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Volume 25, Issue 2/3

Spring/Summer 2016

of Tropical Education and

Migration & Migratory Birds

COTERC Panel Discussion



Why do birds migrate? COTERC's bird-migration forum on May 26th produced lively discussion on that topic and many more. Dr Weir set up the evening by answering the migration guestion: Birds migrate because the competition for food and nesting spots in the tropics is fierce. Our northern forests supply plenty of nest sites, and spring brings loads of insects on which the migrators can feed both themselves and their hatchlings. A northern summer also brings long days, giving the parents more hours to dine. With the additional nutrition, the female can produce more eggs.

But flying north presents plenty of risks, many human caused. Our keynote speaker, Dr Bridget Stutchbury, provided examples of species that have been declining at alarming rates — **annually** — for the last 30 years. For instance, the bobolink and the wood thrush have been declining at 2% per year while the olive-sided flycatcher has seen an astounding annual drop of 3.5%. Dr Stutchbury noted that such rates of decline can quickly produce endangered species.

There are many reasons for the declines. Dr Stutchbury focused on

(Left to right)

- •Dr. Kevin Kerr Curator of Birds and Invertebrates, Toronto Zoo
- •Michael Mesure Founder and Exec. Director of FLAP (Fatal Light Awareness Program)
- Dr. Jason Weir Ass't Prof of Biogeography – Univ of Toronto, Scarborough
- •Dr. Bridget Stutchbury Distinguished Research Prof. (Biology Dep't at York)
 Author Silence of the Songbirds.
- •Marilyn Cole Moderator

our habit of cutting down trees to farm and expand our cities. In much of North America, all that's left are forest fragments. That means bobolinks, thrushes, warblers and other migrators have fewer stopovers to refuel on their migration routes. And fragments are bad for nesting as food is less plentiful. As well, some species require a large territory.

Michael Mesure explained that his organization, FLAP, focuses on deaths caused by migrating birds colliding with urban buildings. These collisions result in over 25 million bird deaths annually in North America. FLAP works with corporations to establish programs that can reduce the carnage. They also rescue and rehabilitate any injured birds they find on their morning patrols. (Cont'd on Page 4)

NOTES FROM THE CHAIR

Marilyn Cole

After almost 25 years, I am stepping down from the Editor's post. I am very pleased to announce the appointment of Doug Durno, Director at Large, to the position of Editor of Raphia newsletter.

Though born in Toronto, Doug earned a B.Sc. at Louisiana State University. His work life was primarily in marketing at Coca-Cola, but his passion is long-distance bike riding, travelling around the world wherever it was possible to ride a bike. His most outstanding experience was spending 7½ months biking round the perimeter of Australia and he is in the process of writing a book about that experience. As a Toronto Zoo volunteer, Doug has written a multitude of fact sheets as well as articles for their newsletter, and during the past year has provided articles for our newsletter. And Doug has first-hand knowledge of Caño Palma Biological Station, having been a volunteer there.

I have no doubt that Doug will put his personal touch on future newsletters. Welcome, Doug!

In other news, the Annual General Meeting of COTERC was held on May 14 in the Atrium of the Toronto Zoo. As always, we are very grateful to the zoo for allowing us to use their facilities and I would like to thank all the members who took the time to attend.

The AGM took place later in the afternoon after volunteers Doug Durno, Daphne Paszterko, Jeremy Leath, Shelley Hutchinson and I took turns manning a booth in the Conservation Building of the Toronto Zoo to celebrate International Migratory Bird Day. Unfortunately, it poured rain and consequently there weren't as many visitors as we had anticipated. We shared the facilities with other like-minded "birdy" groups such as Fatal Light Awareness Program (FLAP), Bird Studies Canada, Ontario Nature, Zoo volunteers and others. This event is one of our projects under our Education mandate.

The guest speaker at the AGM was Kyla

Greenham, Curator of Conservation and Environment at the Toronto Zoo. She outlined the efforts that the Toronto Zoo was making in these two fields, including participation in 30 of the Species Survival Plans that incorporate cooperation amongst North American Zoos in breeding programs of endangered species, including the Black-Footed Ferret, Vancouver Island Marmot and Eastern Loggerhead Shrike. Many such animals are bred in captivity and released into the wild. In addition, Toronto Zoo participates in other initiatives such as The Frozen Zoo (a genetic bank used in reproductive research); conservation and habitat restoration with Frog Watch and Turtle Tally programs; and the recycling of cell phones to protect gorillas and their habitat.

