

Jungle Fever: Ecology students learn more than science on Amazon trip

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What did you do for Spring Break?

Did you go to Cancun, Canada or somewhere in between? Or did you just stay home, wearing out your hard drive watching Netflix, eating pints of ice cream on the daily and sleeping away egregious amounts of precious daylight?

While some of us may have done just that, students in Field Studies in Ecology (EES 475), took the road — or plane — less traveled.

A group of 22 students and three faculty journeyed to the depths of the Peruvian rainforest as they collected data about native wildlife and forest ecosystems.

“We typically bring the course to a tropical region which is known for biodiversity, and so for our students that are interested in studying ecology in general, we want them to pretty much experience ecology in a different system entirely,” Lindsay Seward, instructor of Wildlife Ecology and coordinator of the undergraduate program in Ecology and the Environmental Sciences at the University of Maine, said. “As biologists and ecologists, going to the heart of biodiversity is kind of an exciting thing to do.”

Students in the course were required to go to 7 a.m. meetings every Friday since the beginning of the Spring semester, but only received a taste of what to expect.

Once in Peru, the students were required to complete individual projects relating to their chosen areas of interest.

For Karla Boyd, a third-year wildlife ecology student, her interest was bugs, and there were plenty to be found. Her project focused on light-trapping bugs using plain-white and black lights, and found more diversity of species were attracted to the black light.

Abbey Feuka, another third-year wildlife ecology student wanted to look at how the multilayered structure of the forest affected the ecosystem’s biodiversity.

“I’m interested in those more broader scale ecological concepts,” Feuka said. “I’m interested in how all those layers are interacting, what animals choose what layers, and why it got to be that way in the first place.”

Feuka set out to study leaf size and shape relative to the amount of sunlight. She and her partners set up a sun gradient, looking at where light hits the most and the least on the forest floor. They hypothesized that plants closer to the forest floor would have larger leaves so as to absorb more sunlight.

Their findings? Not much. Contrasting to her hypothesis, the team found many plants close to the ground actually had smaller leaves, boosting the likelihood that these plants were just shade-tolerant species, instead.

But, despite her experiment's misfortune, Feuka is proud to have had the experience to test in one of the most ecologically active sites in the world.

"Really, the point of the project was to get out and sample in the rainforest, in general, figuring out what problems arise," Feuka said. "Here, you do a study and there's always the risk of snow or rain or running into a bear, or something," she added that the project's goal was to get into "that mindset of sampling in a different place and designing a research project in such a complex area."

Amid the research and fieldwork, students did find time to relax, swimming in the Amazon River among the piranhas and pink dolphins.

"The point [of the course] is to go to a place where you've never been, and to not only put together your interests with broader concepts, with the people and the human dimensions aspect of working in an area you're not used to, but it's also just like, good... it's just fun," Boyd said.

"Many of these students have grown up watching elephants and tigers and lions on the Discovery Channel, so the opportunity to experience those directly is pretty riveting," Malcolm "Mac" Hunter, professor of wildlife ecology and conservation biology, said.

And while there may not have been elephants in Peru, dreams did come true for some students. Boyd, who had only wanted to see one bug while in Peru, a Hercules beetle, was granted her wish during the trip.

"Someone brought me a female [Hercules beetle] on a stick. I was really happy. I took a selfie with it," she said.

But aside from the fun and the thrills of wanderlust, and perhaps even more than their ecological studies, the true learning moments came from outside the confines of their studies in interacting with an entirely different culture.

“Obviously I learned a lot about tropical biodiversity, tropical systems, plants, animals, ecology, all that,” Feuka said. “It’s awesome. The best way to learn about that stuff is to be there witnessing it, being really sweaty, getting rained on ... but also, on the other side,” she added, “It was really cool learning about a different culture.”

“I was really looking at the whole thing like it looked run down,” Boyd said. “I was like, ‘wow this place is really impoverished.’ When I left, I knew that it wasn’t impoverished; that’s just how people live. Those people aren’t necessarily poor, it’s just a different way than we’re used to,” she said. “This is how they want to live. They could change if they wanted, but they don’t.” “It’s a very transformative experience for them to see [their culture]. Even though they’re poor college students, they make more money than, say, your average Peruvian in the Amazon Basin,” Seward said.

“It really changed my perspective,” Boyd said.

For those who made the journey, seeing simpler ways of life deepened their appreciation for what they already had in the United States.

“You swim on the river, you grow your own food, you go fishing, hunting,” Feuka said. “Here, it’s, ‘I want to hunt because my family hunts, but I can still go to the grocery store and get food if I need it.’”

“These people depend on the river directly,” she said. “There is no grocery store on the Amazon.”

“I can’t tell you the number of times I’ve heard students say words to the effect of, ‘Wow, these people have almost nothing compared to what I’m used to, yet they’re happy,’” Hunter said.

“Life is not all about material wealth, and so that has been a real eye-opener for a lot of students,” Hunter added. “It makes me [feel] good to know that we’ve been able to provide that insight.”