into the system led this writer to WWF, formerly known as the World Wildlife Fund. Additional information may be had from their website at:

[http://www.panda.org/about\\_wwf/what\\_we\\_do/policy/macro\\_economics/apped/PES.cfm](http://www.panda.org/about_wwf/what_we_do/policy/macro_economics/apped/PES.cfm)

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# Editorial

2005 is almost at an end and so too is the new school year...well, perhaps not quite!

But you can empathise with the school community given its setbacks due to the rains, as we move into the last month of this year and half way through the "Come Learn About the Environment Project", at least for this term. NEPSETTER is happy to report that so far, the process has gone off swimmingly! Pub-Ed officers are out and about busily imparting knowledge on environment and planning issues in Jamaica to many nubile, young minds.

NEPSETTER is, of course, convinced that this is the right approach, as we work together to put Jamaica's environment front and centre in the minds of the nation's future leaders. In fact, given the challenges we faced this year, in the context of declining resources; increased prices in oil on the international markets and the impacts of these locally; combined with the much discussed MoU, NEPA is to be commended for having stayed the journey and for weathering the storm.

We have seen the impacts of droughts, forest fires, hurricanes and other natural events, which have impacted how we have worked and continue to work. The 2005 Bird Shooting Season, which ended on September 25, was affected by some of these. Through the inputs of our able teams of professionals, NEPA was able to appropriately advise the Minister (of Land and Environment) of the best possible approaches to the management of this year's season. NEPSETTER therefore wishes to acknowledge the efforts of our enforcement teams which ensured that the season was properly monitored and that breaches were kept to a minimum. They also ensured transparency and accountability through regular interface and updates supplied to the media.

NEPA also participated in a number of activities and have contributed time, expertise and other resources to assist in the recovery efforts of the agricultural sector, for instance, after the droughts and forest fires this year. We have made vital comments on the "Build/No Build Zone" draft guidelines,

which the Clarendon Parish Council currently uses to decide where applicants can build in the interests of national safety.

The Kingston and St. Andrew Sustainable Development Plan, which will be launched soon marks one of the other significant ways in which NEPA is responding to demands for better service in the public sector. Through this initiative, NEPSETTER is convinced that the objectives of inclusive governance, underlined through the Barbados Plan of Action (BPOA), which was reviewed, *inter alia*, in Mauritius in January, will be given urgent priority.

Now is the time to recommit efforts to the ever-important goals of sustainable development discussed in that forum, as Jamaica moves to tackle important challenges in the larger global context. We are confident that as we look ahead that we are preparing ourselves for the myriad tasks at hand.

Except for the views expressed in this article, the opinions expressed in this publication are not those of NEPSETTER.

## WATER PAYMENT SYSTEM – APPLIED ENVIRONMENTAL ECONOMICS

### *Continued from page 2*

The WWF says that the services can include watershed protection, forest conservation, biodiversity conservation, carbon sequestration, landscape beauty and wildlife husbandry in support of tourism and ecotourism, and more. WWF cites for example its work with its partners in Guatemala's Sierra de las Minas

Watershed, where large downstream users of water -- including soda bottling companies and hydroelectric plants -- have agreed to contribute to a fund that supports upstream conservation efforts. Such an initiative falls under the umbrella of applied environmental economics. In essence, the beneficiaries are really seeking to ensure the consistency in the supply of the resource that they need. It is for this reason that they consider participating in this voluntary system.

Platais identified issues for consideration under the system to include:

- *The quantity, quality and timing of stream flows*
  - *Fish catch and stock*
  - *Hydro damage*
- He posited the view that those upstream had a social responsibility to attend to issues of
- *Water quality*
  - *Prevention of soil erosion and sedimentation issues*
  - *Mitigation measures against natural disaster impacts and*
  - *The maintenance of scenic beauty.*

He stated that this last point on scenic beauty - what the WWF refer to as landscape beauty - was not sufficiently talked about in relation to water impacts and that the aesthetics of our environment had an equally important role to play in our well being.

