OTS Las Cruces Biological Station San Vito, Costa Rica Final Report Winter 2014



On my first day of arrival at Las Cruces Biological Station, I was greeted with a big hug from my mentors—Dr. Matt Betts and Dr. Adam Hadley—at the Tracopa bus station. After a 7hour bus ride in 40°C weather, I was exhausted. Traveling from San Jose to the station relying on nothing but my mediocre Spanish and limited street smarts was an exciting and terrifying challenge that I met with eagerness. I struggled to converse with many local Costa Ricans—or Ticans, as they call themselves—throughout my journey and was rewarded with many smiles and interesting anecdotes. I surprised myself by holding a conversation with a local medicinal botanist for four of the hours, discussing parasitic diseases and biochemistry in Spanish. The first thing that I noticed at the station was the constant hum of life. At all hours, there were always some animals calling. In the middle of a neotropical forest reserve, I was suddenly immersed in an entirely new culture and ecosystem. The call of the Blue-crowned Motmot soon became a comforting sound that I whistled back, as if to an old friend. In a matter of days, I felt like I was at home.

Upon my entry into Costa Rica, my Spanish was rudimentary—enough to get around, but unsatisfactory for engaging in complex discussions. I was often frustrated by my linguistic skills impeding my ability to fully convey my feelings to others. It was somewhat irritating because I knew that my lack of ability to understand and speak Spanish was preventing me from fully getting to know the people surrounding me. In spite of these bouts of impatience with myself, these experiences amplified my motivation to improve my Spanish. During the first week of my stay in Las Cruces, the majority of the field work had not started yet. Some of the field crew arrived later in the following weeks; due to this, I often dined with strangers in the station during this period—it was an amazing experience. I met many students from Chile, Venezuela, Peru, and Colombia who were participating in the OTS (Organization for Tropical Studies) program at the station. We talked animatedly in Spanish about their areas of study, interests, and hometowns. Their friendly inclusion of me and their encouragement to practice speaking more Spanish left me elated. At this epicenter of cultural diversity, these encounters painted a picture in the blank space in my mind created by global naiveté. Noemi, Carla, and other staff treated me like family, and we chatted on a daily basis. Mau and Tocho, our local lab crew members, were some of the most generous and amusing people that I have ever known. They gently corrected me when I made an error, and my Spanish improved. A milestone in my linguistic improvement was when I attended a professor's lecture on neotropical nutrient cycling and understood the majority of her presentation. While I became aware of my weaknesses in the language—namely, verb conjugation—I found that being willing to risk making mistakes and continually trying to converse was a strength that closed this gap.

This internship was very meaningful and essential to me for many reasons: It was an opportunity for me to apply science in an ecosystem which I have never experienced before. In addition to this, the internship was a chance to experience the professional field of wildlife ecology, with all of its highlights and obstacles. As an REU (Research Experience for Undergraduates) intern, I was entrusted to design my own research project, similar to a master's thesis, but less extensive. In addition to learning new skills such as mist netting, radio telemetry, and bird handling, I practiced professional networking with the other researchers that stayed at Las Cruces. Also important, it was an opportunity for cultural immersion and linguistic education. I was challenged professionally, socially, and culturally and I cherished this opportunity to grow.



As an intern, I demonstrated my eagerness to help the lab through my actions. I asked many questions about the research projects underway, offered help without being asked, and performed each task with my best effort. I was often the first to arrive at the laboratory for the early predawn excursions and was the last to leave. For example, when not working in the field or on my individual research project, I aided the laboratory by doing tasks not required of me such as reprogramming RFID readers, entering data from the previous year, and restocking equipment. I enjoyed learning and was interested in what I was doing—my attitude conveyed this, and my transparency aided in developing a relationship based on trust and responsibility with my mentors.

Dr. Betts and Dr. Hadley were exceedingly helpful. They walked me through my preparations for the trip, the challenges to be expected, and set aside much time for discussing my thesis. I was fortunate in that my mentors at Oregon State University also were my mentors on-site at Las Cruces. Every week, one of our lab members would send out an article related to our research and we would discuss it at dinner. They personally trained me for countless tasks, such as programming RFID readers, conducting radiotelemetry, handling birds, and staining flower styles for pollen tube reading. I was very fortunate to have mentors who were so generous and inclusive. In addition to being my mentors, they became my close friends. Their advice has consistently been invaluable, and the opportunities they presented me with have altered my perspective on life. Matt and Adam were not only concerned with my academic self, but were interested in getting to know me as a person.

