

Volume 23, Issue 4

FALL, 2014



CANADIAN ORGANIZATION FOR TROPICAL EDUCATION &
RAINFORREST CONSERVATION

RAPHIA

FIESTA VERDE IS COMING!

“Sharing Beauty – The Migratory Birds of Canada and Costa Rica”

We had to postpone Fiesta Verde, but it will now be held on November 8 in the Atrium of the Toronto Zoo. If you purchased tickets in May, they will be honoured at this event. BUT if you don't have tickets already, be sure to order yours NOW! You can order online at http://www.coterc.com/store/c1/Featured_Products.html Or contact info@coterc.org

Members pay \$75 for a single ticket, \$140 for two

Non-members pay \$80 or \$150 for two

- Cocktails at 6:00 p.m.
- Guest speaker, Ian Shanahan, Ornithologist
- Catered Latin-inspired dinner
- Skype with station manager Charlotte Foale
- Animal visit
- More surprises!
- Silent & Live Auction & other unique gifts

Don't miss out!



Notes From the Editor

Marilyn Cole

Over the summer the Board of Directors take a hiatus, but that doesn't mean that we stop working.

On August 12—14 the By-Laws committee consisting of Jim Taylor, Tom Mason, Marilyn Cole and former Board members Barry & Colette McKee met up at a farmhouse in Muskoka to review the former by-laws and put together a revised version, which will be submitted to the membership at the Annual General Meeting 2015. We believe that we have simplified the wording while still conforming to the rules laid down by the Government of Canada.



Tom Mason, Colette McKee, Barry McKee, Marilyn Cole, Jim Taylor

We welcome a new volunteer, Julie Scott who has agreed to be the non-voting Recording Secretary at the Board of Directors meetings. Julie, a resident of Pickering, Ontario, commented

“I recently graduated from the University of Guelph with a Bachelor in Environmental Engineering, and I am currently working at an engineering consulting firm in Pickering. My passion is the environment and doing my best to help protect it. That is why I saw COTERC as a perfect fit for me. I look



forward to getting to know everyone and helping out in any way that I can.”

We also want to say “thank you” and “farewell” to Research Coordinator Elias Bader, as he prepares to depart from Caño Palma Biological Station to return home. Elias, thank you for all your hard work, and best of luck for the future!



New Members, Etc.

A big “WELCOME” to new member Chadwick Day, London, Ontario

And thank you to

Lauren Stewart for her donation

& Linden Cook for his monthly contribution

Thanks for your support!

COTERC receives no government funding and depends on your generosity to continue our work. Please consider making a donation. You can make a one-time donation or arrange for a monthly withdrawal easily through Canada Helps. Just go to their website

<https://www.canadahelps.org/en/donate/>

Click on “Find a Charity”

Type in COTERC and then follow the instructions.

Whether the amount is \$5 or whatever, your donation is greatly appreciated — and Canada Helps issues a tax receipt to you

COSTA RICA, A 'GREEN DEMOCRACY' WITH URGENT ENVIRONMENTAL CHALLENGES

by **Martin Mowforth**

Translated and adapted from an AFP report

Costa Rica enjoys a wide reputation as a 'green democracy', but the pressures of growth have increased its ecological debt over the last decade, presenting the new government with an urgent challenge.

The almost 2½ million tourists who visit the country each year marvel at the beauty of its parks and natural reserves which cover 25% of the national territory and in which is conserved a rich biodiversity. Costa Rica is the only country in the Americas and one of the few in the world to have banned hunting for sport; and it has managed to remain free of open cast mining and of oil exploration and exploitation.

But the paradise beaches, beautiful forests and dormant volcanoes hide problems about which experts have warned us for some time: namely, the deficient administration of the protected areas and a growing contamination of the air, soil and water sources, among others. Despite the problems, which are considered serious by ecologists, the issue was practically absent from the debates in which the presidential candidates took place earlier this year.