Platais described his system as eco marketing. The World Bank was overseeing an Ecomarkets Project System (EMS) to the tune of US\$33M with an additional

US\$8M from the Global Environment Facility (GEF) in Costa Rica where the concept was working satisfactorily. He reported that between the 1940s and the 1970s, Costa Rica experienced severe levels of deforestation. With the introduction of EMS, that country has seen a 45% level of deforestation, becoming the first country to have a net negative deforestation rate. The Ecomarkets Project for Costa Rica aims to increase forest conservation by supporting the development of markets and private sector providers of environmental services supplied by privately owned forests including protection of biological diversity, greenhouse gas mitigation, and provision of hydrological services. This type of financing permits the government to meet its long-term commitments to private landowners. Call it PES or EMS; it is being tried all over Latin and Central America, Asia and in the Danube Basin.

*Grace Turner PhD.*



# HR Update

## Editorial Note:

As part of the ongoing effort to revamp NEPSETTER, the HR Update feature has been adjusted to reflect issues of interest to you, which the HR Branch wishes to inform you about. Please see our first installment below.

In this edition, Branch Manager, Gervaise McLeod tells us more about an interesting and welcomed emergency medical services plan which has been embarked on by NEPA in tandem with the Nutall Medical Centre, which is located right here on Caledonia Avenue.

Be sure to let us know what you think about this plan in our Feedback column, in the next edition, as well as the adjustment we have made to the HR Update. Send us an email at: [apinnock@nepa.gov.jm](mailto:apinnock@nepa.gov.jm), or [nfearon@nepa.gov.jm](mailto:nfearon@nepa.gov.jm). Pleasant reading!

NEPA/ Nuttall Emergency Medical Services Plan

In an attempt to deal with medical emergencies, which can and often do arise while employees are on the job, NEPA has entered into an arrangement with the Nuttall Medical Centre.

Whenever a medical emergency occurs, please bear the following in mind:

- A report is to be sent to the HR Branch immediately after the accident occurs;
- HR will provide a letter of reference to the Hospital to effect treatment;
- The Staff member will be assisted in reaching the Medical Centre. Colleagues, you are encouraged to assist in this process by transporting injured staff members to the hospital while contact is made with the employee's next of kin, if that is necessary; and, finally
- The hospital will invoice the Agency for the treatment.

In the event that the accident/medical emergency occurs outside normal working hours and HR personnel are absent, Employees are advised to use their Blue Cross Cards. Please inform HR of this as soon as possible so that the matter may be dealt with appropriately.

Even though our offices are located island-wide, this policy now only applies to accidents/medical emergencies which occur on or between the buildings on Caledonia Avenue, in Kingston. Other arrangements are being explored for other areas outside of Kingston.

This policy has been in operation since 2003. We invite your comments and observations, as we strive to improve the

quality of service delivered to you our valued employees.

## Other News

### Recruitments:

We are delighted to report that the following persons have joined the team here at NEPA. Two amongst those listed are, as you are aware, "oldies", who have either rejoined us or are now employed in a new capacity. Welcome onboard! Let us hope that your time spent here will be useful and enriching and will help to chart the course towards your personal and professional development!

**Ricardo Miller** - Environmental Officer (Biodiversity Branch)

**Donna Brodber** - Project Assistant (ENACT)

**Sheries Simpson** - Environmental Management System Officer (Regulations Standards & Guidelines Branch)

### Separations:

Kurt Wedderburn, Project Monitoring Officer and Chasion Beckford, Protected Area Ranger, both from the North coast Highway Improvement Project, have left us for greener pastures. Their contracts ended effective September 2005. Godspeed and good luck in your new endeavours!

