

Glen of Imaal Terrier Enthusiasts & Fanciers Club (EFG)

Health Report

Sunday 22nd March 2015, Ranby Village Hall, Notts

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STATISTICS

BRITISH VETERINARY ASSOCIATION (BVA) / KENNEL CLUB (KC) HEALTH SCHEMES

Links to 15-year summaries of health test results under the BVA/KC Health Schemes can be found here:
www.thekennelclub.org.uk/vets-researchers/dog-health-group-annual-report/ : (DNA, Elbow, Eye & Hip – by breed)

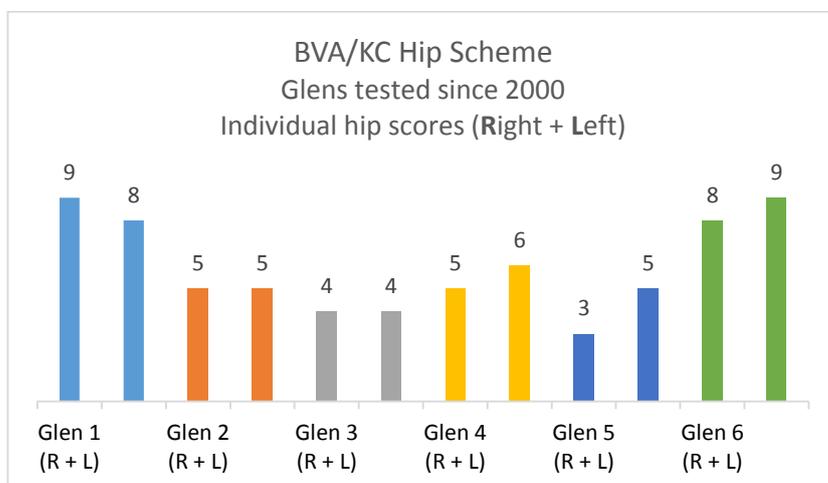
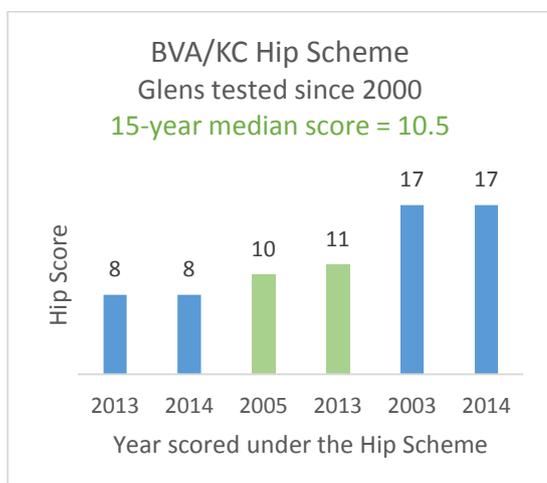
The following results were recorded in the Q1 – Q4 2014 KC Breed Records Supplements (BRS):

DNA TEST FOR CRD3 : A total of 18 Glens had DNA test results recorded for **crd3** (cone-rod dystrophy 3), the Glen variant of progressive retinal atrophy (PRA), which is a late onset disease that causes gradual loss of vision. There were 9 Clear results, including one done prior to the Kennel Club DNA Screening Scheme that was set up in October 2010, and 9 Carrier status results. (*Carrier status dogs have only one copy of the disease gene, so will not develop the disease, and can be safely used in a breeding programme to a Clear mate*).