The three major candidates in the first round of voting – Johnny Araya of the governing right wing National Liberation Party, José-María Villalta of the leftist Broad Front and Luis Guillermo Solís of the centrist Citizen Action Party – all have similar perspectives on the problem:

- to declare access to water a human right and to include it in the Constitution;
- to change the mix of urban transport with a view to reducing the use of fossil fuels;
- to maintain the moratorium on open cast mining or to prohibit it in perpetuity by law;
- to strengthen the protected areas by establishing the State's obligation to provide appropriate resources for their maintenance;
- to promote policies which will prevent and sanction illegal timber extraction.

Environmentalists, however, bemoan the lack of specifics in these proposals and the absence of definite commitment of any of the candidates to treat these issues as a matter of urgency. Randall Arauz (of the Recovery Programme of Marine Turtles, Pretoma) stated, "We are concerned about the lack of definite programmes on the part of any of the candidates and about their ignorance on environmental issues in general, especially those relating to marine conservation."

The 2013 State of the Nation, a prestigious annual report by the public universities, warns that "in the last decade the country has increased its ecological debt from 3% in 2002 to 11 % in 2012" which means that "each Costa Rican consumed on average 11% more than the land's capacity." The report also warns that over 96% of grey waters are discharged into the rivers without any treatment, converting the fluvial network into a system of open sewers.

Ecologists have particularly denounced the huge pineapple plantations – Costa Rica is the world's largest pineapple exporting country – which are causing agro-chemical contamination and serious environmental imbalances in various parts of the country. Organisations like Pretoma confirm that Costa Rica seems to have turned its back on the sea, allowing all kinds of irrational exploitation of marine resources and contamination of the coastline.

Continued on Page 4

SITTING DOWN WITH INTERNS AMANDA AND KELLY

Since 2004, COTERC at Caño Palma has developed a partnership with the York International Internship Program (YIIP) at York University in Toronto, Canada, providing three possible internships: turtle monitoring, large mammal monitoring, and community development. Here, we chat with this year's large mammal monitoring and turtle monitoring interns, Amanda and Kelly, about their experience and life in paradise thus far. To add some context: Amanda is an International Development Studies major, who enjoys playing the ukulele and is crazy about macaws. Kelly is an International Studies & Philosophy double-major, who gets excited reading recipes and thinks thunderstorms in the jungle are wonderful.

What aspects of the internship at COTERC stood out to you when applying to the York International Internship Program?

A: This was my first time hearing about the York International Internship Program (YIIP), which was recommended to me by a friend. I scrolled through each internship listing and description that ranged from all over the world, but immediately COTERC's posting captivated me. Words of sea turtle conservation, mammals tracking, Costa Rican jungle, and the time length of 3 months attracted me. The only barrier and limitation I felt was not having a scientific background, as a portion of the description was highlighting scientific research and data collection for long term projects. Regardless, my application to COTERC through YIIP was the only position I applied for. Since being here I've learned that my interest for such work has evolved into a passion, and that this is exact direction that I want to be headed in, in

terms of being surrounded by wild life, nature, and furthering my practical knowledge of conservation.

K: For three consecutive years, I've had my eye set on applying for an internship through the York International Internship Program (YIIP) and specifically to work on a project in New Zealand focused on sustainability. The internship with COTERC had also caught my eye (who wouldn't think monitoring sea turtles is an awesome experience?) but I had ruled it out due to insecurities on my area of study, inability to communicate in Spanish and lack of field experience. When the time finally arrived to apply for YIIP, I was devastated to find out that New Zealand was no longer in partnership with the program. Luckily, my friend and fellow applicant convinced me to look beyond my set expectations and to just "try". Well, the rest is history!



How did you prep for the internship? What was the "adjustment period" like? What were some challenges and expectations met?

A: Before arriving, I read through past YIIP intern blogs who wrote about their experiences which I found extremely insightful. They provided positive and negative personal experiences about being at the station and being involved in the projects, while describing the environment and adjustments to the extreme weather conditions. I also explored COTERC's website and read through the long term research goals, projects, and surveys that were being initiated at the station, while staying updated by the Caño Palma Facebook page.

Continued on Page 6

Continued from Page 3

The most serious problem, however, and the most difficult to combat, is the generation of greenhouse gases which in the last decade rose by 43.2%, due principally to the rapid growth in car use, according to the State of the Nation report. "The atmosphere is already too contaminated and governments have permitted this lack of control", said Luis Diego Marín, coordinator of the PreservePlanet organisation. According to Marín, conservation areas are also suffering growing deterioration because the State is not providing the resources required for their maintenance.