### Training:

As always, we are delighted to report that some of our colleagues have availed themselves of training opportunities, which, undoubtedly, be of value to them in their respective capacities upon their return to the Agency. Congratulations to all who successfully completed their short programmes and all the best to those who are still assiduously working towards that same objective. Their names are listed below:

Name of Employee	Name Course/ Country	Dates
Shakira Azan (Biodiversity Branch)	Brazilian Symposium on Invasive Alien Species -	October 4-7, 2005
Vivian Blake (Integrated Watersheds and Coastal Zone Management Branch)	Sida course - Mining and the Environment - Sweden.	September 17 - October 16, 2005
Marsha Mason (Protected Areas Branch)	Rare Pride Tropical Conservation & Community Education Programme - United Kingdom	September 11 -Nov .25, 2005
Canute Tyndale (Biodiversity Branch)	Global Climatic Change Conference - Spain	September 12- 18, 2005
Laletta Davis-Mattis (Legal, Standards and Enforcement Division)	Integrated Ocean Policy Conference - Portugal	October 10-14, 2005

## Memoriam:

It gives us no pleasure to report that Karlton Hylton lost his mother, in September of this year. Gregory Garell, son of our former colleague Peter Garrell, who sadly passed last year, died suddenly in September of this year. Our prayers are with the survivors.

## Births:

Happily, there are still silver linings behind those dark clouds. Our colleague Andrea Jones gave birth to new daughter D'Andrea Bennett on September 23, 2005 Congratulations Andrea!

Study Leave/ Scholarships/ Fellowships:

Our very own Agostinho Pinnock, Public Relations Officer in the PECC Branch and Executive Editor of the NEPSETTER, left on October 3 to complete a Masters degree, at the Caribbean Institute of Media and Communication (CARIMAC), UWI, Mona. He returns to full time duties next July. However, in that time he maintains a link with this publication and others in the Branch while he is away. Good luck with your studies, Agostinho! In addition, Michael Myles, Environmental Education Programme Assistant, ENACT, is also at the University of the West Indies completing his final year of the Bachelor of Science degree in Public Administration.

## Temporary Employment:

And, finally, welcome to the following persons who have joined in a temporary capacity. Let us hope that their stay here will be meaningful. All the best!

- **Dr. Betsy Bandy** fills in for Andrea Jones, who is on maternity leave.
- **Ramon Hutchinson** - Applications Processing Project
- **Janet Williams** - Applications Processing Project
- **Collene Shaw** - Applications Processing Project
- **Lancelot McCalla** - Public Relations Officer
- **Ann Cherice Ebanks** - Regulations Standards and Guidelines Project

*The Human Resource Department*

# International Coastal Clean Up Day Reviewed...

*...Minister of Environment Participates in Successful Clean Up!*



*Minister Peart with his son*

International Coastal Clean Up Day, was celebrated, on Saturday, September 17. Jamaica joined the international community in cleaning several beaches and waterways across the island. Minister of Land and Environment, the Hon. Dean Peart and other members of his Ministry joined personnel from the National Environment and Planning Agency (NEPA) to clean the Half-Moon Bay in Hellshire, St. Catherine.

Volunteers were drawn from St. Jago, Spanish Town and Eltham High schools, in the parish; as well as members of the University of the

West Indies; Sub-aqua Club the University of Technology, Jamaica (UTech) and the US Peace Corps. A total of 113 bags of garbage weighing 980 pounds were collected by the 160 volunteers, who came out to support that initiative.

For the first time this year, the Rio Grande Valley, in Portland was cleaned by NEPA along with other volunteers, in particular, from Rafters Rest, who treated the volunteers to one of Portland's favourite culinary items - Bussu soup. Thanks to Rafters Rest, the volunteers also received a delicious, hot meal. A total of 45 bags were collected near

the Rio Grande River, weighing a total of 630 pounds.

In the end, the day was a success and provided useful information on the health of Jamaica's beaches and waterways. For the first time also, volunteers were treated to T-shirts courtesy of NEPA. These were well received.

