

### In this issue

- 2 From the Hip
- 3 Blackboard Jungle
- 6 In from the Outpost
- 7 Thanks
- 8 How you can help

Laurels

9 ECO News

Volunteer for Nature

10 Computer-based Learning Programs

Off the Board

- 12 Toyota Earth Day Scholarship Program
- 13 Mailbag
- 14 Shorts
- 15 Photography Challenge



## From the Hip

Let's be honest with each other. We've all done it. Whether caught up in the tidings of good cheer, the light-headedness of endless parties, or looking forward to a muchdeserved break, made those New Year's resolutions, which under the sober light of January are just not as attractive anymore. You know what I mean? In a rush of enthusiasm and some would say naivety, I agreed, in fact asked, to take over the Editor and Publisher responsibilities for Raphia. This unto itself was justification enough to get more than a few bent-necked glances from the other members on the Board of Directors, but I even went so far as to make a resolution to increase the circulation of the newsletter. But I can let you in on a little secret; the resolution still looks as good as it did when I made it back at the end of 2002. It's simple. To increase circulation, we need more people tuned-in to the mission of COTERC, and thereby willing to support our endeavours. Raphia is a bonus gift as it were. Join COTERC, support our initiatives, and as a small thank you for your generous contributions, receive Raphia, the official publication of our organization. So here's the pitch - pass Raphia on. Share Raphia with five other people - friends, co-workers, teachers, students, whom ever. Imagine that, the circulation would increase five times with only one edition! And imagine if only one of those five joined COTERC. Now we are taking about doubling our membership. Not that hard really, and it's at least one resolution that we can all achieve.

Andrew Cresswell

# **Blackboard Jungle**

The following activity is from In the Global Classroom I by Graham Pike and David Selby (ISBN 0-88751-081-7). The book includes lesson plans to promote a "democratic, equitable and humane classroom environment in which students deepen their understanding of local and global issues

### Fruits of the Forest

Purpose:

Recognizing forest product uses and their impact on the

ecosystem

Time needed:

40 minutes

#### Resources

Glue or paste. Set of Fruits of the Forest cards and a strip of paper (made by cutting newsprint lengthwise into 3) for each pair of students. An extra set of cards and another strip of paper for each group of 6 students.

### Procedure

Working initially in pairs, students read through and discuss the twelve Fruits of the Forest cards, which describe some common uses of the world's forests and forest products. Pairs then try to agree upon where each card should be placed on the paper strip, which represents a continuum from 'totally acceptable' at one end to 'totally unacceptable use' at the other. When agreement is reached on the nature of acceptability and the positioning of cards, the cards are glued or pasted down in position, Individually, students decide at what point they would 'draw the line' (in effect, between 'acceptable' and 'not acceptable'), and mark that point with an initialed pencil line. Three pairs then join together to explain and justify their card placements before trying to negotiate a consensus placement for the group of six, using a fresh set of cards and paper strip. Finally, the students can again mark where they would each 'draw the line', having listened to the arguments of others.

### Potential

An activity, which promotes awareness of some major uses of forest, products and encourages reflection upon the complex issues that their use generates. Although this is a consensus-seeking activity - to stimulate maximum discussion and sharing of perspective - individuals are still encouraged to state their own value positions in terms of where they would 'draw the line' between acceptable and non-acceptable uses.

These are the reproducible forest cards for the Fruits of the Forest activity. Photocopying the page on cardstock and laminating the cards will increase their use, and cut down on the use of forest!

