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TODAY OUR BREED EXPERT looks at one of the most special, unique – and yet often less appreciated – features of the Border collie 'working mind', for anyone who has not read this before.

BORDER COLLIES AND DUAL SENSORY PROCESSING

There are so many different qualities that make Border collies the most prized sheepdogs in the world (though they will also work other stock). Some are purely physical; i.e. speed, stamina, athleticism and agility. Others are behavioural; intense focus, impulse control and a more obsessive desire to control movement, and repeat the same tasks over and over again. But there is also an extra neurological asset, genetically, which we may often take for granted when training them, or watching them working. And without it these dogs would be something far less special.

The asset in question is dual sensory processing. Or in other words, the ability of the dog to both absorb, and respond to, visual and sound information at the same time (see illustration), as most dogs cannot do this, at least not to such a high and consistent level.

UNDERSTANDING SENSORY PROCESSING IN DOGS

In order to better understand why this ability is so special in collies, we first have to appreciate that different senses - i.e. sight, sound or smell - tend to share the same processing space in a dog's brain. Meaning a dog will typically have to prioritise one particular sense over another, for processing in their brains, at any given time. With many dog breeds this may well be smell (which takes up such vast amounts of processing space in the canine brain), meaning that when a dog is more fully concentrating on a scent, they may appear 'deaf' to any sound going on around them - including an owner's exasperated commands! — because sound processing has now gone on the back burner in their brains. Other dogs, like sight hounds, will prioritise visual fixation on movement over any other competing source of sensory information.

DUAL SENSORY ABILITY

In the Border collie, however, you have a dog who is not only a prime visual fixator - i.e. will readily lock their vision on to moving things - but can also simultaneously take in sound commands from a handler (vocal or whistle) and immediately respond to these with required changes to their behaviour – i.e. stop/start/change direction/lie down. Moreover they can do this without having to watch the handler who is giving these instructions, even if they are some distance away. As said previously, it is a quality in Border collies that is so often taken for granted, but it really is special, and underpins the whole ability of shepherd and dog to work together so effectively as a livestock managing team.

Dual sensory processing will also come to the fore in pursuits like Agility, where the dog needs to constantly remain visually fixated on the obstacles ahead of them, while still taking in their handler's sound cues. Or in Obedience, in exercises like the Sendaway, where you verbally command your dog to drop down while they are still visually fixated on the markers ahead or around them.

DIFFERING ABILITIES IN DOGS

Of course some collies will always be far better dual sensory processors than others, with regards to how readily they can both process, and respond to, sight and sound information simultaneously. Or switch rapidly from one to the other in their brains. Some dogs are very strong visual fixators, finding it harder to 'unlock' this sensory priority in their minds whenever sound information tries to compete with it. This is sometimes how sheepdogs can seem to get 'stuck' with sheep; visually fixating on

them so hard, they forget – even if only temporarily - how to move on when the verbal instruction to do so is given.

As ever, a dog's inherent levels of impulse control, as well as their dual sensory abilities, are also key when it comes to dogs who can make the most rapid adjustments to their actions, or behaviour, in response to a handler's commands.

TRAINING

Overarching all of these more natural abilities in dogs, however, will always be the quality of training they are given. For both impulse control and dual sensory processing abilities can always be consistently improved and enhanced in any dog with more persistent work put in on a handler's part.

I begin working on strengthening my dogs' impulse control levels and dual sensory processing abilities from when they are very young, with exercises like down on the move - when they are en route to chasing a toy - or the mid-chase recall, or any number of other distant control exercises that keep the dog's mind constantly anticipating a sound cue from me, before making a next move, even when they are very far away from me, or not even watching me. And it is always so rewarding to see the exceptional minds and abilities of these dogs being stretched to their fullest potential in this way.

Meanwhile, anyone wanting to know far more about the whole working psychology of the Border collie, and how these dogs evolved to be what they are today will find it in BOOK ONE of my BREED APART trilogy (blue cover) SECRETS OF THE WORKING MIND and BOOK TWO in the trilogy – ESSENTIAL LIFE SKILLS & LEARNING - covers impulse control training and other control exercises like 'down on the move' or the 'mid-chase recall' in greater detail.

Carol Price collie books: In the UK from: https://performancedog.co.uk/.../boo.../authors/carol-price/

In the USA from: https://www.dogwise.com/# and

https://www.cleanrun.com/.../border_collies_a.../index.cfm In Canada from

https://www.4mymerles.com/product-category/books/ In Australia from:

https://gameondogs.com.au/ And in the Netherlands and Belgium from:

https://mediaboek.nl/border-collies-a-breed-apart-book-1...

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