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GREEN LEAF

Youth Focus on Biodiversity and Climate Change

Inside this issue:

The Environmental Youth Camp held this year was a success. It achieved its objectives of increasing awareness and knowledge on the major environmental issues of Climate Change and Biodiversity loss.

Campers engaged in Bird-Watching Activity

Participants drawn from Environmental Clubs of Belladrum Secondary, Fort Wellington Secondary, Diamond Secondary, Covent Garden Secondary, 8th of May Secondary and the Central Mackenzie Scout Group spent three exciting and fun-filled days learning in an experiential way about climate change and biodiversity and brainstorming ideas for a better environment. The Camp was held from July 19 - 22, 2010 at the Guyana Forestry Commission's Training Station at Yarrowkabra on the Linden/Soesdyke Highway, an eco-friendly location.

The activities undertaken at the Camp was influenced by the World Environment Day 2010 theme: *Many Species, One Planet, One Future*. Campers participated in interactive sessions which brought them in direct contact with the natural environment. The diversity of life was explored as well their interactions and interdependence. Campers learnt about positive actions that can be taken to protect biodiversity and the environment as a whole. Adult leaders from the clubs were also exposed to specific training in school-yard ecology and effective programme planning.

The Camp allowed for great interaction of participants and the sharing of ideas for activities that could be implemented in their respective areas. Special presentations and field activities were facilitated by the Guyana Amazon Tropical Bird Society (GATBS) – a local NGO that serves to contribute to the protection and conservation of birds in Guyana.

Participants and Facilitators at this year's Camp

Representatives from the GATBS used the natural setting of the campsite to educate the participants about avifaunal (bird) diversity in Guyana and birding. Several bird species were identified during their early morning birding exercise. Campers were also exposed to aspects of avifaunal research such as using mist-nets to capture under-storey birds and basic data collecting techniques.

The Camp programme was designed to give participants a better understanding of the importance of protecting our environment and actions that they can take, individually and collectively, to keep it healthy. The programme was well received and it is expected that the participants would take back and apply what they have learnt to make their local environment a better one that they can enjoy for years to come.

Editorial Note

Ocean Conservancy celebrated 25 years of taking action to protect the marine environment. Each year Ocean Conservancy compiles a report on the debris collected on *just one day* of the year. Astonishingly, in 2009, over 7 million pounds of debris was removed through this exercise and prior to that, in 2007, over 6 million pounds of debris was recorded. This is just a small portion of the trash present in the marine environment.

Everyone depends on the ocean. It drives and moderates our climate. It is the ultimate source of much of the water we drink and much of the air we breathe. It directly feeds millions of people. Oceans absorb a great deal of the air and water pollution generated by a world population approaching seven billion people. Our actions have made our oceans sick and we need to take remedial steps and bring them back to health once more.

According to the United Nations Environment Programme, "Marine litter is one of the most pervasive and solvable pollution problems plaguing the world's oceans and waterways". Trash comes from human hands and we have the power to stop it. Dispose of waste properly; reduce, reuse and recycle whenever possible. Get involved in environmental activities such as the International Coastal Cleanup and make a difference!

Airstrip for Chenapau

Chenapau Village now boasts an airstrip which will provide increased access to the Community. The airstrip was built through KfW-EPA intervention for the Guyana Protected Areas System at an estimated cost of G$21,485,783.

The lack of an airstrip in Chenapau resulted in limited options for sustainable livelihood development, a high cost of living in the village, and a large number of Community members working in the mining industry. Additionally, miners and traders currently use the Kaieteur National Park airstrip to access the Kaieteur Plateau, which contributes to the degradation of the Park.

Unlike many larger hinterland communities in Guyana, Chenapau does not have its own airstrip. The closest airstrip to the Community is located at Kaieteur Falls in the Kaieteur National Park, a distance of approximately 55 km. As such, all foodstuff (flour, sugar, milk) and materials (fuel, medicines and clothing) imported from outside of the area are first transported to the Kaieteur airstrip by airplane, and then shipped to the Community using boats. This two-phased mode of transportation resulted in goods being sold at some of the highest prices in the Region. Community members are therefore pressured to earn substantial incomes in order to afford basic commodities.

