

Alligators, a Cat Named Junior Buddy, and the Search for Sea Turtle Eggs: My Adventures in Belize

by Kathleen Dwyer

MRH High School science teacher Kathleen Dwyer was selected to participate with other scientists and educators from around the world to study conservation and marine ecology in the Central American country of Belize. The following is her account of her experience.

When you think of a trip to the tropics, what do you envision? Lazy naps in a hammock? Attractive wait staff serving margaritas? Quiet sunsets on the beach? Some may consider those scenarios paradise, but I had a different idea. This summer, I had the opportunity to visit Belize as part of Miami University's Global Field Program.

An online course in the spring introduced me to this unique country. It is the only nation whose flag pictures multiracial people and plants, an indicator of the diversity to be found here. Although only about the size of Massachusetts, Belize possesses a variety of habitats: dense rainforests, marshy swamps and a coastal reef that is second only to Australia's. A variety



of cultures, languages and ethnic groups make up its population, predominantly Mayan, African and Spanish.

As soon as I stepped off the airplane, I realized I was nowhere near Kansas anymore. Belize greeted me with a wall of hot air that made me catch my breath. Descending the airplane's staircase, I started sweating and didn't stop for weeks.

The Goodson Airport is about the size of our high school, so it didn't take long to collect my backpack. I was introduced to the members of my cohort on line, and now anxiously scanned the people at the airport for a familiar face. The dark skinned natives greeted their families, then departed. The young American couples hired cabs to whisk them to their destinations. Only I remained in the arrival terminal with two security guards and a magazine vendor. Trying to stifle panic and feverently hoping I had not miscalculated the date, I began rifling through my backpack for emergency contact information. Because of the humidity, every item had been packed into its own Ziploc bag. The pile of individually wrapped socks, shorts and sunblock was still growing when a multicolored school bus pulled to the curb in front of me. The khaki clad occupants looked like the group I was seeking: scientists, zoo educators and teachers from around the world.

As I hurriedly repacked my possessions, a tan and smiling young woman introduced herself as Reema, our cohort leader. She explained that security regulations did not allow them to park. As I was the last to arrive, they had been circling the airport for quite a while, but were now ready to head to our home



Counting manatees with Sidney, a high school teacher from Dagranga, Belize.

base at the Belize Zoo. With sweat pouring down my face, I boarded the bus and greeted my new friends.

The adventure begins

The bus lumbered away from the airport and into Belize City. On the congested roads, bicycle riders cut carelessly in front of cars while vendor carts forced pedestrians onto miniscule sidewalks. Our bus driver expertly maneuvered through the crowded streets. Colorful wooden buildings lined the road. All houses are built on stilts to catch more breezes and to avoid the flooding that would accompany the next inevitable hurricane.

When we drove away from the city, the paved streets tuned into dirt roads. Cows, goats and dogs wandered freely in our path. Our bus slowed to a crawl as it negotiated around muddy ruts in the road. The worn out shocks made our bumpy ride treacherous; I wondered how many in our group had whiplash.

We were rewarded for our adventure with luxury accommodations at the

A colorful toucan.

Tropical Education Center. Screened wooden cabins (on stilts, of course) sat in the dense forest surrounding the zoo. We hastily discarded our backpacks and set out to explore our new home. Every mosquito in Central America decided to personally welcome us. We sprayed and resprayed every inch our bodies with bug spray. Covered arms and legs offered some, but not complete protection from these persistent pests. While I brought two bottles of spray with DEET, I began to think I should have packed twenty. If things didn't get better, I might start drinking it.

We set off down the path to find the bathroom. As we walked, several lizards hurried away from us. Some of the more timid members of our group balked, so we created a mantra to help us as each person stepped outside of their comfort zone, "It's all part of the adventure." As we continued our hike, tarantulas scurried across the path. It didn't bother me, but some others needed to be reminded, "It's all part of the adventure." The next resident to greet us was a small boa constrictor. Was he scary? Not really. Would he hurt us? Of course not. It was all part of the adventure. I had lived in Yellowstone National Park as a college student. I had camped for years as a Girl Scout leader. I was confident that I could handle roughing it in Belize. But then I saw a creature that made me stop in my tracks and forget the mantra. I was fine with the other critters; the lizards were small, the tarantulas were timid and the snake had no interest in any member of our group. But this new creature challenged my confidence. In the middle of the path, freely roaming the grounds of the zoo was a crocodile who was as big as my Labrador. He would probably eat my dog as a snack. What if I needed to go down the path to the bathroom in the middle of the night? I was sure he would be lying in wait, ready to consume my leg in a single gulp. I decided that I wouldn't be making any midnight trips to use the bathroom. In fact, to be on the safe side, for the remainder of the trip, I wouldn't be using the bathroom at all.

We finally navigated our way to the zoo, where we met a tall woman dressed in beige camouflage. She introduced herself as Sharon Matola, the zoo director. Her experience with Romanian lion taming and a Mexican circus netted her a job as animal handler for a documentary shot in Belize. When the filming was complete, she was left with the task of disposing the animals. Because they were domesticated, these animals could not survive in the wild. So Sharon hand painted signs next to the cages, visited schools to teach children about Belizean wildlife and solicited the money needed to found the zoo. Thirty years later, the zoo still houses native species of animals in natural vegetation.

