

GREEN LEAF

Trainee Teachers Benefit from Environment Education Training

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Twenty-seven (27) final year trainee teachers from the Cyril Potter College of Education were selected to participate in a training programme coordinated by the Environmental Protection Agency (EPA) during November 11-14, 2010.

The teachers, engaged in Primary education, are majors in the four (4) core subject areas of the Primary Curriculum - Science, Social Studies, English Language and Mathematics.

The training equipped teachers to integrate Environmental Education (EE) in the four core subject areas during the delivery of the curriculum. This will ensure that the corps of teachers entering the education system are aware of the need and familiar with the methods of integrating EE into core subject areas.

The incorporation of EE into subject areas will also serve to create awareness and initiate behavioural change in pupils. In the long term, it is expected that young people will adopt leading roles in preserving and maintaining a safe and healthy environment.

Young Educators, being in a position of

influence and authority to inculcate values and effect positive behavioural change, are perceived to be very instrumental in promoting environmental literacy. Teachers are nation-builders, especially those at the primary level, since children at that critical level are easily molded and characters are shaped.



Teachers that participated in the Programme.

The session was conducted away from the usual classroom setting at Camp Wesleyana on the Linden/Soesdyke Highway where participants were in harmony with nature and used the natural environment to learn the principles of EE in a practical way.

The sessions, although very intense, were engaging, interesting and fun. The topics included Concept, Principles and Practices of EE, Experiential Learning and EE Infusion versus Diffusion, among others.

In addition, the Environmental Education Curriculum Supplement - "Learning about the Environment through English Language, Mathematics, Social Studies and Science", was used to guide sessions. This Supplement, which was developed in 2000 with funding from UNDP through an EPA/Ministry of Education collaboration, contains sample lessons integrating EE into the four core subject areas. These lessons were created by a number of teachers drawn from the 10 Administrative Regions of Guyana.

The EE supplements are available at primary schools across Guyana and are intended to be used at the level three. It was recognised, however, that the Supplement is not being utilised and EE is not a priority at the Training College

Editorial Note

There's an old saying which goes, "Don't cry because it is over, smile because it happened".

With the year 2010 coming to an end, we reflect on the things we have accomplished, the challenges we have overcome that molds us into stronger individuals, the people we have met and, friends and loved ones who have departed from our lives.

Let us welcome the new year with memories of happy times and wisdom we have gained from our experiences.

The year 2011 brings with it new beginnings with new challenges to overcome, more opportunities to embrace and bigger goals to accomplish. We will welcome new people into our lives and new additions to our families.

Start the New Year with a positive attitude and arm yourself with resolutions. Put your best foot forward and strive to make 2011 an unforgettable year.

May the dawning of the New Year fill your heart with new hopes, open up new horizons and bring for you promises of brighter tomorrows. Have a great 2011!

Trainee Teachers Benefit from Environment Education Training

Continued from Page 1

nor in schools. The trainee teachers were not aware of the existence of the Supplement.

Participants were very enthusiastic about the workshop, making creative and interesting contributions, and developed a plan of action to ensure that environmental awareness and projects will be created and implemented within schools.

A highlight of the workshop was the lesson plan competition, where the trainee teachers were required to develop a lesson plan integrating EE into a subject area of their choice. This was won by Odessa Hackett with Rona Stafford and Kerri Merchant placing second and third respectively.

The workshop was greatly interactive, educational and informative.



Participants at work on a range of activities at the Workshop.



EPA Collaborates with Conservation International - Guyana

The EPA collaborated with Conservation International – Guyana (CI-G) for a centralised workshop that was held during November 19 -20, 2010 in Lethem. At the workshop, members of the eighteen (18) proposed Kanuku Mountains Protected Area (KMPA) communities, and Lethem schools and institutions, were brought together.

The aim of the workshop was to facilitate the planning and designing, for implementation, a comprehensive but differentiated environmental education and awareness strategy and action plan for the proposed KMPA Villages, Lethem and its environs.

