

For ticks, researchers find lemur noses to be males only in Madagascar

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Close-up of a diademed sifaka lemur. The round, brown objects in its nostrils are ticks. Credit: Entomological Society of America

Ticks have long been known to inhabit the noses of chimpanzees, presumably because the chimps aren't able to pluck them off during grooming.

Now [scientists](#) from Ohio State University, Duke University and the Columbus Zoo and Aquarium report that [ticks](#) are also prevalent in the noses of endangered lemurs. Their findings appear in an article in the *Journal of Medical Entomology*.

While surveying the health of lemurs in their [natural environments](#) in Madagascar, the researchers took the opportunity to study the ectoparasites found on two wild populations in Madagascar known as diademmed sifakas (*Propithecus diadema*). An inspection of 87 individual lemurs under anesthesia revealed mites, lice, flies, leeches, and *Haemaphysalis lemuris*, a tick that was previously known to prey on lemurs. But the scientists were surprised by the location of the ticks, most of which were found in the lemurs' nares. At one research site, 64% of all *H. lemuris* ticks were found inside the nostrils.

"The most interesting observations deal with the attachment site selection of *H. lemuris*," they wrote. "There are anecdotal records of ticks attached in the noses of humans, and a report of frequent occurrence of ticks in the noses in a population of chimpanzees, but the current observation, documenting such a prominent use of the [nose](#) as attachment site for ticks (64% of all *H. lemuris* recovered at Ambatovy) is unusual."

Even more interesting, all 295 of the ticks collected from the lemurs' noses were male, and more males were found around the eyes and ears. However, on other parts of the body, male and female *H. lemuris* ticks were similar in numbers.

The exact reasons why male ticks prefer the lemur nose are still

unknown. However, the authors speculate that it may have something to do with finding mates. For *H. lemuris* males, a lemur is sort of like a singles bar. They hang out on one lemur and look for females, but if they're having no luck they will drop off and find another one that hopefully does.

"Male ticks are on the host longer than females, as males look for females while on the host (they feed very little during that time)," explained Dr. Hans Klompen, one of the authors. "Females, on the other hand, get on a host, start the slow feeding period, than stop until they are mated, after which they proceed feeding to full engorgement, and drop off. As a consequence one usually finds far more male ticks on a host than females."

For the *H. lemuris* males, the nose is a pretty safe place to be—like the men's room at the single's bar—because lemurs have a hard time reaching them there during grooming sessions.

Furthermore, the nose is a strategic location. Lemurs often sniff each other, so the nose is a good jump-off point for a male tick that wants to try his luck elsewhere.

"Males on a host without females may move to concentrate in the nose, and transfer to a new host during grooming or sniffing IF the new host has female ticks," Dr. Klompen said.

Because their data set was small, the authors say that it's only a hypothesis at this point, but it may explain why ticks prefer the nostrils of [lemurs](#), [chimpanzees](#) and possibly other primates.

More information: "Ectoparasites of *Propithecus diadema* (Primates: Indriidae) with notes on unusual attachment site selection by *Haemaphysalis lemuris* (Parasitiformes: Ixodidae), [DOI](#):

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