Copiable Handout 7

FRUITS OF THE FOREST CARDS				
Firewood One-third of the world's people rely on firewood for heating and cooking. In the poorest countries of the world, most wood collected is used for fuel.	Cattle Large areas of rainforest are cleared so that cattle can be grazed. Much of the resulting beef is used for mak- ing hamburgers in wealthy countries.			
Medicines  Extracts of many forest plants are used as the basis of modern drugs. Qualine (from the bark of the cinchens tree) is widely used to treat malaria, and extracts from the rosy perminside are effective cancer treatments.	Paper The world uses an enormous quantity of wood pulp to make paper — an estimated four billion trees are cut each year for paper. One large issue of the New York Times is the end product of 400 hectares (988 acres) of forest.			
Medical Research Drug companies are studying thousands of rainfor- est plant species used in medicines by Native peoples. Some of these may contain cures for diseases like cancer.	Pets Rainforest birds, such as parrots and macawa, are sold and kept in cages in Western countries: Iguanas are popular house pets, too.			
Food  Many common foods — including coffee, bananas, cocos and rice — originated in the rainforest. Genes from these wild plants are still required to make new strains which are resistant to disease.	Skins The skins of wild cats from the rainforest — such as the jaguar and the occlot — are used to make expensive fur costs. An occlot cost io made from ten skins.			
Hardwood Prized hardwoods — like mahogany, teak and cedar — are used to make quality furniture, window frames, boats and musical instruments.	Mining Many important minerals — such as gold, iron ore, tin and aluminum — have been found in rainforest areas. Mining causes extensive damage to the land.			
Electricity  Over 30 hydroelectric dams are planned in the Amazon basin, with the result that huge areas of rainforest will be flooded. Much of the electricity produced will be used by local industry.	Transport Mining, logging and other forest industries require the construction of road and rail networks through thousands of kilometers, or miles, of rainforest.			

# In from the Outpost by Tom Mason

The Canadian Organization for Tropical Education and Rainforest Conservation is devoted to three major aims; Education, Research and Conservation. It is conservation that I wanted to broach today. COTERC has worked on several projects over the past 10 years. Work has been carried on around Tortuguero through the Caño Palma Biological Station. The following paragraphs are a composite of conservation initiatives that staff and volunteers of COTERC have been involved in around Tortuguero.

Tortuguero is a small village in north-eastern Costa Rica. On a visit to the area, the first thing one will notice is the lack of motorized land vehicles. In fact, there is only one vehicle in the town, a tractor that is used to carry garbage to the village dump. Transportation around the community is either by foot or by boat. Motor boats are the only way to get around this area. (Caño Palma is actually 5 kilometers from Tortuguero and a trip into town takes half an hour each way.) The main income for the area is the tourist trade. There is a high unemployment rate especially in the female population, there are no banks, no hospital or doctors or rooms to rent.

Early on in the creation of Caño Palma the town of Tortuguero were in a dilemma. The growing population in the area and the increasing number of tourists site-seeing was increasing the amounts of garbage in the area. The town of only 500 people had little problem, but there were thousands of tourists coming into the town every year. Caño Palma became an active part of the solution finding group. Tortuguero is now relatively garbage free and sanitation is not a problem.

A second event occurred in Tortuguero that led to threats on our staff in Caño Palma. It began with the discovery of a road being built through Tortuguero Park from the major road in the east going towards Tortuguero.



The road was illegal but was being backed by two senators in the Costa Rican Government. Residents were split on what this road would do. Some saw it as a way of reducing costs. Trucking directly to town would be much less expensive than boating. Also the road would open up the land for settlement. In Costa Rica if a person can stay in a place for a year unattested, then they have legal right to the land. This would they said, improve the living condition of all people in Tortuguero.

On the other side was a group that saw the road as a dangerous addition. Ecotourism was by far the largest source of income for the area. Ecolodges are the number one employers. This road would cause damage to the park and jeopardize the very source of this income. The road would bring more people in as new immigrants to the area. It would also allow for these immigrants to enter the park and squat illegally. The park is large and very understaffed. This could be a disaster. There was one other factor. The creation of the road through the Tortuguero Park was completely illegal. After listening to all the facts and discussing the issue with the COTERC board, it was decided that the staff of Caño Palma would support the park and the eco-lodges condemning the creation of the road. It was at this time that one of our staff had his life threatened. The law finally condemned the act and all work was halted.