There were 46 participants, including Environmental Club representatives from fifteen (15) proposed KMPA Communities and Schools namely: Yupakari, Katoka, Kaicumbay, Nappi, Parishara, Hiowa, Moco Moco, Kumu, Quarrie, Parikwaranawa, Sand Creek, Maruranau, Rupunau, Shulinab, Shea, St. Ignatius

Primary and Secondary Schools, and Arapaima Nursery/Primary

School. Representatives from the proposed Kanuku Mountains Community Representative Group (KMCRG), the Village Councils, Regional Democratic Council and Iwokrama International Centre for Rain Forest Conservation and Development (IIC) also participated.

Sessions included: **Club Reporting** which highlighted the successes, opportunities and challenges of the various clubs from the proposed KMPA Villages and Lethem area; **Youth Climate Change Training** which highlighted the basics of the phenomenon and the carbon cycle; **Leadership Development** through public speaking, problem-solving and decision-making; **Experiences of the Wildlife Clubs in the North Rupununi**; and **Environment Education and Awareness (EE&A) Strategy/Plan** for the proposed Kanuku Mountains Community Clubs and Lethem Schools. Problems/threats of the South Rupununi and target audiences were identified for the E&A Strategy development. **Programme Planning** within Clubs was

one of the activities during the EE&A Strategy/Plan development session.

The clubs have committed to working on improving their programme of activities for the next reporting session.

An overall Environmental Education Strategy, derived from information gathered during the EE&A Strategy development session, will be created by CI-G. Plans are in place for continuous work in the New Year.



Participants and Facilitators at the Workshop.

Importance of Coastal Zone Protection in Guyana

What is the Coastal Zone?

The Coastal Zone is defined as an area on either side of the coast of any land mass where land, water (especially seawater) and air interact. The seaward limit of the coastal zone includes the coastal sea influenced by natural and man-made processes on land or the continental shelf. Under the United Nations Convention on the Law of the Sea (UNCLOS) treaty, Guyana's national maritime jurisdiction is extended to a maximum distance of 200 nautical miles (called the Exclusive Economic Zone (EEZ)) from the baseline from which the breadth of the territorial sea is measured. In this zone, the coastal state has sovereign rights for exploring, exploiting, conserving and managing all marine/coastal resources.

What are Coastal Resources?

The term Coastal/Marine Resources refers to all kinds of resources found in or around the seas and under the seabed. These can be any naturally occurring item found on or near a coastline, e.g., fish, birds, recreational beaches, water, wetlands, natural gas, sand and gravel, and energy resources available in the sea including thermal, wave and tidal energies, etc.

Many Coastal Resources are Public Resources which are owned by everyone. From public resources, we get life, food, transportation, recreation and jobs. Public Resources are so important that we have to be very careful that we do not lose them, abuse them or waste them. We have to conserve our resources by using them wisely so that the present and future generations will be able to enjoy the same benefits.

Guyana's Coastal Zone

Guyana is situated on the North East Atlantic coast of South America, with an area of approximately 216,000km² with a coastline of about 430 km stretching from the Waini River in the North Western border of Venezuela to the Corentyne River in the South Eastern border of Suriname. The Coast is intersected by the four main rivers in Guyana, namely Essequibo, Demerara, Berbice and the Corentyne and occupies about seven percent (7%) of the total area of the country.

The Coastal Zone of Guyana is the most important natural region in the country since it is home to ninety percent (90%) of inhabitants, its administrative activities are concentrated in this area and seventy-five percent (75%) of the main economic benefits are derived here.

