

# How animals vote to make group decisions

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Credit: AI-generated image ([disclaimer](#))

Today we opt for ballot boxes but humans have used numerous ways of voting to have their say throughout history. However, we're not the only ones living (or seeking to live) in a democratic society: a new study has suggested that [African wild dogs](#) vote to make group decisions.

A new study has found that these dogs sneeze to decide when to stop resting and start hunting. Researchers found that the rates of sneezing

during greeting rallies – which happen after, or sometimes during, a rest period – affect the likelihood of the pack departing to hunt, rather than going back to sleep.

If dominant individuals start the rally it is much more likely to result in a hunt, and only two or three sneezes are required to get the pack started. But if a subordinate individual wishes to start a hunt, they have to sneeze a lot more – around ten times – to get the pack to move off.

The researchers think that this sneezing is the pack members voting on when to start a hunt, since it is often the lower ranking (and therefore the hungriest) dogs who start the rallies.

Communal decisions are essential for social living, and in animals it is rare to find a social system where one individual coerces the rest of the group into performing a particular action. But since animals cannot produce the kind of pre-election propaganda so beloved of human politicians, [social groups](#) must have different ways of suggesting and gaining consensus for activities.

## **1. Baboons: take it or leave it**

When members of a [baboon troupe](#) set off to forage, several members may move in different directions. Other baboons in the group must decide which one to follow, and social dominance has no effect on the likelihood that the majority of the group will follow. Moving purposefully seems to be an important factor in getting other individuals to follow – another parallel with human behaviour, since people will follow whoever seems to have the [most confidence](#) .

## **2. Meerkat voice voting**

In meerkat mobs, social cohesion is vital for survival, and moving from

one patch to another must be done together. A meerkat going it alone will very soon be an ex-meerkat. In order to get the group to head quickly to a new patch, an individual will [emit a "moving call"](#). If three or more meerkats make moving calls within a short period of time, the group will speed up its movement, but two or less individuals calling does not affect the speed. In meerkat mobs three is evidently considered a quorum.

### **3. Capuchin monkeys "trill"**

[White faced capuchin monkeys](#) at a site in Costa Rica have been heard using "trill" calls to persuade the group to move off in the direction preferred by the caller. However, the callers were not always successful in getting the group to move, and status within the [group](#) did not seem to affect the likelihood of persuading the troupe to move. Although the researchers did not consider the possibility that these calls were a form of voting, there are similarities between their use and the sneezes used by the wild dogs.

### **4. Honey bee scouts vote among themselves**

Honey bees have an advanced social system with individual workers having different tasks. When a nest becomes overcrowded and some of the bees need to move out, [scout bees](#) go off to find a suitable site for a new nest. Of course, they all find different sites and some may find more than one location.

When they return to the swarm, the scouts each perform a dance that gives directions to their chosen site. As time goes on some of the scouts stop advertising their site, and a few will switch to advertising another scout's site. The swarm will only move when all the scouts that are still dancing are advertising the same site. This process can take several days

to complete, but it is a bit like buying a house without having seen it on the say-so of a few estate agents.

## 5. Ants vote with their feet

[Rock ants](#), found in the south of England, choose a new nest site based on the quality of the site, with entrance size and darkness among assessed criteria. They appear to use a simple voting system consisting of leaving the nest site if an individual does not perceive the quality to be high enough. When enough ants have accumulated at a site, it is deemed to be of a suitable quality (or perhaps the best that can be found in the area), and the ants move in. If the quality subsequently deteriorates, individuals drift away to another site until enough of the colony have left the original nest and joined the new site. A simple, but apparently effective system.

Voting by animals is not a subject that has been studied to any great extent, although political systems are common among social animals and are quite well documented, but if wild dog, meerkats and ants are doing it, you can bet your bottom dollar that other species are doing it too.

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