

# Culling vampire bats is for suckers, says study

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An undated handout photo released by Nature magazine shows a vampire bat. Killing vampire bats in a bid to curtail the spread of rabies to humans and livestock may make the problem worse, scientists said Wednesday.

Killing vampire bats in a bid to curtail the spread of rabies to humans and livestock may make the problem worse, scientists said Wednesday.

The practice of "vampiricide" in which a poisonous paste is applied to captured animals who spread it to others in mutual grooming back in the roost, does not reduce rabies prevalence, they contend.

It may, in fact, increase it.

"We detected something that is a little bit worrying," team leader Daniel

Streicker of the University of Georgia said of the study conducted in Peru from July 2007 to October 2010 by a team from the United States and Peru.

"In areas that were sporadically culled during the course of the study, we saw an increase in the proportion of bats exposed to rabies," he said.

Colonies that were never culled had the lowest prevalence.

Rabies causes some 50,000 human deaths around the world every year. Bats can live with infection for years.

In [Latin American](#) farming areas, [livestock](#) is the primary [food source](#) for [vampire bats](#) -- the only species that feeds on mammals' blood and is the prime transmitter of rabies in the region.

They sometimes turn to humans for food, especially in areas where their habitat has been destroyed.

Bats also carry other transmissible viruses like those that cause Nipah and [Ebola](#), but are a vital help for humans by eating mosquitos and acting as pollinators.

The number of vampire-bat-transmitted rabies cases in livestock in South America appears to have declined from about 500,000 a year in the 1960s, but still caused annual losses of about \$30 million, said the research paper.

Since the 1970s, efforts to control the spread of rabies in Peru have focused on culling vampire bats, on the assumption that if numbers could be sufficiently reduced, the [rabies virus](#) would die out in targeted colonies.

Instead, the scientists found the virus was present in every colony they tested, no matter its size.

"That's important because if there's no relationship between bat population density and rabies, then reducing the [bat population](#) won't reduce rabies transmission within bats," said Streicker.

The researchers theorised that bats repeatedly exposed to rabies may develop immunity to the disease.

"Vampiricide" would be effective at killing these immune, adult bats but perhaps not juveniles, which are unlikely to groom older bats.

"When you kill off the adult bats that may be immune, you're making space for susceptible juvenile bats," said Streicker.

It could also be that bats immigrate from neighbouring colonies to fill roost space left vacant by culling, or that the number of births increase as humans reduce competition for resources and space.

The scientists hope the findings, which were published in the journal *Proceedings of the Royal Society B: Biological Sciences*, may help officials in Peru develop more effective methods of combatting rabies infection.

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