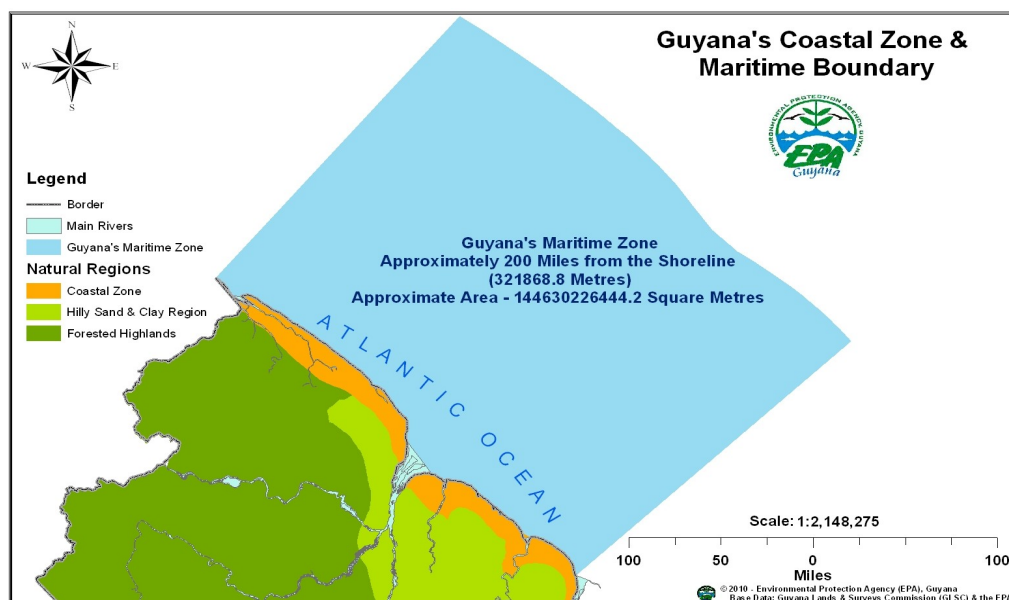
The Coastal Zone is mostly below sea level and is extremely vulnerable to flooding. It is largely made up of alluvial mud swept out to sea by the Amazon River, carried north by ocean currents, and deposited on the Guyana Shores. A rich clay of great fertility, this mud overlays the white sands and clays formed from the erosion of the interior bedrock and carried seaward by the rivers of Guyana. Due to flooding of much of the coastal plains at high tide, efforts to dam and drain this area have gone on since the 18th Century.

Guyana has no well-defined shoreline or sandy beaches. Approaching the ocean, the land gradually loses elevation until it includes many areas of marsh and swamp. Seaward from the vegetation line is a region of mudflats, shallow brown water, and sandbars.

The general issues of importance to the coastal zone include sea level rise, degradation of coastal ecosystems, depletion of fisheries resources, mangrove and beach sand/shell removal, improper waste disposal, water pollution, erosion and flooding.

Importance of Guyana's Coastal Zone

- The major concentration of socio-economic activities such as provision for a variety of jobs; educational and social institutions; cultural and religious facilities are on the coast.
- The growth and manufacturing of major agricultural crops-sugar cane and rice, thrive on the coast and are major sources of foreign exchange and revenue.
- Due to the topography of the coast, it is the place where major irrigation, flood protection and land development projects such as major road networks and many housing schemes, both governmental and private are located.
- The coastal zone is also economically and environmentally important for fisheries, shrimps, prawns and crabs which are seafood delicacies; these can be harvested from the numerous canals, rivers and swamps on the coastal plain.
- Livestock farming is also very important on the coastal zone.
- Mangroves are the first line of defense on the coastal zone. It, therefore, protects us from high wave activity, such as tsunamis and spring tides. There is currently a Mangrove Action Committee that is working to promote the growth, re-growth and protection of mangroves along the coast.



Coastal Zone Protection

The Environmental Protection Agency is mandated by the Environmental Protection Act No. 11, 1996, to co-ordinate an

Nappi Village Embarks on Poultry Farming Venture

The Village Council of Nappi has embarked on a poultry farming project that has been funded by the KfW Small Grants Component of the Guyana Protected Area System (GPAS) Project. The estimated cost of the project is G\$2,699,180, of which G\$2,429,880 was requested from KfW and G\$269,300 was community contribution.

Nappi Village is located to the North of the Kanuku Mountains between the banks of the Rupununi and Takutu Rivers. Nappi includes the two satellite communities of Parishara and Hiowa. The Village has approximately 400, predominantly Makushi, inhabitants.

