



Flatcoated Retriever Society

AGM Report March 2017

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 and published in the Yearbook.

Tumour Survey - Archive

During 2016 Tess Hoather was supported by a Bursary from the Flatcoated Retriever Health fund to archive and catalogue all the tissue and blood samples we have received over the years. This work was completed in September 2016. We have a total of 2033 tissue samples archived in wax blocks, over 200 frozen blood samples and some freshly frozen tissues all of which will provide a valuable resource for future work.

Cause of Death Register

The number of entries into the Cause of death Register now stands at approximately 470 with the addition of 55 dogs since February 2016 (some double / triple entries need to be cleaned up in the data base). This is down a little from 2014 and 2015, hopefully this report will serve as a reminder to people who sadly lost a dog in 2016 to contribute their information for the Breed.

The number of cancer-related deaths is still in the ball park of 65% of entries (68% of entries for 2016) A more detailed analysis of data from the register is contained in the full report, which will be available on the Society website for reference.

Future research at Cambridge

In March 2016 we were awarded funding from Petsavers (BSAVA) for a 1 year Masters in Research for a project entitled "Evaluation of the microenvironment and immune function in Histiocytic Sarcoma, a tumour of dendritic cells".

We have appointed Chiara Talamonti to start this project in April 2017. One aspect of the project is to evaluate T lymphocyte profiles in the blood of affected dogs, so we would be very grateful to hear of any dogs affected by histiocytic sarcoma over the next 12 months. We would be willing to advise on their management or see them at Cambridge (via referring Vet as per normal – but with reduced Consult fee) as part of this work.

We will be advertising this more actively once Chiara is in post.

Please pass my thanks to all members of the Breed Society for their continued support of our work'.

AHT Glaucoma project

The following is a summary from the report received from Janes Oliver (full report to be published in Yearbook and on the Society website)

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

Aims and objectives of the project

1. To provide robust and current prevalence data for pectinate ligament dysplasia (PLD) in the Flatcoated Retriever (FCR) in the UK
2. To collect DNA from i) PLD cases ii) Primary Glaucoma (PG) cases and ii) controls and perform genome-wide association analyses for PLD and PG
3. To identify genetic variants that confer susceptibility to PLD and PG in the FCR
4. To enhance the understanding of the relationship between PLD and PG in the FCR
5. To develop genetic tests based on the mutations or genomic regions we identify
6. To investigate which other breeds share the FCR genetic risk factors we identify and are thus able to benefit from the genetic tests we develop

Progress to date with objective 2

In our previous report (November 2015) we summarised the results of a combined GWAS we had done with GWAS data we had at that time from 148 FCRs and also for 92 Welsh Springer Spaniels comprising i) 24 with normal eyes (controls) ii) 68 with PLD or PG. That analysis revealed a single locus on chromosome 11 that reached a genome-wide significant level of association with disease.

Since our previous report we have repeated a combined GWAS with i) the data from the 166 FCRs we now have (described in this report) and ii) 116 WSSs we currently have genome-wide genotyping data for and unfortunately the locus on chromosome 11, described above, no longer demonstrates a significant association with either PLD or PG. This non-significant result, obtained with a larger data set than before, indicates that our previous association was likely a false positive, obtained as a result of population structure within one or both of the breeds under investigation. We are currently exploring alternative methods to correct for population structure that are more appropriate for binary traits than the fixed effect model we used previously.

Concurrent investigations in our laboratory with other breeds at risk from PLD and PCAG have similarly failed to identify loci associated with PLD, but have successfully revealed two loci significantly associated with PCAG that we are currently following up. For the other breeds we have studied we have larger numbers of samples from dogs affected with PCAG than we have for the FCR. Of our 77 FCR cases 65 are dogs with PLD but without PCAG whereas only 12 have PLD and PCAG; these numbers reflect the fact that the prevalence of PLD (and consequently PCAG) has decreased in the FCR over recent years, probably as a result of extensive eye screening by breeders (reference) and the very modest number of samples we have been able to include in our analyses from FCRs affected with PCAG might explain our difficulty in identifying regions associated with PCAG in this breed.'

The research continues and we will be kept updated on progress, James would be grateful to receive DNA samples from FCR with primary closed angle glaucoma should you hear of dogs diagnosed with this condition.

Health reporting

There has been a marked increase in enquiries and health reports in the last few months with the number of enquiries for January to March 2017 just under the number received throughout the whole of 2016. A number of cases of patellar luxation and two cases of elbow dysplasia has been reported which is concerning.

Health schemes

The following data was taken from the Kennel Club Dog Health Group report for 2016.

Hip Scores

Number of dogs scored over 15yrs: 3430

Number of dogs scored in 2016: 151

15yr median 7.0 (mean 7.9)

5yr median 7.0 (mean 7.3)

Elbow Scores

Dogs scored in 15 yrs	Grade 0	Grade 1	Grade 2	Grade 3
318	312	3	2	1

Eye examinations

Number of dogs examined over 15yrs: 3385 (3216 unaffected, 169 affected Goniodysgenesis)

Number of dogs examined in 2016: 136 (134 unaffected, 2 affected Goniodysgenesis)

Results of repeat KC/BVA gonioscopy tests are still not published with the health data of individual dogs on the KC website, I have spoken to the BVA about this on a number of occasions in the last year and they assure me the data is ready for the KC however publication has been delayed due to a need for updates to the KC IT system. I spoke to both parties (KC and BVA) again at Crufts and have been told the system will be updated in the next few weeks-all results should be available on the KC website for individual dogs by mid April.

Group study update

The study is now entering its seventh year, the group now totals 79 dogs with three new dogs joining the study in 2016. Sadly in the last year three dogs from the original 2010 cohort were euthanased due to illness and in addition three dogs were withdrawn from the group. Fifty-nine owners updated health information for their dogs in 2016 (17 of these from the original group). I would like to take this opportunity to thank all the owners who have contributed so conscientiously towards the study over the years.

The majority of participants remain fit and healthy, with only minor illness occasionally reported. It is interesting to note that only about 40% of dogs have had gonioscopy eye examinations, I am not sure if this is because there is a lack of awareness regarding the importance of eye testing or whether there is a misconception that this test is only necessary prior to breeding?

Breed Health Coordinator of the Year 2016

In December 2016 I was extremely proud to receive this award, I would like to thank the Society for their nomination and everyone who showed their support by voting. As BHC I liaise with the KC health department and BVA on behalf of not only the Society but also the other three breed organisations.

Health Fund

We are extremely grateful to everyone who has organised fund-raising initiatives and for the donations that have been made to the Brenda Phillips Memorial Health Fund over the years. These include donations from litter recordings, sale of the Society calendar, donations from the patellar screening carried out by Jane Alexander MRCVS at the Championship show, donations from raffles and the sale of very popular hand knitted socks to name but a few.

Liz Branscombe Dip AVN(Surgical) RVN
Health Sub Committee
KC Breed Health Co-ordinator
March 2017