International Coastal Clean-Up Day is celebrated every year on the third Saturday in September. It was initiated by the Centre for Marine Sciences, in Washington, DC in the USA, in 1985.

*(Agostino Pina)*



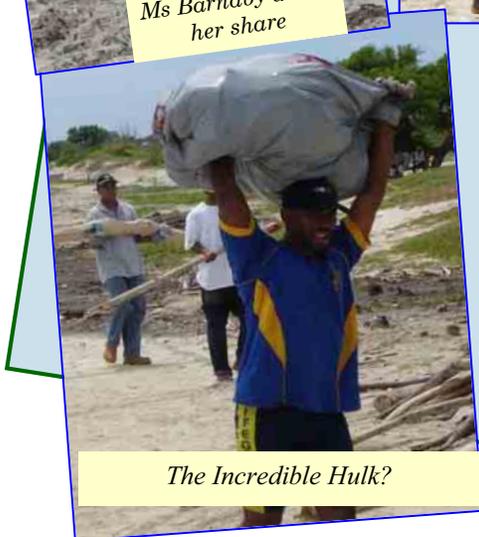
*Garbage taken from the beach*



*Ms Barnaby doing her share*



*St. Jago and Volunteers from overseas taking an break*



*The Incredible Hulk?*



*Taking a bite out of work*



*The youngest volunteer*



# Scenes from Bird Shooting Monitoring in St. Elizabeth



ISCF Officers - Gowdy, Williams, Ellison and Sandcraft.

Bird Shooting monitoring team members in action



Checking on the age of the birds



Hunter with bird dogs



10 White Wings on a bird rack



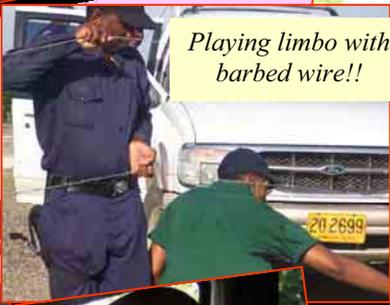
Team Leader Kojo Dawes



OVER YUH HEAD CHRIS OVER YUH HEAD!!



Bird boys in hunter's pick up



Playing limbo with barbed wire!!



NO ENTRY BEWARE OF DONKEYS?



Having Breakfast at 5 in the morning



Hunters having a conversation with Cons. Ellison



Just a little snoozze



Protected birds – illegally shot on the last day of the season



Try pass mi if you dare!



Pose fi mi nuh?!

Businessman Bert Tomlinson was on October 5, found guilty and fined for shooting without a hunters licence when he appeared before the Buff Bay Magistrate's Court.

He was one of two men warned for prosecution for breaches of the Wild Life Protection Act on Saturday September 17 during routine monitoring of the Annual Bird Shooting Season.

Enforcement Officers from the National Environment and Planning Agency (NEPA) along with Officers from the Island Special Constabulary Force

(ISCF) warned a total of nine hunters during the season which ran from August 27 to September 25.

On the day Mr. Tomlinson was apprehended another hunter was warned for obstructing a Game Warden (in the performance of his duty) and for failing to keep one fully feathered wing on the birds shot.

On Saturday Sept 24, enforcement officers apprehended Charles Johnalley, in the Kildare area of Portland, with four Ring-tailed Pigeons and one Bald Pate in his possession. He has been warned for prosecution for hunting illegal birds. Another six hunters

were warned for prosecution on Sunday Sept 25.

The season was shortened to five instead of the usual six weeks. Minister of Land and Environment Dean Peart announced the opening of the season on Friday August 19, much to the relief of the bird-shooting fraternity. A shortened and delayed season was one of three options presented by the Biodiversity Branch because hurricanes, fires and droughts had caused delays in the usual nesting season.

(Zadie Nenfville)

# Highlights from International Ozone Day 2005

September 16, 2005 was observed worldwide as International Ozone Day. Ozone Day, which has been celebrated globally since September 1995 was designated by the United Nations General Assembly to commemorate the Montreal Protocol on substances that deplete the Ozone Layer which was signed in 1987.