At first glance, Costa Rica was intimidating. Upon my arrival in San Jose, I walked out to a street where numerous taxi drivers shouted and accosted me, asking where I needed to go. I was not used to this attention, as you wave down a taxi—not the other way around—in most airports in the U.S. Being a woman traveling alone, I wanted nothing more than to blend in and remain unnoticed. It took a couple of days to get used to the Costa Rican cultural tendency of conversing and approaching strangers regularly. With time, I realized that this is one of the best aspects of Costa Rican culture, as strangers will often treat you like family. It was very pleasant to stop and chat with strangers in town; each new encounter enriched my perceptions of Tican people. The common tradition of kissing people on the cheek in greeting was surprising at first, but it gifted me with a sense of belonging and welcome. A fact that I wish I knew prior to my arrival was that it is possible to cheaply set up a prepaid cellphone. Had I known this prior to leaving, I would have unlocked my current phone and paid for some minutes as an emergency communication device. When lost in the town of San Vito, it would have aided in communicating with my lab crew. Another thing that I wish I knew was that Costa Ricans dress up when in town. This knowledge could have saved me from some minor embarrassment when I showed up in town with my muddy hiking boots and torn rain pants. Despite lacking this knowledge, my overall experience in Costa Rica was positive and rewarding.

A typical day began around 4am. Some days, when the sites we were catching hummingbirds at were far, we would wake up around 3am. Some mornings I was startled by putting on field pants that had a cockroach inside. I would gather my field gear and a large canteen of coffee and head out of my cabin to the lab, keeping an eye out for snakes. The crew grabbed more field gear from the lab and we loaded up the truck. Upon arriving at the site, around 4:30am, we would grab our personal gear and the laboratory gear-portable aviaries, computers, mist nets, and banding materials-and hike into the transect. A giant backpack, known as "El Muerte" weighed a great amount and contained the majority of the field gear. Often the hikes into the sites included shuffling under barbed wire, walking through bull pens, climbing up steep slopes, and hacking through thorny vines in the complete darkness. Most sites had no trails, so we made our small paths in overgrown jungles. It was a race with time to set up all the mist nets before dawn, when the birds would awaken. From dawn until about noon, we would go on net runs and check the nets every half hour, ferrying birds in small bags to the banding table. At the table, the hummingbirds would be measured—wing length, beak length, tail length, weight, bill curvature, pollen load, band size, gender, age—and banded with an ID

number on their leg. Pollen was collected from the birds and placed onto slides for storage. They then would get small PIT (Passive Integrated Transponder) tags implanted just under their skin in the back of their necks, allowing for us to track their movements through RFID readers. After feeding them some nectar and warming them, we released them. We then packed up our temporary station and nets, returned to the station and worked on general lab tasks and individual projects. I usually worked on my thesis, data entry, and style processing during the afternoon into the evening. On Sundays, we were not required to work, and I went on trail runs and hikes around the forest. During meals and breaks, I spent time with local ticans and lab members. We often held cooking and dance fiestas, where I met the family members of Mau and Tocho. Every day I conversed in Spanish to conduct field work and get around the station.

As a suggestion to future interns in Costa Rica, especially those doing fieldwork, I recommend purchasing a money belt and storing a backup source of U.S. bills. The medical system is socialized, and foreigners have to pay all medical costs in cash. A benefit of going to Costa Rica is that US currency is accepted, although it is best to use local money typically. Also, carry a copy of your passport and visa stamp at all times when traveling, since you may get stopped on the road during routine cocaine trafficking checks. Another tip is to write down the contact information for a trusted local taxi driver, a reputable hostel nearby, and the U.S. Embassy. If ever in need of advice, often hostels will provide you with contact information for trusted taxi drivers and give useful suggestions for transportation and entertainment locations. Most importantly, be open to the culture. Interact with locals, challenge yourself to speak Spanish, and get to know the country around you. You will be surprised how many doors can be opened by keeping a friendly attitude and being interested in others. I ended up getting a free ride to San Jose and was offered a few jobs because of my interactions with new people. Chespi, my

friend who I met at Las Cruces that offered to drive me to San Jose, shared with me his views about the Costa Rican economy, politics, and history. What better source is there to learn about the country than from the people themselves from that land?

