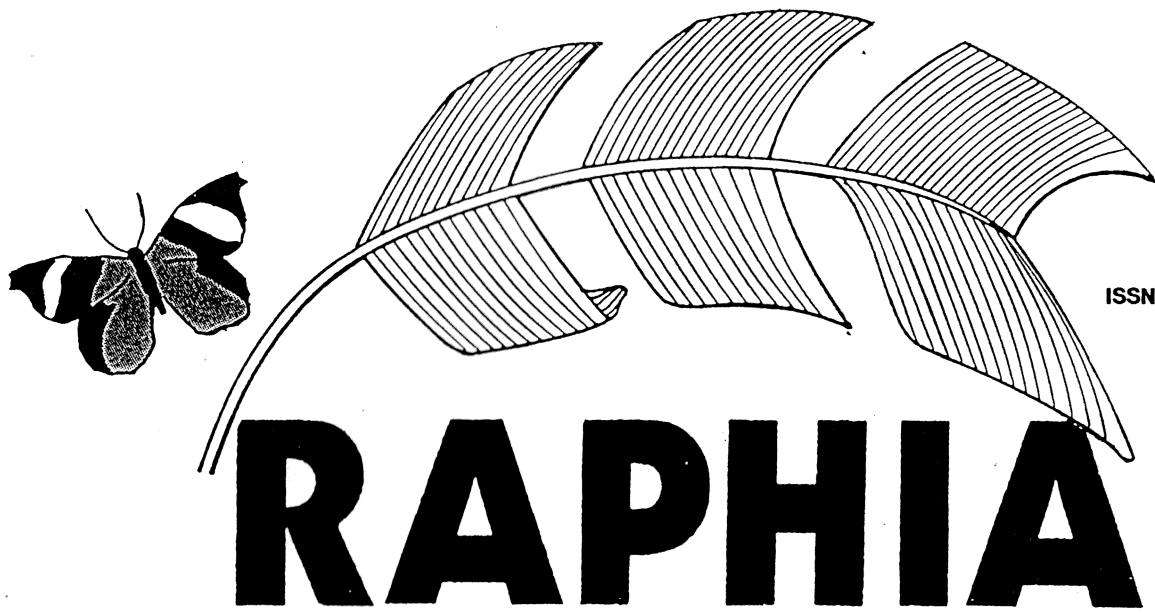


J-223-4  
C-2



ISSN 1188-2425

**The Canadian Organization for Tropical Education  
and Rainforest Conservation (COTERC)  
Newsletter.**  
**VOLUME 3, NUMBER 4, WINTER, 1994**

---

**"HELPING WILDLIFE. WHEN AND HOW MUCH?"**

When should humans intervene? One of the more difficult questions facing conservationists is whether and when humans should 'step in' and intensively manage the breeding of endangered species. And if they do decide to intervene, then to what extent should they modify the normal breeding system of the species? This is exactly the dilemma which has sparked a controversy over the Scarlet Macaw, (*Ara Macao*) here in Costa Rica.

The Scarlet Macaw is one of the Costa Rican's most colourful and most easily identified birds. Unfortunately, its populations are suffering from poaching activity. Nesting success is poor, as in some areas it is estimated that up to 70 % of the nests fail. A large portion of this nest failure is thought to be done by human poachers who climb trees and steal chicks from

nests. Why? People all over the world like to have Macaws as pets. But what should be done to help the bird? An end to poaching is an obvious answer. But until poachers can be stopped, researchers seek alternatives to help the birds.

Two plans to assist the Scarlet Macaw exist here in Costa Rica. One plan is to captive-breed them. The other is to build human-made nests in areas which are well protected.

#### *Captive Breeding*

This approach involves taking wild birds into captivity and starting a breeding program. The theory is that birds can be raised, protected and released into the wild. The idea is to help boost population numbers through direct, "hands on" management.