Fishing and hunting in the Kanuku Mountains are major activities for the residents. During the dry season (September to April), community members would travel far distances to fish. This is prompted by the low water during this time, which concentrates the fish into ponds and pools. As the water rises during the May to August rainy season, the villagers switch to hunting. Hunting is easier during this period due to the concentration of game on the few areas of land that remain above water. Both hunting and fishing activities are concentrated in the confluence of the Maparri and Rupununi Rivers, just north of the Kanuku Mountains.

However, the intensity of harvest has increased in recent years due to population growth, increased markets and improved accessibility to the area. As a result, these activities are becoming more unsustainable and thus a threat to local biodiversity. Most of the domesticated meat is sourced outside the community at substantial costs. As a result, wild



View of one of the Poultry Farms.

meat is often purchased to supplement local protein supply, and has therefore led to increased hunting levels in the community.

This seasonal harvest has proved to be very effective in the past, but is now becoming increasingly unsustainable due to local population increases. The community resource evaluation conducted by Conservation International in 2002 identified over-hunting as a major threat to this area, as villagers reported having to go farther into the mountains every year to hunt.

The poultry farming project has provided an alternative and domesticated protein source for Nappi and Hiowa, therefore reducing the demand for fish and game. The project has increased local food security and reduced the need for unsustainable hunting and fishing in the Kanuku Mountains. Under the project the

following were provided to the communities: 1,000 broiler chicks; broiler feed; poultry farming equipment; and chicken pens were constructed.

Additionally, income will be generated through the sale of animals, both in regional markets as well as to the World Bank-funded Ministry of Education School Feeding Programme. The project will also allow for the collection of organic manure to increase the production of local kitchen gardens. The project has a relatively small environmental footprint compared to other livestock initiatives, with the farm measuring only 600ft²/55.74m². In addition, by reducing the intensity of hunting in the Kanukus, the project will foster wildlife conservation of the Kanuku Mountains proposed Protected Area.

Importance of Coastal Zone Protection in Guyana

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Integrated Coastal Zone Management (ICZM) Programme. To this effect, an ICZM committee was formulated.

The committee comprises the major stakeholders/sector Agencies involved in coastal issues and performs an advisory function on issues of concern to coastal zone management.

ICZM is an ongoing process that seeks to promote the wise use, development and protection of coastal marine resources; foster greater collaboration among sectoral agencies and enhance economic development.

ICZM aims to improve the quality of life of people dependent on coastal resources, maintain biological diversity and productivity of coastal ecosystems, overcome conflicts associated with sectoral management of coastal resources and promote sustainable use of the coastal resources.

To ensure sustainable protection of our coastal zone and its resources, you can do the following:

- Do not remove shells and sand from the beach. These protect the coastline from the sea and it is illegal to remove them.
- Do not cut mangroves unless given a permit from the Guyana Forestry Commission.
- Do not litter or dump solid waste or sewage on the beach or in mangrove areas.
- Limit the use of plastics and disposables such as plastic spoons, etc.
- Participate in a Cleanup or volunteer or work with marine life.
- Avoid over-fishing and over-hunting of animals.

Kids Corner

Some Interesting Facts



- **Bamboo** - the world's tallest grass, has been recorded as **growing as high as (130 feet/39.62m)**. It has also been known to grow up to (4 feet/1.22m) in a 24 hour period.

- Archaeologists have recovered remains of **sunflower seeds dating back to the year 800 AD**.

- 90% of the rainforest plants used by Amazonian Indians as medicines have not been examined by modern science (http://www.savetherainforest.org/savetherainforest_007.htm).

- **Orchids are a member of the asparagus family**. Until now, scientists believed orchids were relatively new plants, evolutionarily speaking. The DNA tells a different story. It looks like it is actually the oldest member of the Asparagales family.



Orchids have the smallest known seeds. (Source: NY Times.)

- **Apple seeds contain a small quantity of cyanide** (a poison) which renders the seeds quite bitter tasting.



