

WILDLIFE SPOTLIGHT

Did you know?

The scarlet ibis (*Eudocimus ruber*) is a South American wading bird that belongs to the same order as herons, spoonbills, and storks. It is known as a gregarious bird, living, traveling, and breeding in flocks. In flight, ibises form diagonal lines or v-formations. This formation decreases wind resistance for trailing birds. When the leader of the pack tires, it falls to the back of the formation and another ibis takes its place at the front.

Although it is the national bird of Trinidad, the scarlet ibis is native to the tropical regions of northern South America from Venezuela to eastern Brazil, Guyana and coastal islands. They inhabit fresh and salt water estuaries, swamps, lagoons, shallow bays, marshes, mud flats, and mangrove trees.



The scarlet ibis is a shorebird and is most noted for its vibrant red coloration, which it derives from its diet of shrimp and other crustaceans and are known to sway their bills back and forth in shallow water to capture prey. Scarlet ibises forage for food by probing their long curved bills into soft mud. Both males and females exhibit the same coloration ranging from pink to bright red with black tipped feathers on the wing tips. The red coloration intensifies as the bird grows older, but young scarlet ibises are dull in comparison, with gray-brown upper-parts and white underbellies. Both sexes are alike with long spindly legs, partially webbed feet, a long and slender neck, a short stubby tail, and a long downward curving bill which is longer and thicker on the male. Adults are 56–61 cm long and weigh 650 g (males slightly larger than females) and their wingspan is usually around 38 inches.

Scarlet ibises reproduce by laying eggs. They reach sexual maturity at two (2) years of age. Males are polygamous (often mate with more than one female) and use displays of preening, flights, head rubbing, and a rocking motion to attract a mate and are rather quiet birds, only grunting or croaking on breeding grounds. They congregate in colonies of several hundred at breeding time, nesting on dense brush and mangrove-covered islands and shore areas near river mouths. Nests are round and made of loosely packed twigs usually located in treetops overlooking water. A clutch consists of 3-5 dull green, brown-streaked eggs. Incubation lasts between 19 and 23 days. Both parents incubate, care for, and protect the young which fledge (develop flight feathers) after 35 days and are independent in 75 days. The life span of the scarlet ibis is approximately 15 years in the wild and 20 years in captivity.

Habitat destruction, poaching, and insecticide use such as DDT have all caused the decline of several ibis species. These birds are not only scavengers, seen around rubbish dumps or sewage works, but they also move around croplands helping egrets and others to rid the area of insect pests. Its adaptability to any of several food sources ensures its success as a species. Because of their role in helping to control crop pests, they are very valuable to farmers. However, agricultural pesticide usage has endangered the birds in several locations. Occasionally, these birds are hunted for food. Their appealing taste is perhaps due to their preference for crabs and other crustaceans.

About Our Logo...

Our logo is the Passion Fruit leaf. Yellow Passion Fruit (*Passiflora edulis flavicarpa*) is native to the Amazon.

The passion fruit plant produces beautiful flowers and a sweet – tart fruit. It was named by the Spanish missionaries in South America.

Passion Fruit is widely grown throughout the tropics and subtropics. The leaves are used in traditional medicine to settle edgy nerves. They are also used for colic, diarrhea, dysentery and insomnia.

THE GREEN LEAF

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GREEN LEAF

SHARING EARTH'S LIVING TREASURES

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The Environmental Protection Agency (EPA) organized a number of activities to mark the International Day for Biological Diversity (IDBD), 2011. Observed annually around the world on 22 May, the day brings focus to a particular biodiversity issue each year. This year the focus and theme was "Forest Biodiversity: Earth's Living Treasures".

The year's observances began with a Biodiversity Youth Forum at the J.C. Chandisingh Secondary School, Rose Hall, Corentyne. Grade 10 students from seven (7) Secondary Schools in the Corentyne area participated in the Forum.

Participating schools delivered presentations and dramatic pieces in keeping with this year's theme.

Mrs. Sumedha Mahadeo – Singh of the Guyana Forestry Commission delivered an interesting summary of Forest Species in Guyana while Mr. Damian Fernandes, of the EPA, shared



Above: Mrs. Mahadeo Singh during her presentation. Left: Students of JC Chandisingh presenting their item



Two Documentaries *Amazon Alive: Forests of the Future* and *Natural Wonders of the Caribbean: Rainforests and Mangroves* were shown at six secondary schools in Georgetown. These films highlighted the importance of forest biodiversity and threats facing them. Conservation approaches and methods to protect forest biodiversity were also featured. The videos were followed by interactive sessions where students expressed their understanding of conservation through the arts, e.g. poems, song, skits, and painting.

Books, activity booklets, leaflets and replicas of forest animals were also on display in the lobby of the National Library. Members of the public were able to view these materials and to obtain copies of a few.