At the AGM, each director reported on activities for the year, and this report has been sent in detail to COTERC members.

During 2015, the board made a decision to abolish membership fees. As many of the students who visit Caño Palma Biological Station don't have funds for such items, and since they would probably be very interested in receiving news about the station and COTERC, we decided that this was the best course of action. As a result, our membership list has increased considerably.

Tom Mason, Director at Large, announced his intention to not seek re-election. After many, many years as a board member in various capacities, Tom is moving further east in Ontario, and feels that he will not have time to attend board meetings. I would like personally to thank Tom for his many years of service and dedication, but I'm sure we haven't heard the last from him! Especially in ticket selling for our fundraising dinners!

We have some new faces on the COTERC Board as a result of the elections held:

Andrew Morris, Director of Finance, has an M.B.A., Honours B.Sc. and a B.F.A. He has an extensive background in finance and strategic planning, having previously worked for CIBC,

(Cont'd on Page 4)



(Cont'd from Page 2)

Bank of Montreal, and currently with Cooperators Group Limited. Andrew has also served on the board of the non-profit theatre company Shakespeare in Action.

Patrick Traynor, Director at Large, has an extensive background in media, in the fields of branding, marketing and advertising, having worked for History, National Geographic and BBC Canada Channels, as well as Pridevision, MTV Asia, Nickelodeon and others. Patrick is a highly innovative individual and, when I met with him recently, he was throwing out ideas left and right! No doubt he's going to be a huge asset to COTERC. And he has already visited Caño Palma Biological Station in the company of Dr. Nathan Lovejoy.

Bonny Shears is another new Director at Large. Bonny is profiled on Page 6.

The fourth elected Director at Large is *Doug Durno*, our new Raphia newsletter editor.

I am very excited to welcome these new faces to the board of directors, and look forward to working with them and the rest of the Board to further the mission of CO-TERC and to ensure its long-term future.

Costa Rica hosts more than 5% of the world's biodiversity though its landmass only takes up only .03% of the planet's surface.

Costa Rica has a population of 4.5 million and a life expectancy of almost 77 years, one of the highest in the world.

(Cont'd from Page 1)

Kevin Kerr outlined how zoos are attempting to save species like the eastern loggerhead shrike from extinction. The Toronto Zoo where Kevin works breeds shrikes in order to release them. Together with other facilities, over 600 young shrikes have been released so far. Through banding, it's been found that many have returned to Canada to breed. Referencing published research, Kevin said that at least 6 bird species have seen saved from extinction by reintroducing captive-bred birds to the wild.

How can you help bird-conservation efforts? Here's a few ideas our panelists offered:

- •**Ecotourism** By vacationing in places like Costa Rica and Nicaragua, you encourage habitat preservation so there's something to show visitors.
- •**Windows** Michael presented examples of what each of us can do to prevent birds from flying into windows. To see some ideas, go to http://lifehacker.com/5911467/how-to-stop-birds-from-flying-into-your-windows (scroll down).
- •Coffee Dr Stutchbury indicated that you can preserve the habitat of birds and butterflies by drinking shade-grown coffee. This saves trees from being cut down on coffee plantations.
- •Cats See the article on Page 5.

The Million \$\$\$\$ Question

As a final question, Susan Kunanec asked panel members what they would do if given a million dollars to save endangered bird species. Susan was expecting they'd use it for something specific to their own needs, something research oriented or educational. Rather, without hesitation, each panelist said they'd use the money to buy habitat.

It only makes sense. As the world's population grows, we cut down more and more forest and drain more and more wetlands to make way for more and more farms and urban sprawl. Study any bird species that is endangered to any degree and almost invariably you'll find that habitat destruction is one reason it's at risk.

Cats Are the #1 Cause of...

