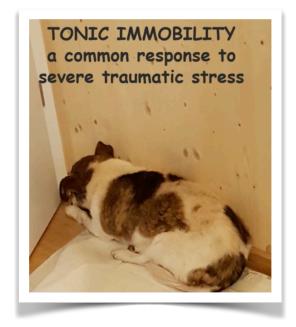
Sniffing for Healing, Jean Donaldson



Fearful dogs, or dogs who may have experienced some trauma, can often be in 'survival shutdown'. It can be a state of freezing, immobilization, and behaviorial shutdown. It is a defence mechanism, 'I'll just stay still and wait to see what happens." Tonic Immobility is the result of feeling incapable of movement, unable to breathe (panic) and a sense of being trapped, with no choice. The dog may be highly aroused (fear) but also unable to move because they feel 'trapped' and that they simply can not engage in any way, and have no option to flee.



Both 'nervous' systems are working are working when a dog is traumatically 'shutdown'.

The sympathetic nervous system: the activation system for fight, flight, fidget, freeze, etc.

And, the parasympathetic nervous system: the system which tries to counteract the sympathetic system, by trying to encourage 'calm down and analyze' or take this in.

The two systems produce a <u>'tonic immobility'</u> in extremely frightened or traumatized dogs. Muscles are physically constricting, so the dogs are simply unable to move in that fearful state.

The mere sight of a 'trigger' can cause shutdown. Dogs who are unable to express fear through moving away, barking or lunging, are not able to express their worry or concern. They have been so seriously impacted by their trauma, that they have a 'learned helplessness' where they can do nothing about their situation, as they have learned that their behavior has no impact on outcomes. Best to simply, do nothing.

Even if your dog is not 'shutdown' but has 'big feelings' or is hyper-aroused, or hyper-vigilante, sniffing can help.

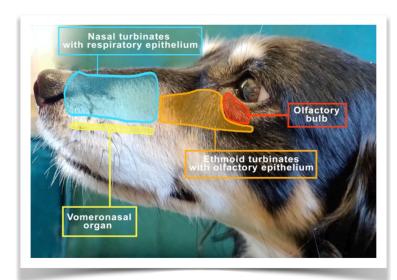
Dr. Donaldson defines trauma as 'overwhelming a dog's normal ability to cope'. It can be a single event trauma (like a dog attack), but it can also be cumulative trauma, from small, everyday stress that can be long lasting & completely overwhelming. And, "After you have been traumatized, you live in a different world." (Dr. Bessel van der Kolk). Not every experience of adversity produces trauma. 'Trauma' happens when a dog is unable to return to a normal state of equilibrium. Trauma is a long term response the dog holds to the experience. Trauma is not what happens to you, it is what happens inside of you as a result of what happened. There is not just a physical injury in trauma, there is a definite diminishment of the dog's Prefrontal Cortex which has largely gone "off-line". They are unable to think past fear. The emotional brain takes over to protects oneself, just in case. In other words, they just can't think because they are just too worried. Your dog is not being 'naughty' or 'stubborn',

they are simply stuck in their emotional brain, scientifically & physiologically. They can not respond thoughtfully.

Restoring the balance between your dog's "emotional brain, and his "thinking" brain, is an important step in reducing your dog's trauma, or fears or reactivity. It provides the dog with a way to self-regulate, when both parts of his brain world together.

Basics about 'sniffing' in your dog's everyday life:

Dogs process the world through their noses. This makes it very important for their confidence and resiliency. They need to sniff in order to understand the world around them. Dogs have more than 100 million sensory receptor in their nose. We humans have only about 6 million. Dogs can smell up to 10,000X more accurately than humans. Processing smells takes up 40% of a dog's brain power.



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Part of the intake of air through the nose goes to oxygenate the blood, but part of that air/scent goes into the dog's olfactory organs (scent). Yep, he can separate the air as he takes it in! And, he can even take in two different streams of air/scent - one through the left nostril, one through the right, at the same time! In studies, dogs seem to sniff through the right nostril when smells are particularly lovely and arousing for them! WOW! Knowing this, and observing right nostril sniffing can help you identify increasing arousal, which may mean less attention or ability to respond in your dog.