Students interacting with EPA staff at exhibition

A panel discussion on the international theme was also broadcasted on television. Panelists were: Mrs. Mahadeo-Singh, Guyana Forestry Commission, Mr. Damian Fernandes, EPA and Mr. Calvin Bernard of the Centre for Study of Biological Diversity.

Editorial Note

Reaching Crystal!

The EPA on June 5 celebrated 15 years of existence and unwavering commitment to the achievement of environmental goals and values. Tasked with treading virgin realms in a relatively young and now developing nation, the Agency mapped an ambitious course towards environmental protection, management, preservation, conservation, monitoring and sustainable utilisation of natural resources with the passing of the Environmental Protection Act. The scope and reach of operation extended to all ten Administrative Regions of Guyana throughout which the Agency is mandated to conduct public awareness and education, promote public participation in the environmental decision-making process and coordinate and regulate environmental management.

A decade and a half later, the EPA is a firmly established, efficiently functioning entity in the socioeconomic landscape of Guyana. From a mere Environmental Unit operating from the Office of the President, the Agency, for the first time since conception, now works with all its Divisions under one roof, from newly renovated offices in Ganges Street, Sophia.

Over the years, there has been restructuring for increased efficiency and effectiveness; expansion was recently undertaken and a Hazardous Waste and Air Quality Unit, fully staffed, significantly boosted capacity. The processes of permitting development projects and biodiversity research and addressing environmental complaints was successfully enhanced and implemented.

The road ahead will be fraught with challenges and new ventures as the Agency continues to grow and strive to fulfill its mandate. The resilience and dedication of the team of professionals the Agency attracts, however, will ensure that the course is stayed and zealously continue the endeavor for a safe and healthy environment for all Guyana.

NATURE AT YOUR SERVICE- WED 2011

World Environment Day (WED) is an annual event which is perhaps the most widely celebrated global day for positive environmental action. WED activities take place throughout the year but climax on June 5, usually with much pomp and fanfare. This observance began in 1972 and has grown to become one of the main vehicles through which the United Nations (UN) stimulates worldwide awareness of the environment and encourages political attention and action.

Through WED, the UN Environment Programme (UNEP) is able to personalize environmental issues and enable everyone to realize not only their responsibility, but also their power to become agents for change in support of sustainable and equitable development. The theme for this year's WED celebrations is "Forests: Nature at your Service" which coincides with the International Year of Forests and brings focus to the importance of our forest ecosystems and the services they provide.

WED, THE GUYANESE WAY!

As the Agency responsible for coordinating environmental awareness in Guyana, the EPA engages a cross section of the population in a number of activities. A Panel Discussion in



EPA contingent on Green Walk 2011

which Dr. Patrick Chesney of the Guyana Shield Initiative and Mr. Khalawan of Forest Products Association of Guyana brought interesting but different perspectives on forests, was broadcasted on national television on Saturday, June 4.

The annual **Green Walk**, which attracted eight hundred and ninety five (895) participants this year, was an exciting mix of colours, creative depictions of the WED theme, and catchy choruses of chanted slogans as Guyanese from all walks of life walked through the streets of Georgetown to raise environmental awareness. The Walk this year coincided with the 15th anniversary of the EPA-Guyana.

This year, a new addition to the usual supporting contingents was the Youth Arm of Olivet Seven Day Adventists, whose exuberance and exultation at copping three trophies—two first place and a second place, for Best Banner, Uniformity and Best Chant, respectively, was led to loud cheers and jumping for joy from members of that contingent. Other participants awarded trophies this year included Marian Academy Environmental Club (Largest Contingent) and Grams Hall Green Ambassadors (Best Chant).



Representatives of the Youth Arm of Olivet SDA collecting first prize for Best Banner.

Brief remarks were given at the end of the Walk by His Worship, Mayor of Georgetown, Hamilton Green, Mr. Navin Chanderpaul, and a PAHO representative. A poem written by Colleen Piper of Christ Church Secondary School titled "Life as a Forest Tree" was recited by an EPA Environmental Officer, Saudia Sadloo.

SHARING EARTH'S LIVING TREASURES...Cont'd from Page 1

Students were especially attracted to the display of forest animals and enjoyed the challenge of finding the "living treasures" (plants and animals) hidden in the forest in a Forest Treasure Hunt game. Activity booklets, provided by World Wildlife Fund (WWF) were also distributed to students at the exhibition.

A **Forest Biodiversity Seminar** culminated activities for the IDBD observance. Presentations—"How do Forests look in Flatlands?", "Beyond the Trees" and "Abundance, Use and Economic Value of Selected Species in Guyana" delivered by Dr David Singh of Conservation International - Guyana, Mr. Calvin Bernard of the University of Guyana, and Mrs Sumedha Mahadeo-Singh of GFC, respectively, brought an interesting and striking perspective on forests for students of the Cyril Potter College of Education (CPCE).