However, some researchers have concerns about this method. While a captive breeding program could possibly protect the birds, there are other potential problems. For example, how will the behaviour of captive raised birds be affected. That is, will human raised birds have the correct social and food foraging behaviour

when released into the wild? Other researchers worry about disease problems.(see "*President Releases Wildlife*" -p.5)

Proponents of captive breeding apparently believe that potential behaviour and disease problems can be managed and that they know enough about the genetic make-up of the population to manage against things like inbreeding. (In many cases inbreeding can decrease population "fitness", the health and reproductive viability of the population.)

#### *Human Made Nests*

The other approach to helping the birds which is being proposed involves building human made nests in an area which is protected from poachers. The theory is that these birds would then have increased nesting success since poachers will not be able to steal chicks from nests. A key question is whether the birds will use the nests.

While both ideas have been aggressively pursued here by two different groups, the human nest building approach seems to be receiving the most support.

#### **INTERNATIONAL DIRECTORY OF PRIMATOLOGY**

The Wisconsin Regional Primate Research Center has published the second edition of the directory.

Coverage includes detailed entries for major primate centres, laboratories, educational programs, etc.; listing of primates held in zoological gardens worldwide; professional primate societies and major information resources in the field.

The second edition is available for \$US23 outside the US. Orders sent to:

Primate Centre Library,  
University of  
Wisconsin,  
1220 Capitol Court,  
Madison,  
WI 53715-1299

A biologist from the Universidad Nacional is heading up a program which is building tubular nests using 2 metre long plastic pipe painted to resemble the holes in trees used by the birds for nests hung by wires from the canopy of the rainforest or tied to the

trees as high as 30 metres above the ground. Some 20 boxes or tubes will be hung in a Punta Leona private reserve (330 hectares) near the Carara Biological Reserve. With luck, the birds will do more nesting in the private reserve where their nests can be protected.

It is unclear how well the nest building project will do, but it appears that the government thinks this less invasive approach is the better idea under the present circumstances.

The question of how humans should help species is one of the more interesting controversies for conservation. In this case, each side has valid points, each also has the same ultimate goal of helping the Scarlet Macaw.

In this regard, a seminar directed at poachers, about the importance of conservation is being planned for next month. This work is perhaps as challenging as the work with the species themselves.

*Pat Opay*

## P L A S T I C S R E C Y C L I N G I N C O S T A R I C A

The Canadian Institute for Environmental Law & Policy sent Jack McInnis, President of Recycling Development Corporation to Costa Rica in May to analyze banana production processes, the use of pesticides, and the final disposal of plastic bags used on plantations on the Atlantic coast of Costa Rica.

In his report, *Management of Banana Plastic: Barriers & Opportunities*, Mr. McGinnis concluded that the recycling of banana plastics is feasible both technically and economically if there is full cooperation and participation on the part of all government officials and industry leaders in Costa Rica. There are significant markets within Costa Rica and other countries and the establishment of a viable banana plastics program can help Costa Rica to build a larger recycling industry for other solid wastes from cities and towns throughout the country.

Mr. McGinnis also recommended that an agreement be sought to use

the "ECO-O.K." or "Rainforest Alliance" logos for products which support the Banana Amigo Program.

## E X E C U T I V E D I R E C T O R ' S R E P O R T

*Marilyn Cole*

During the past few years there has been a steady growth in the number of tourists who find their way to Tortuguero village, the site of the famous sea turtle nesting beach and the closest village to Cano Palma Biological Station. Although tourism has brought much-needed money to the community, it has not been without a certain amount of difficulty. One important aspect is the accumulation of garbage generated by both tourists as well as townspeople; until recently there was no system for disposal and everything was either thrown into the ocean or canal, or else buried.

In early 1994, a recycling program, not dissimilar to our own in Canada was initiated by the village. Various bins have been placed in strategic positions, with signs in English and Spanish clearly marking which are for glass,

plastic, etc. On my last trip to the area in May, I noticed that the litter found around the village was decidedly less, and it was apparent that both villagers as well as tourists were participating in the recycling program. Thus, one area of pollution is being addressed in a positive manner.

