

## ***French Bulldog Club of England Health Improvement Strategy 2012,***

### **Owners & Breeders**

- Continue to promote and encourage owners and breeders to participate in the French Bulldog Health Scheme, DNA testing and research programs
- Provide breed health information

### **Buyer Education:**

- Provide breed health information to prospective puppy buyers and identify ways to improve the availability of breed health information on commercial puppy sales websites

### **Communication:**

- Provide regular updates on the work of the FBCE, using a variety of on-line and off line channels/media
- Liaise with French Bulldog Clubs including overseas clubs

### **Health Surveillance**

- To continue to monitor the health status of the breed.

## **FBCE Breed Health Co-ordinator's Report**

### **Communication and Education**

There are four key groups of people with whom we have to communicate effectively:

- Breed Club members
- Breeders who are not members of Breed Clubs
- Owners and potential owners of French Bulldogs
- Judges and potential judges of French Bulldogs

The FBCE have continued to develop their approach to communications in a number of ways -.

- The **Facebook** page continues to grow, this is an Open Group where anyone can view the contents , but only members can comment on posts.
- The new **Website** is currently averaging around 700 visitors per day In the

week after Crufts the site had double the number of visitors compared to previous weeks and we had over 1200 unique visitors each day over the Crufts period 2013

- A **Judges Training Seminar** was held in March 2012
- An **online guide** '*Judging French Bulldogs , Putting Health First*' has been made available on the FBCE website
- The Health pages of the website provide up-to-date 'News' of health events and seminars as well as links to various health related topics , posts are also made on the clubs Facebook page.
- **Health Results** are published on the website and updated regularly
- We placed an advert in the Breed Club section of Your Dog Magazine in October to try to reach the pet owning public .
- **Health Articles** continue to form an important part of the FBCE's magazine the French Connection
- The FBCE also accepted an offer of a **Health Seminar** from the Dick White Charitable Trust and this took place on 3<sup>rd</sup> March 2012. Those Frenchie owners present were able to make donations to the Dick White Charitable Foundation.
- For many of the conditions that we need to address, it is necessary to seek **specialist advice** . We therefore continue to work in partnership with specialists from the Animal Health Trust, Kennel Club, Cambridge University Veterinary School, Thermal Imaging UK and others, as necessary.
- We have also sought advice from **geneticists and vets** to help inform our member's decisions on amending the KC Breed Standard Colour Clause
- As KC French Bulldog Breed Health Co-ordinator I continues to build relationships with other breeds' Health Coordinators in order to **share experience** and learn from other's work. For example the FBCE has shared its experience with the Health Scheme with a number of other breeds who have been able to tailor it to their own requirements and implement it successfully

## **Genetics and Diversity**

Genetic diversity refers to the total number of genetic characteristics in a species. It is important that species have a large genetic diversity to allow them to adapt to changing conditions. Inbreeding reduces the genetic diversity of a breed and increases the chances that a dog will inherit the same (possibly bad) version of a gene from both parents

The Kennel Club "Mate Select" on-line service was launched in 2011. The site enables breeders to:

- Find the health test results of individual dogs
- Find out the Coefficient of Inbreeding of an individual dog
- Find the Coefficient of Inbreeding for an entire breed
- Predict the Coefficient of Inbreeding of puppies from a proposed mating

The (breed) average inbreeding coefficient for a breed is calculated on an annual basis by calculating the inbreeding coefficients of all individuals of the breed born during the selected year. The average of the inbreeding coefficients is taken as the mean value for that year.

As of December 2012 the Coefficient of Inbreeding for French Bulldogs was 5%. This may be misleadingly low as the data (5 generation pedigree) on many import dogs is unavailable.

### **What does this mean ?**

The higher the COI, the greater the probability (and risk) that two copies of a particular gene will be inherited from a common ancestor. The KC will no longer register puppies from mother/son, father/daughter or brother/sister combinations - these would have a COI of at least 25%. The lower the COI figure, the less inbred a dog is. This matters because there is well-documented evidence that as the amount of inbreeding increases, the risks of lower fertility, compromised immune systems and smaller litter sizes increases.

Over the past 5 years, a greater number of French Bulldogs have been imported than ever before in the history of the breed. This influx of new blood, where it is from unrelated pedigrees, has helped to increase the genetic diversity of the UK French Bulldog gene pool. It has to be said though, there are risks associated with importing dogs; for example bringing in genetic mutations that may cause health problems that aren't currently present.

## **Health Surveillance**

The focus of our health surveillance and education in 2012 was the **French Bulldog Health Scheme**. To date this has achieved a response of more than 250 individual Frenchies being awarded the Bronze Health Certificate. Approximately 90 Frenchies awarded the Silver Certificate and 25 Frenchies awarded the Gold Certificate. The first French Bulldog Ch Hetana Paddy O'Reilly has achieved the Stud Dog of Excellence Certificate having sired a number of offspring who have also gone on to achieve the Bronze, Silver and Gold Certificates.

In addition to aspects of the French Bulldog's conformation and construction which may cause health concerns, the FBCE has acted to prevent **health issues in relation to coat colour**.

