



GREEN LEAF

Turning Trash to Fashion

Inside this issue:

- ◆ Turning Trash to Fashion P.1
- ◆ EPA takes Environmental Message to Region 6 P. 2
- ◆ Trash Free seas, every piece, every person P. 3
- ◆ EPA Collaborates for CYEN Summer Camps P. 3
- ◆ Environmental Authorization P. 4
- ◆ Complaints Management and Response P. 4
- ◆ Ozone Awareness spread to Region 3 P. 5
- ◆ National Museum Taxidermy Camp P. 6
- ◆ EPA Staff Capacity Building P. 6
- ◆ Kids Corner & Upcoming activities P.7
- ◆ Wildlife Spotlight P. 8

In June this year, the Environmental Protection Agency (EPA) partnered with the Japan International Cooperation Agency (JICA) to conduct 'waste reuse' workshops with fifteen (15) secondary schools in Region 4.

These workshops introduced more than four hundred (400) students to basic techniques to transform everyday waste items into useful products. As an incentive, students and teachers were afforded the opportunity to apply their



knowledge and skills to create fashionable pieces which were displayed at the fashion show, dubbed 'Trash to Fashion.'

Editorial Note

Chapter II, Article 25 of Guyana's National Constitution states that "*Every citizen has a duty to participate in activities designed to improve the environment and protect the health of the nation.*" Moreover, awareness and education are key components in achieving the goal of a clean and healthy environment. Within Guyana, it is evident that evolving methodologies are needed to address environmental issues, especially that of improper solid waste management.

While the Litter Enforcement Unit of the Environmental Protection Agency (EPA) continues to carry out its mandate in monitoring compliance with the Litter Prevention Regulations (2013) and promoting litter awareness, the Agency has sought to employ innovative means of getting the general public involved in environmental protection. In this regard, throughout the quarter, the Agency made its presence felt at various exhibitions across the country and also executed a Trash to Fashion Show, in collaboration with the Japan International Cooperation Agency (JICA). This collaboration highlighted the need for action by various players in combating environmental issues. Indeed, it is time that all stakeholders put their heads and hands together to improve Guyana's environment; from government institutions to private businesses to regional and international organizations and even ordinary citizens. Guyana is ours! Let's care it to enjoy its natural beauty.

Ms. Naoko Kanda, Senior Volunteer of JICA was instrumental in the execution of the workshops and fashion show which were coordinated by EPA with support of Ms. Carol Fraser, established local Fashion Designer. While volunteering at the EPA, Ms Kanda's work showcased the high value of using art and creativity in environmental education.

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Turning Trash to Fashion

Nine (9) schools, St. Stanislaus College, Ann's Grove, Golden Grove, Bladen Hall, Annandale, Beterverwagting, Brickdam, Christ Church, and Covent Garden Secondary gracefully displayed their vibrant and creative pieces on the catwalk in the cool landscape of the Promenade Gardens. Prizes were awarded for 'Most Creative', 'Most Marketable' and 'Crowd Favourite - the WOW factor'.

This project aimed to educate, raise awareness and stimulate students and teachers to think critically about creative solutions to help address the waste management issues within their schools and communities. The Fashion Show reinforced the need to find creative ways to manage our waste and to stimulate an understanding that many of the environmental issues we face can be managed with simple, innovative actions. The EPA and its partners hope to continually present events of this nature in an effort to foster critical thinking about environmental issues and potential solution.



EPA takes Environmental Message to Region 6

During the period September 18-22, 2015, patrons flocked the EPA booth to be actively engaged in games and other activities based on pertinent environmental issues such as waste management, climate change and environmental health., just to name a few. Patrons were also enlightened on the work of the Agency and their role in environmental management and protection. The exhibition held at the Albion Community Centre ground provided an opportunity for businesses and organizations to showcase their products and services. The Agency sees this Expo as an excellent opportunity for residents of Berbice to voice their concerns and provide feedback on the work of the Agency in that Region.



“Trash Free Seas, Every Piece, Every Person”

With the aim of contributing to the goal of trash free seas, the EPA collaborated with the Caribbean Youth Environment Network, Guyana Chapter (CYEN) and the Department of Natural Resources (DNRE), Ministry of Governance, to coordinate International Coastal Cleanup activities across Guyana. Cleanups were held in Region 4 along the Kingston Seawall between the Marriott Hotel and Camp Street, and in Region 6 at the No. 63 Beach.

