

# NOVA SCOTIA DUCK TOLLING RETRIEVER CLUB OF UK

## HEALTH SURVEY 2014

The main aim of this survey was to evaluate a general outlook of the health status of the breed over the last 10 years and seek to improve the health and welfare of the Toller.

The questionnaire was designed to access all owners and breeders, whether show dogs, working or pet dogs. The owners and breeders were not required to be members of the NSDTR Club of UK. This survey was available as a download from the club website, notification was given through the dog press and via the Kennel Club Health coordinator as a paper copy.

All information provided was on a voluntary basis and any information collected would be treated confidentially i.e. no names of dogs and owners would be published. This article is a brief synopsis of the results.

A total of 214 Health surveys were returned, i.e. one questionnaire per dog, of these 105 were dogs and 109 bitches. Therefore, giving a percentage of 49% dogs and 51% bitches. Out of 214 questionnaires, 60 (28%) of returned surveys were included in the breeding program. This was divided into 38 bitches (63%) and 22 dogs (37%). Some general questions were asked e.g. what type of diet was fed? The Health questions ranged from whether the dog / bitch had been DNA tested to had the animal developed any serious issues such as kidney/ liver failure to cancer.

Fig.1 shows the number of dogs participating in each category.

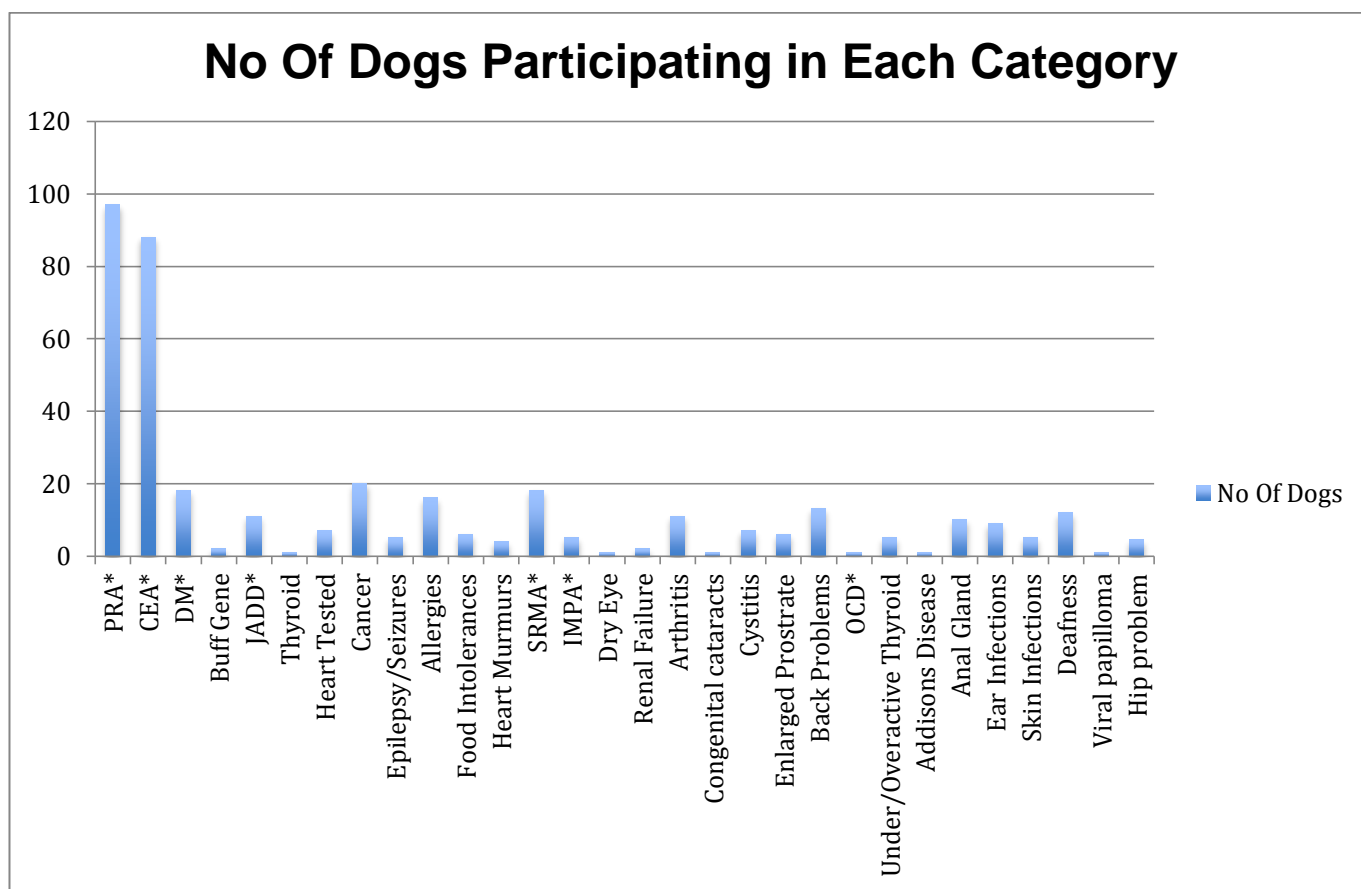