The Belize Zoo also continues to fulfill its role as a haven for animals needing a home. In 2007, a jaguar entered the zoo's rehabilitation program as a "problem animal" when it reportedly preyed on sheep. Three months later, she gave birth to a cub, then rejected it. Since he was raised by humans, the cub, now fully grown, is very friendly. Named Junior Buddy, Sharon taught him to somersault on command, come when called and give visitors a "high-five." She reasons that if people have an enjoyable experience, they will become partners in the protection of jaguars and their habitat.

During our stay at the zoo, our group had the pleasure of working with and helping care for rescued animals. Ceibo and Navidad, a pair of tapirs, are housed together in hopes that this endangered species will breed. Tapirs are also known as "mountain cows" and use their short trunks to grab cucumbers from volunteers. While adults resemble giant grey pigs, babies are brown with white spots and stripes. A baby tapir arrived during our visit, demanding frequent bottles of milk and bananas with belly scratches. I happily obliged.

Other species we had the opportunity to observe included beautiful scarlet macaws, the magnificent harpy eagle and coatimundi. But our experiences



Top: Me the baby tapir. Middle: A howler monkey. Bottom: Feeding chicken fingers to Junior Buddy, a rescued jaguar.

were not restricted to the zoo grounds. Every morning, we would pile into the school bus to travel to another Belizean destination.

“No one spoke”

The Community Baboon Sanctuary is a unique mixture of dense forest, farmland and villages. Local residents worked together to establish a conservation program that protected the howler monkeys in the sanctuary. This agreement saved many other animals that live in the area, including the tapir, jagarundi and hundreds of birds.

At Gales Point Wildlife Sanctuary, our group spent one morning counting blades of grass. Sea grass, that is. By measuring the density of the plant populations, we hoped to help the scientists understand the distribution of other species in the lagoon. As exciting as counting grass may sound, it was nothing compared to the thrill of counting the manatee that breed in these waters. Because they are marine mammals, they must periodically surface for air. We sat on the boat in the hot sun, staring at the



grey water for hours. I grew so weary, I started seeing manatees everywhere. Heat exhaustion and eye fatigue are probably the reasons that sailors once mistook those chubby, whiskery faces for mermaids.

Observing the ecosystem beneath the surface of the water was a welcome change. After two weeks of sweating, bug bites, crocodiles and exhaustion, we enjoyed a trip to the islands. The ocean breeze and sparkling clear waters soothed our bodies and minds. We visited Carrie Bow Caye, an island the size of our high school lot, where the Smithsonian sponsors numerous coral reef research projects. My scuba dive revealed an impressive array of underwater creatures: sting rays hiding in the sand, parrotfish scraping algae from colorful corals, sea stars, sea turtles and huge schools of colorful fish. The evening dive was even more spectacular, affording the opportunity to watch the sinewy movements of an octopus, the inflation of a puffer fish and the gathering of nurse sharks. Unfortunately, some areas of the reef were seeing a decline in fish populations. The cutting of mangrove trees to build hotels and houses removed essential spawning habitat. Continued research will help monitor the status of this destruction.

The negative impact of humans was witnessed on the shoreline as well. One evening, we left at dusk to conduct research on sea turtle nesting. Females come ashore at night, use their flippers

to crawl above the tide line, dig a pit, then deposit 50 to 200 eggs. To reach their nesting site, we traveled across a lagoon for an hour, then hiked through dense forest for another hour with the hungriest mosquitoes in the world, until at long last, we arrived at the ocean. As we hiked along the shore, the waves filled our shoes with sand, making us tired and uncomfortable. Even heavier was the depression that accompanied the condition of the shore; everywhere we looked, the sand was mixed with garbage: plastic bottles, wrappers, fishing line, and junk. When we finally found a set of turtle tracks, we could see where the female had come ashore, tried to dig a nest, but could not burrow through the refuse. Another set of tracks led away from the scattered garbage, showing us that the turtle had given up and returned to sea. We marched further down the shore and saw the same story told in another set of tracks, again and again. It was well after midnight before we located an actual nest. Shells were scattered around the perimeter where a raccoon or some other animals had helped themselves to a feast. Peering into the hollow, we discovered ten eggs that had escaped becoming dinner. They looked like ping-pong balls and had soft leathery shells. We covered the eggs back up and placed a screen over the nest as additional protection. No one spoke. No one needed to. We had seen the beautiful sea turtles swimming in the ocean, then witnessed how human carelessness was contributing to their extinction. As educators, we knew that it was our role to teach others how each person has a responsibility to the environment.

I left the country sunburned, bug-bitten and exhausted, but very glad I was able to take part in this experience. Back home, simple things were now luxurious – drinking water right from the tap, putting on shoes without first shaking out the scorpions, and eating something other than rice and beans. I stopped sweating and started texting. And I started planning ways to use what I learned to help my students, other teachers and our planet.

*Top: With other teachers, measuring sea grass at Tobacco Caye (that's me on the right).
Left: A sea turtle.*