Another area that greatly concerns me is the ever increasing numbers of small motorboats that roar up and down the rivers, including past Cano Palma Biological Station. The local inhabitants have always relied on the boats for their transportation to and from the village for supplies, etc. and cause only a minor problem. But with the influx of tourists, local hotels have felt it necessary to ferry their guests around to see the local sights. The increased number of motorboats cause both noise and gasoline pollution, and contribute to the decline in the very wildlife that these people have come to see. And recently night tours have been initiated so that the wildlife cannot escape even during their rest periods.

There has been a great deal of discussion amongst local guides about monitoring the

waterways, closely, and restricting their use for tours to those guides who live in the region. More and more we are seeing guides coming from as far away as Limon with their tourists. Quite apart from the pollution aspect, they contribute nothing to the local economy, and it is hoped that this situation can be rectified in the near future through the guides' own association.

On April 17, 1995 COTERC will be holding a monster bingo to raise funds to further our environmental conservation school programs in Ontario.

The bingo will be held at Ajax Bingo Country, 610 Monarch Ave., Ajax, Ont starting at 4 pm. Prizes totalling \$7500 are offered. We invite you and your friends to come out and support us on April 17th.

We are pleased to announce that Cano Palma Biological Station will be participating in the Audubon Society's Christmas Bird Count for the first time in 1994. We have recently received notification that we have been accepted to do this work. Indeed, the birds in Tortuguero have never been included in previous Counts,

and it is therefore a significant event in the ongoing development of the Station's Conservation activities.

1995 is fast approaching and with it the current Board of Directors' term will come to an end. We will be seeking nominations for directors in our next newsletter. Our membership is world-wide, but if you live in the general area of Toronto and feel that you may wish to contribute your time and effort, we invite you to consider running for a position. Or perhaps you may know of someone who is interested. Look for more information in the next newsletter.

*DO YOU WANT TO KNOW?*

*Pat Opay has written from Cano Palma that he and Daryl would welcome any questions from readers. If you have any questions that you would like them to answer, write to COTERC in Canada or to Pat and Daryl direct in Costa Rica.*

## CANO PALMA BIOLOGICAL STATION REPORTS

by Daryl Loth

Elke Meyfarth (a Canadian volunteer) spotted a margay while going to the outhouse one morning. Daryl spotted a heron which he could not find in the bird book. Is still trying to verify if it is something unusual or not. We have helped the Caribbean Conservation Corporation do some turtle tagging. We had their volunteer coordinator and tag coordinator out for lunch to the station and a person from the Bronx Zoo came to the station to take pictures of roots and stayed the night.

The new kitchen construction is well underway. Even getting quotations for materials and transport has been a major stumbling block. The phones have been nightmarish and prices have varied depending on who made the inquiry. Inflation has also affected verbal vs. actual prices. Two scary trips up Rio Suerte brought back 170 building blocks, ten bags of cement and a dozen sheets of fibreboard for the walls. The base will be a raised concrete pad, providing flood protection

for all but the worse cases (ones like July's of biblical proportions).

We had our first group of school kids out to the Station. One professor came with one class on a Saturday. We spent some time telling them about the Station and they also had a partial "class" (study materials that they brought along).

Chainsaw Arrived. Thanks to everyone. A huge pterocarpus officinalis fell across the canal and we had

to cut through it with an axe and a machete, to allow tourists visiting the station to pass.

I am buying soccer shoes to play with the locals on Sunday afternoons. The schoolteacher is willing to teach me Spanish in the morning and I will offer him English lessons in return.

## P R E S I D E N T RELEASES WILDLIFE

The president of Costa Rica released hundreds of turtles and caimans to commemorate National Wildlife Day in July. Over 1,000 turtles and 100 caimans had been raised in captivity in communities surrounding the Cano Negro Wildlife Reserve. There is an ongoing debate in the Costa Rican scientific community as to whether this is sound practice.

