

## **SCAPEGRACE KENNELS - HEALTH TESTS**

The health and welfare of any puppy we at Scapegrace breed is very important to us. Scapegrace would advise you to always see the health tests for the Dam and Sire of the puppy you are preparing to buy. These should always be available – if they are not you should consider why.

As a Kennel Club Accredited Breeder, Scapegrace is required to maintain a record for each of our breeding dogs' for the following three conditions:

### **PLL – Primary Lens Luxation**

Is a painful inherited eye disorder where the lens of the eye moves from its normal position causing inflammation and glaucoma.

### **LOA – Late Onset Ataxia**

Is a genetic disease characterized by lack of balance and in-coordination of gait. There is no cure. Dogs are often euthanized.

### **SCA – Spinocerebellar Ataxia**

Progressive, irreversible degenerative condition in the areas of the spinal cord. Most dogs are euthanized due to restrictive and poor quality of life.

We are now also DNA testing for three further conditions.

### **DM - Degenerative Myelopathy**

Is a disorder which affects the tissue of the spinal cord. This generally causes muscle atrophy and degeneration of the nerves beginning in the hind limbs leading to loss of ability to walk. Onset is usually around 8 years of age with loss of walking a year or so later.

### **HUU - Hyperuricosuria**

Is a disorder which causes high levels of uric acid in the urine which can cause crystals or stones in the urinary tract. It can also cause loss of appetite, weakness, and vomiting.

### **SCID - Severe Combined Immunodeficiency Disease**

Is an immune problem as a result of inability to produce a certain protein needed. Affected dogs suffer from severe fungal, viral, and bacterial infections causing poor growth, weight loss, vomiting, and diarrhoea. Affected dogs often die within four months of birth. C

Though not DNA tests Scapegrace has also decided that three further tests are very much worthwhile undertaking.

**BAER Hearing Test – Brain-stem Auditory Evoked Response:**

Congenital deafness can be a problem in dog breeds that have a predominant white coat or extreme piebald or merle gene.

The BAER test is used to check the hearing of a dog by detecting the electrical activity of the brain in response to an auditory stimulus, which is recorded and displayed on a computer.

**BVA/KC/ISDS Eye Test – on our breeding dogs/bitches:**

A clinical eye examination as a means to identify inherited and non-inherited eye conditions in dogs.

**Patella Luxation:**

Patella Luxation can be common in some breeds, especially smaller breeds of dogs. The condition is where the kneecap is displaced or dislocated from the knee joint where it belongs. This condition can be congenital (inherited) or may develop in later life (developmental).

The assessment is under the Putnam Koch Singleton Scoring System.

We have our dogs assessed by a vet at the appropriate age for this condition.

Addition considerations to be borne in mind before breeding are addressed below.

### **Blood Screening:**

Before an intended mating our bitches have a blood screen check to ensure there is no underlying or unforeseen health concerns. This is to ensure our bitches long term health is not put a risk and ensures the best possible outcome of any mating.

### **COI – Inbreeding coefficient:**

When matings are made, especially where a breed has limited diversity in the gene pool, it is essential that inbreeding is minimised where possible. The Kennel Club provide a calculation of the level of in-breeding between a pairing. As a kennel we always aim to be below the breed average %.

### **DNA – DNA Profile:**

Though not strictly health related we are DNA profiling all of the dogs and bitches we use for breeding and going forward any puppies we breed.

This will provide a DNA fingerprint for each of the dogs we breed in the future.

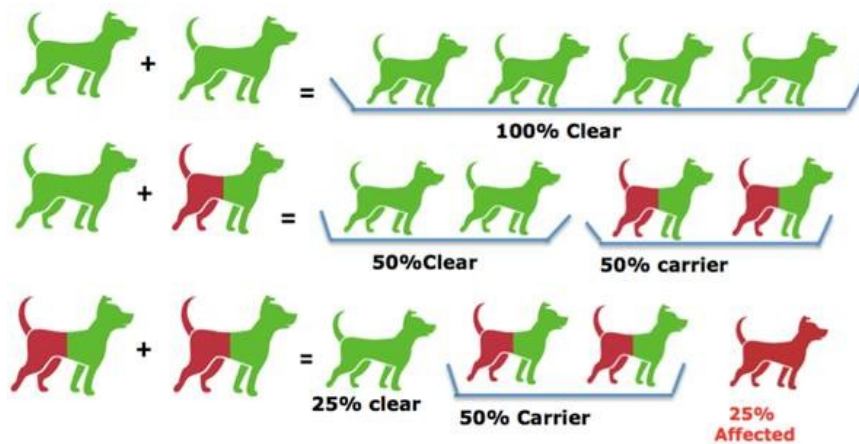
## DNA Testing

Certain health conditions are inherited – fortunately unless they have 2 affected copies of the gene no dog will not be affected by the condition. By testing a kennel will know which category a particular dogs is in.

1. **Clear:** The dog has two normal copies of the gene and neither exhibits nor can pass on a particular condition.
2. **Carrier:** The dog has one normal copy of the gene and one affected copy. The dog does not exhibit the condition but any offspring could end up as clear, a carrier or worse affected.
3. **Affected:** The dog has 2 affected copies of the gene. The dog will exhibit the condition and any offspring will be carriers or affected.

It is highly unlikely there would be an affected dog as ethical breeding would not allow matings between two carriers and this is the only way to produce an affected dog.

In the diagram below green represents the unaffected gene and red the affected gene.



At Scapegrace if a dog has a status of carrier we would only ever mate with another dog which has a **tested** status of clear.