Fig 2 below – Reference to \* in above graph.

PRA	Progressive Retinal Atrophy
CEA	Collie Eye Anomaly
DM	Degenerative Myelopathy
JADD	Juvenile Addison's Disease
SRMA	Steroid Responsive Meningitis
IMPA	Immune Mediated Polyarthritis
OCD	Osteochondrosis Dissecans

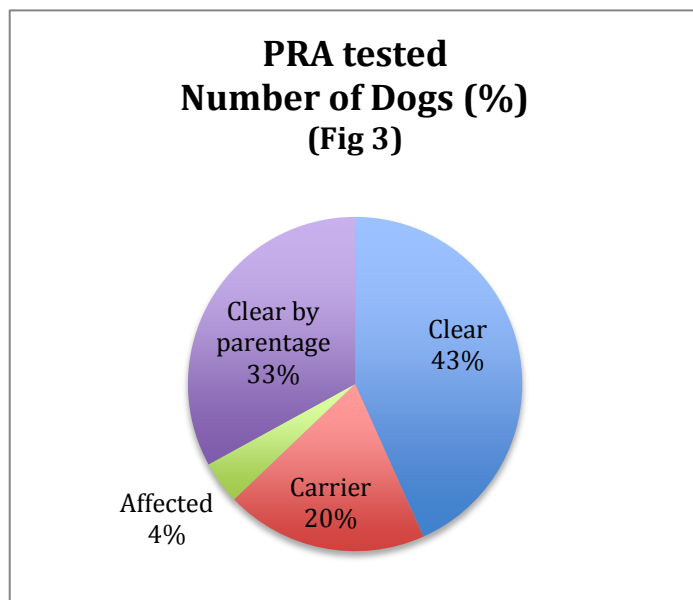
## SPECIFIC HEALTH ISSUES

### DNA Testing

There were 5 areas of DNA testing – PRA, CEA, DM, Buff gene & JADD. Three of these are recommended by the Kennel Club & NSDTR Club of UK i.e. PRA, CEA & DM.

**PRA or Progressive Retinal Atrophy** is a degeneration of the retina in the eye, which will eventually lead to blindness. This condition occurs in many breeds of dogs and there are variations depending on the breed.

In this survey, 97 (46%) of the total health surveys returned showed that the dogs had been tested for PRA, this was divided as follows: (see Fig 3)



**CEA or Collie Eye Anomaly** is an inherited condition affecting the eyes of a number of breeds of dogs. In animals with CEA, there are abnormalities of the choroid and may also be changes in the sclera. The major change, which is present in all dogs with CEA, is 'choroidal hypoplasia' (CH), a pale patch in the back of the eye caused by abnormal development of the choroid layer. Affected dogs may also have abnormalities in the sclera, producing pits or 'colobomas' in or around the optic disk.

A similar number of health surveys, 88, (42%) were returned for CEA/CH. Out of the survey, 58% were clear, 5% carriers, 0% affected and 37% clear by parentage.

