

## **Screening Project into the Prevalence of Progressive Retinal Atrophy (PRA) in the UK population of Clumber Spaniels**

Progressive Retinal Atrophy (PRA) has been noted in Clumber Spaniels and the mutation has been identified as the RPGRIP1 (cord 1) variant. It is a recessively inherited condition and a dog would need to inherit two copies of the faulty gene to be at risk of developing this form of PRA which is a disease of the retina that leads to blindness in affected dogs; the condition usually takes a long time to develop and night blindness can be an early indicator. As the disease progresses, dogs will also lose the ability to see when it is light and eventually will lose their sight completely. It is often seen as a late onset condition although it must also be recognised that other conditions can lead to sight loss, particularly in older dogs.

The Clumber Spaniel Club is undertaking this study to investigate the prevalence of the condition within the UK population using DNA testing. It will also use the BVA Eye Test scheme to see if any of the dogs found to be genetically "Affected" are also clinically affected for the condition. The Club has engaged the help of Laboklin for this project; they will issue test forms specifically for this project and the results will be shared with the Club as well as the owner. Laboklin has validated a DNA test for Clumber Spaniels and a sample for the test is gathered by a simple mouth swab.

A dog tested "Clear" has not inherited the faulty gene and is free from the disease.

A dog tested as a "Carrier" has inherited one copy of the faulty gene; it will never display any symptoms but may pass the gene to their offspring.

A dog tested as "Affected" has inherited two copies of the faulty gene; it MAY display symptoms and will always pass on one copy of the gene to their offspring. Please see advice from Laboklin below.

**The following advice from Laboklin should be noted:**

**Not all dogs tested affected genetically for cord 1 PRA have developed the PRA clinical symptoms, which is also the case in other breeds including Miniature Dachshunds and English Springer Spaniel, we must make it clear that not all Clumber Spaniels tested as genetically affected for cord 1 PRA will definitely develop PRA.**

**It is thought that in there are other factors, which maybe genetic or otherwise that affect the onset of clinical symptoms in genetically affected dogs, and therefore, test results will have the following statement: "Association between the cord 1 PRA mutation and symptoms of PRA is not always observed"**

This is based on previous research by the Animal Health Trust that indicates a second gene may be involved that allows the condition to develop in some dogs. It is hoped that this study will help to identify how many Clumbers carry the gene for PRA and also how many are actually clinically affected by the condition.

Initially the study will test 50 Clumber Spaniels aged 8 years and above and dogs that have been bred from will be given priority.

Applications are invited from all owners of Clumber Spaniels.

The test is free to members of the Clumber Spaniel Club and there is a nominal charge of £15 for non-members. (£15.00 is the cost of a new Club single membership so by taking out a membership the test becomes free and all the other benefits of membership will be gained.)

Any Clumber that is found to be genetically "Affected" will be offered a free BVA Eye Test.

More information about PRA and its inheritance can be found on the Club's website:  
[www.clumberspanielclub.org.uk](http://www.clumberspanielclub.org.uk)

The application form can be downloaded from the Club's website.

For more information or to request a hard copy of the application form please contact the Breed Health Coordinator, Carol Page on 01489 589734 or [health@clumberspanielclub.org.uk](mailto:health@clumberspanielclub.org.uk)

**Applications are to be received by Friday 21st May 2021**