View of the Chenapau Airstrip

Mining is one of the limited livelihood options currently available to villagers that can provide a significant level of income. Many Community members, particularly men, are employed in small to medium-scale dredging operations, or practise individual prospecting. These activities have already had significant social and environmental impacts on the area. The dredging operations often result in the pollution of creeks and rivers, which then impact on downstream areas including the Kaieteur National Park. Additionally, a number of Community members have already died or have been injured in mining-related accidents.

The lack of an airstrip at Chenapau has also hampered local attempts at accessing the significant Kaieteur Falls tourism market. In 2001, an attempt was made to construct a Community guest house in Chenapau so as to provide an alternative to mining. Unfortunately, the price of fuel increased significantly during the construction of the guesthouse, resulting in excessive costs for the combined air and river transportation.

Increasingly, more human activity is being experienced at the Kaieteur National Park. With the Kaieteur airstrip being the primary access point for air travel to Kaieteur plateau, most mining operations and store owners ship their goods and equipment through the Park. This has resulted in the establishment of unplanned infrastructure within the Park (access roads, houses, storage bonds) during the last 50 years. This infrastructure and associated activity have had a negative impact on the area's biodiversity, particularly in the area adjacent to the falls.

In 2005, the Ministry of Amerindian Affairs (MoAA) began the construction of the airstrip was in the Community but this was not completed due to funding and implementation challenges. The project which saw the completion of the airstrip built on the work started by the MoAA and included clearing, levelling and extending of the unfinished runway, clearing and installing drains on the sides of the runway and clearing the vegetation that obstructed the approach and take-off paths.

The airstrip at Chenapau will address the challenges resulting from the village's isolation by facilitating the landing of aircraft with goods needed by the Community. This airstrip will allow for direct air travel to and from the Community, thus removing the cost of river transport. The resulting decrease in transportation costs will translate into cheaper goods and materials available in the Village.

Lower transportation costs will also greatly assist in the completion of the guesthouse and this in turn will attract visitors to the Community. Once completed and functioning, the guest house will create job opportunities for Community members and lead to sustainable income generation for Chenapau.

The airstrip will also make it more affordable to send craft and other local produce from the Community to markets in Georgetown. As such, there will be less pressure on Community members to pursue jobs in the mining sector. Most of the non-tourist flights into Kaieteur National Park can also be re-routed to Chenapau, thus reducing the level of human activity in the Park. In the end, Chenapau Village will enjoy more income-generating opportunities and a lower cost of living, while Kaieteur National Park will be better managed and preserved.

The airstrip is expected to be completed and certified for flights by the Guyana Civil Aviation Authority by the end of the year.

Mining Our Resources - Minding Our Future

It has become a summertime expectation for children, young adults as well as the young at heart, to learn in a stimulating environment about gold and diamond mining through the Guyana Geology and Mines Commission (GGMC) Annual Mining Exhibition.

Hosted in collaboration with local Stakeholders, this exhibition is an exciting mix of activities which encourage participation and stimulate interest and learning about issues related to mining. At this year's event, a number of booths displayed exhibits ranging from heavy-duty mining equipment to state-of-the-art satellite voice and data equipment.

The event this year was held from August 23 – 25. The EPA was among exhibitors which included IMON Wireless Solutions, Crown Mining Supplies, Ghamandi and Sons Engineering, Deandra's Gems and Jewellery, Swiss Machinery, Diesel Kleen Power Service Products, Guyana Forestry Commission (GFC), and Industrial Safety Supplies.

There were also booths manned by the Departments of the GGMC such as the Library, the Environmental Division, the Mines Division, the Land Management Section, the Geo-Services Division, and the Petroleum Division. The GGMC displayed many mining apparatuses promoting improved practices in gold and diamond recovery.