Mr. Calvin Bernard engaging the audience "Beyond the Trees" at the Forest Biodiversity Seminar.



UPCOMING ACTIVITIES

The EPA initiates and undertakes continuous activities to ensure that the concept of environmental stewardship reaches across counties to all parts of Guyana. Having successfully achieved the set goals in this regard for the first quarter of the year, planning and coordination have already begun to guarantee a varied and participatory approach to events planned for the next quarter.



The interesting mix of activities planned for July- September 2011 include the following:

Activity	Theme	Target Group	Date
Environmental Camp	Forests: Nature at your Service	Environmental Clubs from Regions 2, 3 and 6	July 12-15
Climate Change Workshops	Adapting to Climate Change	Primary School Students	July - September
Nature School Sessions	Trash & Climate Change	Primary School Students	July - September
International Coastal Clean-up		Environmental Clubs	September



STRATEGISING FOR VIBRANT ECs

In an attempt to take existing Environmental Clubs to greater heights and tailor programmes to meet the needs of members and communities within which they function, Club Supervisors and Staff of the EPA resorted to the drawing board to work out challenges and brainstorm ideas for implementation.

At the two sessions held in Berbice so far, Club Supervisors shared experiences, concurred on similar challenges and discussed possible strategies for implementation within respective clubs. The sessions were interactive and rewarding as participants discussed possible solutions to current challenges and conceptualized new paths and possible projects for implementation within clubs.

Environmental Clubs exist within some schools and aim at raising awareness on environmental issues, complement teaching/learning, inculcate problem-solving and inquiry skills and instill sound environmental values within students. Over the years, the school's academic curriculum has taken up the entire school day to the detriment of extra-curricular activities such as Environmental Club activities. This has negatively affected the instillation of sound environmental values and stymied the use and tuning of critical skills associated with environmental education such as inquiry, observation, analysis and practical application among others.



Participants of the Environmental Clubs Supervisors Training pt 2.



Participants of the Environmental Clubs Supervisors Training

ENVIRONMENTAL AUTHORISATIONS

The EPA's Environmental Management Division (EMD) grants Environmental Authorisations for various projects submitted to the Agency. This is done after a site visit is conducted to assess the potential or current environmental impacts of the project. Large projects are usually required to submit an Environmental and Social Impact Assessment (ESIA) or Environmental Management Plan (EMP). Noise permits for various events and operations are also granted by the Agency.

A total of seventy-seven (77) applications for Environmental Authorization, were received for the period March to May, 2011.

Twenty-six (26) of the applications received during this period were for new projects, twelve (12) were for existing projects, thirty-three (33) were for renewal of Environmental Authorizations, one (1) for the transfer of Environmental Authorization, and five (5) for the variance of Environmental Authorizations.

The Agency is currently reviewing the updated Environmental Social Impact Assessment (ESIA) for the Amaila Falls Hydropower Project and the EIA Addendum for the Haag's Bosch Landfill. An EIA Addendum and Environmental Management Plan (EMP) were submitted and reviewed by the Agency.

EMPs were also submitted for the following developments: JOP

Property Holdings for a Liquefied Petroleum Gas Storage and Bottling Facility and from the Guyana Industrial Minerals Inc. for a Bauxite Mining project.

Forty-four (44) applications for noise permits were received and issued for this period.

The Division conducted thirty-eight (38) site visits for new projects and fourteen (14) verification visits for existing projects/operations. Compliance/renewal audits were also conducted for ten (10) operations that were issued with Environmental Authorizations.

The Agency granted thirty (30) Environmental Authorizations during this period. Seventeen (17) Environmental Permits and two (2) Construction Permits were granted for new projects and ten (10) Operation Permits and one (1) Letter of Authorization were granted to existing projects.



EPA ROUND UP

WELCOME...

EPA welcomes Mr. Dhanraj Anthony Persaud who filled the post of Administrative Director on May 16.

CONFIRMATIONS...

Congratulations to Staff who were confirmed as follows:

Administrative Division

- Marcia Crawford, Human Resources Officer
- Solomon Baldeo, Finance Officer

Natural Resources Management Division

- Oumardatt Ramcharran, Senior Environmental Officer

Environmental Management Division

- Kimberly Craig, Environmental Officer
- Earla Nelson, Environmental Officer
- Malicia Hall, Environmental Officer
- Latoya Farinha, Environmental Officer
- Saudia Sadloo, Environmental Officer
- Mahendra Saywack, Environmental Officer
- Shabana Yusuf, Environmental Officer

TRAINING...

