

## Pheromones: non-verbal communication

Dogs excel at non-verbal communication. However, when we use this term, most people think of reading a dog's body language since many educational resources focus on this characteristic of living with dogs.

One aspect of non-verbal communication which is not as readily discussed is pheromones, the invisible and odourless chemicals secreted by the body which trigger a species-specific response. A cat's pheromones will not 'work' on your dog, but your dog will almost certainly be able to communicate with other dogs both in and outside of your household through pheromone detection.

Pheromones are detected by the dog's vomeronasal organ, commonly referred to as Jacobson's organ, which is located inside the nasal cavity of the head. You can't see this organ in the living dog; MRI imaging describes the organ's size and shape (MRI Features of the Vomeronasal Organ in Dogs (*Canis Familiaris*), *Frontiers in Veterinary Science*, 24 March 2020).

There are different types of pheromones, each with a specific purpose:

- Sex pheromones influence mating behaviours
- Maternal pheromones are emitted by a lactating bitch to soothe her puppies
- Fear and stress pheromones, which a fearful or stressed dog will emit and which are then detected by other dogs. This is one reason why veterinary clinics can be the source of great stress to your dog, even if they have never visited the clinic before!
- Appeasement pheromones, emitted to tell other dogs that the dog is not a threat and is friendly

Areas of pheromone secretion include:

- The facial, perianal and genital areas, for social status or dominance
- Legs and the perianal area, to indicate alarm
- Legs, perianal area and in urine and faeces, for marking purposes



- The perianal area and genitals, for sexual communication
- The mammary glands, for appeasement of puppies

Once a pheromone has been identified through chemistry, synthetic versions of the chemicals can be produced. If you have used Adaptil (which used to be marketed as DAP) on your dog for Guy Fawkes night or other stressful situations, you've used the synthetic version of dog appeasing pheromone. ([www.adaptil.com/nz](http://www.adaptil.com/nz))

For obvious reasons, most study of pheromones has occurred in the appeasement area because of the interest in managing stress in our dogs. Since pheromones are not a drug and are species-specific, they are considered safe for use around humans and pets of other species in the household. 🐾

If you are based in Christchurch or will be in town on Saturday, 7 December 2024, please join us for our Christmas dog walk, carol sing, and market — this event is 100% dog-friendly for well-behaved dogs and their owners.

The event takes place at St Paul's Anglican Church in Papanui and starts with a dog walk at 10:00am followed by carol singing in the church. The market hall will remain open until 3:00pm.