**DM or Degenerative Myelopathy** is a progressive disease of the spinal cord in older dogs. The disease has an onset between 8 and 14 years of age. It begins with a loss of coordination in the hind limbs. The affected dog will wobble when walking, knuckle over or drag the feet. This can first occur in one hind limb and then affect the other. As the disease progresses, the limbs become weak and the dog begins to buckle and has difficulty standing. The weakness gets progressively worse until the dog is unable to walk. This can take from 6 months to 1 year before dogs become paraplegic. If signs progress for a longer period of time, loss of urinary and faecal continence may occur and eventually weakness will develop in the front limbs.

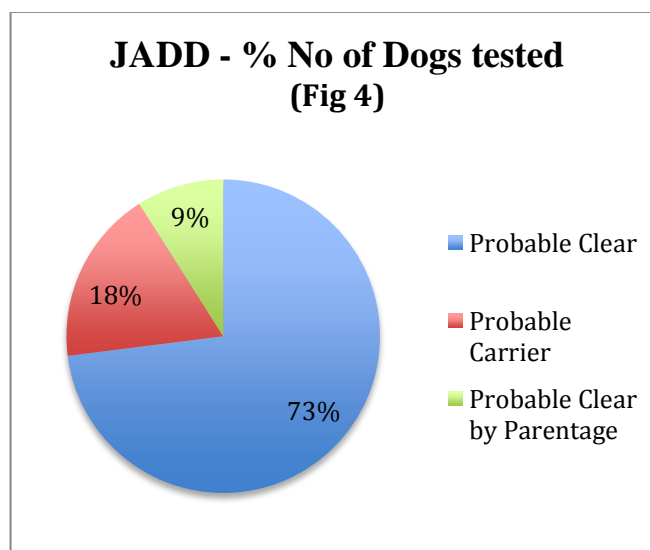
This test is relatively new to the NSDTR, so from the survey 18 dogs have participated of which 56% are clear, 33% carriers, 0% affected & 11% clear by parentage.

**Buff Gene** is a recessively inherited coat colour variant that occurs in the NSDTR but doesn't appear to cause any health issues. Puppies are born a lighter shade of red that can appear silver in colour. As they age, they can sometimes darken to a red colour but they are lighter than they would be without the effect

of the buff mutation. This coat colour is inherited as an autosomal recessive gene i.e. any affected puppies inherit one mutant copy of the gene from each of its parents.

Only 2 surveys recorded this test done, 50% clear & 50% carrier.

**JADD – Juvenile Addison’s Disease** NSDTR’s can have a genetic form of Addison’s disease (hypoadrenocorticism) which may occur in young animals. (Age range 8weeks up to 12 months). The juvenile form of Addison’s disease distinguishable from the adult type in that all dogs who develop the juvenile form have two identical copies of a specific region within their genome. A haplotype (a group of alleles of different genes on a single chromosome that are closely enough linked to be inherited usually as a unit) test is under development. Hence, the results of the survey are not defined as “clear”, “carrier” and “clear by parentage” but “probable” clear, “probable” carrier and “probable” clear by parentage. Eleven dogs had been tested (see Fig 4)



**Addison’s Disease** – From the survey, 1 case of adult Addison’s Disease was recorded.

**SRMA – Steroid Responsive Meningitis-Arteritis** is a condition that involves a dog's central nervous system. Meningitis means inflammation of the meninges, the covering layer of the central nervous system. The condition is referred to as SRMA, or steroid responsive meningitis-arteritis because it affects the arteries in many body system tissues as well. Certain breeds of dogs, such as NSDTR’s seem to be more prone to developing SRMA but it is considered to be a condition of any breed.

From the survey, 18 dogs had developed the disease (8% of the total questionnaires), of this 10 dogs (56%) and 8 bitches (44%). The age range for first diagnosis varied, from 12 weeks to 2 years. All were treated with steroids, and some also had various types of antibiotics.

**IMPA – Immune Mediated Polyarthritis**, the “Immune Mediated” refers to the body’s own immune response causing the problem & the “polyarthritis” specifies that this condition can affect more than one area or joint. The results from the survey revealed that 5 dogs had been diagnosed with IMPA. One of these had been previously diagnosed with SRMA . Once again, the age ranges varied (18 months to 7 years).

