### **Undergraduate Program**

Ecological Technology Design
Ecosystem Health
Soil and Watershed Science
Natural Resources Management

### **Graduate Program**

Soil and Watershed Sciences
Ecological Technology Design
Wetland Science
Ecosystem Health & Natural Resource Management

# Tropical River Ecology & Sustainable Development

Research on tropical ecology and resource management has been conducted on a river in central Belize for nearly 20 years. An important focus for the work has been a travel-study course in which University of Maryland students visit Belize either over spring break or during the summer months. The course is taught by Dr. Patrick Kangas, an Associate Professor in the Department of Environmental Science and Technology.

This is a research course so, in addition to lectures and field trips, students contribute to the overall research goals and they conduct their own independent projects. The original goals of the study were to develop a baseline description of the river ecosystem and to make conservation recommendations based on the ecological field work. Over time, however, the focus of the research has changed from emphasizing descriptive ecology towards greater involvement in the human side of conservation. As a consequence, a number of trials of sustainable development options have been attempted over the years, including the creation of a "rainforest" business to help market local products, a restoration program for mahogany trees and, most recently, the development of conservationbased games for the local schools. Belize is a good place for conservation because so much Nature exists compared with many other locations in the Neotropics. The presence of relatively intact forests and watersheds provides a head start and gives hope that sustainable systems of man and Nature can be achieved here, and this research is a contribution towards that objective.

## Field Research projects Include

- Land Crabs in the Riparian Forest.
- Aquatic Birds of the Sittee River.
- Salinity Gradient.
- Fishes of the Sittee River.

### **Sustainability Projects Include**

- A Migratory Bird Art Exchange Program Between Belize and Maryland.
- Sittee River Trading Company.
- Mahogany Planting Project.
- Sittee Point Preservation Proposal.