Approximately 300 volunteers supported these activities representing various youth groups, church groups, government organisations, the private sector and schools. Sessions were conducted with schools and groups prior to the cleanups in an effort to raise awareness about the prevalence of marine litter and the problems it poses to our environment. More importantly, the volunteers worked extremely hard recording every piece of garbage that was collected.



This information allows the necessary authorities to put measures in place to combat improper solid waste management across Guyana. The EPA extends gratitude to its organising partners and the volunteers that were a part of the Cleanups. We challenge all Guyanese to dispose of their waste properly to reduce the amount of trash that inhabits our coast by implementing simple practices such as disposing of waste properly, reducing waste and reusing waste items.

EPA Collaborates for CYEN Summer Camp

Recognizing the great need for increased youth to youth engagement across Guyana, CYEN Guyana hosted its 2nd Annual Environmental Day Camp at the Georgetown Cricket Club. The EPA once more was delighted



to collaborate with the volunteer group to facilitate the camp activities. EITD staff engaged children in activities focused on air in the context of pollution and climate change.

On the first day, activities were targeted to a vibrant group of children, 11-14 years old, while the second day, children ages 6-10 learned the same concepts from age appropriate presentations, games, demonstrations and group work. By the end of the day's fun and informative activities, both groups were informed about the delicate atmosphere we share and how human and natural actions can either harm or protect it. Further, they learned the importance of individual action in the fight against climate change.

Environmental Authorizations

A total of forty-one (41) Applications for Environmental Authorization were received for the period July to September, 2015. Sixteen (16) of the Applications were for New projects, four (4) for Existing projects and nine (9) for Renewal of Environmental Authorizations. Sixty-one (61) Applications for Noise Permits were received and issued for this period. Two (2) applications for Long Term Noise permits were received.

The Division conducted sixteen (16) site visits for New projects and five (5) site visit for existing operations. Compliance/renewal audits were also conducted for eighteen (18) operations that were issued with an Environmental Authorization.

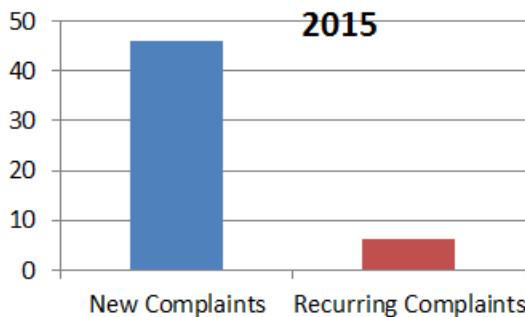
The Agency granted seventy-two (72) Environmental Authorizations during this period. Three (3) Environmental Permits; four (4) Operation Permits were granted for new projects; and four (4) renewals were granted. A total of sixty-one (61) short- term noise permits was issued by the Division.

The Division continues to process the other applications received during this period to determine whether these projects will be required to conduct an Environmental Impact Assessment (EIA) or prepare an Environmental Management Plan (EMP).

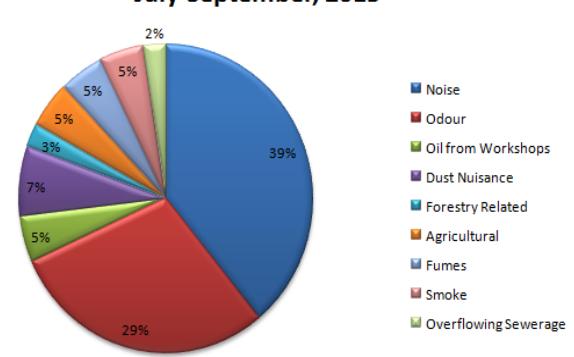
Complaints Management and Response

The Environmental Management Compliance Division (EMCD) received a total of forty-six (46) new complaints, six (6) of which are recurring complaints. The Division conducted eleven (11) compliance inspections. Three (3) Prohibition Notices was issued for the quarter.

New and Recurring Complaints Received from July-September, 2015



Types of New Complaints Received from July-September, 2015



Ozone awareness spread to Region 3

EPA staff, along with volunteers from the Japan International Cooperation Agency (JICA) and the United States Peace Corps, travelled to Region 3 to conduct workshops with Secondary and Primary school students in Region 3 on September 15 and 16, respectively. This was part of sharing Ozone Education for International Day for Preservation of the Ozone Layer, observed annually on September 16. This year's theme; "30 years of healing the Ozone together", was supported by the slogan "All there is between you and UV."