## **GENERAL HEALTH ISSUES**

**CANCER** – A total of 20 dogs (8 dogs 12 bitches). The cancers ranged from mast cell tumours to leukaemia. There was no specific age i.e. 2½ years being the youngest to 14 years old. All had different types of treatments – from removal of the cancer to chemotherapy.

**BRAIN** – 2 cases of suspected brain tumours completely unrelated, neither proven after tests.

**HEART** – From the questionnaire, seven dogs had been tested under the BVA Heart scheme. There was 100% pass rate (all were clear status).

**Heart Murmurs** A total of 4 other dogs had been reported as having heart murmurs. These ranged from puppy murmurs to a Grade 2 murmur.

**Heart Failure** The survey revealed that there were 4 cases of heart failure. The ages ranged from 7 months to 9 years.

**EPILEPSY / SEIZURES** – There were 5 dogs in total reported to have had or continuing to have epilepsy or seizures. All are at different ages & prescribed different treatments. Most are controlled by medication.

**THYROID** – One dog had tested for thyroid problems but was declared clear.

**Under or Overactive Thyroid** Five dogs have either under or overactive thyroid problems. Their ages ranged from 4 years to 10 years. All are being controlled by various treatments.

**ALLERGIES** – A total of 16 dogs have had allergic reactions, these included bee/wasp stings to reactions to flea treatments such as Frontline.

Several dogs (6) had food intolerances. This included fish and red meat (raw products).

## **ORGAN FAILURE**

**Renal** – 2 cases were reported. The age of diagnosis was 8 months to 14½ years.

**Liver** – A total of 3 cases were reported. These all occurred in the later years, the youngest being 7 to the eldest of 14½ years.

**ARTHRITIS** – 11 cases (5% of the overall total of surveys) had developed some type of arthritis. The age range was from 3 years to 14 years. All were being treated with Metacam or a similar medication.

**CYSTITIS** – 7 animals (2 dogs 5 bitches) were diagnosed with cystitis. All have been treated with various types of antibiotics and the symptoms have cleared.

**ENLARGED PROSTATE** – The survey showed that 6 dogs had prostate problems. All but 1 were castrated after various types of medication & had successful outcomes.

**BACK PROBLEMS** – From the questionnaire, a total of 13 dogs (9 dogs 4 bitches) had various back complaints. These ranged from agility injuries to spinal disc collapse. The youngest was 6 months old, the eldest 6 years.

**OCD** – Dog 1 year old. Ulnar Sclerosis. Now recovering post-op for removal of bone fragments from left elbow.

**ANAL GLANDS** – 10 cases anal gland problems were reported. The age ranges from 5 months to 10 years. Various treatments were used from removal of glands to dietary adjustment.

**DEAFNESS** – A total of 12 (4 dogs 8 bitches) were noted. These cases were mainly late onset probably due to old age (9 years and above). 1 case was a congenital defect at birth.

## **INFECTIONS**

**Ear** – 9 (7 dogs 2 bitches) of various types of ear infections. The age range was 5 months to 6 years. Various courses of treatment were followed i.e. antibiotics to the most severe being ear canal removal.

**Skin** – A total of 5 dogs (4 dogs 1 bitch) were reported. Various cause such puppy acne to sebaceous addonitis. 6 months to 8 years was the age range. The main treatment being antibiotics.

**Viral papilloma** – 1 case reported and this was benign.

**Dry Eye** – 1 case was reported & the treatment is on going.

**Congenital Cataract** – 1 case reported but this was related to PRA.

We would like to thank all Toller owners/breeders who took part in this survey, unfortunately some of the major breeders chose not to take part which was rather disappointing as the results are not a complete record for the breed.

Recently we have heard of two suspected cases of DE (Degenerative Encephalopathy) in the UK Toller population, so far neither of these cases have been reported to the Official Breed Health Co-ordinator.

This is unfortunate as this disease could not be included in this survey. The University of Missouri are researching possible causes for DE but, as they are bound by confidentiality, and the Breed Club has no record of the dogs involved it is not possible to approach the Breeders/Stud dog owners to supply DNA for this research.