

African wild dog packs vote by sneezing

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How do animals that hunt in packs make group decisions? African wild dogs have it figured out: they sneeze.



Two young African wild dogs huddle around each other. The dogs can move in packs as large as 20; their sneezes serve as votes for whether the pack should move on or stay in the same location to hunt for food. (Mosztics Attila via Wikimedia Commons)

to a group consensus, which is extremely important, especially for hunting and migrating; the pack needs to decide when to get going and when to stay put.

To make these hunting decisions, the pack holds a round of group sneezes called a rally, which serves as a rudimentary voting process. The more sneezes, the more likely the rally is to succeed: that is, getting the pack to move, according to a study published this week in *Proceedings of the Royal Society of London*.

This study is the first to find that wild dogs use sneezes to communicate. The most surprising finding is not the sneezing itself, but the fact that the sneezing seems democratic: the dogs follow a fairly strict dominance hierarchy, so scientists previously thought that the highest-ranked dogs made decisions for the entire group. But, as it turns out, even the dogs at the bottom of the hierarchy have a say.

African wild dogs are one of the most cooperative species on the planet. Wild dogs bond within a group more strongly than lions or hyenas, and they are extraordinarily non-aggressive toward each other. A pack of dogs works together to prevent inbreeding, raise their young, defend the pack, and hunt. This lifestyle means coming

While groundbreaking for dogs, the vote-by-sneeze process isn't really democratic by human standards. Any dog can initiate a sneezing rally, but the lower a dog's social rank, the more sneezes it needs for its rally to succeed. And some dogs have been observed to "vote" more than once.

Study co-author Reena Walker hopes that the modest media attention to the study's findings will raise public awareness of African wild dogs, an endangered species. "They're absolutely gorgeous animals," she told *National Geographic*. "The more people who are aware [of] how amazing these animals are, the better."

African wild dogs are highly endangered, because their natural habitat in sub-Saharan Africa is being rapidly replaced by human settlements. They are also frequently shot by farmers hoping to protect their livestock.

There are about 3,000 remaining African wild dogs, including those in parks and reserves, and this population is decreasing. Conservation groups like the African Wild Dog Conservancy in Kenya and Painted Dog Conservation in Zimbabwe are working to reverse this trend; they collaborate with local communities to monitor the dogs, combat poaching, and raise awareness.