

What's the use of Hearing Testing Border Collies?

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It has become apparent over the past 15 years that there is a significant prevalence of deafness in the Border Collie. Currently, of the Border Collies that have been tested using the Brainstem Auditory Evoked Response (BAER) test at the Animal Health Trust (AHT), 3.6% have been diagnosed with deafness in one or both ears, which is highly significant when compared with the incidence of deafness in the canine population as a whole, which is estimated at 0.025%.

Most people seem to be resistant to the idea of testing, as there is a perception that "there is not a serious problem with deafness" in the breed. However, it is not sufficient to assume that, if you have never identified a puppy of your breeding as being deaf, there is no problem within your breeding lines. This is especially important if an individual is to be selected for breeding. Deafness can be present in both ears (bilateral deafness), or only in one ear (unilateral deafness). A unilaterally deaf dog behaves in a clinically normal manner, as the hearing in the functional ear is totally normal, and therefore it is virtually impossible to identify without the BAER test. Even more significantly, many Border Collies may adapt to total deafness by responding to other cues, and are so clever at this that their owner may not realise that the dog is deaf (it happens more often than you think!) and deafness is not always the first thing an owner might think of as the reason if their dog is not particularly obedient, or doesn't respond as expected.

Scientists at the AHT are currently reviewing all Border Collie hearing test data, with a view to carrying out pedigree analysis and ascertaining the heritability of deafness in the Border Collie. This is in conjunction with DNA sampling, where the aim is to identify the gene or genes responsible for the disorder, and eventually to devise a genetic test for the condition. The work is completely confidential, and no individual animals or owners are mentioned by name. As well as looking at pedigree information, work is being carried out on the effects of certain physical characteristics, such as whether an individual has one or more blue eyes, or if they have an excess of white in the hair coat, especially on the head and whether the merle gene is significant. However, the greatest number of affected animals found so far has, in fact, been of classically marked black and white animals. In summary, work is being carried out on several fronts to get to the bottom of deafness in the Border Collie. In many respects, the analysis is still at a very early stage. However, without the data obtained from breeders who elect to have their stock BAER tested, an answer would be even further away.

If you have any queries, please do not hesitate to contact Julia Freeman at the AHT.