- **11,700 years old is the approximate age of the oldest known plant**, the Creosote Bush growing in the Mojave Desert.

Make a Disco Ball

Materials

6 to 8 CDs you don't need
5" Styrofoam Ball
Tacky Glue or Low Temp Glue Gun
Wire for Hanging
Kitchen Shears



What you do:

Cut CDs into irregular 1/2" pieces. Some pieces will splinter. Discard the splintered pieces. Wrap wire around Styrofoam ball in two directions. Bring loose wire ends together and form into a loop. Glue CD pieces all around Styrofoam ball. Hang from the wire in your room or anywhere it can catch the light.

- **Ever eaten tree bark? I bet you have!** Cinnamon is tree bark rolled into quills. It comes from the bark of the *Cinnamomum zeylandicum* tree. The bark is peeled from the sprouts of these trees, then set out to dry and rolled up into quills.

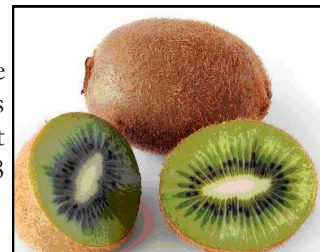
- The beautiful two color appearance of the tulip on the right is referred to as a **'break'**. It's **caused by a virus**.



- Seeds were always thought to have needed to come in contact with liquid water in order to germinate. It has now been discovered that the **presence of water vapor, not necessarily liquid water, is required for germination**.

- The **ancient Greeks believed mushrooms came from Zeus's lightning** because they appeared after rains and reproduced and grew inexplicably. Some species are edible, others contain dangerous toxins.

- **Kiwi fruit** contains 600-1000 tiny edible seeds inside each fruit. It contains two times the amount of vitamin C that oranges have and can be stored up to 8 months.



Coloured Flowers

This is a colour changing experiment.

Materials you will need:

- Water
- Scissors
- Food Colouring (any colour)
- Jar, Plastic Cup or Test Tube
- A Flower (with white or light coloured petals)



Steps:

1. Fill the cup with water.
2. Add a few drops of food colouring.
3. Cut the end off the stem (stalk).
4. Put the flower in the water.

Watch and in time the food colouring will be sucked up the stem along tiny tubes (called xylem vessels) and the petals of the flower will start to change in colour.

Did you know that plants need water to live?

As well as absorbing water from the atmosphere through their leaves, they suck water up through their stems.

Climate Change Message Taken to Berbice

Twenty-three (23) women are now empowered to make positive environmental intervention within their homes and communities. This was made possible through a collaborative effort between the EPA and the Women's Affairs Bureau of the Ministry of Labour, Human services and Social Security. Women of Regions 5 and 6 associated with the Women's Affairs Bureau converged at State House, New Amsterdam during October 18-20, 2010 for a capacity building workshop on the **Environment** with special emphasis on **Climate Change**. The workshop was facilitated by three (3) Environmental Officers from the Education, Information and Training Division of the EPA. It was designed to engage the participants through the use of active listening and learning strategies. These strategies were used to facilitate the exchange of information and interactive learning. The participants were exposed to sessions on Climate Change, waste management, water and energy conservation, the Low Carbon Development Strategy and efficient use of transportation.

They were also afforded the opportunity to evaluate their lifestyles by measuring their carbon footprints. The final day of the workshop was allotted for action project planning. The various groups developed action projects in relation to an environmental issue in their respective communities with the intention of implementing these projects within their respective communities.



Participant presenting after Group work.



Above: Participants and facilitators.

Right: Participants calculating their "Carbon Footprint".



The workshop was productive and rewarding for both the facilitators and participants since it brought to the fore sharing of ideas, capacity building and provided impetus for change. The women expressed gratitude and appreciation for the comprehensiveness of the

programme and expressed the desire to have more women benefit from similar sessions. They unanimously decided that since they are equipped with the requisite knowledge and resources, they will act on and implement what they have learnt, beginning in their respective households and communities.