Dr Stutchbury highlighted recent research that shows the devastation that cats are unleashing on birds. In fact, cats are the #1 cause of human-related bird deaths. We hear all about birds colliding with buildings, vehicles and electrical wires. We like to blame wind turbines and the oil industry. But add them all up and they don't combine to equal the bird deaths caused by cats.

While not all cat owners allow their pet outside, plenty do. In Canada, it's estimated that cats kill between 200 and 300 million birds annually.



In the US, it's an astounding 2 to 3 billion birds. Cat owners will say that their cat might bring home the odd bird, but it doesn't happen often. However kitty cams attached to cats are showing that if your cat is outside, it's killing. It's instinct. The cams also show that cats only bring home 1 out of 4 birds that they kill.

Even more harmful than pet cats are feral cats that are outdoors all the time. Ferals number between 30 and 80 million in the US and 1 to 4 million in Canada. Though their numbers are smaller than household cats, they kill more birds. Yet we have groups that feed them and provide them shelter. Naturally, these ferals breed. These groups often take this problem seriously and neuter the ferals, believing that the feral colonies will eventually die off since there will be no offspring. But that isn't what happens. Numbers gathered by the Humane

Society show that about 50% of cats admitted to animal shelters in Canada were abandoned by their owners. So feral colonies will always have fresh cats coming in, often unneutered. Feral colonies will always be with us. It's as if the feral feeders are undoing one source of cruelty, the abandonment of cats, so that they can unleash another source of cruelty, the boundless killing of birds.

Can we do anything about this problem of outdoor cats that like nothing better than catching a juicy bird? Ultimately it's up to owners to keep their cats inside. But most will not even know their cat is contributing to the demise of entire bird species. And many believe that it's healthy for cats to roam the great outdoors.

But outdoor cats are hit by cars, get lost, catch diseases, gather ticks and other parasites, and get into fights. As a result, statistics show that outdoor cats have much shorter lives than those kept indoors - on average 5 years vs 17. If owners won't respond to the premature deaths of their beloved kitties, perhaps there's no hope to save the birds.



Green Turtle Nesting

Compared to 2013, nesting events for green sea turtles in 2014 were down about 50% on Playa Norte, the beach that fronts the hotels near the station. For 2015, numbers were anticipated to rise. This didn't happen. Instead we saw the lowest numbers in the 10 years of data collection at Caño Palma.

One contributing factor could be the El Niño episode of 2015/16. When combined with El Niño, global climate change can produce high sea levels and coastal erosion. More research is needed to confirm that this is what is happening.

It should also be noted that the failure of green turtles to nest in a specific location in a specific season is not necessarily an indication that the population is in decline. Data have to be analyzed over a longer period and on a larger geographical scale in order that the differences in the population trend can be fully understood.

<u>Predation</u> - When eggs are laid, the biggest problem inhibiting nest success has been predation by dogs. Research has shown that burying protective mesh above the egg chamber can be effective in restricting the dogs' access. In 2014, the Caño Palma team started experimenting with plastic mesh. Success was limited because the dogs could rip through the plastic.

In 2015, the plastic mesh was reinforced with bamboo shafts. But, since burying plastic mesh on a beach is an environmental concern, the team came up with a new design comprised of just bamboo shafts woven into a square. This mesh has been fairly successful with about 60% of predation attempts failing. Even if the dogs were partially successful in getting into the nest, the re-

maining eggs had a 73% chance of producing hatchlings. To find the optimum depth for mesh placement, experimentation is continuing.

Bonny Shears - Director at Large

There's nothing like the demands of the business

world to develop a broad range of skills. And Bonny Shears, a newly elected member of COTERC's Board, brings many years of experience in business development, marketing, sales and global strategy with her. As well, she has worked in many different cul-



tures from Brazil to Japan to England.

With a B.A. and teaching degree, Bonny is putting that training to work at the Toronto Zoo as a volunteer, working with kids and adults to pass on the value of conservation. That interest led her to COTERC where she's hoping to contribute by growing our sponsorships so that we can continue investing in research and educating the public on conservation. With her energy, enthusiasm and work background, Bonny is a valuable addition to our team.

Bonny also emphasizes that volunteering is a great way to give back to the community.



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)

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

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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 chair@coterc.org

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