COTERC was also pro-active in a project that began in 1993. With a grant from the Canadian International Development Agency, COTERC designed and built a butterfly garden and rearing facility. The theory was to create a source of income for residents of Tortuguero. Butterflies would be bred and displayed at the exhibit for visiting tourists and excess pupa would be sent to displays overseas. Caño Palma was not to receive any income from it. Money earned would go to employees. All profits would be used to improve conditions at the school in Tortuguero. This was COTERC's first attempt at providing a sustainable way of living without damaging the forest. The program has had its ups and downs over the years. Unfortunately building a method of making a business is only half the battle. There also has to be someone willing to take it on. We had not expected it to be so difficult to find someone. Hopefully there will be someone to do this in the future.

The staff at Caño Palma have also been involved with many other programs that promote a sustainable management of the forest. Staff regularly clear fallen logs from the canal. This allows ecotourist traffic to use the canal. The station has also been used as a site for guides to walk in the forest. This use is important to the park, because all tourists travelling up Caño Palma and not staying there pay a fee to the Tortuguero Park. Coterc has been asked if it could supply enough money to pay for a permanent park person

to patrol Cano Palma. Unfortunately we do not have the money to so. Caño Palma Biologico Station has been offered as a site for a parks office on Caño Palma however.

Another program begun by Paul Grant, one of our Station Managers, was the adoption of orphaned birds for re-release. Collected by people on the Caño from fallen trees or destroyed nests, the orphaned birds were doomed. Instead the animals were brought to the station and reared within the forest. The birds are then "hacked out" (trained to live in the wild) and released. These birds were all found on the Caño Palma and released into the same area.

The staff at Caño Palma Biological Station does several other things in the area. They patrol the canal and have been involved in controlling illegal squatters and in one case, a call from a station manager led to the arrest of a group of sea turtle poachers. On the other side, the managers have acted as field medics for people living along the canal. The staff must walk a narrow line. If every infraction they see and hear about is reported, then they will not be trusted. On the other hand, they are there to help conserve the region, so they must make a stand and make that understood by everyone that they deal with. This can be difficult when the community you are dealing with has lived off the land by hunting, logging and fishing for several generations. In some cases, these people are unaware that what they are doing is illegal and none sustainable. It can be difficult for them to understand that a change in attitude is required. Trust is required for these changes to occur. Everything the staff does is observed and assessed by the people of the region and we all must be careful with what we do and say down there.



In the next issue, I will talk of future endeavors that Caño Palma plans to get into over the next period of time. Caño Palma Biological Station plans to get involved in the restoration of the Serro. It is a large project that perhaps you would like to help us with. I'll explain then.

### **Thanks**

Grant Crossman from Port Credit Pet Center for donating a snake hook to

## How you can help

In an ongoing effort to improve the research station, we are collecting Canadian Tire money to purchase badly needed supplies. Start checking your glove compartment, under the car seats, in your top drawer, the laundry room, and even your wallet! Having Canadian Tire money certainly cuts down our expenses, and allows us to get much needed supplies. Take some time, and send any Canadian Tire money you can to our mailing address listed on the front cover of *Raphia*. Thanks!



### Laurels



Thanks to the Durham Avicultural Society of Ontario for their kind donation of \$100 and to Tom Mason for making a presentation to the Society. For more information about the society, check out their website at:

www.birdelub.ca

Special thanks goes to Kim Evans-Milak and her grade 3 class at Holland Landing Public School for their donation of \$47.95. Kim writes "My Grade 3 class created a "rainforest cafe" and sold punch and cookies made from rainforest plants. They would like to donate their funds to your organization. I am very proud of the as this is NOT an affluent school community." Thanks kids for all your hard work, and your kind donation!

