CANADIAN ORGANIZATION FOR TROPICAL EDUCATION AND RAINFOREST CONSERVATION (COTERC)

Position: Research Assistant for a Marine Turtle Study for North Beach & Assistant to the Large Mammal Monitoring Study in the Caño Palma region

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:

Tortuguero Beach is known to be one of the largest nesting sites for green sea turtles in the world. For many years, research and conservation work has maintained a strong population of sea turtles nesting on the beach south of the mouth of the Tortuguero River. Historically, sea turtle have been observed nesting north of the river mouth. These specimens are not protected, and many are being poached and their eggs destroyed.

The intern will work under the guidance of the COTERC manager at Caño Palma Biological Station, and with current program leaders on the north beach with the ongoing sea turtle conservation program. The intern will also assist the large mammal monitoring program and other projects as deemed necessary.

The intern will:

- Continue with ongoing data collection of sea turtle conservation project already initiated by previous interns, and now which has been fleshed out into a full program which involves evening and morning walks with set protocols.
- Work on Marine Turtle Tagging Program under Station Manager, current partner expedition leaders, and MINAET (Government Agency responsible for marine turtles and Environment.
- Assist other interns in the program for mammal monitoring transect maintenance and weekly data collection as dictated by protocol, or in any other research projects as deemed necessary.

- Work with station manager, research coordinator, and all partners to ensure that both the turtle protocol and mammal protocol are effectively carried out.
- Gain an understanding of all legal aspects of the country and the area in question as it pertains to developing this program.
- Liaise with conservation groups, Park's officials, eco-tourist guides, and land owners to discuss possibility of program & cooperation in development.
- Liaise, work with, and utilize staff and volunteers from set partners to help with program. It must be noted that safety guidelines set by the station must be adhered to while working in Costa Rica.
- Help co-ordinate and assist in discussions between interested parties.
- Discuss the program and its importance in the local schools, and where possible teach the need for sustainable management of natural resources.
- Work with other York University intern(s) and other CPBS station interns, staff, and other researchers in a cooperative manner.

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 turtle conservation and protection program for the north Tortuguero Beach. 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 sea turtle project, and a
 potential method to create a Costa Rican team for the continuation of the sea
 turtle project.
- Aiding in suggesting or developing a direction for future interns to aid the program 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 poaching, time permitted.
- Completing a written final report to note what work was done, and what is still required to ensure that the program is operational.

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 lowland wet forest research transects, 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:

- Biological background with knowledge of conservation biology and the development of renewable resource management.
- Physically able to walk up to 10 kilometers on wet sand in poor light in an
 efficient manner in each working day
- Ability to live and work in an isolated situation.
- Good skills in moderating and problem solving.
- Capable of using a motor boat for transportation purposes.
- Capable of analyzing all factors gathered and determining whether this project is feasible for the area.
- 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
- The works of Archie Carr will give interns useful insight into the issues surrounding turtle conservation, as well as the history of the area.

Language requirements:

English; a sound knowledge in the Spanish language with good communications skills is useful.

Please note:

York interns pay a rate of \$255 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. They may also be involved in tours of the station by some of the areas tourists with visitors are given an interpretive lecture by volunteers and staff to help explain the local ecosystem and some of the conservation issues.

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.