

# RAPHIA

WINTER 2008      Volume 17, Issue 1

## *Notes from the Chair*

I hope everyone had a wonderful Holiday Season, and a great year. 2007 was certainly busy for COTERC. Our "Spring Fling" was one of the most successful events we have ever undertaken, a new manager started working at Caño Palma, the sea turtle program stepped up a notch, we lost a major source in our funding with the closing of bingo, we partnered with Toronto Zoo and Ryerson University to develop an ecology course for the school in the community of San Francisco, and Fiesta Verde turned out to be one of the most successful fall events we have had in years.

So what's in store for 2008?

The directors are busy looking for methods to fill the loss of the bingo income. To do this, we have been keeping our webmaster busy to improve the website. It is looking great and soon we will be selling items online as a source of income. Thanks to Mr. Grant Crossman, we have been invited to represent COTERC at the Reptile and Aquatic Exhibitions. This is a great chance of stimulating many people with interest in rainforest wildlife. We are also taking on another "spring fling" project. We are working with Josh Feltham of Reptilia to have an Art Show for artists of natural his-

tory. We are starting a corporate sponsorship program as well.

If anyone has ideas to help us, please contact the COTERC office. Your support is more than welcome—it's necessary.

I will be going to Costa Rica in March to get my annual fix of Caño Palma. A group of people will be returning with me as will other COTERC members interested in seeing the myriad of diverse life observed around the station. Thanks to the donation from COTERC member Dr. Gordon King, there will be a new tandem kayak down there for people to observe wildlife in the canal. It is one more important tool to help us study the forest.

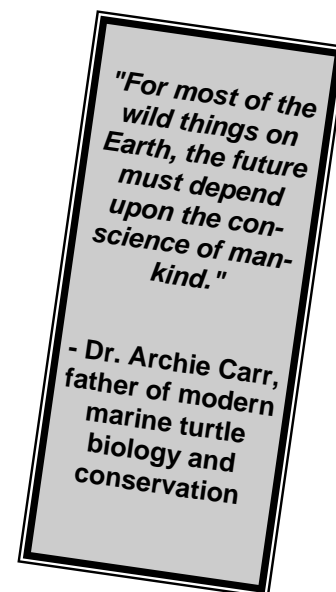
We have applied for two more interns from York University. One will be helping to develop an ecology teaching curriculum being developed and the other will be working on the sea turtle program. Another York student and ex-intern, Sami Abdelmalik has decided to work in San Francisco to help in the conservation of the area through education. We have also had a request from two sea turtle researchers in Costa Rica who have asked us to sponsor their research. For

\$4,800.00 plus room and board, we can cover their basic needs at Caño Palma. This would ensure another full year of data collection and protective measures taking place on the north Tortuguero Beach. We are actively searching for grants to do this, so again any ideas or help is welcome.

We have a lot of work ahead of this year. Keep in touch and we will make a difference.

COTERC Chair,

*Tom Mason*



## COTERC participates in Reptile Expo!

Grant Crossman, the organizer of The Ontario Reptile and Aquatics Expo, kindly organized for COTERC to be present at the most recent event on February 17. This expo allows individuals that have the same enthusiasm and passion for herpetoculture and aquaculture to gather in one location to share their experiences, their history and their concerns for the animals they all enjoy working with. Grant also arranged for vendors to provide items for a silent auction at the event. From the last two expos we have raised close to \$1,000.00!

The next event is scheduled for April 13, 2008, and will be held at the Capitol Banquet Centre at 6435 Dixie Road in Mississauga.

COTERC would like to thank all those exhibitors that donated items to help us raise funds for our work here and in Costa Rica.



### *Thank You*

COTERC would like to thank the following for their generous donations:

|                                |          |
|--------------------------------|----------|
| In Honour of Alexander Jagsch  | \$50.00  |
| In Honour of Christie Roberts  | \$50.00  |
| David Kitler                   | \$250.00 |
| Art Shannon and Kym Snarr      | \$450.00 |
| In Honour of Sam Perlmutar     | \$25.00  |
| In Honour of Jacqui Waddingham | \$120.00 |
| Catherine Mo via Canada Helps  | \$450.00 |
| Jim Taylor                     | \$200.00 |

Thank you so much for demonstrating your dedication to the research and conservation efforts in the tropics.