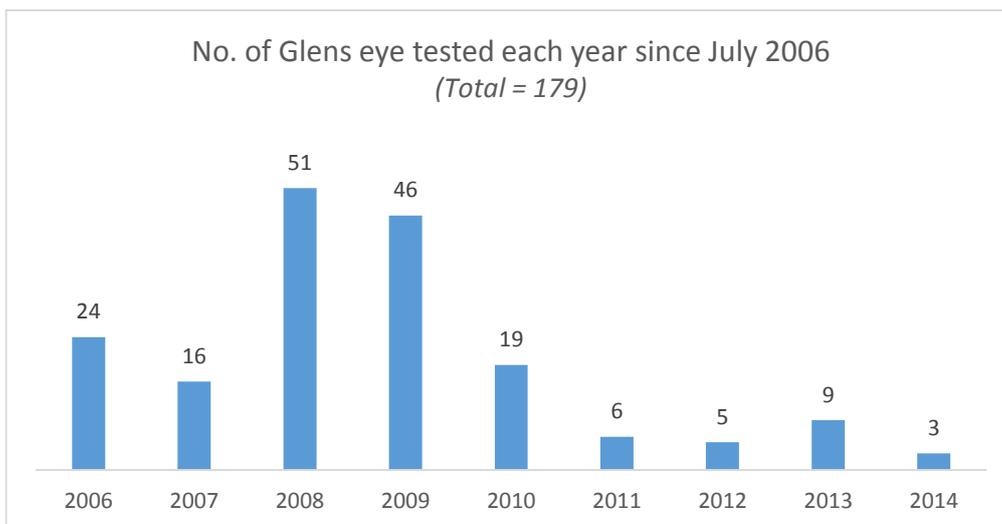
The KC now has crd3 test results recorded for 117 Glens, with 69 Clears, 47 with Carrier status, and 1 with Affected status. *NB. These figures represent Glens DNA tested after the DNA Screening Scheme was set up in October 2010 and those Glens tested prior to the Scheme whose owners have since submitted results to the Kennel Club.*

Ref: www.thekennelclub.org.uk/health/breeding-for-health/dna-screening-schemes-and-results/dna-screening-for-breeds-c-g/glen-of-imaal-terrier-dna-screening/

ELBOW & HIP SCHEMES : A total of 2 Glens were tested under the **Elbow** and **Hip Schemes**. Both scored 0 for elbows (Normal) and their hip scores were 17 (R8 + L9) and 8 (R3 + L5) respectively. Since 2000, just the 2 Glens have been tested under the **Elbow Scheme**. In addition to the 2 above, another 4 Glens have been tested under the **Hip Scheme** since 2000 – see graphs below for scores. The 15-year median score is 10.5 (x 6 dogs) and the 5-year median score is 9.5 (4 dogs).



EYE SCHEME : Just 3 Glens were tested under the **Eye Scheme**; all had Unaffected results. In July 2006, the Glen went onto Schedule A of the Eye Scheme, meaning that all eye test results are published, including ECVO (European College of Veterinary Ophthalmologists) results, in the KC's BRS. There has been a steady decline in the number of Glens being eye tested since the development of the DNA test for crd3 – see graph below.



Since July 2006, there have been 179 eye tests done under the BVA/KC Scheme, plus 1 under the ECVO Scheme. Just 5 Glens have had Affected results – 3 in 2007; 1 in 2010; and 1 in 2011. From July 2006 to the end of 2010, 156 eye tests were carried out on 110 Glens. Since the beginning of 2011, only 23 eye tests have been carried out on just 16 Glens.

There have been 12 litters registered in 2014 – from 9 sires and 12 dams. Only one of the 9 stud dogs had ever been eye tested; his last (of 3) eye tests was back in 2010. One of the 12 brood bitches had an up-to-date eye test at time of whelping – please see next paragraph and refer to **ONGOING & FUTURE PROJECTS** (p.5) & the EFG Code of Ethics. Only one of the other brood bitches had ever been eye tested; her last (of 2) eye tests was in 2009.

The KC advice for members of the Assured Breeder Scheme (ABS) regarding eye testing is “Eye examinations should be repeated annually and must be within 18 months prior to the date of birth of a litter”.

Ref: www.thekennelclub.org.uk/media/9846/abshealthreqs.pdf

LITTERS RECORDED IN THE Q1 – Q4 2014 BRS

A total of 67 puppies from 12 litters were registered in 2014 compared to 53 puppies from 10 litters in 2013. The 2014 figures represent a 26% increase in the number of puppies registered, and a 20% increase in the number of litters registered.

The chart below illustrates the number of litters born with puppies that are NOT at risk of developing crd3 (**SAFE MATINGS**) and the one litter of 5 puppies (**UNSAFE MATINGS**) that could potentially be at risk if the “No crd3 record” parent is either Carrier status or Affected for crd3.

RISK OF DEVELOPING CRD3		2014	2013
		No. of litters	No. of litters
SAFE MATINGS (NOT AT RISK)	Clear x Clear	6 (50%)	3 (30%)
	Clear x Carrier *	4 (33%)	6 (60%)
	Clear x No crd3 record *	1 (8.5%)	1 (10%)
UNSAFE MATINGS	Carrier x No crd3 record *	1 (8.5%)	0

* Offspring from these matings MUST be DNA tested for crd3 status if they are to be used for breeding.