Plus, ever notice your dog opening his mouth a little or licking occassionally when he is sniffing? That's to allow more air/scent into the vomeronasal organ, located at the roof of his mouth, leading into his nasal cavity.

There is a scientific difference in the definitions of 'smelling' versus 'sniffing', noted in the graphic at the right:

In dogs, both inhalation and sniffing are intertwined in the brain's processing.

'Sniffing' is like the dog's internal computer processing information and allowing him to evaluate and make behaviorial decisions. Therefor, we can What distinguishes sniffing from smelling is sniffing's cognitive, information-processing component:

"Smelling is an implicit (unconscious), effortless, non-cognitive process that is an accompaniment of breathing . . . In turn, sniffing could be defined as an explicit, effortful, cognitive behavior (Kokocińska-Kusiak et al., 2021)."

impact behavioral and emotional change through sniffing by either creating new associations with those smells, or simply allowing the dog time to sniff and evaluate his world (and those triggers) more effectively.

Sniffing is an important prerequisite to **cognition** in dogs since olfactory information tells them much more about their world than any other experience.

- 1.) scent helps dog to process information: they do not relay on their hearing or eyes as much
- 2.) through scent, the dog has the information it needs to solve problems, to understand situations
- 3.) with this understanding, dogs can make thoughtful decisions about what they should do

Sniffing is a social coping mechanism for dogs, and is known to be a displacement behavior. Ever notice your dog just move away from another dog or a group of people and sniff? Dogs naturally choose sniffing to relax or deal with stress. Has your dog all of a sudden started sniffing in the middle of your training? It's how they cope with stress or frustration.

Sniffing encourages social engagement, with other people or with the environment. Engagement with an activity can be super helpful for worried dogs. While they are engaged they are less worried.

Sniffing promotes movement. Sniffing is a predictable and rhythmic behavior, and dogs love patterns & predictability. "Movement is medicine". Rhythmic activities, like the whole body movement of sniffing, can help to restore the balance of emotional and thinking brains. The calming and safe feelings associated with rhythm start in utero and have life long benefits.

Sniffing engages the 'seeking system' in dogs. It puts your dog in a state characterized by exploration, investigation, foraging. These activities give the dog feelings of eagerness & enthusiasm & curiosity, which is a more positive state of mind. And, sniffing brings the dog to information processing & problem solving, versus emotional responses.

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Sniffing signals the dog's brain to release dopamine into the bloodstream, and activate dopamine circuits - versus stress or cortisol circuits. Dopamine is a feel good hormone & neuro transmitter which promotes feelings of well-being, excitement and desire to engage, or 'do stuff'. Without dopamine, a dog can be far less motivated to engage or learn.

Sniffing is no longer considered a problem, or a distraction. Sniffing is truly a welfare issue for dogs. They need to be provided with opportunities to do this. Change your outlook. Being able to sniff is an absolute necessity for dogs. Let 'em sniff!

Don't underestimate the power of sniffing! Along with other socialization and behavioral modification or training, sniffing can help to raise a confident, resilient dog.

How do we teach our dog's to discover the calming effect of sniffing?

- 1.) Stress 'detox sniffaris' on a long line and sniffing! Just follow him around!
- 2.) Introducing interesting environmental smells in the house can help a 'shutdown' dog to learn to sniff again. (bringing in a sod, or leaves, or twigs, etc.)
- 3.) Snuffle Mats are a great tool to encourage sniffing. Hide treats in cardboard boxes, or treat dispensing balls, etc.
- 4.) 'Start with 'Search' (a single and repetitive 'treat toss'), which can be more arousing than calming
- 5.) Move to 'Find It' ('treat scatter or hide), which builds calm sniffing

Make it a practice to combine both 'street' walks, where you have your dog walk by your side, training a loose leash walk with you, and 'sniff time', where you let out your long line and simply allow your dog to sniff, explore, and be a dog!





(source: Jean Donaldson, PFD, CDBC, CPA CTP, CCUI, Certified Trauma Professional)