## Field Diaries...

**Field Diaries** is a series of logs that provide an insight into the daily life of Sami Abdelmalik, a former researcher at Caño Palma Biological Station who worked on the ongoing Sea Turtle Conservation project. This personable series allows readers to get a sense of what it is like to venture out into the depths of the Costa Rican coastal rainforest with the intent to enlighten and even inspire participation in the collaborative conservation effort.

### Log 10: A Suitcase on Sand

Guess what I saw today? The elusive ***Chelonia mydas***, commonly known as the green sea turtle. Fully exposed and out of its element, yet still dignified in its shell. My first sighting ever! It all started with a walk on the beach. Mind you, this wasn't a nonchalant walk. It was midnight, pitch-black and on a beach that paralleled the coastal jungle. As eerie as it was, this was the best time for spotting nesting sea turtles, which only come out of the sea and onto the beach under the cover of darkness.

I was walking with a volunteer that came to join the research projects, and at exactly 1:30am, we came across a fresh set of tracks that started at the edge of the sea. As soon as we saw the tracks, we paused for a second and looked at each other as if to sign, "this could be it". Of course, we knew there was a good possibility that the tracks were old and that perhaps the turtle was long gone. Nevertheless, after a moment of anticipation, I followed my flashlight beam up the beach from the shoreline and to the edge of the vegetation. "Oh my! Wow, I can't believe it! It's a real-live sea turtle." I was in complete and utter shock.

The ancient reptile was much bigger than I imagined. It, or more precisely "she", was looking straight at me with glassy-black olive-shaped eyes. I am sure the turtle was probably just as shocked to see us as we were to see her. I stood motionless and stared with fascination. Witnessing this first-hand really brought 136 kg of shell, muscle, and fat into perspective. Having swam in the world's oceans for millions of years, this an-

cient ocean dweller opened her beak-like mouth with such turtle poise, I anticipated a loud screeching sound just like the ones the dinosaurs make in the movies. This was definitely a turtle too big to fit in any fish tank. She was thick, wide, and bulky, and could be described as a suitcase on sand—certainly not built for the encumbrances of life on terra firma. With a hydrodynamic physique, comprising of an upper carapace, a lower plastron, and powered by rigid paddle-like flippers, I can imagine how this mammoth could glide effortlessly in the water.

**FAST FACT:** Habitually ocean dwellers, sea turtles are agile swimmers, but on land they are cumbersome.

*(Continued on page 4)*



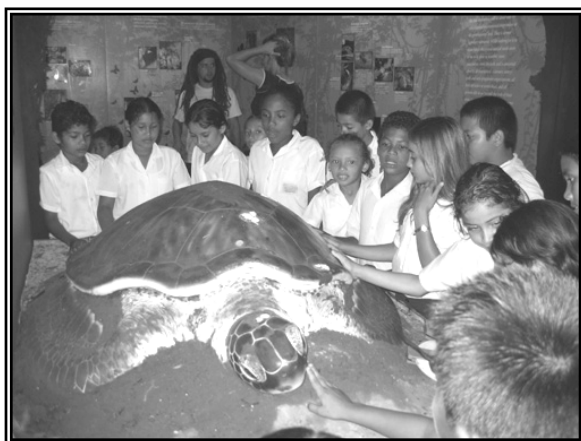
**Go online to view a short documentary film** featuring the trials and tribulations of the ancient sea turtles of Tortuguero, Costa Rica.

[www.gateway2nature.com/html/motion\\_pictures.html](http://www.gateway2nature.com/html/motion_pictures.html)

## Field Diaries, cont'd

(Continued from page 3)

Eventually, I collected myself and realized the intent of the turtle. She was nesting and in the process of concealing her eggs after having dug a three foot deep pit and depositing her eggs. I think it's a funny start to life, having to bury your young alive and then leaving them to re-emerge from layers of sand. They really are on their own and have to fend for themselves from the moment they are born. Surpassing the ordinary, with instincts as their only ally, the hatchlings face not only terrestrial but also aquatic predators.