Social conflict related to environmental issues has risen and has even included violence. Last year, the assassination of Jairo Mora, a young ecologist who was protecting marine turtles in the Caribbean, shook the country. "Jairo vive" shout environmentalists in their demands for justice and protection, not just for natural resources but also for those who work in conservation.

*Reprinted by permission from ENCA newsletter
August 2014*

PROFILES OF NEW BOARD MEMBERS

Patricia Davidson lives in Barrie, and now that she is on maternity leave from Ontario Parks, she contacted COTERC to see if she could be a good fit for the vacant position of Director of Education.



Patricia has an eclectic background that makes her eminently suitable for this position. A graduate of Oxford Brookes University, she has done research with gorillas and chimpanzees, has worked as a wildlife rehabilitator and educator and most recently created the piping plover project for Wasaga Beach Provincial Park.

She is currently developing a plan to move forward with environmental education in schools, as well as relevant events, within the Province of Ontario

Nancy Cox is COTERC's new Director of Special Events.

Nancy has a background in project management who enjoys using her skills to organize entertaining events for fundraising and the enjoyment of many.

She has worked in the field of financial services for many years engaging colleagues with employee giving and inclusion through diversity.

She lives in Pickering with her husband and two 20-something kids and a very excitable German Shepherd.

"I'm an avid gardener, a voracious reader and in my spare time I volunteer at the Toronto Zoo, Junior Achievement and the New Friends Book Shop".

No doubt, COTERC will benefit greatly from Nancy's skill set and she has taken on the job of organizing Fiesta Verde.

Welcome, Patricia & Nancy!

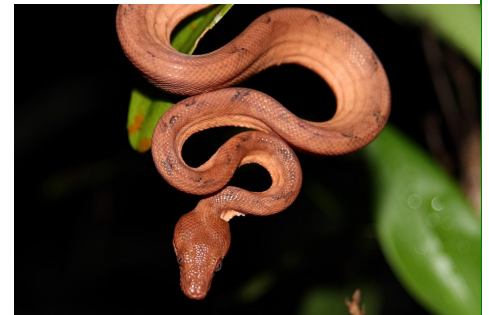
In August Director of Conservation & Research Dr. Kimberley Snarr brought a group of students from Laurentian University to study at Caño Palma Biological Station. They enjoyed their time very much, while earning a credit towards their degree.



From left to right Sarah Williams, Dr. Kimberley Snarr, Alec Martin, Celeste Carpentier

DID YOU KNOW

The annulated tree boa (*corallus annulatus*) is a non-venomous boa constrictor found in Central & South America. Three sub-species are currently recognized. The colour pattern consists of a brownish-red



colour overlaid with blackish rings.

The annulated tree boa is long, slightly flattened laterally, with a thin body and large head. Their elongated anterior teeth can penetrate layers or feathers to get a good grip on their primary prey, birds.

They are nocturnal and, besides birds, they feed on a variety of arboreal vertebrates. They spend most of their time in trees and are often observed on branches overhanging slow-moving bodies of water, such as Caño Palma, and thus are often found on the night snake surveys.

Corallus annulatus is considered to be uncommon and therefore infrequently observed in the wild, generally speaking.

Interns Amanda & Kelly Continued from Page 4

When I first arrived, Charlotte, the station manager, was very welcoming as she introduced us to our new home for the next 3 months and provided us with health and safety information along with other tips needed to make our experience as comfortable as possible. One of the pressures and stresses I felt was knowing that I was surrounded by biologists and scientists, and I had no scientific background.

It took about a week for me to adjust to the patterns of the station, as it was really difficult to shut down my brain from excitement. The sounds of the frogs, birds, insects, and howler monkeys replaced the sounds of car horns, T.V., cell phone rings, and other urban noise. Meeting new people and learning about the projects, being introduced to a minimalist living situation and the dynamics of communal living was all very overwhelming. I found myself lying in a bottom bunk with a mosquito net thinking of the surrealism of being in such a reality, in the middle of the Costa Rican jungle, actively being involved in sea turtle conservation and mammal surveys. After about a proper week of not sleeping, training, and walking, my body and mind trained itself to sleep when it was needed (although I'd rather never sleep).