One of the main highlights was a bateling and diamond jigging exercise which is practised by porknockers (small miners). Another crowd attraction was the exhibit of a state–of-the–art satellite communications system designed for data and voice communication from remote areas exhibited by IMON Wireless Solution. Among other attractions was processing equipment which could be used as an alternative to mercury amalgamation in the recovery of gold, featured by Crown Mining Supplies. Deandra's Gems and Jewellery displayed hand-made jewellery with genuine gems, including diamonds, while Ghamandi and Sons Engineering and Swiss Machinery displayed machine items and spare parts for equipment used in mining. Diesel Kleen displayed products which improve engine performance of diesel engines and reduce emissions by more than 50%.

Crowd attractions: Bateling (above) and creating mining site with Jigsaw puzzle (below)

At the EPA booth, a jigsaw puzzle portraying best practices in a typical medium-scale gold mining operation and speed drawing competitions on different aspects of mining generated much interest among members of the public who eagerly participated in these activities.

The exhibition was held in the compound of the Girl Guides Pavilion, Brickdam, while heavy-duty equipment used for mining were displayed at the Square of the Revolution.

The Exhibition was educational and fun, providing a welcome reprieve from the routine of the workday since it was held during the week. In addition to photographs, maps and charts, each of the booths also had information brochures, posters, bookmarks and flyers among other tokens which were a valuable source of information to visitors.

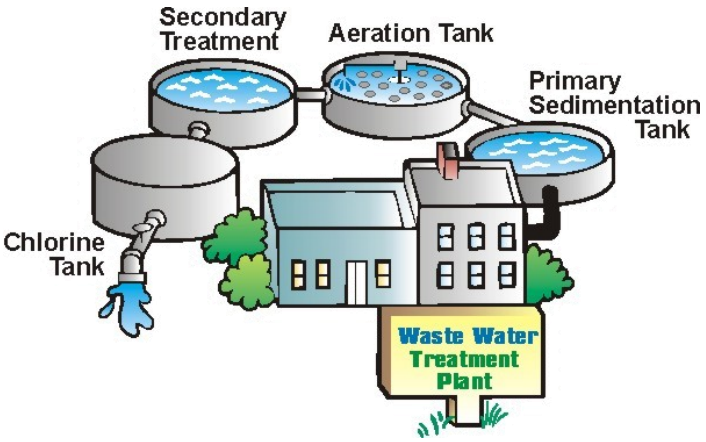
EPA Officer explaining the effects of improper mining practices to visitors

Testing artistic skills through Speed Drawing

Waste Water Treatment

The need for effluents to be treated before being discharged to sewerage, waterways, water bodies, etc and water pollution sources were highlighted in the last issue of the Green Leaf. In this article, we discuss what wastewater treatment is, and what the process involves.

The main objective of wastewater treatment is to remove or diminish pollutant concentrations in order to obtain water of an acceptable quality, for discharge into water bodies, according to the relevant laws. Wastewater treatment may involve three stages, namely, primary, secondary and tertiary treatment. At each of these stages, specific contaminants are removed.



The main objective at the Primary stage of treatment is the removal of solids, oil, grease, and other particles. This is done by setting up the proper conditions to separate these pollutants. In a quiet setting, heavy solids tend to settle, while the lighter ones, as well as oil and grease, float. In this way, the heavy solids as well as the floating material, can be removed from the water. After this stage, the water can be subjected to secondary treatment or be discharged if it meets the required quality to do so.

Secondary treatment, commonly known as biological treatment, aims to remove dissolved and suspended biological matter and involves the participation of micro-organisms in a controlled environment. Simply put, bacteria consumes organic matter as a source of energy, so by ensuring that the habitat conditions are exactly what the micro-organisms need to work efficiently, the organic matter can be removed in the short-term.

Biological treatment can be divided into anaerobic and aerobic treatment. This classification is related to the bacteria being used. Certain bacteria need the presence of oxygen to carry out their normal functions and remove the contaminants from water. These bacteria are used in aerobic treatment. In anaerobic treatment, the bacteria do not require the presence of oxygen which may even be harmful for them, slowing their activity or killing them. A lot of research has been done in order to increase and enhance the efficiency of biological treatment. Many types of reactors have been designed in order to attain this successfully, and as a result, biological treatment is widely used all over the world for treatment of domestic and industrial wastewater.