Curious students examine a turtle replica displayed at the CCC museum.

PHOTO: SAMI ABDELMALIK

We walked off, leaving the turtle in the comfort of darkness. We didn't see anything else in the 3.5 miles, but the image of the ancient sea turtle resonated in my mind. What a remarkable experience. Although by the end, even with a starlit sky, the rest of the night still seemed dramatic. With the looming lighting that flickered in the horizon over the ocean, the suspicion of

unrevealed shadows, and the randomness of unfamiliar sounds, my legs hurried to get back to home-base after shivers rippled through my spine.

### Log 11: School Trip

Another week has passed and the sea turtle conservation project is advancing exponentially. This week, for the weekly environmental class, we took the local elementary school students on a

field-trip to the Caribbean Conservation Corporation's (CCC) Biological Field Station. CCC was an ideal choice for a class trip aimed to enhance the children's environmental awareness, as it is a non-profit organization dedicated to the conservation of marine and coastal wildlife through research, education, advocacy and protection of natural areas.

One of the local hotels agreed to donate two boats in order to take the students across the river to the CCC, which was about a 20-minute boat ride from the school. Upon arrival, the students got to watch a video on the history of the CCC and then received a talk from the resident biologist about the research conducted. The research includes tagging the turtles with ID numbers in order to track their movement, counting the number of eggs found in individual turtle nests, noting hatchling success rate, conducting size measurements on adult turtles, and counting tracks to see how many turtles are coming out in one season. Learning beyond the walls of the classroom gave the students an opportunity to connect, engage, and develop a better understanding of the vast environmental issues that encompass their community. The field-trip was well received by all the students and they were delighted to receive snacks courtesy of the CCC, which brought the field visit to a great end.

For a living planet,

*Sami Abdelmalik*

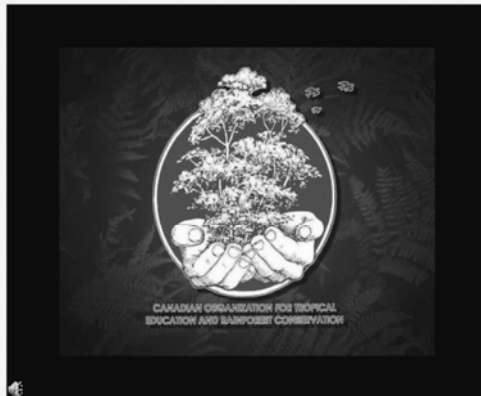
# SAVE AN ACRE

Support a unique strategy to establish a wildlife reserve. You can Save an Acre by buying an acre. Habitat destruction is the greatest threat to wildlife today.

We are a registered Canadian non-profit charitable organization (#890096183 RR0001) which is establishing a wildlife reserve in the Atlantic Lowland Tropical Rainforest of Costa Rica. We currently own 100 acres on which the Cano Palma Biological Station is located. The properties nearby are being bought up for use as lodges and farms; trees are being cut down to clear the way to build cabins and other buildings, thus destroying the habitat of many species of animals.

The Save an Acre Project is very special, dedicated to promoting conservation through the acquisition, protection and sustainable use of threatened habitat.

One hundred percent of your contribution goes directly to the land trust to buy land for the wildlife reserve. The money is held in trust until we reach our goal of \$450,000 to purchase land presently available



Help us to save this precious piece of our planet!  
Each acre costs \$450.  
You will receive an Acreage Certificate acknowledging your participation in the land trust

YES, I want to Save an Acre by contributing towards the cost of \_\_\_\_\_ acre(s) at \$450, for a total of \$ \_\_\_\_\_ OR 1/2 acre at \$225 \_\_\_\_\_ OR 1/4 acre at \$120 \_\_\_\_\_  
Other amount \$ \_\_\_\_\_

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ Province/State \_\_\_\_\_

Postal Code \_\_\_\_\_ Phone \_\_\_\_\_

Email (optional) \_\_\_\_\_

Tax receipts are available on request. Please mail to COTERC office Box 335, Pickering, Ontario L1V 2R6, Canada info@coterc.org www.coterc.org