Developing Our Most Valuable Resource

The human resource of any company is by far the most valuable resource of that company and a highly skilled, motivated workforce is a sure guarantee of success and progress. Cognizant of this fact, the EPA invests substantially each year in the development of its human resources and Officers are provided opportunities for training and professional development both internally and overseas. The year 2010 was no different to other years in this regard. During the year, a number of training programmes were made available to staff of all Divisions within the Agency and have enhanced capacity of those who participated.

Generally, training was of both a specialized and professional nature since the nature of the work of the Agency is highly technical and specialized in some areas. Staff of all the

Divisions benefitted from both sets of training and already, positive results are being reaped through new approaches to work, enhanced outputs and greater efficiency and effectiveness.

Participation in several seminars and conferences, both national and international, also served to enhance awareness of current trends and developments which would impact the work of the Agency. This served to expanded insight of current affairs, placing staff who participated in better positions to make meaningful contributions in their respective fields of work within the Agency.



Environmental Authorisations

The Environmental Management Division (EMD) continued to grant Environmental Authorisation to operations - new and existing, throughout the country. During the period September to November 2010, a total of fifty (50) Applications were received requesting Environmental Authorisation.

Thirty-one (31) of the applications received were for new projects, eleven (11) were for existing projects, six (6) were for renewal of Environmental Authorisations, one (1) was for the transfer of Environmental Authorisation, and one (1) was for the variance of Environmental Authorisation.

An Environmental Impact Assessment (EIA) was requested for a project submitted by Simon and Shock International Logging Inc., a logging and sawmilling project located at Area A on the Right Bank Rewa River, Left Bank Essequibo River, and Area B on the Right Bank Essequibo River, Left Bank Essequibo River, Left Bank Corentyne River.

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

A revised EMP was submitted by BLT Enterprise for a Fertiliser

Storage & Blending Facility located at Area K, Providence, East Bank Berbice.

Fifty- one (51) Applications for Noise Permits were received and issued for this period.

The Division conducted thirty-six (36) site visits for new projects and sixteen (16) verification visits for existing projects/ operations. Compliance/renewal audits were also conducted for thirteen (13) operations that were issued with Environmental Authorisations.

The Agency granted twenty (20) Environmental Authorisations during this period. Twelve (12) Environmental Permits and one (1) Construction Permit were granted for new projects and six (7) Operation Permits were granted to existing projects.

In comparison to the previous period (June to August), there has been an increase of fourteen applications that requested Environmental Authorisation. This increase is reflected by an additional four applications for new projects and eight additional applications for existing projects during this period.

Site visits conducted for this period increased by twenty one (21) for new projects, twelve (12) for existing projects and eight (8) for compliance/renewal audits.

Positive Results from Climate Change Workbook Pilot Test

A Climate Change (CC) Workbook for Children prepared by the EPA to raise awareness on the phenomenon was successfully pilot tested in schools. The EPA collaborated with the Ministry of Education to assess and pilot test the Workbook. The pilot test was conducted each Wednesday during the period 8 September – 6 October, 2010, at five schools, namely, Graham's Hall Primary, Rama Krishna Primary, Eccles Primary, Sophia Primary and West Ruimveldt Primary for students of the Grade 6 level. A total of 186 students and five teachers participated in the activity. The workbook was well received by both students and teachers.

A pre-test and post-test were used to assess the children so as to determine the success of the workbook in accomplishing its aim. Evaluation of the data collected from the tests showed that there was a 13% average increase of students who scored 50% and over in the post-test. The students found the activities to be fun and easy to understand. This is an indicator that the Workbook can be used as a tool for teaching Climate Change since it enforces the concepts in a child-friendly manner.

The teachers who participated in the pilot testing found the Workbook relevant and appropriate for the Grade 6 level and indicated that it can be integrated in the various subject areas. It was unanimously reported that the Workbook was a simple and fun method for teaching the very serious and complicated issue.

