#### **ANNUAL HEALTH REPORT 2021**

### Registrations

In 2021, 286 puppies were registered from 48 litters; this shows a significantly large increase of 67% from 185 in 2020. In addition 9 imports were registered.

### Surveys

### a/ Lifespan Survey

Only 1 lifespan survey form was returned for 2021; this was for bitch aged 13 years 6 months with a gastro intestinal carcinoma.

#### b/ Breeding Survey

Only 1 breeding survey form was returned for 2021; this reported problems with whelping that required a Caesarean Section after the birth of the first puppy and 2 stillborn puppies produced.

## **Health Screening**

## a/ Eye Testing

The Clumber Spaniel Club has always recommended health screening and eye testing with the KC/BVA Eye Scheme has been utilised by some over the years. However the results are not published therefore in 2009 the Club started its own database for the results and anyone with an eye test certificate for a Clumber is invited to forward a copy. This will enable the Club to gather information on the true status of the breed's eye health.

The Club started to subsidise the cost of eye testing for its members in 2012 and in 2013 the subsidy was extended at a lesser rate to cover non members Clumbers and this has being repeated each year since. The Club now provides free testing for all dogs aged 8 and over and an eye testing session is now held in conjunction with the Club's Championship Show each year.

In 2021 the BVA issued 79 eye test certificates for individual Clumber Spaniels, an increase on 39 in 2020. The BVA sightings meeting to consider the sightings from the certificates issued for 2019 – 2021, delayed because of the pandemic, note:

Distichiasis 6
Entropion 8
Ectropion 8
Combined Entropion/Ectropion 5
PPM1
PPSC Cataract 1
Post Cataract 4
Nuclear Cataract 3
Anterior Cortical Cataract 2
GPRA Like appearance 6
Equatorial Cataract 1

The Club received 28 copies of the eye certificates issued in 2021 for the database which can be found on the Club's website. For the 5 years ending in 2021 26% of the dogs registered in the period had an eye test although some dogs may have been tested more than once in that time.

No certificates were published by the AHT or ECVO Eye Schemes.

Eye Testing is recommended for Assured Breeders.

## PRA (Progressive Retinal Atrophy)

Progressive Retinal Atrophy (PRA) is an inherited 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. There are many genetic variants, each affecting different breeds, but all cause a degeneration of the retina at the back of the eye. It is a disease that is often identified as a late onset condition in that it is seen in older dogs. Currently there is no treatment for progressive retinal atrophy.

Some Clumbers may lose their sight but this can be due to a variety of causes as is evident from the BVA eye test results.

The Clumber Spaniel Club became aware that a number of Clumber Spaniels that have been screened by Embark in the USA have been identified as carriers for PRA with a limited few being found to have two copies of the faulty gene. Two Clumbers are confirmed to be clinically affected.

The PRA mutation that has been found is the RPGRIP1 (cord 1) variant that was first identified in Miniature Dachshunds by the AHT and has since been noted in English Springer Spaniels. 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.

Laboklin has validated a DNA test using samples from the clinically affected dog plus several Clumbers that Embark had determined to have two copies of the faulty gene but were not yet clinically affected. The sample for the test is gathered by a simple mouth swab and members of the Clumber Spaniel Club will qualify for a 10% discount on the Laboklin test

In 2021 the Club launched a study to find out more about PRA in Clumber Spaniels.

The study aims 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.

The study into PRA is ongoing; the Club intends to test 50 dogs aged 8 years and above and still have capacity for more Clumbers to enrol. It is hoped that this study will help us to assess the correlation between the cord 1 mutation to PRA symptoms in the breed.

From those that have been tested as part of this study we have identified 4 that are "Genetically Affected" at the close of 2021 and all have been offered a BVA eye test to establish if they have any clinical symptoms. One was found to show some symptoms that may be seen associated with but not restricted to PRA and one was found to be clear of any symptoms. The result on the other two will be reported in due course. The Club has received results for a number of Clumbers that have been tested outside of the study and the database has been published on our website. It has 35 results recorded, of which 13 (37.1%) are Clear, 14 (40%) are Carriers and 8 (22.9%) are "Genetically Affected".