## ***Euchre night is a success!***

Our Euchre event on February 19 was a great success raising \$1,870! Here are the results:

High Score Male: Gary Murakami

High Score Female: Lorieann Broadfoot

Most Honest Male: Jim Taylor

Most Honest Female: Bev Patterson

Most Lone Hands: Gary Murakami (5)

As is often the case with successful fundraising events, our recent Euchre Tournament was supported by many generous volunteers. The amazing chilli was provided by Kristen Chuffe, Amy Lathrop, Rocky Manserra and Brad Hubley. The ever popular Gary Murakami worked his magic at the bar, Barry and Colleen McKay provided invaluable front desk service for sales and registration, Tom and Fran supplied yummy buns and butter to accompany the chilli, Annette Simms and Jim Taylor captured the evening digitally, George Banovage persuaded many to part with their cash in exchange for Share the Wealth tickets, and June and Blue Enright held the whole evening together.

Thank you all so very much!



Our Euchre nights are our primary fundraising tool, so we cannot stress enough the importance of these events. See our notice for the next Euchre night to come out and have a great time while providing us with much needed support!

### **Who is Nobody** by Eric Bennis

My idea for **Who is Nobody** (a project at my school, Colonel J.E. Farewell) is to plant trees in the rainforest to make up for all the ones that have been cut down. To do this I searched for an organization to help with my idea. At first this was hard since all the organizations were so far away. That's when I found COTERC (Canadian Organization for Tropical Education and Rainforest Conservation).

I knew they could help since their location was Pickering Ontario! So I called the Executive Director (June Enright) and told her about my project and idea. I also said I needed a pin or pendant to stick on the **Nobody** doll. She sent me materials in a package that included: A COTERC pin, Membership forms, 3 Raphia issues (COTERC's newsletter) and much more!

Using one of the membership forms I decided to become a student for \$15.00. I paid my Dad from my allowance and he mailed a cheque to COTERC. I look forward to getting more people involved in the Organization and meeting some of the other members.

Thanks COTERC!

## **Notes on some of the little known heroes of the forest by Tom Mason**

Everybody has heard about jaguars and monkeys, but few people realize that it is the little creatures that make the rainforest what it is. Spiders, katydids, treehoppers, flies and ants (you can't forget ants) are the creatures that ensure that the forest runs smoothly. Vegetarian insects, such as the treehoppers and katydids, busily eat holes in leaves and flowers while hiding from all those other creatures that use them for the next meal. Mind you many types of katydids have widened their appetites. There is one species that has grown large spines on its legs that are used to entrap insects below it, so that it can then grab them and devour them alive. Others may just eat pollen from flowers. There are flies and beetles that devour dead organic matter to help reduce the material to a level where fungi and microbes can further create the nutrients that make the forest so green. And then there are the spiders. In many forests these are the most visible creatures in the forest. Each family shows itself with a specific shape and strength of their webs. Some build a new web each night, while others fill the spaces where the sun breaks through the canopy. On a first visit people believe that spiders are the most common animal of the forest, but in reality they are only just a small part of the ecosystem.

There are other creatures in the forest and each is a small piece of the puzzle. But surprisingly when it comes to animals, one type dominates the forests. They are the top predators and pollinators, move more soil than earthworms, disperse seeds and are the num-

ber one herbivore in South America: the ants. It is said that E. O. Wilson found 73 species in one tree. Ants create refuse piles that become a source of nutrients for living plants and a nursery for seedlings, and ensure that no species gets too numerous. The biomass of animals they consume is greater than all predaceous birds, mammals, reptiles and amphibians in the forest combined. A single colony of leaf-cutter ants can have 2.5 million individuals. When a colony of army ants moves into an area, all animals (including people) move or take cover. Nothing in the natural forest stands in their way. And yet there are beetles that have learned to trick them and use them as a source of food and protection, and there are large numbers of birds that follow the trails to take advantage of the small insects and other edible creatures that break cover when the ants move in. Even the people of the forest welcome the ants because they know that when they leave, most of the pest species such as roaches, spiders and scorpions have been cleaned out and will take time before they again become a problem.

