

CANADIAN ORGANIZATION FOR TROPICAL EDUCATION AND RAINFOREST CONSERVATION (COTERC)

Position: Mammal Monitoring Technician

Number of Placements: 1

Location: Tortuguero, Costa Rica

Website: <http://coterc.org>

Field/Subject Area:

Open to all York students who meet the eligibility criteria

Position Description:

Caño Palma Biological Station lies at the southern tip of Barra Del Colorado Wildlife Refuge (BCWR) and north of Tortuguero National Park. The area is rich with mammal species, a number of them found there are listed as endangered. Over the past four years, a large mammal monitoring program was instituted to provide a baseline on current mammal species composition and abundance. Presently, thirty-five species have been accounted for, including Baird's tapir, the Central American spider monkey, jaguars and other smaller cats, and others which are on the Mammal Checklist. Major impacts to the mammal population are anthropogenic in nature, and include habitat loss and degradation, and poaching. Environmental education is critical to creating change in the area as it relates to reducing anthropogenic impacts.

The intern working under the direction of the COTERC station manager at the Caño Palma Biological Station will continue the established comparative transects used in the mammal monitoring program. The intern will work in coordination with the station manager and research coordinator to maintain the transects and with routine data collection for tracks on these transects. The intern will organise camera trap data, and assist in the collection of data on tent-making bats. They will also assist in the river-otter project, ongoing sea turtle conservation program and other programs where deemed necessary.

The intern will:

- Coordinate with the research coordinator, and station manager to assist in the maintenance and weekly monitoring of presence data following the mammal

monitoring program as the protocol dictates which includes a once a week data collection on each of 3 sites, on the rough muddy terrain research transects

- Assist with kayak-based, Neotropical river otter surveys, up to 3 times per week
- Transcribe the data into the established database, and/or assist the Research Coordinator in data revision, to ensure accuracy.
- Support and assist other interns under the direction of the research coordinator and station manager, and the volunteer partners with the sea turtle conservation and other research programs.
- If times permits, work with interns to help prepare environmental and science material for the local public school students with the permission of the public school teacher in the village of San Francisco.
- Develop outlines from his/her experience gained for future use in the region and make the course outline user friendly for future interns.
- Write a report on completion of the internship on his/her summer's work and suggest recommendations for improving the internship and educational programs.

From the three month study, the intern will develop a written report which is two-fold. First, the report will indicate what was accomplished during their stay as it relates to the current mammal monitoring studies in the Caño Palma area. And secondly, a critique of the current program and suggestions on how to collect data that would be usable in a scientific, statistical analysis needs to be part of the report. The report may include a plan of action if it is feasible, and any alternative ideas of a livelihood from poaching, or macro-level analysis for alternatives to the area supported by successful case studies and literature would be welcome. This report is expected within one month of return to Canada and is deliverable to the two contacts listed above.

Specific tasks will include:

- Working on developing a strong understanding of the mammal programs.
- Aiding in suggesting or developing a direction for future interns to aid the mammal programs based on their experiences in the program.
- Ensuring that each party involved shall be aware of their tasks and responsibilities and will have a complete understanding of why the projects are so important.
- Possibly helping to develop graphics, brochures and educational programs that can be used within the school system and local villages, to help deter anthropogenic impacts including habitat degradation, loss, and poaching, if times permits.
- Completing a written final report to note what work was done, and what is still required to ensure that the program is operational.

- Delivery of three written interim reports and images to use in public blog, social media and in newsletter, The Raphia.

Complete all tasks assigned, which includes but is not limited to the responsibilities outlined above.

Expected work hours:

Hours will be long with both engaging in night work on the beach and day work including walking a research lowland wet forest transect, talking to villagers, children, lodge owners and government agencies. Weekends are often spent working as well. It is difficult to be away from the station due to its remoteness. We work a typical Costa Rican 6 day week

Preferred start date: Late May

Qualifications/skills required:

- Capable of working in rustic, somewhat isolated conditions
- Physical ability to walk in wet muddy Neotropical forest conditions
- Good knowledge of tropical ecosystems/ecology
- Good organizational skills
- Good communication and public relations skills
- Practical knowledge of small water crafts (kayak/canoe)
- Basic computer skills and ability to use spreadsheets and other database programs
- Ability to work in an isolated area, and be pleasant and tolerant of others in team situations
- Basic certification in emergency first aid an asset
- Pre-reading on the local area, such as the works of Archie Carr, are useful, in gaining an understanding of the history of attitudes toward local wildlife.

Language requirements:

English; a sound knowledge of Spanish is important but not required.

Please note:

York interns pay a rate of \$225.00 US per week which includes accommodation and food. There are no banks in Tortuguero and so traveler's cheques are not accepted. All payments to the station must be in U.S. dollars. When arranging U.S. cash for your trip, be sure to ask your bank for clean crisp bills. Any bills with tears or writing on them will

be rejected. If you are nervous about carrying money, arrangements can be made to pay the amount at the COTERC office. There will be a \$15.00 transfer charge to do this.

Highlights of Organization/background information:

The Canadian Organization for Tropical Education and Rainforest Conservation (COTERC) is a registered Canadian and Costa Rican Charity that was formed in 1991. COTERC operates Cano Palma Biological Station, which is located north of Tortuguero in the Limon Province on the northeast Caribbean coast of Costa Rica.

The chief mandates of the organization are to provide leadership in conservation, education and research for the preservation of tropical rainforests. The goal is to extend efforts in Neotropical conservation to extend beyond the stations 40 hectares.

The mission of the Canadian Organization for Tropical Education and Rainforest Conservation is to provide leadership in education, research, conservation and the educated use of natural resources in the tropics.

Several projects are underway at the station, they include:

- The “Save an Acre” program, a fund expressly for the purchase of conservation through land purchase.
- Educational programs and support to local schools and universities in Costa Rica, Canada and abroad.
- A volunteer program which provides biology students and other interested parties an opportunity to live in a Neotropical rainforest and participate in the stations daily operations. Volunteers learn about biological studies and conservation efforts in the tropics. They also get personally involved in working on many aspects of conservation.
- This includes an ongoing inventory of the flora and fauna of the Tortuguero region, monitoring program for resident and migrating birds and shorebirds, large mammals, herpetology, plant phenology and sea turtles, and daily collection of meteorological data.

Cano Palma Biological Station is a small outpost on Cano Palma in the Barra Del Colorado

Wildlife Refuge. The station is situated in lowland flooded tropical wet forest and receives between six and seven meters of rain annually. It is considered one of the most bio diverse areas of Costa Rica. Cano Palma functions as a biological field station located in the rainforest. All visitors to Cano Palma arrive by boat. There are no roads in this area and all travel is done along a system of rivers and canals. Living facilities are

clean and comfortable but basic. Volunteers, researchers and students share a dormitory which can house 30 people.