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A Mysterious Die-off of Dozens of Dancing Lemurs

Scientists are still trying to understand what paralyzed and eventually killed more than 30 critically endangered Verreaux's sifakas in Madagascar this spring.

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Verreaux's sifaka "dancing lemurs" in Madagascar

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A troop of Verreaux's sifakas are a lively bunch. When these lanky, white-and-brown primates aren't leaping through the canopy of Madagascar's southern spiny forests, they're bounding across the ground on their hind legs as if riding a pogo stick. The sifakas are aptly nicknamed the "dancing lemurs".

But earlier this spring, wildlife managers at the Berenty Reserve were horrified to find some of these usually spry animals dragging themselves across the forest floor with their hands. Their hindquarters had suddenly become paralyzed. Over the next 24 hours, the mysterious ailment crept up the lemurs' bodies until it caused their lungs to seize, leading to their death. Many more of the affected animals were then found dead in the forest. All told, at least 31 Verreaux's sifakas met this fate over the course of April, making it one of the largest lemur die-offs in recent memory.

Any time wild animals die in large numbers under uncertain circumstances, it raises a red flag for wildlife managers, but the fact that Verreaux's sifakas are rare—and getting rarer—makes conservationists extra nervous. At a recent meeting of the International Union for Conservation of Nature (IUCN) in Antananarivo, Madagascar's capital city, scientists had up-listed all nine species of sifaka to critically endangered. Like many other types of lemurs, sifakas suffer mainly from loss of habitat, due to widespread deforestation on Madagascar, as well as hunting. The last thing they need is a plague to boot.

No one can say for sure how many Verreaux's sifakas are left in the wild, says Russell Mittermeier, the chief conservation officer for Global Wildlife Conservation and chair of the IUCN's and Species Survival Commission's primate specialist group. But in the Berenty Reserve, where the outbreak unfolded, there are thought to be around 200 of them. This means that almost 20 percent of the entire Verreaux's sifaka population in one of the species' last strongholds may have died in April.

According to the reserve, the strange affliction wiped out at least two entire lemur groups. What's even stranger is that almost all of the affected animals were males.

The only good news is that the outbreak seems to have halted, with no new cases reported since April 30. Now scientists are trying to figure out what happened and how to prevent it in the future. They sent samples from the dead lemurs to France, hoping that pathologists there could reveal more about what happened to these primates.

"My guess," says Mittermeier, "is that it's some kind of rickettsia transmitted by ticks. But that is a pure guess."

Rickettsia is a type of bacterium that can cause several nasty illnesses, such as typhus, Rocky Mountain spotted fever, rickettsialpox, and African tick bite fever. It is carried by ticks and other arthropods, including fleas, mites, and chiggers. Mittermeier bases his hunch on the fact that the researchers found higher-than-normal tick loads on many of the sickened lemurs. A high tick count, however, doesn't always bring disease. As Edward Carver writes at Mongabay.com, scientists noted Verreaux's sifakas had heavy tick loads back in 2014 without incident.

Whatever the culprit, its effects may not be restricted to Verreaux's sifakas. The Berenty Reserve, which is popular among tourists, is home to six species of lemur, an enormous colony of Madagascar fruit bats, and 103 bird species. Hantanirina Rasamimanana, a biologist at the University of Antananarivo who has studied the lemurs at the Berenty Reserve since 1983, says two brown lemurs seem to have died from the same affliction—and possibly one chameleon.

A team of German veterinary scientists are also on site conducting analyses, but Ariane Düx, a team member who previously worked on pathogens like anthrax and Ebola, says her group can't comment on the research while it is ongoing.

This sudden loss of life is obviously concerning, but the mysterious malady still falls far below habitat destruction and hunting on the list of threats most likely to snuff out the Verreaux's sifaka for good. But with the species' recent designation as critically endangered, every concern is a big one. And every outbreak could be the last.

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