Holland Landing Public School

### **ECO News**

ATLANTA (Reuters) - Home improvement retailer Home Depot Inc. said on Thursday it will only buy wood products from suppliers committed to environmentally friendly logging and lumber practices. The move expands a policy adopted by the largest U.S. lumber retailer in 1999 to quit selling wood from endangered forests. Home Depot hopes to use its purchasing power to encourage wood suppliers to follow good forestry practices, said Ron Jarvis, vice president of merchandising for lumber and building materials. "It's an important message to send," he said. The retailer sells about S5 billion of wood products each year, accounting for about 9 percent of its annual revenues. Since 1999, Home Depot has bought more certified wood products and reduced sales of lumber from areas with questionable forestry practices, it said in a report prepared for environmental and government groups. The number of vendors providing Home Depot with products certified by an accrediting group, the Forest Stewardship Council, has grown to 40 in 2002 from five in 1999. The Atlanta-based company's purchases of such products soared to over \$200 million last year from \$20 million in 1999. Moreover, Home Depot said, nearly all of the cedar it now buys comes from second and third-generation forests instead of older forests that are most at risk of extinction. It has also cut purchases of Indonesian lauan wood by 70 percent, reflecting concerns about illegal logging in the Asian nation. "We're really impressed with the forward steps Home Depot has taken on its responsible wood supply," said Jennifer Krill of the Rainforest Action Network, a San Francisco group that held protests at Home Depot stores a few years ago in a bid to force it to stop selling wood from endangered forests. (Thursday January 2, 2003 By Karen Jacobs )

# Volunteer for Nature

"Together, Federation of Ontario Naturalists (FON) and the Nature Conservancy of Canada (NCC) Ontario Region are creating new conservation volunteering opportunities in Ontario through their Volunteer for Nature (VfN) program. The goal of the program is to provide people with opportunities to work outdoors, enjoy being part of a team, learn new skills, and participate in hands-on conservation projects in Ontario's spectacular natural places." For more information on the Volunteer for Nature program visit the Federation of Ontario Naturalists website at www.ontarionature.org

# Introducing COTERC's computer-based learning programs! by Josh Feltham

When you consider the name Canadian Organization for Tropical Education and Rainforest Conservation, education is almost our middle name. New curriculum in Ontario schools and specific Ministry of Education criteria for teachers has made it easier for COTERC to provide valuable learning resources for teachers. By following the guidelines published by the Ministry of Education, COTERC has prepared computer-based lessons that meet curriculum expectations. Teachers that use these lessons and the accompanying activity sheets will reduce their prep time while still ensuring that curriculum expectations are met. All lessons are self guided tours so students can work through the information independently or in groups without the need for teacher supervision. Three lessons targeting three different grades have been prepared to date. All lessons are available on CD-ROM and they are both PC and Macintosh compatible.

Rainforest Expedition – Grade Two - This program introduces children to some of the fascinating animals of the rainforest. While looking at slides of mammals, birds, amphibians, reptiles, and insects, students will learn about the amazing lives of these creatures. Students will learn about the differences between different types of animals and how they meet their needs for survival in the rainforest and they will learn about the cycles of life in the rainforest and changes that occur on a seasonal basis. Finally, students will also learn about how humans are affecting the lives of these animals.

The Web of Life – Grade Four - The interconnectedness of the natural world is the focus of this lesson. Children learn that their actions have a direct affect on the world around them. They also learn that the natural world has a direct affect on humans. People are a part of nature and the their activities affect the natural world positively and negatively. What students will come to understand is that when they damage the natural world they damage themselves and the lives of others.

Students will also have an opportunity to draw parallels with human activities in Canada.

A Delicate Balance – Grade Seven - Energy flow in ecosystems and the disruption of energy flow is what rainforest conservation is all about. Rainforests are incredibly productive ecosystems where most of the energy in the system is in the form of living organisms. Students will learn about the differences between this type of system and others where there is either very little energy or where most of the nutrients and potential is in a non-living form.

