

Myth of tolerant dogs and aggressive wolves refuted

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Low-ranked wolves often defend food against their high-ranked partner. Dogs don't. Credit: Roobert Bayer

Dogs are regarded as more tolerant and less aggressive compared to their ancestors, the wolves. Researchers from the Messerli Research Institute at the Vetmeduni Vienna question this image. They show in a recent

study that wolves interact with conspecifics in an even more tolerant way than dogs, suggesting that dogs have a steeper dominance hierarchy than wolves. The results will be published in the journal *Proceedings of the Royal Society B*.

The good relationship between humans and dogs was certainly influenced by domestication. For long, it was assumed that humans preferred particularly tolerant animals for breeding. Thus, cooperative and less [aggressive dogs](#) could develop. Recently, however, it was suggested that these qualities were not only specific for human-dog interactions, but characterize also dog-dog interactions. Friederike Range and Zsófia Virányi from the Messerli Research Institute investigated in their study if dogs are in fact less aggressive and more tolerant towards their conspecifics than [wolves](#).

They carried out several behavioural tests on dogs and wolves. The animals were hand-raised in the Wolf Science Center in Ernstbrunn, Lower Austria, and kept in separated packs of wolves and dogs. Range and her colleagues tested nine wolves and eight mongrel dogs.

Dogs express a steeper dominance hierarchy

To test how tolerant wolves and dogs are towards their pack members, pairs consisting of a high-ranked and a low-ranked animal were fed together. They were fed either a bowl of raw meat or a large bone.

While low-ranked wolves often defended their food against the high-ranked partner and showed aggressive behaviour as often as higher-ranked wolves, this was different in dogs. Low-ranked dogs held back and accepted the threats of the dominant dog. Overall, however, neither wolves nor dogs showed a lot of [aggressive behaviour](#). If any, they showed threat signs.

"Wolves seem to be more tolerant towards conspecifics than dogs that seem to be more sensitive to the [dominance hierarchy](#)", explains lead author Range. "This was shown by the fact that also low-ranked wolves can challenge their higher-ranked partners and the dominant animals tolerate it, while in dogs aggression was a privilege of the higher-ranked partners."



Wolves are more tolerant towards conspecifics than dogs. Credit: WalterVorbeck

"When humans domesticated wolves, they probably chose the submissive animals that were ready to adjust", says Virányi. Dog-human interactions are more about living together without conflicts, not about equality. Their ability to respect and follow others made [dogs](#) the ideal

partners of humans.

Wolves are more tolerant than dogs

Dogs and wolves are rarely aggressive towards conspecifics. Range draws the following conclusion: "Wolves are already very tolerant to their conspecifics. This was shown by the fact that high-ranked wolves accepted the threat behaviours by their lower-ranked conspecifics in the feeding experiment. This tolerance enables wolf-wolf cooperation which in turn could have provided a good basis for the evolution of human-dog cooperation."

More information: Testing the Myth: Tolerant dogs and aggressive wolves , *Proceedings of the Royal Society B*,
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