So the next time you are watching a special on primates or see a magnificent jaguar in a zoo or on TV, or even if you are lucky enough to actually visit a living breathing rainforest, remember that it is the little creatures that actually make that forest tick and allows that beautiful creature you are watching to survive. It is one of those wonders that keeps me going back to see and learn just a little more.



Education Center

As part of your charitable giving strategy you will want to consider the tax implications to ensure that you structure your donations in the most cost-effective way. This article has been developed to provide assistance to charitable donors to ensure that their charitable giving strategy makes the best use of the incentives available in the Canadian tax system. This report will provide you with an overview of the tax implications of donating to your favourite charities, both in your lifetime and in your Will, so that you may increase the amount of taxes you save while providing generous support to the charity of your choice.

#### Annual Donation Limit Eligible for the Donation Tax Credit

| Type of donation   | Maximum donation creditable in year of donation   |
|--|---|
| Cash   | 75% of net income   |
| Capital Property (including Qualifying Capital Property) | 75% of net income + 25% of taxable capital gain realized on transfer of capital property to charitable organization |
| Certified Cultural and Ecological Properties             | 100% of net income  |
| Donations in year of death                               | 100% of net income + carryback to previous year with limit of 100% of net income of previous year                   |

- ◆ Donations of qualifying capital property can be done on a tax-free basis,
- ◆ Unused charitable donations can be carried forward for five years to offset taxes of those years, subject to the annual donation limits noted above,
- ◆ Spouses are allowed to combine charitable donations and claim them on one tax return, and
- ◆ Recently proposed legislation limits the availability of tax shelter donation arrangements.

This guide has been prepared to assist you in understanding the income tax consequences of making eligible donations as part of your charitable giving strategy. With a proper understanding of the tax consequences you can structure your charitable giving in the most cost-effective manner. How you structure your charitable giving strategy may significantly impact the amount you give.

For a more detailed analysis please see Canada Revenue Agency's Interpretation Bulletin 110R3 – Gifts and Official Donation Receipts at the following website

<http://www.cra-arc.gc.ca/E/pub/tp/it110r3/README.html>.



## Euchre Night!

Mark your calendars— Don't miss out—Book Early

Join us for a fun night at the Toronto Zoo and help us raise funds towards our important work !

Registration: 6:00pm

Games Start: 6:30pm

Toronto Zoo Atrium,  
361A Old Finch Road,  
Scarborough

**COST \$20.00**

**Includes**

- *Lots of Euchre Games*
- *Snacks*
- *Great Deserts, coffee & tea*
- *Prizes*



**Contact person:**  
**June Enright**  
**905-831-8809**



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**E-mail: [info@coterc.org](mailto:info@coterc.org)**

**For more information go to [www.coterc.org](http://www.coterc.org)**

## COSTA RICA PHONE NUMBER CHANGE

**As of March 20<sup>th</sup>, all phone numbers in Costa Rica will be changing to 8 digit dialing. An 8 needs to be added in front of all cell phone numbers and a 2 is added before all land lines.**

## THANK YOU ADRIAN!



Adrian just turned 6...but he's not your average 6-year-old! At his birthday party on February 16 he and the other kids had a grand time—and did their part to help the environment while doing so! Everyone who attended was invited to contribute to COTERC rather than buy him a present.

What an amazing idea! He helped raise approximately \$350.00 for COTERC, and these funds are greatly appreciated and needed. We all wish Adrian a happy 6<sup>th</sup> year!