The Constitutional Chamber of Commerce has been deliberating whether to allow the Iguana Verde Foundation to capture 36 wild scarlet macaws for use in a breeding program that would eventually reintroduce the birds into the wild. The Foundation is headed by the world renown biologist Dagmar Werner

### SEND YOUR JOURNALS TO CANO PALMA

Pat and Daryl have asked if it might be possible to receive copies of Conservation Biology and related publications. Also "National Parks" has a recent issue with an ecotourism article on Costa Rica. If you have any of this material and are willing to donate it please send to :

Cano Palma Biological  
Station,  
SJO 1882,  
P.O. Box 025216  
Miami, Florida 33102-  
5216

but the plan is strongly opposed by Universidad Nacional biologist Chris Vaughan. The reintroduction plan has never been tried with macaws before. Opponents say reintroduction does not eliminate environmental degradation and that reintroduced animals may carry diseases unknown to the existing populations.

### GUIDES LEARN ENGLISH THROUGH NATURE

A training program funded by the RARE Centre for Tropical Conservation and administered by World Teach (a program that trains U.S. volunteers to teach English to elementary school students in Costa Rica) will train 15 nature guide trainees to speak English through classes in

natural history. The classes are being held outside the Monteverde Cloud Forest Reserve. The natural history class is taught in Spanish, but the students are required to ask questions in English. By the end of the program only English will be spoken. After two weeks in Monteverde, the group moves to the La Selva Biological Station in Puerto Viejo de Sarapiquí for two weeks. Two more programs are planned in the next two years.

### NEW NATIONAL PARKS WITH CANADIAN SUPPORT

Two national parks were recently announced in Costa Rica. Tenorio passed from being a 'protected zone' to National Park status. The 10,000 hectare park has a vast potential for energy development and hosts a number of rivers.

Arenal Park will be expanded by 12,000 hectares to include land that was once classified as "forest reserve" and "protected areas".

The Canadian Ambassador has pledged to fund infrastructure work on the parks, to provide for park rangers and visitor facilities.

### PRIMATE TALK -A DISCUSSION FORUM

The electronic mail server PRIMATE-Talk is an open forum for the discussion of primatology and related subjects. There are currently over 550 P-T members in 30 countries. Subjects include:- News items; meeting announcements; research issues; information requests; job notices; animal exchange information and book reviews.

Anyone with Internet, BITNET or UUCP addresses can communicate with P-T. Users of other networks should contact the Wisconsin Regional Primate Research Centre.

If you are interested in joining, send a message to: primate-talk-

*request@primate.wisc.edu*

### CARBON SEQUESTERING REACHES COSTA RICA

Costa Rica has recently signed an agreement with the United States that will bring "a huge influx of dollars while allowing for greater environmental protection". The agreement sets the framework for U.S. companies to offset carbon emissions with

#### GOOD NEWS !!!

We are excited to report that four Scarlet Macaws visited the station this past month. They are a very u n c o m m o n visitor.

*Daryl & Pat*

reforestation and plantation projects in Costa Rica.

With U.S. companies required to reduce emissions to 1990 levels by the year 2000, many businesses, especially utilities are looking to the deal as a way to allow them to exceed pollution limits but receive cost-effective credits for projects in the tropics. according to the Tico Times report, environmentalists were equally receptive to the agreement but acknowledged that there will be a need for rigorous monitoring of the deal.

Under the agreement, U.S. firms can approach the Ministry of Rural Development with funds to pay for tree planting. The firms do not need to plant native species or vary the variety planted. Local farmers will receive money for the planting and care of the trees. After a period of

15 to 25 years, the farmers can harvest the trees and keep the proceeds from the sale.

**STRONG'S APPROACH TO CARBON SEQUESTERING**

*Tico Times* (26/8/94) has reported Maurice Strong as stating that industrialized countries should be paying developing nations for the oxygen produced in their forests.

