

### FIELD PROGRAM AT-A-GLANCE



**BELIZEAN PARTICIPANTS** 

1)4 U.S. PARTICIPANTS

1,296 FIELD DAYS

### PROGRAM OUTCOMES

515 YELLOW-HEADED PARROTS COUNTED

HOURS SPENT MONITORING MANATEES

14% IMPROVE SCORES IMPROVEMENT IN ENVIRONMENTAL LITERACY

### **CULTURAL EXCHANGE**

At Cockscomb Basin Wildlife Sanctuary, students not only explore the jungle to collect data on jaquars but also learn about the lives, culture, and conservation practices of the indigenous Mayans who live adjacent to the sanctuary.

# BFFIFE FIELD PROGRAM

EPI Belize's programs immerse students and teachers in field-based learning, research, and conservation service in marine ecology and climate change in three protected areas in Belize. A total of 169 students and teachers participated in 11 Marine Ecology courses, working alongside EPI instructors, researchers, and our educational partner, the Toledo Institute for Development and the Environment (TIDE), to monitor and protect threatened species and habitats.

### CONSERVATION RESEARCH

### **Threats to Manatees in Protected Areas**

Payne's Creek National Park (PCNP) is one of Belize's most significant marine protected areas, and the adjacent Port of Honduras Marine Reserve (PHMR) was established to protect manatees that were hunted for meat by local fishers. Yet boat traffic and nearby habitat loss and development are still threats to the manatees in these protected areas. EPI students observe, classify, and record manatee sightings in the Park and Reserve to

help determine baseline populations for the manatee, and to help identify potential wake-free boat zones where human/manatee conflicts may be most likely to occur.



STUDENTS TAKE A BREATH BETWEEN SNORKEL SURVEYS OF SEAGRASS BEDS

## **Seagrass Surveys**

Seagrass beds are important fodder for manatees, and critical nursery grounds for commercial species such as conch, lobsters, and fishes. Seagrass

beds are under threat from habitat loss and degradation. Climate change is causing an increase in wave action, sea level rise, and erosion. EPI students measure the health of seagrass beds through snorkel surveys, where they record biomass and percent cover.

### **Protecting Yellow-Headed Parrots**

Habitat loss through forest fires, logging, expansion of farms, as well as poaching continue to threaten the endangered yellow-headed parrot. Alongside educational partner TIDE, EPI students build nest boxes and monitor populations to help protect this charismatic species.

- "I believe that all the information I learned on my EPI course could be valuable to me in the future - pursuing schools, furthering my education, and finding a future occupation."
  - Elbert, local student from Toledo, Belize

# ALUMNI & OUTREACH

EPI Belize creates and supports opportunities for community members and EPI field program alumni to stay engaged in local conservation efforts. EPI Belize helps alumni continue to develop conservation leadership skills while contributing to new research and service projects through strengthened collaborative relationships with local conservation organizations and government agencies.

### ALUMNI ACTIVITIES AT-A-GLANCE



ALUMNI AND COMMUNITY PARTICIPANTS

PARTICIPANT DAYS

**INTERNSHIPS** 

### **ACTIVITIES**

### **Workshops and Field Trips**

Twenty-two eco club members, teachers, and administrators from the Agriculture and Natural Resources Institute (ANRI) participated in a field trip to Laughing Bird Caye National Park (LBCNP). The Southern Environmental Association, a non-governmental organization which co-manages reserves including LBCNP with the Belize Fisheries Department, hosted a snorkeling workshop, allowing teachers and students to observe areas of coral bleaching and impacts on marine species diversity.

Twenty-seven students and teachers from St. Viator High School visited Shipstern Nature Reserve to bolster awareness of biodiversity conservation and natural resource management in a changing climate. Emphasis was placed on climate change strategies that included local knowledge and local commitment to conservation.

#### **Internships**

Two EPI alumni from Gwen Lizarraga High School interned at Chiquibul National Park with Friends for Conservation and Development, the NGO that manages this protected area. Internships focused on the monitoring of nesting sites for the scarlet macaw in the Park. Ya'axche Conservation Trust and EPI partnered to offer two, two-week internships to EPI alumni from ANRI. Interns collected data for the Trust's human-jaguar conflict project, and helped establish a central repository of camera trap photos of all human encounters with jaguars on community members' farms. EPI Alumni from Georgetown Technical High School joined the World Conservation Society for one week to participate in fishermens' catch data collection at Glover's Reef Marine Reserve.



AN EPI INTERN CLIMBS TO CHECK A SCARLET MACAW **NESTING SITE AT CHIQUIBUL** 

### NOTABLE

This season, EPI Belize partnered with the World Bankfunded Marine Conservation and Climate Adaptation Project (MCCAP) to deliver a suite of alumni and outreach activities, including field visits to protected areas, community conservation service, and internships. These activities empowered youth ecology clubs to take active roles in conservation and climate adaptation.

"My EPI course and my internship at Chiquibul National Park have made me an environmentalist who wants to change the world."

- Risa, Belize City, Belize

A group of 15 students and teachers from Gwen Lizarraga High School joined EPI instructors and community members of San Pedro Town, Belize's most heavily populated tourist destination, for a beach cleanup. Organized by



the Hol Chan Marine Reserve Secretariat, this visit highlighted the consequences of toorapid tourism growth on small island communities and challenges to conservation and sustainability.

### **FUNDERS**

MAR Fund Marine Conservation and Climate Adaptation Project Paul M. Angell Family Foundation

### **PARTNERS**

Toledo Institute for Belize Audubon Society Shipstern Nature Reserve

Friends for Conservation and Development Development and Environment Southern Environmental Alliance Wildlife Conservation Society Ya'axche Conservation Trust