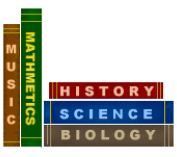
Tertiary treatment has the objective of providing a final treatment stage to raise the effluent quality before it is discharged. Depending on the water quality that the complete treatment achieves to meet, different types of treatment may be used in this stage to remove the remaining contaminants from water including disinfection, removal of colour, odour, salts or further biological treatment to improve water quality.

In Guyana, under the Environmental Protection Act 1996, there are the Environmental Protection (Water Quality) Regulations 2000 which states the need for an Environmental Authorization for any activity which discharges effluent. Furthermore, it is also stated that the EPA may establish the parameter limits of effluent which may be discharged. This part of the process is addressed by the requirements set out in the **Guyana Interim Guidelines for Industrial Effluent Discharge into the Environment,** currently under review by the Technical Committee - Environment and the GNBS. This ensures that the Wastewater discharged into the water systems is safe and will have minimal impact on the environment.

Upcoming Activities

In October, a Programme will be undertaken by the Environmental Protection Agency (EPA) in partnership with the Women Affairs Bureau, Ministry of Labour, Human Services and Social Security. The focus of this programme will be on the environment - waste, recycling and current trends that impact the environment and life in general. It is intended to empower women to appreciate the importance of sound environmental values and its role in reducing costs while achieving higher standards of personal and environmental performance.

Scheduled for November 11 – 14, 2010 at Camp Wesleyana on the Linden, Soesdyke Highway, is a three-days workshop on "Integrating Environmental Education into the Primary School Curriculum" with trainee teachers of the Cyril Potter College of Education. A Manual titled *"Learning about the Environment through English Language, Mathematics, Social Studies and Science",* which was developed by the Agency would be used as the main resource material during the training exercise.



Kids Corner

Make Your Own Paper

Many types of paper that can be used include:

- Computer Paper (unprinted);
- Newspaper (if you want a grayish colored paper);
- Magazines;
- Egg Cartons;
- Old Cards (for heavier paper);
- Toilet Paper;
- Paper Bags;
- Non Waxed Boxes (pre-soak in warm water);
- Office Paper;
- Tissue Paper (for finer paper);
- Typing Paper;
- Napkins; and
- Construction Paper.

Supplies you'll need:

- Sponge;
- Window Screening (mould);
- Wood Frame (old picture frame can be used too);
- Plastic Basin/Tub (large enough to totally immerse frame);
- Blender/Food Processor (for making paper pulp);
- White Felt or Flannel Fabric;
- Staples or Tacks (for tacking screen on frame); and
- Liquid starch (optional).

Instructions:

1. Select the pieces of paper to be recycled. You can even mix different types to create your own unique paper.

2. Rip the paper into small bits, and place into a blender (about half full). Fill the blender with warm water. Run the blender slowly at first then increase the speed until the pulp looks smooth and well blended (30 -40 seconds) Check that no flakes of paper remain. If there are, blend longer.

3. The next step is to make a mould. The mould, in this case, is made simply by stretching fiberglass screen (plain old door and window screen) over a wooden frame and stapling it. It should be as tight as possible.

4. Fill a basin about half way with water. Add 3 blender loads of pulp (the more pulp you add the thicker the finished paper will be). Stir the mixture.

5. Now is the time to add the liquid starch for sizing (this is not necessary but if the paper is going to be used for writing on, you should add some, the starch helps to prevent inks from soaking into the paper fibers). Stir 2 teaspoons of liquid starch into the pulp.

Place the mould into the pulp and then level it out while it is submerged. Gently wiggle it side-to-side until the pulp on top of the screen looks even.

6. Slowly lift the mould up until it is above the level of the water. Wait until most of the water has drained from the new paper sheet. If the paper is very thick, remove some pulp from the tub. If it is too thin, add more pulp and stir the mixture again.

7. When the mould stops dripping, gently place one edge on the side of a fabric square (felt or flannel square). Gently ease the mould down flat, with the paper directly on the fabric. Use a sponge to press out as much water as possible. Wring the excess water from the sponge back into the large plastic tub.