As is customary the National Environment and Planning Agency (NEPA) organized a number of activities marking this important event which commenced on September 12 and culminated on September 16, 2005.

An Exhibition was mounted at the St Matthew's Anglican Church Hall in Santa Cruz, St Elizabeth on Friday September 16 under

the theme "ACT OZONE FRIENDLY AND STAY SUN SAFE". Despite the torrential rain that blanketed the day's activities, students and community members turned out to view the display which featured important messages on Ozone preservation and health concerns associated with Ozone depletion. A number of brochures and souvenirs were distributed while the *Ozzy Ozone* video, an educational animated film used worldwide attracted the attention of both young and old. The event was buttressed and publicized nationally by an outside broadcast of "Laing and Company" which provided a wonderful opportunity for those unable to attend the exhibition to learn more about the Ozone Layer and the

work of the National Ozone Unit. During the days leading up to September 16 a number of schools were visited to spread the message while posters were distributed to select libraries island-wide.

The week of activities received notable media attention with representatives of the National Ozone Unit, the Ozone Commission and the Public Education and Corporate Communication Branch at NEPA conducting media interviews throughout the week. An article was carried on the week's activities in the September 14 Gleaner while a special 2-page advertising feature was published by NEPA on September 16.

*(Natalie Fearon)*



*Nicol Walker Manager National Ozone Unit speaks with students from St Elizabeth Technical High at the Ozone Day Exhibition*



*Nicol Walker, Manager, National Ozone Unit shows a senior citizen what to look for when purchasing CFC free products at a recent exhibition held at the St. Matthew's Anglican Church.*



*An animated Tony Laing speaks with Carole Miles, National Ozone Unit*



*Students from St Elmo's Prep School view the Exhibition*



*A student from STETHS happily displays her Ozzy Ozone T-shirt at the Ozone Day Exhibition held at the St Matthew's Anglican Church in Santa Cruz*



*Salome, National Ozone Unit with a guest*



*Ozzie ozone*



*Students from St Elmo's Prep School watch the Ozzie Ozone video*

# Children, Come Learn Project Launched...

*...Pub-Ed Initiative Hailed as Useful Intervention!*

Amid bustling rush hour traffic and the ominous threat of rain, members of the Public Education and Corporate Communication (PECC) Branch as well as other members of NEPA took to the streets on Wednesday, September 21, to remind the public of the importance of environment and planning issues in Jamaica. The occasion was the official launch of the "Come Learn About the Environment" Project, which took place in Halfway Tree, New Kingston and Portmore, in St. Catherine. Flyers, pamphlet, bookmarkers and the proverbial "horse and pony show" characterized the atmosphere and the spirits of those who participated.

According to Dr. Grace Turner, Manager of the PECC Branch, "the initiative was well received and certainly provided us with a useful platform from which to move forward." Moving forward, here, refers to the literal thronging of the schools across Jamaica by her team of Public Education Officers.

In Dr. Turner's words: "they were motivated by the success on Wednesday morning to literally, go forth and preach the gospel that: "proper planning equals safe communities! And that, "a cleaner, healthier environment begins with each one of us!" In her opinion, the "Come Learn Project has certainly struck a responsive chord.



*Bright and Attentive, Those primary school students are learning how to be better environmental Stewards*

Dr. Turner is delighted at the possibilities for growth and expansion under the project.

She is not alone. Natalie Fearon, one of the newest members of the PECC Branch, in reviewing the **Come Learn Project** to date, was decidedly full of praises. According to the bubbly "Pub-Edder", the name officers in the Branch sometimes use in reference to themselves, "the children and the teachers are certainly excited to be afforded this unique opportunity to drink in this information." Mrs. Fearon indicates that efforts are coordinated amongst the officers before they leave for a particular destination and that the same message is delivered to all the schools. She is careful to state though, that the officers are mindful of

the need to vary presentation styles based on age and, admittedly, the interests of the audiences with which they interact.