For more information or to order please contact COTERC: Phone: (905) 831-8809; Fax: (905) 831-4203; Email: coterc@interhop.net

# Off the Board

The Annual General Meeting will be held at Toronto Zoo on Saturday May 10th at 4:00pm after the Migratory Bird Day Event. The meeting will be held in the Atrium and everybody is invited. There will be a couple of vacancies on the Board of Directors and we would like you to consider joining the Board. We are in the process of restructuring COTERC and we have a lot of new and exciting ideas for the future . If you feel that you would like to become involved at the grass root level and would like to have a say in YOUR organization please send a letter or email to the COTERC office explaining why would like to be involved and what you can bring to the organization. These should reach us by May 1st.

Tropical Treat will be held at Toronto Zoo on Saturday October 18th. Tickets will be \$45.00 and are available now (a slight white lie). Last year the event was sold out and we had a waiting list for tickets. If you would like a ticket please contact the office, payment by cheque or credit card accepted. Our Auctions always have an array of really interesting items and it is thanks to the many people and companies who donate items. Please look around and see if you are able to donate something or pass along the name of a business or company that might help out.

The Spring is a time for yard sales, car washes, and BBQ's. If you would like to hold a fundraising event for COTERC we can provide information and support for the event.

# Toyota Earth Day Scholarship Program

#### CULTIVATING TOMORROW'S ENVIRONMENTAL LEADERS

Are you, or is someone you know, one of tomorrow's environmental leaders? The *Toyota Earth Day Scholarship Program* recognizes graduating high school students and Québec junior college students who have achieved academic excellence and distinguished themselves in environmental community service. Ten scholarships of \$5,000 each will be awarded across Canada. A national winner will also receive a Panasonic CF50 Toughbook<sup>TM</sup> notebook computer.

The Toyota Earth Day Scholarship Program is an important step in cultivating the environmental leadership of tomorrow.

Many young Canadians demonstrate their passion for the environment every day through the important work they accomplish in their communities. This dedicated group will develop to be tomorrow's environmental leaders. Toyota Canada and Earth Day Canada are pleased to announce a new scholarship program that celebrates and encourages environmentally-minded students. The *Toyota Earth Day Scholarship Program* recognizes graduating high school students and Québec junior college students who have achieved academic excellence and have distinguished themselves in environmental community service, and extracurricular and volunteer activities.

Increasingly, environmental issues are being tackled through multidisciplinary approaches. The *Toyota Earth Day Scholarship* is offered to students entering their first year of post-secondary studies in any chosen discipline – because future environmental leaders will come from a broad range of academic backgrounds.

The *Toyota Earth Day Scholarship Program* consists of 10 awards of \$5,000 each, to be applied directly towards tuition, books, room and board (where applicable), or other educational expenses in the first year of post-secondary full-time studies in Canada. Panels of community, business and environmental leaders will select two winners who best meet the selection criteria in each of five geographic regions: Atlantic Canada, Quebec, Ontario, Western Canada/Northwest Territories/Nunavut, and British Columbia/Yukon.

A national winner – selected from the 10 regional winners – will be awarded an additional Outstanding Environmental Achievement Award of a Panasonic CF50 Toughbook<sup>TM</sup> notebook computer at the National Award Ceremony in Toronto.

For more information and applications please visit <a href="www.earthday.ca/scholarship">www.earthday.ca/scholarship</a> or <a href="www.toyota.ca">www.toyota.ca</a> Applications must be postmarked no later than May 1, 2003.







### Mailbag

"Dear all:

I am pleased to inform you that the next week began the first Zoo Nutrition Course in Costa Rica, for diplomat students of the University of Costa Rica. This is the first time that one course in the zoo animals nutrition field is imparted in this country. This is a best news for our zoo, and for our region."

Sincerely,

Andrea Brenes S. Professor - Zoo Nutritionist Simon Bolivar Zoo Costa Rica

# **Photo Credits**

J. Feltham (Cover, Page 5, 7)

A. Cresswell (Page 2, 8, 16)

### **Shorts**

'Shorts' is about creative expression. In this column, we highlight short pieces of writing from our members. Send us your 'Shorts'!

# Canal to the Ocean Part I

Paulo bobbed and dipped, as if carried along by some unforeseen wind. His arms and legs outstretched like herons, which dry their wings when the midday sun is just reaching the inner layers of the canal. Relaxed, he drifted farther.