8. Now comes the tricky part. Hold the fabric square flat and slowly lift the edge of the mould. The wet sheet of paper should remain on the fabric. If it sticks to the mould, you may have pulled too fast or not pressed out enough water. It takes a little practice. You can gently press out any bubbles and loose edges at this point.

9. Repeat the steps above, and stack the fabric squares on a cookie sheet. Save one fabric square to place on the top of the stack to cover the last piece of paper. Use another cookie sheet to press the remaining water out of the stack. (do this outside or somewhere which could be easily cleaned as it can make a mess).

10. After you press the stack, gently separate the sheets. They can be dried by hanging on a clothesline or laying them out on sheets of newspaper. When they have dried peel them off the fabric and voila! you have paper!

Marine Litter

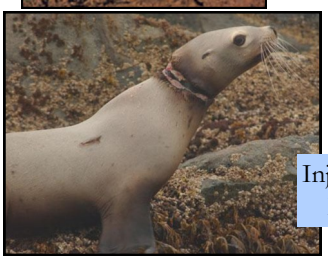
Marine litter is waste that is discarded - whether directly or indirectly; deliberately or unintentionally - in the marine and coastal environment.

It is a global concern affecting all the oceans of the world and has disastrous effects on the marine environment.

Ocean currents have caused an accumulation of waste in the Oceans called 'garbage patches'. The largest being the Great Pacific Garbage Patch. It contains approximately 3.5 million tons of trash. The effects of Marine Litter are: →

Threat to Human Health and Safety

Aesthetic and Economic Issues



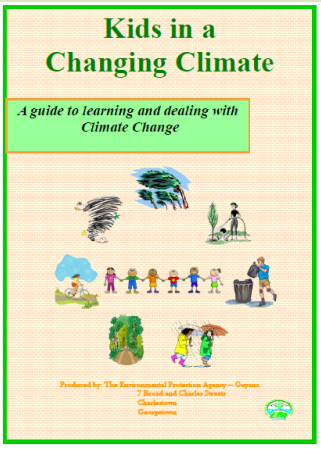
Injury and Death of Marine Species

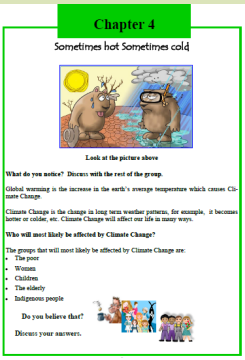
Habitat Destruction

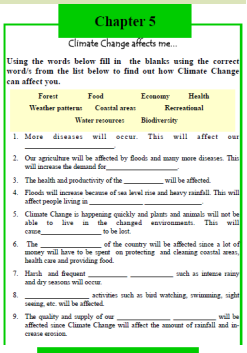
Taking Climate Change to Children

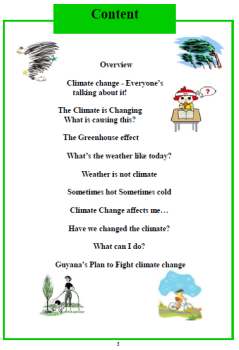
The EPA is currently pilot-testing a Workbook on Climate Change specially prepared to teach children about the phenomenon.

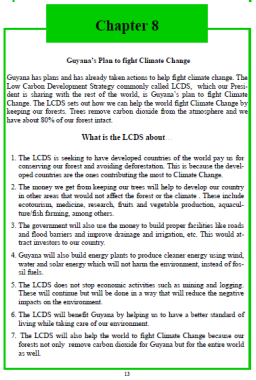
The Workbook is designed to help children ages 9-12 develop a basic understanding of Climate Change - its causes and effects and how they can adapt. Importantly, the lessons in the book will help its readers to recognise what is supposed to be their attitudes and behaviours toward the environment and their health.











The lessons in the Workbook are intended to be interactive and informative and are specially designed to appeal to various aspects of a child's cognitive development. They are designed to make students more prepared for climate change by engaging them in a range of activities including puzzle solving, going through mazes, word search, unscrambling words, interpreting pictures and filling in missing letters.

Several Primary Schools in Georgetown, East Coast and East Bank Demerara are involved in the pilot-testing. The booklet will be reviewed after testing is completed.

