

Researcher hunts down frogs to help them live

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It is a good night for the amphibian researcher with the green-tinted hair and frog and snake tattoos on her right thigh.

Two hours earlier, rain had pounded Central Florida, so the chirping frogs are now in full force in the muddy water at twilight.

"It's already rockin' and rollin'," said Ariel Horner, a 25-year-old University of Central Florida biology graduate student who has caught more than 400 frogs.

About three times a month, the Titusville native yanks on her knee-high galoshes and straps a light on her head to catch frogs, a childhood pastime she relives as an adult.

Horner is working to better understand two emerging amphibian diseases that are killing frogs across the world. She hopes her findings will help predict when future outbreaks might occur.

Frogs play a role as both prey and predator in the ecosystem, Horner said, adding, "If you take that piece out of the food chain, you have a potential collapse."

On Tuesday, Horner rounds up four UCF undergraduate biology students who don't mind ruining their shoes in the mud. And they don't need class credit or money to do it.

"Studying? Catch frogs?" said Andrew Letter, 22, of DeLand. "I'd rather do field work."

They cram into a pickup truck and drive less than a half-mile from the main campus to a place that feels farther away. Deer stare up at the headlights and sprint past. There has been the occasional bear sighting here in the university-owned wetlands known as the Arboretum.

"I never even knew it was here," said one of the students, Emily Karwacki, 20, of Destin.

They trudge through the cypress trees in the mud that seeps into their socks and shoes. It's almost 8:30 p.m., and the sky is growing dark. It's early though. Once, Horner and Donald Chappell, a 20-year-old UCF student from Tampa, caught frogs at 3 a.m.

"I'm literally trying not to step on them, they're so many," Horner says as they kneel down and scoop up the frogs that are smaller than an inch long into Ziploc plastic bags.

After they catch 20 animals, they record their sex and length and cut off the longest toe on the back foot - Horner says it will grow back - to test later if there is Chytrid fungus in the tissue.

Jason Waddington, 23, of West Palm Beach puts the tiny toes into capsules of ethanol to store them.

They free most of the frogs, although one out of every five caught is euthanized and brought to the lab to see whether the deadly ranavirus shows up in the liver and kidney.

Horner wants to understand if the two diseases are more prevalent during certain times of the year in Florida. Are frogs more likely to catch them

when it's rainier or drier? Hotter or colder?

The research is part of her thesis for her master's degree. Eventually, Horner hopes to publish her work, add more sites to the frog hunt and collect data as she pursues her Ph.D.

Even as a little girl, she seemed destined to work with animals, said her father, Rick Horner.

But at times, her passion created uncomfortable moments.

"I had snakes growing up. I have them now still," Ariel Horner said. "What do you feed snakes? You feed them rodents."

That meant loved ones reaching for the ice cream in the freezer sometimes came across a bag of frozen rats.

Not far from her campus biology lab, Horner shares a house with two roommates, plus her collection of rescued snakes, turtles, a lizard, a salamander, several kinds of [frogs](#), an orange and green parrot and a poodle named Harvey.

After she finishes her Ph.D., she wants to become a zoo curator or run a nature center. Her work also is leading her into politics as she hopes to protect animals of all kinds from the threat of humans and land development.

"I want to make change," Horner said.

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