- a) Successfully lobbying the KC to prohibit the registration of Merle French Bulldogs and their offspring
- b) In addressing the tightening up of KC Breed Standard Colour Clause

## **Spine Problems**

The FBCE initiated a study into the potential value of using Thermal Imaging to assess the health of French Bulldog's spines and hips. This followed discussions with Veterinary Thermal Imaging UK. A small-scale pilot study was conducted in October 2012 in which 20 dogs were thermally imaged. Of these 20 dogs, 7 showed increased thermal readings along the dorsal line.

A further robust study will commence this year. This study seeks to extend this preliminary work to a statistically significant population (imaging of 200 subjects is recommended) to ensure repeatability and accuracy of findings, in addition to determining the best practice screening protocol for thermal imaging.

French Bulldogs are predisposed to various congenital abnormalities of the vertebrae. These abnormalities are traditionally identified via X-ray and MRI screening, both of which are invasive and costly for the owner. There is a desire to reduce incidences of these conditions through screening breeding animals, to try to eliminate genetic factors. We hope the study may be able to identify the differences between healthy and unhealthy backs. If the study proves successful, it may provide us with a way of identifying "at risk" dogs and therefore influence whether or not they

should be used in breeding programmes.

Spinal Problems in Frenchies also include degenerative Spinal Myopathy:

We hope to collect DNA samples from dogs taking part in the Thermal Imaging project for possible DNA research in the future. This DNA will be banked. We will have to explore the cost involved .

**Patellar Luxation** : To date the evidence collected through the Health Scheme using the established Putnam 1968 method (which does not require anaesthesia) preliminarily indicates that this is only a very small problem in the breed. This may or may not be confirmed by a Breed health Survey

**Heart Disease** Preliminary results from approximately 150 French Bulldogs scanned to date indicate that this appears not to be a significant problem in French Bulldogs . It may be sensible to continue the Cardiac Screening programme for a minimum of 5 - 10 years to confirm . ( Requirement of Silver health Certificate)

#### **Eye Disease:**

There has been approximately 400 French Bulldogs who have taken the HSF4 DNA test to date. With 19 carriers identified. The FBCE organised a special discount on the cost of the test on 3 occasions. This discount as been made available to all French Bulldog owners, not just club members and was offered to both other breed clubs

**BOAS** : Talks began in 2102 between Vets at Cambridge University Vet School and myself as Breed Health Coordinator. The BOAS project was to be undertaken by a vet for her PhD qualification. We invited them to give a short presentation to us and the KC High Profile Breed Rep, to show us what would be involved for our Frenchies.

Once agreed the project (with a grant from the KC Charitable Trust) commenced this year (2013) with a free seminar hosted by the Cambridge research team

The initial findings of their study have provided objective characterisation of the respiratory cycle of brachycephalic dogs and its relationship to the skull dimensions. However, they would like to also study healthy brachycephalic dogs to gain

information about the frequency with which BOAS is seen in the breed, to have controls against which to compare their clinically affected dogs and to see if they can use WBBP (*Whole Body Barometric Plethysmography*) as a screening test for BOAS. The study targets include both healthy brachycephalic dogs and BOAS-affected dogs. This study also aims at defining the genetic basis of BOAS and to associate the genotypic and phenotypic abnormalities that affect respiratory function in brachycephalic dogs. By taking DNA cheek swabs from a large number of both healthy brachycephalic dogs and BOAS-affected dogs, together with the WBBP measurements, they expect to identify the genes of interest in BOAS.

The long-term aim of this study is to improve the health and welfare of brachycephalic breeds by reducing the incidence of severe BOAS and give them a better quality of life.

### **Priorities for 2013**

- Establish a 'Health Group if possible
- Conduct a review of the Health Scheme
- Conduct a General Health Survey to include a Cause of Death Survey
- To promote the use of the BVA clinical eye examinations in addition to the use of DNA screening for Hereditary Cataracts.
- Continue to support and carry out the many health initiative that are already under way
- Continue to increase the availability of breed health information to potential puppy buyers (e.g. via on-line media, magazines and Discover Dogs etc)
- Continue to provide regular updates on the work of the various health initiatives undertaken by the FBCE

Penny Rankine-Parsons. KC Breed Health Co-ordinator

An independent review of our work so far from the KARLTON INDEX

The health agenda for French Bulldogs is being ably led through the French Bulldog Club of England. As illustrated by the significantly increased score that health agenda has broadened and deepened since the first Karlton Index was published eighteen months ago.

The much improved score is merited on the basis of:

Further developments in the Club's own health scheme most notably the level of take-up. In 2011 the site reported 12 French Bulldogs had been through the scheme whereas at the time of this assessment over 300 have.

The club website has been updated and now has a more detailed and clearly labelled health section

The scheme is explained very well and dogs that have been through it are listed

The scheme proactively encourages the relevant testing protocols

They are organising health events such as the one specifically on bracycephalic issues

Their strategy for health surveillance is clearly emerging with plans to conduct an online health survey in 2013

Their communication strategy looks at ways of targeting specific audience such as judges, pet owners and breeders and includes social media campaigns.

Marks for participation were awarded on the basis of the levels of take-up of the health scheme outlined above, and the numbers of HC tested dogs has increased from 88 in September 2011 to over 350 in March 2013, also some small take-up of other schemes.

There is good evidence here to show that the team in French Bulldogs has been impressively active on health these past eighteen months, and must be congratulated for being the second most improved breed in that time.