National Ozone Unit Conducts Ozone Awareness Workshops

On December 19, 1994, the United Nations General Assembly proclaimed September 16 the International Day for the Preservation of the Ozone Layer. This day was commemorated in 1987 - when the Montreal Protocol on Substances that Deplete the Ozone Layer was signed.

Countries are invited to devote this Day each year to promote, at the national level, activities in accordance with the objectives of the Montreal Protocol and its amendments.

As part of Guyana's national observance of International Day for the Preservation of the Ozone Layer, the National Ozone Action Unit, in collaboration with the Education, Information and Training Division of the Environmental Protection Agency on Wednesday, September 15, 2010 held a half-day workshop for trainee teachers at the Cyril Potter College of Education.

The workshop targeted primary, as well as Social Studies, Science and Geography majors of the secondary department of the Cyril Potter College of Education. The aim of workshop was to raise awareness of the Montreal Protocol and ozone depletion among teachers and provided scope for the effective integration of this topic in the relevant subject areas.

Fifty-four trainees participated in this workshop, which included a video presentation and group discussion facilitated by Officers of the EPA. In addition, Secondary School Ozone action packs were distributed to teachers by the National Ozone Action Unit.

Trainee Teachers engaged in Group Activity

Demonstrations on the application of the packs were done using a series of activities recommended in the teacher's pack.

Teachers expressed much appreciation for the opportunity to participate in the event and applauded the organisers on the initiative of hosting such a workshop.

In addition, the National Ozone Unit collaborated with the University of Guyana to conduct a workshop with students to raise awareness and to foster an appreciation for the Montreal Protocol and its role with respect to the various disciplines. A television appearance and newspaper articles on Ozone were also done during the week of the observance.

Environmental Authorisations

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

For the period of June - August a total of thirty-six (36) Applications for Environmental Authorisation were received. Twenty-seven (27) of the applications received were for new projects, three (3) for existing projects, five (5) for renewal of Environmental Authorisations and one for the transfer of Environmental Authorisation.

Two (2) draft ESIAs were submitted for review during this period for the following logging projects - Sherwood Forests Incorporated located at the right bank of the Lysles River, the right bank of the Essequibo River and the right bank of the Berbice River; and Chaitram Parasram Timber (CPT) Inc. located on the left bank of the Cuyuni River, right bank of the Pomeroon River, Region 2. A third revised ESIA was also submitted for Romanex Guyana Exploration Ltd. - Alluvial Gold Mine located in South Rupununi.

A revised ESMP was submitted by Amaila Falls Hydroelectric Project Access Road and is currently being reviewed by the Division.

Fifty -four (54) applications for Noise Permits were received and issued for this period.

The Division conducted fifteen (15) site visits for new projects and four (4) verification visits for existing projects/operations. Compliance/renewal audits were also conducted for five (5) operations that were issued with Environmental Authorisations.

Thirteen (13) Environmental Authorisations were granted by the Agency during this period. Eight (8) were Environmental Permits for new projects and six (6) were Operation Permits for existing projects.

In comparison to the previous review period - March to May, there has been an increase in applications submitted for new projects. However, a decrease in the number of Environmental Authorisations and Noise Permits granted for this period was noted.

A Successful 25th International Coastal Cleanup

Youth in action at ICC across Guyana

On September 25, volunteers around the world participated in the Ocean Conservancy's 25th International Coastal Cleanup (ICC). This event focuses on removing debris from the shorelines, waterways, and beaches of the world's lakes, rivers and bordering oceans. However, an integral part of the event is the collection of valuable information on the amount and types of debris so as to influence policy changes and other measures needed to reduce marine debris and protect our oceans. Last year (2009) over 400,000 volunteers supported this event in 108 countries and collectively contributed to the removal of over 7 million pounds of marine debris.

Guybernet, a local NGO, is the coordinator for ICC in Guyana. Over the past nine (9) years, they have been successfully co-ordinating the ICC events at the seawalls bandstand at Kingston. EPA has always given support to this effort through mobilisation of the affiliated environmental clubs and other youth groups.