At the workshops, the students benefitted from videos, interactive presentations and activities such as a word search and 'Oh Ozone' Board Game that made learning about the ozone layer and what can be done to protect it fun. Students and teachers gave the programme excellent evaluations and only wished we could have brought the programme to more schools. These kind of educational opportunities add spice to the school curriculum and open young minds for seeds to grow. Schools engaged in these workshops were Zeeburg, Uitvlugt and Leonora Secondary; and Cornelia Ida, Hague, Dem Amstel, Blankenburg, Leonora, Uitvlugt, Zeelugt, Meten-Meer-Zorg and Greenwich Park Primary.

National Museum's Taxidermy Summer Camp

The National Museum Taxidermy Summer Camp is more than a pass time for students out of school on their August vacation; it provides the opportunity for youths to get some hands on experience in the ancient art and technique of taxidermy. This is an important discipline that lends itself to researchers and other educators to closely investigate plants and animals in a natural state. People visiting museums can get 'up close and personal' with dangerous and heroic creatures. The programme ran in two phases and the EPA was very grateful for the invitation to participate in both phases. This program served as a conduit for providing useful information to students on different environmental issues such as Climate Change which was the main focus in the second phase of the camp. Students learnt how it is affecting the world and its many ecosystems, and how the art of taxidermy can play a vital role in the preservation of species that are becoming endangered and sadly extinct. Keeping in mind the target group, students were provided with information on causes and effects of climate change and possible measures that can be put in place to mitigate and alleviate these impacts. They were then tasked with using the Arts and Environmental Education to relay the same information but in a fun and creative way. As their creative juices got flowing, ideas came out in the form of poetry, songs, art and craft and even drama.



EPA Staff Capacity Building

Work Study:

The Agency responded positively to requests to accommodate three (3) students as part of a two (2) months work study programme during July – August, 2015; the students that were selected to undergo the programme at the Agency were:

Ms. Jessica Thakurdin from the Apex Education who was attached to the HR Unit, ADMIN Division.

Ms. Sharadha Sonaram from the West Demerara Secondary School who was attached to EMCD.

Ms. Annthea Percival from the Queen's College Secondary School who was attached to EMPD.

Internship:

The Agency also facilitated a request from the University of Guyana, to accommodate one (1) University Student as part of a one (1) month internship programme:

Ms. Afeefa Richardson, 2nd year Environmental Science student, attached to EITD.

Workshops/ Meetings:

Ms. Faneesa Alli: Communication in the Office by the Public Service Ministry during August 04 – 07, 2015.

Mr. Dhanraj Persaud: National Cyber Security Sensitization Workshop on August 12, 2015.

Ms. Khadija Ali: Caribbean Climate Online Risk and Adaption Tool Training during August 17 – 21, 2015.

Ms. Malicia Hall: Applied Engineering for Small Hydropower Projects on August 21, 2015.

Mrs. Angela Franklin: The Annual Caribbean Water and Wastewater Conference and Exhibition in Miami, Florida during August 24 – 28, 2015.

Upcoming Activities

Activity	Target Group	Date
Environmental Mural Painting	Art students and volunteers	October, 2015
Teacher's Training Camp	Trainee Teachers	October 22-25, 2015
Rupununi Expo, Business Forum and Agriculture Expo	General Public	October 30- Nov 01, 2015
Green Conference and Expo	General Public	October 30-31,2015

Kids Corner

"30 Years of Healing the Ozone Together"

Ozone is very precious; it helps to protect life on earth from the harmful ultra violet (UV) rays of the sun. The sun is estimated to be about 150 million kilometers (93 million miles) from our planet earth. Everyday, as the sun rises, we begin to feel the heat. This heat is radiated through millions of miles, and yet we still feel it. The rays from the sun contain Ultra Violet Rays (UV Rays). UV rays are not all bad, because they help humans with Vitamin D. But too much of it is very dangerous. However, human activities have depleted the ozone layer but collective action to get rid of ozone depletion substances has been very successful. Now the ozone is beginning to heal itself and is expected to recover by the middle of this century.



Let's Celebrate International Coastal Clean-up

Every year on the third Saturday in the month of September, people all around the world celebrate International Coastal Cleanup and you can too!

This year marks the 30th Anniversary of the Coastal Cleanup. Over the years, many volunteers from around the world join together to clean-up their beaches, oceans, and coastal plains.

Due to littering and improper disposal of garbage, the build up of waste in the waterways create a disastrous effect on our marine biodiversity. Some animals mistake the garbage for food, and others get injured or trapped.