K: I would say preparation work started once I heard that I would have an interview for the position. It was about a week's notice and I remember being so excited that I stayed up past midnight exploring COTERC's website and watching all the informative videos. As Amanda mentioned, reading blogs from previous York interns was also a huge help in constructing my expectations of the station. Through the administration of YIIP, we were connected via email to the interns from the previous year. We were lucky to have three open, informative, and friendly individuals who patiently and thoroughly answered all of our questions. And, the bottom-line conclusion was: it is an experience of a lifetime!

Despite all that prep work, the reality is: you can only do so much... and there comes a point where you just have to adapt once you arrive. I would categorize three interconnected challenges: (1) social: understanding the dynamics and being aware of individuality within a community where your private (work) life barely separates from your public life; (2) physical: getting used to walking the uneven surfaces on the beach...in the dark...late at night or at the crack of dawn; and, (3) spatial: being conscious of living in shared spaces including (most importantly) the proximity of wildlife (almost like being in a wildlife documentary or in some reality TV show). Thankfully, staff on base has been a huge help in getting us adjusted.

Did anything on this internship bring surprising experiences to you and surprise you about yourself?

A: I was definitely able to push limitations and boundaries that I set for myself in Canada. I found when being put in a situation that is completely out of the norm, we are open to making new norms or allowing ourselves to get accustomed to the norms that surround our environment (this of course isn't always the case). The more you allow yourself to let down walls of limitations and preconceptions, the more open you are and can achieve growth. I have never been in such a natural environment that incorporates working and learning about topics that I am genuinely interested in, so for me the learning experience has been positive as I am very receptive and eager to learn more. Pre- Caño Palma I was extremely uncomfortable being around snakes. Mid-way through my experience, I was given opportunities to be active in the processing of snakes while learning about the characteristics and behaviours of various species while the data was being collected. I have developed a respect for their beauty and potential danger. So many people evolve through the station facing fears and leave tolerating situations that were thought to be intolerable.



K: Through my past experiences, tolerance has been something I've developed and worked on to the point that I was surprised to find it challenging to keep my cool in many instances such as dealing with being wet and prune-y and participating in the "never-ending" combat against mold. Everyone wishes they had this, everyone wishes they did that...and everyone definitely has their bad days (yes, even in the jungle). This is where the capability to be flexible and adaptable comes in. As someone who enjoys baking and cooking and does it by following recipes to the dot, I learned to use what I have...even to the point of dealing with the lack of internet and creating my own recipes. There were definitely a few mishaps but it has given me a new sense of independence and accomplishment. Having taken so much from this internship, it's strange to think about what I've done to add to the community of Caño Palma. As much as it is common knowledge that food is the way to anyone's heart, I never thought I'd meet people who are that appreciative of any kind of baked goods or food in general.

It definitely has motivated me to continue my foodie passion and to put the station's toaster oven to use .

How would you describe a day-to-day life at the station?

In terms of scheduling there is a weekly routine of lunch that is deliciously prepared for us and served at 11:30am and dinner that is served at 5:00pm alongside daily station house keeping duties that everyone contributes to. There are Shore Bird surveys, Caiman Census, Herp walks, mammal walks, and the Conservation Club involved with the school in San Francisco that are scheduled throughout the week alongside regular daily Turtle Project morning census's and night patrols. Also many presentations, meetings, training sessions, and station activities are scheduled in. For example today Shore Bird surveys and Morning census took place at dawn; then brunch; the Laurentian Students who have been studying Medicinal Plant use within the area will present their findings; there will be a team photo; newbies will arrive and will be given an orientation and a Turtle Project presentation; then night patrol teams will leave to monitor the beach seeking turtle data, and the day will marvelously end when we feel protected under the mosquito net with our heads resting on our pillows wrapped in blankets with the rotating fan.

What are some of your favourite places at the station?