Like last year, in the effort to strengthen support to Guybernet, the Agency was successful in increasing participation in ICC in Guyana to allow for a wider spread of the event along Guyana's Coast and also increase the amount of data being collected for Guyana. The EPA co-ordinated ICC activities in Regions 2, 3 and 6. Prior to the ICC on September 25, schools were targeted in the Agency's ongoing marine litter campaign to bring awareness to marine litter, their sources and threats. The importance of the ICC event was also highlighted and students were encouraged to participate in the event.

This year, approximately 150 volunteers participated in ICC events in Regions 2, 3, 4 and 6 in Guyana. Volunteers from Charity Secondary, 8th of May Secondary and Anna Regina Multilateral Secondary Schools in Region 2; Zeeburg Secondary, Uitvlugt Secondary, Stewartville Secondary and Leonora Secondary Schools in Region 3; Marian Academy Environmental Club, Queen's College Environmental Club, St. Stanislaus College Scout Group and the Guyana Public Service Union in Region 4; and Lower Corentyne Secondary School in Region 6 collectively contributed to a greater spread and overall participation in ICC in Guyana.

The Agency wishes to commend all the volunteers that supported ICC events in Guyana this year. This event has led to cleaning up of our local coastal areas locally and provided valuable data which will guide actions for the formulation of policies and the compilation of data internationally. The data collected from volunteers around the world will also contribute significantly to Ocean Conservancy's efforts in protecting our oceans and marine life.

Wildlife Spotlight

Did you know?

The **Hawksbill Turtle** (*Eretmochelys imbricata*) is an endangered sea turtle belonging to the family Cheloniidae. It is the only species in its genus and has a worldwide distribution. They are one of the four species of marine turtles that lay their eggs at Shell Beach.

The Hawksbill has a generally flattened body shape, a protective carapace (shell), and flipper-like arms, adapted for swimming in the open ocean. It is easily distinguished from other sea turtles by its sharp, curving beak and the saw-like appearance of its shell margins. The Hawksbill's shell slightly change colour, depending on water temperature. The turtle's carapace, has an amber background patterned with an irregular combination of light and dark streaks, with predominantly black and mottled brown colors radiating to the sides.

Hawksbill turtles have been known to grow up to 1 metre (3 ft) in length, weighing at around 80 kilograms (176 lb). Adult Hawksbill turtles are usually seen resting in caves and ledges in and around tropical coral reefs throughout the day. As a highly migratory species, they are found in a wide range of habitats, from the open ocean to lagoons and even mangrove swamps in estuaries.

Sea sponges constitute 70–95% of the turtle's diet in the Caribbean. They feed only on select species. Aside from sponges, Hawksbills feed on algae, the Portuguese Man o' War, comb jellies and other jellyfish and sea anemones. They are highly resilient and resistant to their prey.

The 6 month nesting season of the Hawksbill is longer than that of other sea turtles. Nesting occurs between February and August, and courtship and mating begin somewhat earlier. Hawksbills mate biannually in secluded areas off their nesting beaches in remote islands throughout their range. Nesting in the Caribbean is principally nocturnal, although rare daytime nesting does occur. Hawksbills nest on average 4 times a season, at intervals of 14 days. After mating, females drag their heavy bodies high onto the beach, clear an area of debris and dig a nesting hole using their rear flippers. The female then lays a clutch of approximately 140 eggs and covers them with sand. After the 1-3 hours-long process, the female returns to the sea. After 2 months the baby turtles, usually weighing less than 24 grams (0.85 oz) hatch at night. Sex determination is temperature-dependent. These newly emerged hatchlings are dark-colored, with heart-shaped carapaces measuring around 2.5 centimeters (1 in) long. Hawksbills have a strong site fidelity and are capable of returning to the same place season after season.

The Hawksbill is listed as an endangered species by the International Union for the Conservation of Nature and Natural Resources. It is also listed as endangered throughout its range by the Endangered Species Act of 1973. Hawksbills face most of the same threats that endanger all marine turtles. Sadly, they are also singled out for their own special threat: humans find their shells highly attractive. The full extent of the threat is not known, but experts believe that the killing of Hawksbills for bekko (shells) is a major problem.

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 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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