## ***Baird's Tapir - The Large Mammals of Cano Palma***

*Written by Dr. Kimberley A Snarr, Director at Large*

Large mammals are important components in all forest ecosystems, playing critical roles in seed dispersion and seed predation. In the lowland tropical wet forests of Caño Palma dwells the largest terrestrial mammal found in the Neotropics, commonly known as ‘**danto**’, the Spanish common name for the Baird’s tapir (*Tapirus bairdii*). This odd-toed ungulate weighs about 250 kg and is on average 5 meters long. With its large but streamlined body, it routinely lives and moves along paths it makes in the forest, solitary or with a single infant. It communicates through a range of whistles with varying pitch and duration. The tapir has a long fleshy prehensile nose which it uses to grab leaves and eats large quantities of fruits and leaves from the forest floor or aquatic vegetation where available. The browsing of the tapir allows understory brush to be thinned and this promotes healthy understory growth. The males have small home ranges of about 1 km<sup>2</sup> whereas the females have larger ranges. While active at dusk and dawn, they can be seen during the day, seeking water to rest in and cool themselves.

Tapirs are considered important as ‘seed dispersers’ due to the fact that they eat fruit with seeds, then they move through the forest, passing the seeds from their digestive system, allowing the seeds to be distributed. Seed dispersion is an important ecological service provided to the overall forest health by the tapir. Without its browsing, subsequent thinning, and seed dispersion, the forest health and biodiversity can suffer.

The Baird’s tapir ranges in the highly fragmented forested areas of Central America and down into Western Columbia and Ecuador. It is classified by the IUCN as ‘Endangered’ with a population estimated at fewer than 5000 individuals. The natural

*Continued on next page...*



**Baird's tapir track image from the preliminary data of the Large Mammal Monitoring Project , showing the three toes of this odd-toed ungulate**

## *Baird's Tapir cont'd*

predators of the tapir are jaguars and pumas, whereas the current threats to their continued existence are habitat loss, habitat fragmentation, and hunting. With long gestation periods of 13 months that only produce one offspring, tapirs are slow reproducers. This, coupled with the current threats of habitat loss and fragmentation, illustrates how important it is to maintain tapir populations where appropriate habitat currently exists. The Baird's tapir is found in the forests at Caño Palma. The preliminary Large Mammal Monitoring Project has found clear evidence of the presence of the Baird's tapir, detected through tracks. As Caño Palma lies at the lower end of Barro Colorado Wildlife Refuge (BCWR), it acts as a wildlife conduit or corridor, allowing gene flow between BCWR and the southern Tortuguero National Park by providing suitable habitat without the presence of poachers.

Sources Alais, M., Lloyd, P. & Taylor, A. 2002. *Tapirus bairdii*. IUCN Red List of Threatened Species. Foerster C. R. & aughan, C. (2002) Home range, habitat use, and activity of Baird's Tapir in Costa Rica. *Biotropica* 34:423-437 Reid FA (1997) A field guide to the mammals of Central America and Southeast Mexico. Oxford University Press, New York Tapirs Specialist Group for the IUCN, <http://tapirs.org>

### DID YOU KNOW?

**This odd-toed ungulate weighs about 250 kg and is on average 5 meters long.**



## FIESTA VERDE NEEDS YOU!



Every fall we have our major fundraising event, Fiesta Verde (formerly known as Tropical Treat). This night requires much planning and organizing, for months leading up to the event. While we have a great team who is already eager to start planning, we still have a need for dedicated members to join the committee.

Do you like marketing? Logistics? Graphic design? Let us know what your specialty is, or if you would just like to help out!

If you can attend bi-weekly meetings and would like to help make Fiesta Verde an even BIGGER success than last year, we want to hear from you! Please contact Jen at [jencorris@hotmail.com](mailto:jencorris@hotmail.com) if you would like to join our committee. You will have a lot of fun, make new friends, and know that you are really making a difference in the success of COTERC.

RAPHIA IS THE OFFICIAL NEWSLETTER OF  
CANADIAN ORGANIZATION FOR TROPICAL  
EDUCATION & RAINFOREST CONSERVATION

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CANADIAN ORGANIZATION FOR TROPICAL  
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**Station Management Committee:** Josh Feltham

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## HELP US TO BE MORE ENVIRONMENTALLY FRIENDLY!

We are now able to offer an electronic version of Raphia, and we'd like to encourage as many of our readers as possible to receive our newsletter in PDF format.

If you are interested in receiving Raphia electronically, please forward your name and email address to [info@coterc.org](mailto:info@coterc.org) or contact the COTERC office at  
905-831-8809.



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