

# ORAL PRESENTATIONS

## Communication between wolf and domesticated dog revealed from experimental scent marking

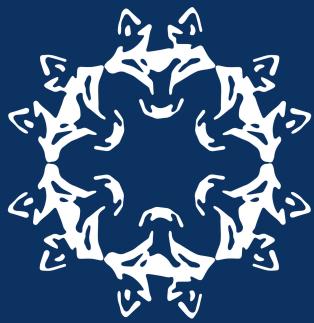
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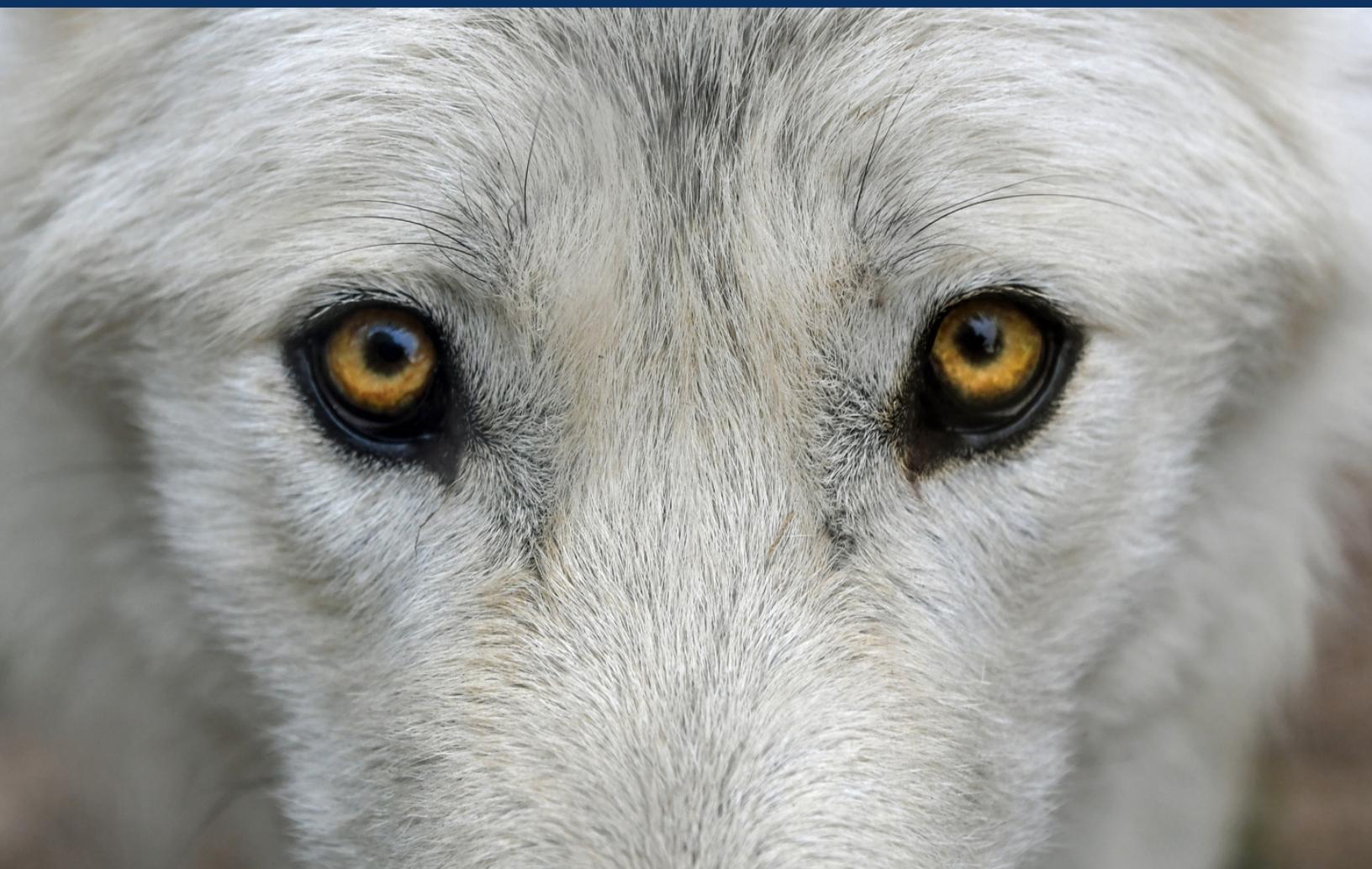
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The European grey wolf (*Canis lupus*) and the domestic dog (*Canis lupus familiaris*) share not only a common origin, but also many similarities in their behavior. Because of their improved protection, wolf populations have increased in Poland and across Europe. The increasing presence of wolves in human-dominated landscapes brings them increasingly into contact with their domesticated relatives, dogs. However, the potential for and ways of interactions between the wild and domesticated form of the wolf are still poorly understood. Scent marking is one of the major forms of communication for canids. It entails among others information essential for marking territories, synchronization of reproduction, establishment of hierarchies in groups, and formation of new pairs. As scent-marking plays an important role in communication for both wolf and dog, the presence of dogs in wolf territories could potentially impact the behavior of wolves. To test this, we experimentally scent-marked locations to simulate the presence of "unknown wolves" (wolf urine from outside the area) and "unknown dogs" (dog urine from outside the area), as well as water as a control. By means of camera traps we studied the behavioral response of wolf families living in Kampinos National Park while exposed simultaneously to all scent stimuli. Our study showed that wolves responded to scent marking from the dog by overmarking it. Wolves spend significantly more time exploring and sniffing "unknown wolves" scents marks compared to "unknown dogs" scent marks. However, time spent by breeding pair on reaction to both scent marks (by overmarking and ground scratching) were on similar level. This result indicates that wolves can distinguish between wolf & dog scent marks, but especially juveniles spend much time exploring dog scent marks. Dog scent marks did trigger a behavioral response in wolves showing that it does affect their behavior. This suggests that the increasing co-occurrence of dogs inside wolf territories, could affect (potentially disturb) scent marking behavior of wolves which deserved more attention in future studies.



# WOLVES ACROSS BORDERS

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