- Ms. Felicia Adams, Environmental Officer, EMD, is currently undergoing training in **"Environmental Pollution Control Technology for Developing Countries"** in China during the period May 11 – July 5, 2011.
- Ms. Joanne Ford, Special Projects Officer, NRMD, Mr. Osbert Ellis, Environmental Officer, EMD, Mr. Tomas DeStaic, Economist, Administrative Division, and Mrs. Candacie Brower-Thompson, Environmental Officer, EITD, participated in a Workshop on **"Payment for Eco-systems Services (PES)"** hosted by the Guyana Forestry Commission during May 12-13, 2011.
- Mr. Enrique Monize & Ms. Nadia Nasir, GIS Unit, enjoyed training in **"Remote Sensing"** during June 6 -17, at the GFC.

CELEBRATING 10 YEARS OF WILDLIFE FESTIVALS

April comes with the anticipation of Easter and the Annual Wildlife Festival in Annai, Region 9, for Wildlife Conservation and Environmental Clubs in Guyana. This year marked the 10th anniversary of the North Rupununi Wildlife Festival and as customary, the EPA fully participated in this event. The Festival, first conceptualised in 1998 after visiting the Santa Rosa Conservation Club in Region 1, brought together sixteen (16) Wildlife Clubs of the North Rupununi, five (5) Conservation Clubs from the South Rupununi along with first timers, the Buxton Fusion School of Music. The Agency was represented by Officers Renwick English (EO II, EITD), Aretha Forde (EO I, EITD), and Oumardatt Ramcharran (SEO, NRMD), in addition to Mr. Kamal Ramdayal (Driver), who all played an integral role at this year's festival.

For a period of three days, club members (ages ranging from 8 – 17 years old), chaperones and staff enjoyed a wide range of cultural traditions: basket weaving, cotton spinning, fire lighting, cassava grating, sports and culture show. Social issues were also included to help instil positive behavioural ethics. New lessons were learnt not only by participants, but by staff as well.

The festival was made even more historic by the presence of the Buxton Fusion School of Music, who introduced a piece of Guyanese culture (African drumming) that was never before experienced at the festival.

During the festivities, club reporting sessions at the forum provided a forum for members to share experiences, challenges, threats and opportunities among each other. While some experienced major challenges, other clubs were able to weather the storm, like the Surama Junior Wildlife and Conservation Club, Yakarinta Giant Otter Conservation Club, Yupukari Hearts and Hands Junior Wildlife Club, Mororo Environment Youth Club and the Santa Rosa Conservation Club.

Culture night presentations were also a treat and a valuable educational experience as

some were delivered in the native language of Makushi and to spice things up, the Buxton Fusion group, performed African and Guyanese folk songs to the beat of traditional African drums. A special duet was done by the group along with the Santa Rosa Environmental Club, as they sang 'Wherever you will go', 'La Bamba' and 'Guyana'.

Aranaputa Club presenting their banner.



Buxton Fusion, Santa Rosa CC duet.

CLIMATE CHANGE – STILL A HOT TOPIC

The EPA has embarked on a Climate Change Outreach, primarily targeting Grade 6 students who would have recently completed the National Grade 6 Assessment. The outreach began on May 30, 2011, and will continue until the end of the school term. The primary schools targeted for this first phase were selected at random for Georgetown and its environs. Thus far, a total of 276 students from seven (7) primary schools in and around Georgetown participated in the outreach.

The idea to conduct climate change awareness sessions targeting primary schools stemmed from the increasing impacts of climate change being experienced in Guyana. More so, Guyana has gained international recognition and mileage from its Low Carbon Development Strategy (LCDS) and His Excellency the President has adopted a proactive national and global role in the fight against climate change. This is therefore a crucial time to help Guyanese understand the reality of the phenomena of climate change. As a result, educational materials were created to suit various target audiences which included both women and children; one such educational tool was a Climate Change Activity Booklet titled – **"Children and the Changing Climate"**. This Booklet,

which was created and pilot tested in 2010, was also endorsed by the Ministry of Education. The booklet is designed to help children ages 9-11 develop a basic understanding of climate change. It promotes learning about the causes and effects of climate change and how people can adapt. More importantly, it also enlightens children on the LCDS and help them to recognize and adapt appropriate attitudes and behavior for a better environment and human health.



The lessons in the booklet are informative and interactive and are specially designed to appeal to various aspects of a child's cognitive development. During the outreaches, the children were engaged in a range of activities including puzzle solving, mazes, word searches, interpreting pictures and filling in blanks to complete sentences and phrases. It was observed that although most children heard of the term climate change, they did not have a clear understanding of what it meant. At the end of each session, children showed a more comprehensive understanding of climate change and were able to link the concept with the effects and impacts it would have on them and everyday life. These outreach activities are expected to continue during the new school term in order to raise awareness among one of our most vulnerable groups – **'Our Children'**.