A: I really love being on the top level of the boat dock. There is a mini platform that overlooks the canal. Within 5 minutes you're bound to see some kind of lively force of nature—a caiman lurking in the vegetation, a basilisk lizard running across the water, or Great Green Macaw pairs squawking across the sky. I also enjoy the kitchen simply because I like eating and there are usually some tasty treats being made. I appreciate the good company of people hanging around the tables chatting, or attempting to work on projects while snacking on some baked goods.

K: Three words: Canal, jungle, kitchen. I will never forget the journey to the station in all its captivating glory...can you imagine a canal being your driveway? The amount of versatility in the canal brings a new moment every time whether it be spider monkeys, kayaking to Laguna Quatro or taking a lazy afternoon of drifting.



NEW SPECIES REPORTED FOR THE TORTUGUERO REGION

Research Coordinator Elias Bader recently reported the first recorded capture in the area of a snake species known as *coniophanes bipunctatus*. The two-spotted snake was found on the cerro on one of the night snake surveys.

According to the IUCN website, this snake is native to Belize; Costa Rica; Guatemala; Honduras; Mexico; Nicaragua and Panama. It is a species of Low Conservation Concern but “*There is only a single record from Costa Rica (Savage, 2002)*”, found in Heredia province, so Elias's sighting is significant.



Coniophanes bipunctatus is found in swampy areas of lowland tropical rainforest, is semi-aquatic and feeds on fishes and frogs.

It is a member of the family Colubridae and is the largest, most widely spread and diverse family of snakes.

NEW STUDENT REPS

Station Manager Charlotte Foale has reported the appointment of two new student reps. Jessica Sutton is from University of California, Santa Cruz, working on her Bachelor's degree in Ecology & Evolution. Melvyn Staff is from the University of Lausanne (UNIL) in Switzerland and is studying biology. They both served as interns previously and will now promote the station at their home universities with presentations to departments and groups there.

Continued from Page 7

Before your arrival you did not meet your roommate and fellow intern; how would you describe that dynamic?

A: I am so thankful and lucky to be paired with such a Mcgyver roommate and fellow YIIP mate. She is a baking wizard and one of the most positive people I've ever met. There have been some situations where I needed advice from someone, and naturally I opened up to her as she is very understanding and honest. This girl can make a room smile with her baking and infectious laugh.

K: I will never forget our conversation in San Jose leading up to the internship when we discussed what could potentially cause stress, how we dealt with stress and how we would like to be approached when stressed. We were very clear that we would probably get sick of each other but looking back at this talk that took place almost 3 months ago...it seems almost silly!! Amanda is a constant reminder of being appreciative of each moment and grasping every opportunity to learn. I'm very lucky to be able to share this experience with her.



How does this experience differ from other conservation projects that you have participated in the past?

A: At York I have been involved with some conservation based gatherings. I am involved in the Maloca community garden at York, where a group of us meet and plant vegetables, attend seeding workshops, or seed exchanges with staff and students around campus. Also, last year a classmate and I were able to start a club at the university where we discuss ideas with like-minded individuals and come up with ways to make our footprints more positive on the earth. Also, the group of people I surf with regularly host beach (lake) clean ups which I like to attend from time to time. This experience is different for me as I have never been completely immersed in conservation before and in such an environment where I am reminded every day of how important it is to keep areas such as this thriving. Here every action is

accounted for, which I will carry with me wherever I go.

K: There are so many ways to view sustainability and conservation. At home, I had the lens of these issues within the context of Toronto and specifically at York University. I participated in raising awareness on consumption through the environmental committees and clubs on campus as well as organizing a Fair Trade Fair to create an open dialogue within my community. However, all these experiences are incomparable to Caño Palma. For every action, there is an obvious and visible direct consequence whether it be incorporating a minimal impact method to data collection of the nesting sea turtles, reducing and reusing things (saving good plastics to create



furniture!!) to helping out at the Conservation Club with the children of San Francisco.

How does this experience relate to future plans?

A: At Caño Palma, I have been able to push my limits far beyond what I expected in terms of team work, leadership, communication, rainforest weather conditions, along with other physical and mental demands. Pre- Caño Palma I always knew that I wanted to be involved in conservation, I just wasn't sure which direction to go in. I now know that I want to incorporate marine conservation efforts as well as community based conservation efforts into my future in an environment similar to this (or exactly like it).