Noting that the project is still fairly new and has a long way to go before all the schools across Jamaica are visited, Onyije Chigozili, Community Animator in the Branch, indicated that "working with the students in the various schools is very interesting and rewarding." In her view: "teachers are important in helping to shape the project's future." Through them, the "Pub-Edders" will be able to adjust presentation styles and will make appropriate knowledge interventions, based on the types of environment and planning information to which their audiences are already accustomed.

In fact, the **Come Learn Project** has set itself the ambitious task of periodic self-evaluations and adjustments. Over time the Project will be revamped to meet the shifting needs of its diverse audiences but will, nonetheless remain true to the original objectives of educating more young Jamaicans about environment and planning issues. Through this initiative, Dr. Turner and her team of "Pub-Edders" are convinced that they will be making useful strides in protecting Jamaica's land, wood and water!

*(Agostinbo Pinnock)*

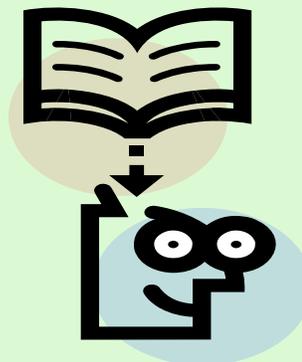
## FEEDBACK

*Since our last publication, we are happy to report that there have been various comments regarding several of the outputs of this and our sister publications, including the website and the radio drama series, **Down to Earth**.*

In fact, were we to accept those comments we have received as fact, then we could allow ourselves to be convinced that we have done all there is to do. We are sure that this is not so, however, and it is in that spirit that we accept the praises but also work to ensure that our standards of excellence are maintained.

Natisha Campbell, a student at the Mico College, right here in Cross Roads, was full of praises for the service she received from the PECC Branch when she visited our offices on September 30, 2005. She requested information on how to get a presenter on global warming as well as general information on the environment. According to Natisha, she had "a great experience!"

Insiders report that some members of the Board have given two thumbs up to the Down to Earth series. Responses to our questions continue to filter in. We wait with bated breath for the season finale and to announce the winner who will claim \$10,000.00.



# NEPA retrieves crocodile from Beach in Negril

On Saturday, October 8<sup>th</sup> 2005 in response to a call from Mr. Richard May, Group Environmental Director for the Sandals Chain, the National Environment and Planning Agency (NEPA) had to mobilize its field personnel to retrieve a crocodile sighted close to the beach between Hedonism 2 and Sandals Negril.



With the assistance of officers from the Negril Marine Park and water sports operators at the resorts, the Westmoreland Enforcement Inspector Mr. Nedson Gardner was able to retrieve the animal which was temporarily housed at the Negril Royal Palm enclosure. The crocodile when measured was 12 feet, 3 inches in length. The animal was later relocated to Black River, one of its natural habitats.

Credit must be given to the Biodiversity Branch which had the foresight to train resort personnel in Negril to safely capture and secure these animals. It is anticipated that Sandals may request further training for their staff. The incident also highlighted a need for the procurement of additional equipment to aid in the retrieval of crocodiles.

In the meantime, the American Crocodile population will be monitored by NEPA under a special project intended to study the migratory patterns of crocodiles in the wild. NEPA anticipates that tracking the animals will provide valuable data for the management and protection of the crocodile population. However, the tagging of the animals had to be put on hold after problems developed with the tracking devices, the units have since been sent back to the manufacturers. Once the technical glitches are resolved the Biodiversity Branch will begin to tag and track the animals. It is expected that the project will serve to guide in the reduction of human interaction with crocodiles when they venture too close to populated areas. Similar tracking devices are used in a number of countries worldwide and have provided important information on the animals' behaviour and movement patterns.

