



Flatcoated Retriever Society
AGM Health Report March 2018

University of Cambridge Report

The following is a summary from the report received from Dr Jane Dobson, University of Cambridge- the full report will be available on the Society website after the AGM.

'Cause of Death Register

At December 2017 the number of entries into the Cause of Death Register stood at 558 with 509 cases having complete information to allow further analysis. The key findings are:

- The median age at death was 9 years (range 1-16 years).
- The most common causes of death were "cancer" (n=336, 66%), "old age" (n=37, 7%) and cardiac and kidney conditions (n=22 and 19, 4% each).
- Within tumor related death "sarcoma, soft tissue" was the most common together with "sarcoma, histiocytic" (n=78, 23% and n=65, 19% respectively).
- "Cardiomyopathy, dilated" accounted for 50% (n=11) of the cardiac causes of death.

Over 500 owners have kindly offered precious information for the good of the breed when grieving the loss of their beloved pet. Many people contributed a lot of detail of their dog's illness which Chiara Talamonti summarised for publication in a recent Newsletter. The contribution made by these owners has been very much appreciated by everyone involved in the project.

Other News.

In April 2017 we appointed Chiara Talamonti to undertake a 12 month project funded by Petsavers (BSAVA) entitled "Evaluation of the microenvironment and immune function in Histiocytic Sarcoma, a tumour of dendritic cells". We are very grateful to Liz Branscombe and Jane Alexander in helping us secure samples of blood and tumours for this work. The project is nearing completion, we are hoping to publish some of the findings in due course. '

A summary of findings can be read in the full report which will be available on the Society website. Although Chiara's project is nearing completion Jane Dobson is still interested to hear of dogs affected by histiocytic sarcoma but does not require fresh blood or tissue samples at present. Jane and Chiara have asked me to pass on their thanks to all members of the Breed Society for their continued support of their work.

AHT Glaucoma project

“Identification of genetic risk factors for glaucoma and pectinate ligament dysplasia in the Flatcoated Retriever and development of DNA tests to reduce disease prevalence”

The following is a summary from a project report received from Cathryn Mellersh and James Oliver, the full report will be made available on the Society website (within the health section under the DNA research tab)

‘We have shown that PLD almost certainly progresses in FCRs. This means that repeated gonioscopy screening is recommended throughout life and this replaces previous advice that screening should be a once-in-a-lifetime event. We have found a position in the genome where a genetic risk variant(s) for glaucoma in FCRs is located. As yet we have not identified the precise position in the DNA that is responsible for the increased risk so at this stage we are not in a position to offer any form of DNA test. We have also identified a gene that is worth further investigation because its expression appears to be different between dogs with glaucoma and dogs with healthy eyes. Our findings quite clearly indicate that PLD and glaucoma are complex conditions, and as such investigations to tease apart the genetic basis of these conditions will take time and continued research. James Oliver is now writing up his thesis, so will spend much of the next six months preparing for his PhD examination and also preparing a scientific paper detailing his findings, which will be submitted for publication, also within the next six months. We hope that once our findings have been published we will be able to secure additional funding to continue our investigation of glaucoma in FCRs as well as other breeds.’

AHT Give a Dog a Genome Project

We have been advised by the GDG team that they have now reviewed the health concerns we summarised for the Flatcoated Retriever and collated the information. After assessing all of the evidence available the team has decided that it will be most useful to sequence the whole genome of a dog with Histiocytic Sarcoma. A DNA sample from a suitable dog was collected and the sequencing process is currently taking place. When the sequence data is received the GDG team will update us and liaise with other research collaborators investigating this disease in the Flatcoated Retriever to share their findings.

Kennel Club Breed Health and Conservation Plan

This project was launched by the Kennel Club in September 2016, it is hoped that this resource will aid breeders and breed clubs in making balanced breeding decisions for the future health of their breed. A plan will be developed for each breed and will take a variety of factors into consideration such as known inherited conditions, any conformational concerns and population genetics.

The Kennel Club BHCP project is led by Dr Katy Evans, a veterinary surgeon with a MSc in Veterinary Epidemiology and a PhD in Quantitative Genetics. The Breed Health Coordinator and breed health representatives from the breed organisations will be the central collaborators in the identification and prioritisation of health concerns but additional information for each breed’s plan will be sought from veterinary and research communities in order to provide clear indications of the most significant health conditions in each breed, in terms of prevalence and impact.

We have been informed that the Flatcoated Retriever will be one of 30 breeds to have a BHCP developed during 2018. The BHCPs will be used to offer guidance to breeders and breed clubs

regarding maintaining and improving breed health and to identify where additional research or resources are required and where further funding is needed.

More information can be found in a booklet produced by the Kennel Club <https://www.thekennelclub.org.uk/media/1159270/bhcp-booklet-v1.pdf>

Group study update

The study is now entering its eighth year, the group now totals 77 dogs with three new dogs joining the study in 2017. Unfortunately, twenty-two of the owners did not return questionnaires in 2017, 8 of which have now lapsed for two years so we assume they no longer wish to participate, I have received no communication despite an annual email reminder. Sadly, in the last year two dogs were euthanased due to illness. Once again, I would like to take this opportunity to thank all the owners who have contributed so conscientiously towards the study over the years, we still have 13 dogs from our original group who began the study in 2010.

The majority of participants remain fit and healthy, with only minor illness occasionally reported.

BVA/KC Eye Scheme

The Flatcoated Retriever is currently certified under the BVA/KC scheme for the eye condition Goniodysgenesis (G) also referred to as Pectinate Ligament Abnormality (PLA). Goniodysgenesis/Pectinate Ligament Abnormality is the predisposing abnormality to primary angle-closure glaucoma. It can only be detected by gonioscopy examination. As we now know this can be a progressive condition in Flatcoated Retrievers, the BVA therefore recommended that gonioscopy examination should be carried out every 3 years in all Flatcoats.

The BVA Eye Panel Working Party (EPWP) have devised a grading system which was introduced in July 2017 which reflects more accurately what the Eye Panellist observes during gonioscopy examination, results will now be recorded as PLA grades (0, 1, 2, 3).

Grading will provide owners and breeders with a greater level of information about the extent of any goniodysgenesis, especially the extent of pectinate ligament abnormality (PLA) / dysplasia (PLD) and the potential for glaucoma to develop in later life.

Further information about the grading scheme and breeding advice relating to this can be found on the FCRS website and will be published in the Yearbook.

May I take this opportunity to thank everyone who has supported our breed health initiatives throughout the last year.

Liz Branscombe Dip AVN(Surgical) RVN
Health Sub Committee
KC Breed Health Co-ordinator
March 2018