



Encyclopedia of Life

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Mexican Long-nosed Bats Podcast and Scientist Interview

Leptonycteris nivalis

The batman of Mexico has his own bat-cave. He just shares it with 4,000 Mexican long-nosed bats. In this episode, join bat researcher Rodrigo Medellín as he descends into the Devil's Cave just north of Mexico City. It's a journey that started decades ago when Medellín was on a game show as a boy. He lost the game show, but won a prize far more valuable—for himself, his students, and Mexico's bats.

Transcript

Ari: From the Encyclopedia of Life, this is One Species at a Time. I'm Ari Daniel Shapiro.

This story is a portrait of a man who found his passion as a boy...and who's spent the rest of his life rallying people around him and his cause.

His name is Rodrigo Medellín, and it's not uncommon for him to start his day at night. At the moment, he's near the town of Tepoztlán, just north of Mexico City. He's got his headlamp switched on and he's walking deeper and deeper into the Cueva del Diablo, the Devil's Cave. Suddenly, Medellín stops. The ceiling of the cave, just 8 feet above our heads, is furry, and moving.

Medellin: There's a lot of Mexican long-nosed bats over here.

Ari: About 2000 Mexican long-nosed bats, or *Leptonycteris nivalis*. But looking up at a colony like this is just asking for trouble.

Medellin: Ffffft! I'm getting pee on my eyes.

Ari: He turns away to clear his eyes. But before long, he's looking up at the bats again.

Medellin: They're mating – you can tell! Just look at pairs forming, and a male is grabbing a female from behind. There's one there.

Ari: Medellín's a biologist at the National Autonomous University of Mexico, and he's been coming to this cave for three decades. It was just a few years ago that he and his students first saw Mexican long-nosed bats mating here – or anywhere.

Medellin: From then on, we've been trying to find other caves where this endangered species mates, and we haven't found any.

Ari: That makes this cave incredibly important. He figures there are about 4000 of these bats here in all – that's down from maybe 8000 a decade ago. He fears people are disturbing the bats.

Medellin says that while many types of bats are doing just fine in Mexico, humans threaten the survival of certain species. People often unintentionally destroy bat roosts and habitat, and in some places villagers intentionally kill bats. Medellín has made it his mission to help these animals, by studying them and fighting for their protection.

Back in his lab in Mexico City, Medellín says his passion for bats – indeed for all animals – started early in life.

Medellin: My first word was not mama or dada, it was flamingo.

Ari: He read about flamingos and other animals non-stop as a kid.} When he was a boy, he appeared on a popular national TV quiz show. He got to choose what subject he'd be quizzed on, and he selected mammals.

Medellin: I did not win. But in the process of spending 6 or 7 weekends on TV, a lot of people saw me, including the people at the University of Mexico that, at the time, were the experts on bats.

Ari: They invited Medellín at age 11 to help in the lab and the field. He was amazed that bats came in such a wide variety of shapes and sizes.

Medellin: Long snouts, short snouts, small eyes, big eyes, huge ears, rounded ears, pointed ears, colorful as can be.

Ari: He was hooked. He says everyone should appreciate bats, and be grateful to them. Bats eat massive amounts of insects. They disperse seeds, and pollinate plants.

But convincing the public that bats are worth protecting isn't easy. He says he has to persuade people it's in their own best interest. Take his approach here in Mexico.

Medellin: Our own Mexican identity's very closely linked to tequila.

Ari: Tequila is made from the agave plant.

Medellin: Well, we would not have tequila if it wasn't because of the bats pollinating agaves for millions and millions of years.

Ari: Which means, he says, that if Mexicans want tequila in the future, the country has to protect its bats. Medellin's started a program to offer a special consumer label to tequila producers who farm their agave plants in a bat-friendly way.

Medellin's also working to save bats in other countries – more than a dozen worldwide.

Medellin: If you want to do effective conservation, the leaders have to be the locals because they know the context, the culture, everything.

Ari: Medellin is in his mid-50s, and he realizes that to save bats in the long run, there has to be a younger generation of conservationists. So he's been training a small army of researchers. He rarely enters a cave alone.

Back at the Cueva del Diablo, Medellin's accompanied by a few of his students. Rubén Galicia is working on his Master's. He says he loves being around bats.

Galicia: Llego y apago mi luz, y me quedo así – en silencio – solo con el ruido de los murciélagos.

Ari: "I enter a cave and shut off my light," he says. "Then it's silent, except for the sound of the bats."

Today, Medellin's students have set up a net in front of the entrance to the cave. It's not long before they catch one of the Mexican long-nosed bats. Medellin untangles it from the net.

Medellin: Aaaaand, it's out.

Ari: It's a female. He hands it off to a student who weighs and measures it.

Knoop: Cincuenta y cinco, punto seis.

Ari: Medellin takes the animal back. He holds it in his hands, and gets ready to release it.

Medellin: We're gonna recharge its batteries, giving it a little bit of guava juice there.

Ari: She's licking it up.

Medellin: It's ready to go.

Ari: The students watch him hold out his hands.

Medellin: Okay, 1,2.

Ari: They can't help but feel his gentle devotion. The bat waits for a moment...

Medellin: And 3.

Ari: And then it flies off. Back into the night.

Ari: To see some photos of Medellin and his bats, visit eol.org.

Our series, One Species at a Time, is produced by Atlantic Public Media in Woods Hole, Massachusetts. I'm Ari Daniel Shapiro.

Meet the Scientist

Meet Scientist Rodrigo Medellin Legorreta, featured in our Bat podcast:



Where do you work?

I work at the Institute of Ecology of the National Autonomous University of Mexico, one of the top Spanish-speaking universities in the world, and one of the largest, at 300,000 students.

What do you study?

I study the ecology, evolution, and natural history of mammals in Mexico and other Latin American countries to inform and orient policy and decision making processes in conservation.

What are three titles you would give yourself?

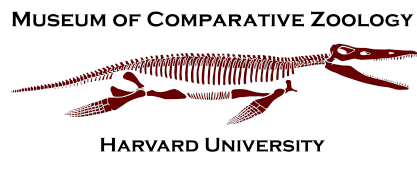
Conservation scientist, Popular science enthusiast, Ethnic foodie and culinarian.

What do you like to do when you are not working?

Having fun doing science in the field with students, cooking, eating off-beat food.

What do you like most about science?

Asking questions about the natural world and mainstreaming the answers; building bridges with other scientists to answer questions together.



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