# HAWKSBILL TURTLE RESCUED

This Hawksbill Turtle found its way ashore in Lucea to lay her eggs during the customary peak nesting season and was captured by some fisher folk in the area. The Island Special Constabulary Force was contacted and Mr. Roger Williams, Manager of the Enforcement Branch and his team at NEPA as well as Rangers from the Negril Coral Reef Preservation Society (NCRPS) came to the rescue of the animal.



possession either the eggs or the animal itself. All sea turtles found within the Wider Caribbean are protected by the Act. Under section 8a, it is an offence to hunt any protected animal or bird or to take their eggs from the Economic Exclusive Zone.

NEPA wishes to remind the public that under the Wild Life Protection Act, it is an offence to hunt or have in one's

The photos show the turtle being measured and its release at the Negril Marine Park after it was tagged by the Rangers of the NCRPS. The NCRPS has the delegated management authority for the Negril Marine Park. The turtle was estimated to weigh between 54.48 and 59.02 kg (120 and 130 lbs).

# Computer Talk

In this edition, we feature a two-part series on how to upgrade your personal computers, particularly now that most of you are in the season where either you or your youngsters are back in school. Look, see what you may learn about some of the best possible approaches to computer upgrades. Have fun!

## Computer Upgrades Is an upgrade for you?

Quite often we junk our old system and buy a new one wasting our investment in a computer that has served us well over the past few years. It does not always have to be like this. In many cases you can save your existing investment by upgrading your computer. These are some of the upgrade options available to you:

1. **Memory.** Adding more memory can substantially improve the performance of your system in most cases. If the computer has less memory than the software requires, it keeps shuttling information between the memory and disk wasting precious CPU time. Adding memory can often yield significant performance improvements.

2. **CPU.** Your CPU upgrade path depends upon the type of computer you have. If you have a:

- 286 or 386 system. You cannot upgrade your CPU only. Your best

bet is to look into [upgrade kits](#) or [bare bone systems](#).

- 486 system. If your motherboard is one of the later 3.3 volt variety (ask your vendor if you are not sure), then most likely it can take the AMD 486 DX4-100 or 5x86-133 CPUs resulting in significant performance improvement. If you have a 5 volt motherboard, check if the CPU is soldered on the motherboard. If yes, you have no choice but to replace the motherboard. If no, then it is quite likely that your motherboard will accept a [CPU OVERDRIVE](#). Ask your computer vendor which overdrive is compatible with your motherboard, the Intel DX4-100 overdrive, Intel Pentium 83MHz overdrive or the Turbo Chip 133. It is always advisable that you contact your computer vendor before ordering an overdrive. Whichever overdrive you choose, you will get a significant power boost over your existing CPU unless you already have a 486 DX4-100 or higher.

- Pentium System. If you already have a Pentium system, ask your vendor if your motherboard will accept a faster Pentium CPU. If yes, simply replace the [CPU](#). If not, go with [Upgrade Kits](#) or [CPU](#) or [Bare Bones Systems](#).

- [Motherboard](#). If your current

motherboard will not accommodate a faster cpu or you have a 286, 386 or 486 motherboard and you want to move to a Pentium or Pentium Pro system, replace your motherboard. Replacing a motherboard can be accomplished in many ways:

- Buy a [motherboard](#) and CPU of your choice. Do not forget to order a fan with the CPU. This option is for those who know what they are doing and know the strengths and weaknesses of the various motherboards and which one will go well with the CPU you are buying. If you are not technical enough to make that judgment call, then go with [Upgrade Kits](#) or [CPU + Motherboard Combo Kits](#) or [Bare Bones Systems](#), where we have made that decision for you.

- Buy an [Upgrade Kit](#). Upgrade Kits are ideal if you do not want to bother with researching the motherboard that goes well with your CPU speed. Price-wise also, it usually is better to buy a kit than to buy the items separately. However; you must have enough technical knowledge and time to replace motherboards. It is not as simple as you may think and takes a good two to three hours.

