



Working for the Breed

Hip and Elbow Dysplasia

The WCSS recommends that all dogs used for breeding are British Veterinary Association (BVA) hip and elbow scored by having the dog X-rayed prior to breeding. Hip scoring is done after the dog is 1 year old and is used to determine the degree of hip dysplasia.

The lower the score, the less the degree of dysplasia present. The minimum (best) score for each hip is zero, and the maximum (worst) is 53, giving a range for the total of 0 to 106. Each hip is scored separately under the BVA, so within the UK scores are usually displayed as two numbers separated by a forward slash (e.g., 2/6). The BVA score gives a value for each hip, which added together gives the total actual hip dysplasia (HD) for the dog across 9 separate criteria.

The breed 5-year average hip score is 15.5. A hip score below the breed average is excellent. A total below 25 is acceptable, though the lower the score the better and ideally, we want to aim for scores in single figures, where possible for working dogs.

Unlike hip scores, elbows are scored 0-2. 0 being no changes to the elbows and 1 and 2 indicate increasing signs of elbow arthritis or dysplasia. Unlike hip scoring the higher score of both elbows is taken as the score for that dog. So, if one elbow was 0 and the other 2 the score for that dog would be 2.

Elbow score for breeding dogs should be zero.

The BVA do not advise to breed from dogs with scores of 1 or 2 as this indicates significant changes in the elbows which may be passed on to offspring.

However, it should be noted that hip and elbow dysplasia are only partly genetic and can be greatly affected by environmental factors especially in puppyhood.

In order to better determine how much an individual dog's hip dysplasia has been influenced by genetic rather than environmental factors we can also look at Estimated Breeding Values (EBV) for HD which are available on the Kennel Club website.

Estimated Breeding values (EBV) for Hip Dysplasia

EBVs give an estimate of a dog's, or a litter's level of inherited Hip Dysplasia (without a BVA score necessarily being in place, although the confidence level of the EBV rises when a BVA score has been done). EBVs are only estimates, and they depend on BVA hip scores being in place for the dogs and their close relatives to be calculated with any degree of confidence. Each EBV rating comes with a percentage confidence rating which gives an indication of the amount of data that has been included

in the calculation. The higher the EBV rating, the higher the risk of inherited hip dysplasia, so negative ratings are good, zero is the current breed median score, and a confidence rating over 70% should be sought.

For breeders, checking the EBV of both the proposed sire and dam and taking a mean average of these will give the EBV rating for the proposed litter, so that if one of the breeding partners has a higher BVA hip score than we would ideally like, partnering this dog with one with a compensating low EBV can still produce pups with a lower-than-average EBV. This means that greater flexibility can be used in selecting dogs for breeding with a higher-than-average EBV and therefore more dogs can be bred from, which of course is all good for genetic diversity.

More information on EBVs is available on the KC website here: www.thekennelclub.org.uk/about-ebvs. EBVs for elbow dysplasia will be available on the KC website sometime in the future.

Advise for Puppy Buyers

Check both the hip and elbow scores for both parents, but also check the EBV for both the sire and dam on the KC website (to do this you will need to know the KC registered name for both dogs).

To work out the EBV for a litter, take the mean average two values (ie sire score plus dam score and divide the total by 2) and this will give you the EBV for the litter. Ideally this should be zero or a negative number which indicates a lower chance of hip dysplasia being passed to the offspring. Try to avoid litters with a high positive value.

Environmental factors

A pup from good scoring parents is not guaranteed to have good hips/elbows but likely to have a higher chance of this. Remember there are also environmental factors affecting hips and elbows and these can be minimised by ensuring a good diet for growing bones, ensuring your pup/dog does not become overweight, limiting high impact exercise in young growing dogs, and discouraging jumping and going up and down stairs.

Clumber Spaniels are a rare and vulnerable breed with only around 200 puppies born each year.

Breeding strategies need to be thoughtful and well informed. There is a responsibility to act on scientific facts rather than personal opinion.

The Working Clumber Spaniel Society is grateful for the ongoing guidance and support from both the Kennel Club who study and understand the breeding strategies appropriate to the breed and its small gene pool.