If this is representative for the breed then it may be that the faulty gene is widespread within the population however the fact that we do not find large numbers of Clumbers with sight loss attributable to PRA then it may be that, as with the Dachshunds, a second faulty gene is needed for the dogs to develop the condition. We must remember it is evident from the BVA eye test results that some Clumbers may lose their sight due to a variety of other causes.

#### b/ Hip & Elbow Scoring

Hip Scoring is recommended for all breeding stock and in 2021 a total of 76 Clumbers were screened for Hip Dysplasia which is an increase on the 2020 figure of 32; 62 were also screened for Elbow Dysplasia which is 35 dogs more than in 2020.

Hip Scoring is a requirement for Assured Breeders.

The 5-year Rolling Trends in hip scoring shows the improvement in hip health is being maintained. For the 5 years ending in 2021 it can be noted that 21.1% of the dogs registered in that period were hip scored and 138 dogs (54.8% of the total scored) had a score of 10 or less. The lowest score for 2021 was a total of 4 and the highest score was a total of 73. The Median based on 5 years stands at 10.

### **Estimated Breeding Values (EBVs)**

As a good proportion of the Clumber Spaniel population has been hip scored the Kennel Club have developed Estimated Breeding Values for the breed. This tool uses all screening data and pedigree information from the individual dog and its surrounding family, to more effectively determine the genetic risk that each dog will pass this disease to its progeny and is more accurate than by using an individual dog's test score alone.

This was introduced in 2015 and can be found on the Kennel Club's website.

## c/ Pyruvate Dehydrogenase Phosphatase 1 Deficiency (PDP1)

In 2021, 11 Clumbers were tested for PDP1 and all were Clear. There are 261 PDP1 test results recorded on the Club's database and only 4 carriers of have ever been found in the UK.

It is recommended that all breeding stock is tested for PDP1. This is carried out by Laboklin and arrangements have been made for a discounted test fee through the Club.

PDP1 Testing is recommended for Assured Breeders.

# d/ Exercise Induced Collapse (EIC)

EIC emerged in Clumber Spaniels in August 2015; it is due to a genetic fault and is proving to be more widespread than the PDP1. Affected dogs may be symptomatic whilst others show no symptoms at all but are at risk of developing symptoms at any time during their life. A DNA test has been developed and validated by Laboklin and the Kennel Club have recognised the test as an Official DNA Test for the Breed. The condition follows an autosomal recessive trait of inheritance and therefore has a clear mode of inheritance; this should enable breeding out the condition within a few generations. The Club has established a voluntary database for results and also includes the published results.

In 2021, 21 Clumbers were tested for EIC of which 17 were Clear and 4 were Carriers.

At the end of 2021 the results of 455 dogs were known; of these 258 are Clear (56.7%), 180 are Carriers (39.6%) and 17 are affected (3.7%). However this does not give an accurate picture as most of the dogs tested to validate the test were those suspected of having the condition and their results led to a significant number of related dogs being tested. Therefore more results from different bloodlines are needed to determine the true prevalence within the Breed.

It is recommended that all breeding stock is tested for PDP1. This is carried out by Laboklin and arrangements have been made for a discounted test fee through the Club.

EIC Testing is recommended for Assured Breeders.

# Incomplete Ossification of the Humeral Condyle (IOHC)/ Elbow Y Fractures

IOHC (also known as Humeral Intracondylar Fissure, HIF) is a condition in which there is a weakness in the humeral condyle (part of the elbow joint in the forelimb) and it is most commonly seen in spaniels, This condition predisposes to fractures (breaks) of the humeral condyle and can also cause lameness in its own right without fracture.

There may be a genetic basis to IOHC/HIF, but as yet, this has not been determined.

A number of cases of Clumbers suffering from elbow breaks have been reported and data from all of the reported cases has been compiled so that research into this condition can be investigated.

## **Population Size & Inbreeding Coefficient**

The Inbreeding Coefficient for each breed is revised annually and currently stands at 15.9% which is a very slight increase from 15.7%.

## **Kennel Club Judges Health Monitoring**

There has been no report from The Kennel Club's feedback from Championship Show Judges questionnaires concerning Breed Watch Points of Concern for 2021.