COEFFICIENT OF INBREEDING (COI)

As of 2014, the annual breed average COI is calculated each June using Kennel Club registered dogs born in the UK between January and December of the previous year.

Ref: www.thekennelclub.org.uk/services/public/mateselect/breed/Default.aspx?id=3069

In June 2014, the revised figure (calculated using KC registered litters born in 2013) was reduced from 7.9% to 7.6%.

10 litters were born in 2013, but the calculation was based on 9 litters with COIs ranging from 5.9% to 10.2%. The other 2013-born litter, which was not registered until after the calculation in June 2014, had a COI of 8.5%, which would have increased the annual breed average to 7.7%.

Of the 10 litters so far registered that were born in 2014, the COIs range from 8.3% to 22.8%, giving a breed average of 13.5%. It is likely that our annual breed average COI will be significantly higher for 2014-born litters. These COIs are calculated going back 10-12 generations (median=11) with just 5-7 generations (median=6) being complete.

Links to Glen health records can be found on the EFG Health website: www.efghealth.co.uk/links.html#records

“Why should breeders worry about these trends in their breed’s genetic population structure? Increases in a breed’s average inbreeding coefficient, and indeed on the average inbreeding coefficient of their own dogs, means that the chances of genes becoming homozygous, i.e. the chances that a puppy will inherit the same copy of a gene from both its dam and sire, will increase. This is of course true for genes that have a beneficial impact, and this has traditionally been the reason for breeders practising what they call ‘line breeding’. But sadly it is also equally true for those genes which have a potentially deleterious and sometimes very serious impact if they too become homozygous. There is absolutely no way that we can make precise predictions about the impact that increases in average inbreeding coefficients will have on a breed, but what we do know is that, as the inbreeding coefficients increase, the risk of these having a serious and deleterious impact on the breed will also increase.”

Ref: www.thekennelclub.org.uk/services/public/mateselect/genetic-diversity.aspx

INTERNATIONAL GLEN OF IMAAL TERRIER CONFERENCE, FINLAND

The World Show 2014 was held in Helsinki, Finland and the Finnish Breed Club organised the breed’s first International Conference. With over 30 delegates (and a few Glens) in attendance, there were speakers from five countries – Finland, USA, UK, Denmark and the Netherlands. Presentations included “Health Survey, Finland” with Tiina Assinen and Janne Leino; “Breed-specific Breeding Strategies of Glen of Imaal Terriers in Finland” with Tiina Assinen and Johanna Inkeri; “Health Survey, USA & PCDU” with Mary McDaniel; “DNA Archive” with Alison Seall (UK); “Double mating” (dual sire litter) with Gitte Thorsen (Denmark) and “Glen Footprints Database” with Huub van Benthum (the Netherlands).

Most of the presentations can be found here: www.glennit.fi/glenconference2014.php

EFG HEALTH WEBSITE

The DNA Archive page of the EFG Health website has been updated, to include the EFG Health Coordinator, Alison Seall’s presentation at the Glen Conference in Finland, a short video demonstrating how to take swabs for the DNA Archive, and an online form to submit Glen health information for our Confidential Health Database, for Glens submitting swabs to the DNA Archive:

www.efghealth.co.uk/dna_archive.html

www.efghealth.co.uk/DNAarchive.pdf

www.efghealth.co.uk/dna_archive.html#video

http://www.efghealth.co.uk/dna_archive.html#db

DNA Archive page

DNA ARCHIVE presentation (EFG Health Coordinator)

Video demonstrating how to take swabs

Confidential Health Database

DNA ARCHIVE UPDATE

The DNA Archive at the Animal Health Trust (AHT) was set up at the end of 2013 and over 30 swabs kits have been requested and sent out to the owners in the UK, Finland and the USA. DNA swabs from 24 Glens are now stored at the AHT.

The DNA Archive is a storage facility for Glen buccal (cheek) swabs at the Animal Health Trust, along with pedigree data and health information. Establishing an extensive DNA archive will mean that the identification of affected dogs and the analysis of pedigrees to find close family members, and non-related "control" dogs, can be a relatively straightforward process for scientists involved in future health research projects.

