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Hug-Loving 'Hippie' Monkeys Left Alone in Forest as Epidemic Kills Other Primates

A yellow fever epidemic sweeping through parts of Brazil has killed off thousands of howler monkeys, leaving a population of northern miqui monkeys solitary in a near-silent forest.

BY JEN VIEGAS (http://www.seeker.com/community/jen_viegas/)



Northern miqui monkeys. Credit: Carla Possamai

The northern miqui monkeys of Brazil – popularly known as "hippie" primates – are vegetarians, begin their day with a group hug, and are one of the planet's most peaceful and egalitarian animals. They normally share their forest habitat with noisy howler monkeys that eat their food and appear to get on their nerves, but the hippies are now in flux. A yellow fever epidemic just wiped out thousands of howlers, leaving the hippies as the only thriving primates in the forest.

Karen Strier, a University of Wisconsin-Madison anthropologist, just visited the forest, which lies within the federally protected RPPN Feliciano Miguel Abdala reserve near the Brazilian city of Caratinga.

(<http://www.preservemiqui.org.br/ing/rppn.htm>)

"It was just silence, the emptiness," she remarked to Seeker. "It was like the energy was sucked out of the universe."

Strier, who is also an associate conservation scientist with the Global Wildlife Conservation (<http://globalwildlife.org/>), explained that howlers, like humans, are vulnerable to yellow fever. The viral illness results in acute flu-like symptoms, and is spread by mosquito bites. The present epidemic began in December last year. A few days ago, a man in the state of Rio de Janeiro died after contracting the virus, bringing the human death toll of this latest outbreak to 137. At least 424 other people have come down with the disease, which continues to spread throughout the region. Nearly a thousand additional cases remain under investigation.

Health departments in Brazil are rushing to vaccinate as many people as possible – but the howlers and hippie monkeys cannot be vaccinated.



Howler monkeys. Credit: Carla Possamai

"For now, there is nothing that can be done to prevent the death of the primates," Sergio Lucena Mendes, a professor of animal biology at the Universidade Federal de Espirito Santo, told Seeker. "So far, the conservation community has been collaborating with a campaign to prevent people from injuring the primates in fear of yellow fever."

Strier added that some people do not understand that the monkeys are victims of the disease too. As a result, they are blaming the monkeys for the virus. The northern

muriqui is among the most critically endangered primates on earth.

There are various species and subspecies of howlers, but the researchers believe that the recent deaths put many surviving howler populations at risk for extinction as well.

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"The monkeys actually act as sentinels, warning us when there's a disease outbreak that could affect humans," she said.

It is unclear why the howlers are so vulnerable to the virus, while the hippies and a close relative of them, spider monkeys of the Amazon and parts of Central America, appear to be more resistant.

Mosquitoes have been out in droves, possibly because rains following two years of severe drought prompted the hatching of eggs that remained dormant until the wet weather began.

Before the epidemic, the howlers and hippies had an uneasy co-existence. Howler monkeys are plant eaters too, so they would often eat much of the food in areas that the northern muriquis would pass through. The howlers additionally are very vocal, emitting screams and other loud vocalizations, including a guttural call

(<https://www.youtube.com/watch?v=UdnwLX5m3G8>) that has been used in many horror films, as well as the *Jurassic Park* series.

The hippies, conversely, are a quieter bunch.



Close-up of a northern muriqui "hippie" monkey. Credit: Carla Possamai

"They have the most peaceful, egalitarian societies, in which males and females rarely exhibit aggression toward one another and do not display the kind of hierarchies that lead some individuals to monopolize resources by threatening or intimidating others," Strier said.

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"Their peaceful behavior is most evident when a female is sexually receptive and the males are basically all lined up, patiently waiting for their chance to mate," she continued, describing the species' practice of free love. "Their peaceful, affiliative lifestyle sets the muriquis apart from other primates, including ourselves. The muriquis are a great model for how to get along peacefully with others."

While the howler mass die-off could result in short-term gains for these hippie monkeys, such as more food, researchers are worried about what the long-term effects of the deaths could be. The howlers aid in seed dispersal, for example, so their absence could lead to dramatic changes in the composition of the forest.

For now, Strier, Mendes, and their colleagues are hoping to safeguard the hippies and any surviving howlers from human threats. Although the monkeys live in a "protected" reserve, agricultural areas are very close to the forest, so it is not too hard for people to hunt the monkeys and disturb their habitat.

The researchers are also intently studying the hippie monkeys to learn more about them, particularly at this unprecedented time when a rival primate suddenly disappeared within weeks.

"We can't reverse this tragedy," Strier said, "so it's now our obligation to learn as much from it as we can."