K: Besides it being a nice break from being in a classroom or the city, Caño Palma has definitely been my home and place of immense personal growth. As much as I am indecisive and constantly changing my aspirations, I know for certain that I enjoy working in such an environment. I definitely would like to take this affirming internship to develop further experiences in an interdisciplinary manner: a combination of conservation and the environment with gender and women studies.



RECIPES FROM CAÑO PALMA BIOLOGICAL STATION—ORDER FORM

If you have ever visited Caño Palma, you will want this souvenir, whether you can cook or not!! The divider pages feature colour photos of people, wildlife and station buildings, while the delicious recipes speak for themselves! Marilyn Cole gathered recipes from the cooks, staff and volunteers and compiled the best into this unique cookbook. The Hints and Definitions section feature suggestions that all volunteers need to know! You can order online at http://www.coterc.com/store/c1/Featured_Products.html or contact info@coterc.org Paypal or cheque

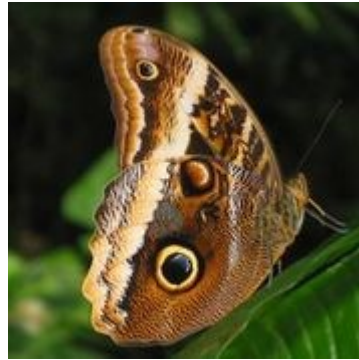
Recipes from Caño Palma Biological Station



**Canadian Organization for
Tropical Education &
Rainforest Conservation
(COTERC)**



Geoffroy's Spider Monkey



Owl Butterfly



Tamandua

Canadian Organization for Tropical Education and Rainforest Conservation

Membership Application Form

This is a request for: NEW Member: _____ Membership Renewal: _____ Date: _____
Membership Type: Individual\$30: _____ Student/Senior:\$25 _____ Family: \$40 _____ Corporate \$100 _____
 Surname: _____ Given Name: _____ Initial: _____

Email _____

As a member of COTERC a copy of our quarterly newsletter “*Raphia*” will be sent to your primary E-Mail address unless you check one of the following options.

- Do not E-Mail the newsletter to me. Please send a hard copy to my Mailing Address
- I do not wish to receive the “*Raphia*” newsletter

MAILING ADDRESS:

Street: _____ Apt: _____

Town/City: _____ Province/State: _____ Postal Code _____

Country: _____ Postal / ZIP Code: _____

Cheque, payable to COTERC	Credit Card	No. Expiry Date	Cash		
---------------------------------	----------------	------------------------	------	--	--

Please mail form to Box 335, Pickering, Ontario L1V 2R6, Canada or order online at <http://www.coterc.com/store/c5/Memberships.html>

ADVISORY COMMITTEE

Dr. Robert Murphy

Dr. Fiona Reid

Dr. Peter Silverman, Order of Ontario

Dr. Wm. Rapley

Raphia Editor & COTERC

Co-founder *Marilyn Cole*

BOARD OF DIRECTORS

Chair *Vacant*

Vice-Chair (Acting Chair)
Marilyn Cole

Finance
Scott Tell

Marketing
Darryl Swain

Membership & Archives
Jim Taylor

Education
Patricia Davidson

Site Services
Tom Mason

Conservation & Research
Dr. Kymberley Snarr

Director of Special Events
Nancy Cox

Director at Large
Susan Kunanec

Director at Large
Beverley Carter

Canadian Organization for
Tropical Education and
Rainforest Conservation
(COTERC)

Box 335
Pickering, Ontario L1V 2R6,
Canada
(905) 831-8809
info@coterc.org



We're on the Web!

www.coterc.com

Facebook—Canadian Organization
for Tropical Education and Rainforest
Conservation

Twitter @COTERC

CONTACT US AT
INFO@COTERC.ORG



WE WANT TO HEAR FROM YOU!

We welcome any comments or suggestions from our members so that we can be sure that you feel involved. If you have an idea for an article, or better yet, would like to write one yourself –if you have a photo or two that you think we could use — if you have a suggestion for improving Raphia, please do send it along to us at vice-chair@coterc.org

If you have a general comment about COTERC or Cano Palma Biological Station, please email info@coterc.org