For information on how to submit swabs from your Glen, please visit the DNA Archive page on the EFG Health website: www.efghealth.co.uk/dna_archive.html

VETCOMPASS UPDATE

Information about the Royal Veterinary College (RVC) VetCompass initiative was included in the Spring/Summer 2014 newsletters of both the EFG and GOITA (Glen of Imaal Terrier Association) and leaflets were sent out with the newsletters. There are now 79 Glens (and 2 Glen-crosses) registered with 58 veterinary practices that are signed up to VetCompass.

"This nationwide veterinary surveillance study aims to identify the important conditions affecting our pets today and explore how their detection and management can be improved."

For more information about the VetCompass project, please visit the EFG Health website: www.efghealth.co.uk/links.html#vetcompass

BREED & KENNEL CLUB HEALTH SURVEYS

GLEN OF IMAAL TERRIER HEALTH SURVEY 2014

The Glen of Imaal Terrier Health Survey 2014, which ran from 29th September to 12th December, attracted 381 responses from 13 countries, with 129 responses from the UK. A summary of these responses can be found on the EFG Health website: www.efghealth.co.uk/survey14.html

N.B. ~ The number of UK responses was revised from 130 to 129, as there was one duplicate response.
~ The time for publication of the report has been put back to May/June 2015.

When the report has been completed and approved, it will be published on the EFG Health website: www.efghealth.co.uk/reports.html

KENNEL CLUB 2014 PEDIGREE BREED HEALTH SURVEY – (ALL BREEDS)

The KC carried out a follow-up all breeds health survey in 2014, ten years after its Purebred Dog Health Survey in 2004. Compared to the 2004 survey, which attracted responses for 55 live and 6 deceased Glens, the response for the 2014 survey was rather disappointing, with responses for just 33 live and 3 deceased Glens. This poor response may be due to the fact that the KC survey overlapped with our own international breed health survey and UK owners did not wish to complete two similar surveys within just weeks of each other.

The results of the 2004 survey can be found on the EFG Health website and, when the 2014 survey results have been published by the KC, a link will be provided: www.efghealth.co.uk/reports.html

ONGOING & FUTURE PROJECTS

CODE OF ETHICS

As discussed at the inaugural AGM in 2014, agenda items for discussion this year include the addition of a “Breeders’ Section” in the Code of Ethics with “Best Practice” guidelines regarding [i] DNA testing of breeding stock for crd3, to ensure that puppies are not at risk of developing crd3; and [ii] eye testing of breeding stock, to help monitor the ocular (eye) health of the breed.

Please refer to the EFG Code of Ethics – www.e-f-g.co.uk/#!/code-of-ethics/c16xo – for updates following the AGM.

BREEDER GUIDELINES BOOKLET

We plan to produce a booklet for new breeders in time for the EFG AGM in 2016.

DNA ARCHIVE & VETCOMPASS

We will continue to promote both initiatives via the EFG newsletter, the EFG Blog and Facebook Groups. The Glen of Imaal Terrier Health Survey 2014 requested owners to indicate if they would be happy to participate in research and so, over the next twelve months, we will contact these owners with information about the DNA Archive.

OWNER HEALTH UPDATES

We plan to replace the current “Health Updates” forms on the EFG Health website with an online facility for owners to submit updates of new diagnoses, notification of spay/neuter and end of life information.

RESEARCH PROJECT, FINLAND

A collaboration in Finland, between Helsinki University Veterinary Teaching Hospital and Kennel Marfidal (Leena Glans), is setting up a research project, “Anatomy of the front legs and its effect on the movement in the Glen of Imaal Terriers”.

The researchers aim to recruit 50 Glens to be elbow & hip X-rayed and undergo locomotion studies.

Ref: leenaglans.wix.com/glennitutkimus

An agenda item at the AGM asks if the EFG wishes to be involved with this research project, taking into account the following considerations:

- i. Finding a veterinary institution that would be happy to collaborate
- ii. Recruiting up to 10 Glens to participate
- iii. Costs

EFG members can visit the “Members’ Area” of the EFG website, to read the minutes of the AGM and see the outcome of this proposal: www.e-f-g.co.uk/#!/memberarea/c1jyh

HEALTH SEMINAR

We plan to organise a health seminar in 2016.

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