Mario hated when his father told Paulo those stories. Of course they were legends to the Mesquite, but Mario saw them as nothing more than stories created by the idle old men, who had long since given up fishing, or working on the plantations. He had suffered through the endless stories as a youth, and now his father was filling his oldest son's head with the legends of the *tortuga*. It wasn't so much that Mario resented the stories themselves, but the messages they were meant to convey. Sometimes men had to do things that they weren't proud of. The last thing Mario needed was his father condemning him to his son.

Baula held a special place in the mythical world of the Mesquite. Unlike the other sea turtles that frequent the beaches along the canal, the Leatherback was unique. Paulo sat staring at his grandfather, as if he held the answers to all of life's mysteries. He especially liked it when they would sit alone together under the spreading rancho after dark. The stars glittered not unlike when the sun catches the water a certain way in the dark blue of the Caribbean Ocean. Wrapped in the caring arms of the old man, gently rocking in the woven hammock his mother made, Paulo was treated to the stories that he had heard a dozen times.

Even the casual observer will notice that the Leatherback is different. Unlike the other turtles that return to beach each spring to lay their eggs, the Leatherback does so without the protection of a hard shell. Local Ticos will tell you that it is because they are favoured by the Creator, and are not in need of armour. Even with this knowledge, it little stops the men from eatching and killing the turtles.

# IN FROM THE FIELD



"A picture is worth a thousand words..." We don't want a thousand words, so send us your best shots. Think about it - when you travel, what is the first thing you do when you get home? No, not unpacking our less-thanfresh baggage, but rushing our rolls for developing. So, here is the challenge. We are looking for photos to use in upcoming editions of Raphia and other COTERC publications.

Prizes will be awarded in the following catagories:

- \* Best of show
- \* Runner-up
- \* Honourable mention

Rules and Regulations: 1) Members of the Governance Board are exempt. 2) COTERC cannot be held responsible for entries that are lost, damaged or delayed during transportation. 3) Winners will be selected by a panel of judges and notified on or before November 1, 2003. Winning photographs will be published in a forthcoming edition of Raphia. Winners agree to authorize COTERC to announce and publish their page and photograph in any forthcoming publish. and publish their name and photograph in any forthcoming publicity, without any claim for royalty rights. 4) Prizes must be accepted as awarded and has no cash equivalent. 5) By entering, entrants agree to abide by the contest rules and the decisions of the contest organization, which are final, and release COTERC and its affiliates, members and employees from any liability arising out of this contest or the awarding of prizes therein.

Maximum 2 entries per person. All material must be labeled with the entrant's name, address, e-mail, and phone number, and submitted along with a brief description of the image and where it was taken. Material must be received by September 1, 2003. Submit entries to: COTERC Photo Challenge, Box 335, Pickering, Ontario, L1V 2R6

There was a time, Paulo's grandfather recalled, when a family would only take the life of a turtle when there was nothing else to eat, which was unfathomable to Paulo given the bounty that the rainforest offers. Whether taken for the meat, the organs, or to be made into trinket for the increasing number of tourists, the result is still the same. Not even the eggs are safe, since, as Paulo learned, in Asia, turtle eggs were believed to be a traditional medicine for virility. Paulo's grandfather often says with a small wrinkle in his lip, that there must be many ugly women there.



Work is underway on the new dock at Caño Palma Biological Station.



Raphia is the official publication of the Canadian Organization for Tropical Education and Rainforest Conservation. The articles contained in Raphia express the opinions, observations, and views of their writers, and do not necessarily reflect the views of COTERC. All articles are copyright their respective authors, and may not be reprinted without the author's consent. While we welcome submissions, COTERC is not responsible for

unsolicited articles. *Raphia* reserves the right to refuse or edit any submission. Any inquiries should be addressed to COTERC phone (905) 831-8809 fax (905) 831-4203 Email: coterc@interhop.net