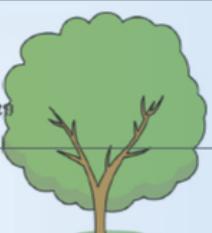
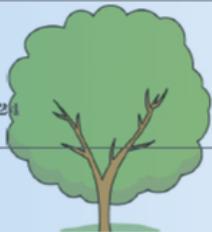
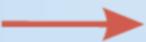
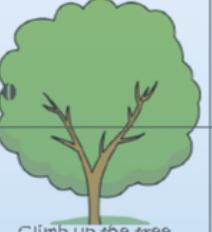
WE ARE THE ONES THAT CAN MAKE A DIFFERENCE.

- Don't litter,
- Encourage others not to litter,
- Get educated ; and
- Always remember we are all connected.



Oh! Ozone!



END	CROP DESTRUCTION Go back 4 spaces 35	Slide down with the Sun's rays 34 	SUNNY DAY Lose a turn 33	LOSS OF AMPHIBIANS Go back 3 spaces 32	31
SUNBURN Go back 1 space 25	BURNING GARBAGE Go back 2 spaces 26	 27	28	 29 Climb up the tree	STOPPED AEROSOL CAN USE Go forward 4 spaces 30
 21 Climb up the tree 13	USED SUNSCREEN Go forward 3 spaces 23	Slide down with the Sun's rays 22 	SUNNY DAY Lose a turn 21	 20 Climb up the tree	REUSED CONTAINERS Go forward 4 spaces 19
AGRICULTURAL BURNING Go back 3 spaces 12	OZONE HOLE REPAIR Go forward 3 spaces 14	 15	SKIN CANCER Go back 1 space 16	17	Slide down with the Sun's rays 18 
START 	RAINY DAY Take another turn 11	 10 Climb up the tree	LOSS OF BEES Go back 3 spaces 9	PLANTED TREES Go forward 6 spaces! 8	 7
	WALKED INSTEAD OF DRIVING Go forward 3 spaces 2	 3 Climb up the tree	USED A HAT Go forward 2 spaces 4 		UMBRELLA USED Go forward 4 spaces 6 

WILDLIFE SPOTLIGHT

Did you know?

The Silky or Pygmy Anteater (*Cyclopes didactylus*)

The Silky Anteater (*Cyclopes didactylus*) commonly referred to in Guyana as the Pygmy Anteater is the only living species of anteaters in the genus Cyclopes and the family Cyclopedidae.

Appearance

Pygmy anteaters are the smallest living anteaters. They have proportionately shorter faces and larger crania than other species. Adults have a total length ranging from 360 to 450 mm (14 to 18 in), including a tail 17 to 24 cm (6.7 to 9.4 in) long, and weigh from 175 to 400 g (6.2 to 14.1 oz). They have dense and soft fur, which ranges from grey to yellowish in colour, with a silvery sheen. Their eyes are black and the soles of their feet are red. The claws are present on the second and third toes, with the latter being much the larger. The fourth toe is very small, and lacks a claw, while the other two toes are vestigial or absent, and are not visible externally. The hind feet have four toes of equal length, each with long claws, and a vestigial hallux that is not externally visible.



Habitat

Silky anteaters inhabit a range of different forest types, including semi deciduous, tropical evergreen and mangrove forests, from sea level to 1,500 m (4,900 ft). They are nocturnal and arboreal, found in lowland rainforests with continuous canopy, where they can move to different places without the need to descend from trees. Females have smaller home ranges than males.

Diet

This mammal is a slow-moving animal and feeds mainly on ants, eating between 700 and 5,000 a day. Sometimes, it also feeds on other insects, such as termites and small beetles. The Pygmy anteater defecates once a day. Some of those faeces contain a large quantity of exoskeleton fragments of insects, indicating the silky anteater does not possess digestive enzymes found in insectivorous bats.

Reproduction and Nesting

It is a solitary animal and gives birth to a single young, up to twice a year. The young is born already furred, and with a similar colour pattern to the adults. They begin to take solid food when they are about one-third of the adult mass. The young is usually placed inside a nest of dead leaves built in tree holes, and left for about eight hours each night. Because of its resemblance to the seed pod fibers of these trees, it can use the trees as camouflage and avoid attacks of predators such as hawks, especially harpy eagles. During the day, they typically sleep curled up in a ball. Although they are rarely seen in the forest, they can be found more easily when they are foraging on lianas at night.

Fact

When threatened, the silky anteater, like other anteaters, defends itself by standing on its hind legs and holding its fore feet close to its face so it can strike any animal that tries to get close with its sharp claws.

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

The Green Leaf is published quarterly by the Environmental Protection Agency, Guyana.

This publication is intended to promote awareness on the work of the Environmental Protection Agency.

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