

From VOA Learning English, this is **SCIENCE IN THE NEWS**. I'm June Simms.

And I'm Bob Doughty. Today we tell about a new animal species native to South America. We tell how agricultural chemical products are harming frogs in northern California. And we have a report about elephants and how the night sky could affect the timing of their raids on farms.

Meet the new mammal! The olinguito is new to science, although it has been living in the cloud forests of South America for some time, unknown to researchers.

Scientists say the olinguito is the first new carnivore discovered in the Americas in more than 30 years. It is a hairy orange-brown creature with a sweet face and big eyes. The animal has small, rounded ears and lives in the trees. An adult weighs one kilogram and measures about 75 centimeters, with half of those centimeters taken up by its ringed tail.

The olinguito shares its family roots with raccoons and kinkajous. Most of the time, it likes to eat fruit, although it also eats meat. Active at night, the animal has lived in Colombia and Ecuador for a long time. But the olinguito did not exist in science books before now.

Kristofer Helgen is the curator of mammals at the Smithsonian Institution's National Museum of Natural History in Washington. He led the research team that confirmed the existence of the olinguito. It had been mistaken more than a century ago for a look-alike animal -- a similar but larger olingo.

"Think about these cloud forests. This animal, like so many animals in the rain forest, only comes out at night. It doesn't come out of the trees. It's wet. It's dark. It's soaked-in with cloud. It's hard to find these animals."

But his team succeeded in making the discovery. In the forest, they observed that the olinguito was not just another olingo.

Mr. Helgen had been studying olingos in a museum 10 years ago. At that time, he observed a difference in the size and shape of the heads and teeth. That led him on an effort to prove he was looking at an animal never before described by science.

About 10 years of work led Kristofer Helgen from museum storage areas to cloud forests in South America. He got lucky when he communicated with a zoologist in Ecuador. The animal expert there made a short video that scientists say shows an olinguito in the trees. The video confirms that the olinguito is different from the olingo.

Mr. Helgen says even people who live near the olinguitos' forests do not see it as different from similar animals.

But it seems the world knew an olinguito long before 2013, without knowing it. A female of the species from Colombia was even kept at zoos in the United States during the 1960s and 1970s. But zoo officials thought they were showing an olingo, the similar animal.

Kristofer Helgen spoke with the keeper of that olinguito, who told him a sad story. She said the animal was moved from one zoo to the next because she refused to mate with male olingos.

Mr. Helgen says that mating was impossible. The olinguito and the olingo are totally different species. So she was not just choosy.

Mr. Helgen says tens of thousands of olinguitos live in the wild and are not in danger of disappearing forever. Human beings, however, are moving closer to the olinguito habitat in the Andean cloud forests. The research team estimates that 42 percent of historic olinguito habitat has been removed.

The findings were published in the journal ZooKeys.

You are listening to Science in the News from VOA Learning English. With Bob Doughty, I'm June Simms in Washington.

California Parks May Be In Danger

America's national parks in northern California may look clean and untouched. But scientists are finding that the land could have hidden problems. Researchers say pesticide products may have harmed local wildlife, both deep in the forests and up on the mountain tops. They say the pesticides came from agricultural operations in the valleys far below.

Researchers with the United States Geological Survey have been catching frogs in the mountains of the Sierra Nevada. They tested the frogs for contamination with agricultural pesticides, chemicals used to protect crops.

There is no farming in the national parks. But winds can bring chemicals from farms in California's Central Valley into the mountains. Kelly Smalling is the lead author of the study. She says pesticides could be harmful to animals like frogs.

"The decline of amphibians has been documented for decades and decades. We know that amphibian populations are declining. Some populations have gone extinct. And why these populations are declining is still a mystery."

The researchers also collected samples of pond water and sediments from the bottoms of mountain pools. These samples tested clean, or close to it.

But the researchers found evidence of 12 different agricultural pesticides in Pacific chorus frogs from the area.

Scientists are concerned about the test results. They suggest that there are harmful pesticides in the bodies of animals that live in protected areas.

“The concentration in the frog becomes greater than the concentration that is present in the water or the sediment, or some other part of the environment.”

The most common chemical compound in the frogs was DDE, a decomposed product of the insecticide DDT. The researchers expected these results. DDT was banned in 1972, but it is a long-lasting chemical.

The team was also surprised by some of the results. They found three pesticides, including two fungicides, in the frogs. All three had never been found in frogs before. And the researchers believe that this is the first time frogs have tested positive for fungicide contamination.

The results of the study show the unexpected ways industry is polluting our planet. Kelly Smalling says the next step is deciding what to do about it.

“The first thing we need to do is understand how these chemicals that we’re finding will impact the frogs. Then we have to start looking at the larger question on how to fix the problem.”

Moon Influences Eating Habits of Elephants

A new study has found that African elephants appear to use darkness to avoid being seen or heard when raiding farmland for food. The study also showed that elephants carry out their food raids based on the appearance of the moon, or lunar cycle. Researchers believe the animals are doing this during the cover of darkness to avoid contact with human beings.

A report on the study appeared in the African Journal of Ecology. Rachel Grant teaches animal behavior at Anglia Ruskin University in England. She says elephants are cathemeral, meaning they are active both day and night. But she says their raids on crops almost always take place at night. This suggests that the animals go near villages when they sense that their huge bodies are more difficult to see.

Ms. Grant added that an elephant’s knowledge of the higher risk of being discovered on moonlit nights could explain its behavior during the lunar cycle.

The study was carried out in and around Mikumi National Park in Tanzania. The park has one of the largest populations of wild elephants in Africa. It is about 300 kilometers west of Dar es Salaam.

The researchers chose five villages near the wildlife area and counted how many times elephants raided crops. They found that few of elephant "raid nights" took place during a full moon. The amount of crop damage also fell considerably during such periods.

Rachel Grant says some elephants have what she calls "an internally arising biological rhythm" or they may be basing their decision-making on local conditions. In her words, "Many animals alter their behavior according to varying light levels and the perceived risk of predation." She says this rhythm is likely to be a partly evolved, partly learned response.

Ms. Grant says the behavior probably is found in elephant populations in countries other than Tanzania. She adds that information from the study could be used to protect farms from elephant damage.



This Science in the News program was written by Madeline Smith and Jerilyn Watson. I'm June Simms.

And I'm Bob Doughty. You can comment on this show at learningenglish.voanews.com. And you can find us on YouTube, Facebook, Twitter, LinkedIn and iTunes at VOA Learning English. Listen again next week for more news about science on the Voice of America.