Strong reported that his company, Ontario Hydro, has backed away from previous plans for unilateral action on carbon sequestering. "My hope is that carbon sequestering will be used as a means to try to recognize, through the actual transfers of resources, the value of services the tropical rainforest actually performs for the world community and at the same time that it will help to preserve biodiversity" (by *only planting one species and non-native species?-ed. note*)

Strong stated that Ontario Hydro is interested in the subject of carbon sequestering and the company is moving towards "full cost accounting".

**OF THE 33 COUNTRIES WITH NET EXPORTS OF TROPICAL TIMBER IN 1987, ONLY 10 WILL HAVE TIMBER LEFT TO EXPORT IN THE YEAR 2000.**

**R A P H I A  
ARTWORK**

Joan Watson has been very generous in providing us with original art and is currently designing a T-shirt for the Cano Palma Biological Station. Joan is a graduate of the Ontario College of Art and now works at the Metro Toronto Zoo.



Spider Monkey

(*Ateles Geoffroyi*)

**CANADIAN ORGANIZATION FOR  
TROPICAL EDUCATION AND RAINFOREST CONSERVATION**

**MEMBERSHIP**

*YES, I want to join COTERC  
and support its efforts in the  
tropics. I'm enclosing my  
membership fee of :*

- Senior/Student*      \$ 15.00
- Individual*         \$ 25.00
- School Class*      \$ 25.00
- Family*              \$ 35.00
- International*     \$ 50.00
- Corporate*
- Membership*       \$100.00
- Donation\**         \_\_\_\_\_

**TOTAL** \_\_\_\_\_

\*tax deductible

**NAME:(PLEASE PRINT)** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_

**PROVINCE:** \_\_\_\_\_

\_\_\_\_\_

**SUPPORT COTERC- BUY A COTERC  
T-SHIRT**

**HIGH QUALITY 100% WHITE COTTON  
SHIRTS FEATURING OUR LOGO  
OF HANDS PROTECTING THE RAINFOREST  
(JADE COLOUR)**

*ONLY \$15.00 PLUS \$2.50 for postage and  
handling charges*

*I would like to order \_\_\_\_ COTERC shirts for  
\$15.00 plus \$2.50 postage each.*





# CANADIAN ORGANIZATION FOR TROPICAL EDUCATION AND RAINFOREST CONSERVATION

P.O. Box 335 Pickering, Ont. L1V 2R6 Canada TEL: (905) 683-2116 FAX: (416) 392-4979

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. The Canadian Organization for Tropical Education and Rainforest Conservation (COTERC), a non-profit organization, is establishing a wildlife reserve in the Atlantic Lowland Tropical Rainforest of Costa Rica.

The Save an Acre project is very special, dedicated to promoting conservation through the acquisition, protection and sustainable use of threatened habitat. For each acre purchased you will receive a certificate acknowledging your contribution to this private reserve, named YOLILLO. One hundred percent of your investment goes directly to the acquisition of the land for the reserve.

You are welcome to visit the area to see for yourself how your contribution is ensuring the protection of the rainforest. As a contributor, you have preferred rates to stay at Cano Palma Biological Station in the Yolillo Reserve.

Each acre costs \$125. Quarter acres are also available at \$35. COTERC is a federally registered charity #6908061-21 under the Income Tax Act of Canada.

## FOR MORE INFORMATION CONTACT:

**COTERC**  
Attention: Save an Acre Project  
Box 335  
Pickering, ON L1V 2R6  
Canada  
Phone: (905) 683-2116  
FAX: (416) 392-4979

**YES, I want to Save an Acre by buying**

\_\_\_\_\_ acre(s) at \$125

\_\_\_\_\_ quarter acre(s) at \$35

TOTAL: \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

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

Country \_\_\_\_\_

Phone (        ) \_\_\_\_\_

I understand that this land is to be administered by COTERC for the sole purpose of sustaining the Yolillo Reserve.

Signature \_\_\_\_\_

# SAVE AN ACRE

National Library of Canada  
Bibliothèque nationale du Canada



3 3286 50557 4414