- [Bare Bones Systems](#). The difference between an Upgrade Kit and a Bare Bones System is that the motherboard is pre-installed in the com-

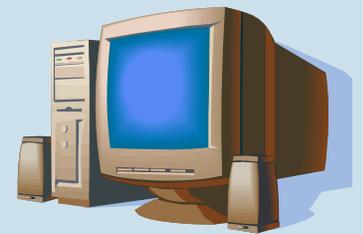
puter case. CPU and Memory is not included in the price of the bare bones system and you have to buy them separately. The price of bare-bones systems is slightly higher than if you were buying a motherboard and case separately as installation charges are added up. However; the extra money is well spent if you are not a very technical person or don't have the time to spare.

(Everol Anderson)

### Editor's Note:

Join us next time when we tell you more about computer upgrades for Christmas! Perhaps as a gift to yourself or someone you love, you may choose this option. See you next time.

SOURCE: <http://www.comcal.net/upgrade.html>



## From the Doc Centre

Recent additions to the Doc Centre's stock include the following:

- Caribbean Environmental Outlook Special Edition published for the Mauritius meeting on Sustainable development for Small Island Developing States (SIDS). UNEP, 2005
- Integrated Environmental Management and Planning. ENACT, 2001
- Marine Mineral Resources: Scientific Advances and Economic Perspectives. ISA, 2004

- Minerals other than Polymetallic Nodules of the International Seabed Area - Proceedings of a Workshop held in Jamaica 2000. Volumes I and II
- Multilateral Environmental Agreements (MEA) Implementation in the Caribbean: Report and Guidelines. UNEP, 2000
- Proceedings of the Tenth Anniversary Commemoration of the Establishment of the International Seabed Authority. ISA, 2004
- Selected Decisions and Documents of

the Tenth Session. ISA, 2004

### Environmental Impact Assessments

- Caribbean Cement Company Expansion and Modernisation Programme
- Proposed Expansion of Mining Operations in Northern Manchester - JAMALCO
- Proposed expansion of Mining Operations in Southern Manchester - JAMALCO



# Youth corner



## Kidz Environment Quiz

1. What is the meaning of the word Environment?

\_\_\_\_\_

\_\_\_\_\_

2. What does the term 'natural resources' mean?

\_\_\_\_\_

\_\_\_\_\_

3. What is the meaning of pollution?

\_\_\_\_\_

\_\_\_\_\_

4. Name three types of pollution

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Name three diseases you can get from pollution

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. What is the meaning of extinct?

\_\_\_\_\_

\_\_\_\_\_

7. What is the meaning of endemic?

\_\_\_\_\_

\_\_\_\_\_

8. Name three things you can do to protect the environment?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. What is the meaning of deforestation?

\_\_\_\_\_

\_\_\_\_\_

10. Name three animals or plants that are endemic to Jamaica

\_\_\_\_\_

\_\_\_\_\_

### RECYCLING FIND A WORD

P A P E R A D E B G C  
 L O X R E D U C E F L  
 A G J L C C R E U S E  
 S M K O Y I P Q H R A  
 T R Q R C S V T W U N  
 I T S G L X O Y I S B  
 C V U A I Z A X Y N G  
 W Y X N N X M E T A L  
 I O Z I G I K J M L A  
 D B E Z H N O P Q R S  
 G C F E T V B U C A S

Find these words in the puzzle above:

- |           |          |
|-----------|----------|
| recycling | organize |
| reduce    | plastic  |
| reuse     | paper    |
| clean     | metal    |
| glass     |          |

## 2005 ENVIRONMENTAL AND PLANNING CALENDAR NOV & DEC

Science and Technology Month  
 World Town Planning Day  
 GIS Day  
 International Mountain Day

November 01–30\*  
 November 08\*  
 November 16  
 December 11\*

\*Denotes set dates every year