The CC Workbook was developed for children (ages 9-12) and aims to give them a basic understanding of Climate Change in a practical way. It served to enlighten their minds and arouse curiosity of the causes, effects and adaptation measures necessary to deal with CC. In addition, it will enable children to examine their attitudes/

behaviour toward the environment and their health, and foster positive changes.

Lessons in the Workbook are interactive and informative and have been specially designed to appeal to various aspects of a child's cognitive development. The lessons involve learning through solving mazes and puzzles, word searches, unscrambling words, interpreting pictures and filling in missing letters.

The Ministry of Education has indicated that the workbook is a good initiative and assisted in reviewing the workbook. The EPA intends to explore the possibility of using the Workbook in the school



Students of West Ruimveldt Primary that participated in the pilot test

system across Guyana. Introducing the workbook into schools will help the children to better grasp the concept of Climate Change.

Some adjustments are to be made to the Workbook with the intention of using it at the lower levels in the primary schools. The EPA is also exploring developing similar materials to be used at the secondary level.

The major goal of this initiative is to foster attitudinal and lifestyle changes by moulding young minds to become environmental stewards and subsequently, agents of change for the environment.

Wildlife Spotlight

Did you know?

The **Jaguar** (*Panthera onca*) is the only *Panthera* species found in the Americas. It is the third-largest feline after the tiger and the lion, and the largest in the Western Hemisphere. Its present range extends from Mexico across much of Central America and south to Paraguay and northern Argentina.

The base coat of the jaguar is generally a tawny yellow, but can range to reddish-brown and black. The cat is covered in rosettes for camouflage in its jungle habitat. The spots vary over individual coats and between individual jaguars.

The spots on the head and neck are generally solid, as are those on the tail, where they may merge to form a band. The underbelly, throat and outer surface of the legs and lower flanks are white. The jaguar is a compact and well-muscled animal; this distinguishes it from the leopard. Jaguars normally weigh 56–96 kilograms (124–211 lb). Larger males have been recorded at 160 kilograms (350 lb) and smaller ones have extremely low weights of 36 kilograms (80 lb). Females are typically 10–20% smaller than males. The length of the cat varies from 1.62–1.83 metres (5.3–6 ft), and its tail may add a further 75 centimeters (30 in). It stands about 67–76 centimeters (27–30 in) tall at the shoulders. A short and stocky limb structure makes the jaguar adept at climbing, crawling and swimming.

While dense rainforest is its preferred habitat, the jaguar will range across a variety of forested and open terrain. It is strongly associated with the presence of water and is notable as a feline that enjoys swimming.

The jaguar is a largely solitary, stalk-and-ambush predator, and is opportunistic in prey selection, playing an important role in stabilising ecosystems and regulating the populations of prey species. The jaguar has an exceptionally powerful bite which allows it to pierce the shells of armoured reptiles and to employ an unusual killing method: it bites directly through the skull of the prey between the ears to deliver a fatal bite to the brain. Like all cats, the jaguar is an obligate carnivore. Its diet encompasses 87 species of animals. The jaguar prefers large preys and will take adult caimans, deer, capybara, tapirs, peccaries, dogs, foxes, and sometimes even anacondas. However, the cat will eat any small species that can be caught, including frogs, mice, birds, fish, sloths, monkeys, and turtles.

Jaguar females reach sexual maturity at about two years of age, and males at three or four. The cat is believed to mate throughout the year in the wild, although births may increase when prey is plentiful. Female estrous is 6–17 days out of a full 37-day cycle, and females will advertise fertility with urinary scent marks and increased vocalisation. Both sexes will range more widely than usual during courtship. Mating pairs separate after the act, and females provide all parenting. The gestation period lasts 93–105 days; females give birth to up to four cubs, but most commonly to two. The mother will not tolerate the presence of males after the birth of cubs, given a risk of infanticide.

The Jaguar is a near threatened species and its numbers are declining. Threats include habitat loss and fragmentation. While international trade in jaguars or their parts is prohibited, the cat is still regularly killed by humans, particularly in conflicts with ranchers and farmers in South America.



THE GREEN LEAF

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

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

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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.

