

Wolves and dogs appear to remember where people hid food

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A wolf from the Wolf Mountain Sanctuary, Lucerne Valley, United States.
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In a study involving several wolves and dogs, both animals performed better at finding hidden food if they had observed the food being hidden by a person—suggesting that they remembered where the food was, and did not rely solely on scent to find it. Sebastian Vetter of the University

of Veterinary Medicine Vienna, Austria, and colleagues present these findings in the open-access journal *PLOS ONE* on September 13.

Many species transmit important information through social learning, where one individual learns by observing or interacting with another. Prior research has suggested that [wolves](#) and [dogs](#)—who were domesticated from wolves—are capable of a form of [social learning](#) known as observational spatial memory, in which an individual can remember where another individual hid a cache of [food](#) and pilfer it. However, much remains to be learned about these abilities and how they may differ between wolves and dogs.

To shed new light, Vetter and colleagues conducted a study with nine timber wolves and eight mongrel dogs living at the Wolf Science Center in Ernsbrunn, Austria. They tested the ability of each animal to find four, six, or eight caches of food, either after seeing a human hiding them or without the animal seeing the hiding.

The researchers found that both dogs and wolves found more of the first five food caches more quickly and with less distance traveled if they saw the food being hidden than if they did not see the hiding. This suggests that the [animals](#) did not just use scent in order to find the food, and it provides further support for the hypothesis that both kinds of animals are capable of observational spatial memory.

Whether or not they saw the food being hidden, wolves outperformed the dogs in finding the caches. The researchers suggest that this difference in performance may not be due to differing observational spatial memory abilities, but instead arises from differences in other traits, such as persistency and food-related motivation.

The authors add, "While domestication probably affected dogs' willingness to adjust to humans, the results of the current study

collaborate previous findings suggesting that [cognitive abilities](#) do not differ very much between dogs and wolves."

More information: Observational spatial memory in wolves and dogs, *PLOS ONE* (2023). DOI: [10.1371/journal.pone.0290547](https://doi.org/10.1371/journal.pone.0290547).
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