

Irish Setter Association England – Health Information



Stationary Night Blindness - A Possible New Condition in Irish Setters?

Introduction

It has been brought to the attention of the ISAE Committee by the breeders that an eye condition recently found by Professor Bedford in three Irish Setters has provisionally been identified as a Stationary Night Blindness (SNB). It affects the rod photoreceptors in the retina, impairing night vision. (N.B. It is NOT PRA!) A similar condition occurs in Briards, where the mode of inheritance is recessive, with the pattern we are familiar with from PRA rcd1 and CLAD. However, the mode of inheritance in Irish Setters has not been established: DNA tests of two of the affected animals have shown that it does not involve the same defective gene as in Briards. Two bitches are from the same litter. The third animal, a dog, is related but not closely. None have been bred from. The discovery of this condition resulted from an owner mentioning apparent night vision problems during a routine eye test by Professor Bedford. The bitch and her litter sister were subsequently tested at the Royal Vet College and both found to have apparent SNB. Much later, in conversation, it was realised that the dog also had problems after dark. The aim of this leaflet is to make Irish Setter owners aware of the potential problem and to take more notice of their dogs' general behaviour after dark.

How to check on your dog's night vision at home (an extract from ISAE 2007 Annual Review)

- Here is a simple home test that can be used on all dogs.
- Dogs normally have very good night vision (far better than yours or mine).
- The first signs of night blindness are rarely noted by the owner as the dog is in familiar surroundings and manages very well.

The equipment needed is minimal

1. One or two torches with good batteries.
2. Red tissue paper covering the light from the torch.
3. A totally dark room (you need a strange environment such as your garage or a friend's home)
4. Obstacles to place throughout the room.
5. Friend to hold dog across the room from you.

The Test

- Aim the red coloured torches at the ceiling.
- Have a TOTALLY dark room.
- Allow your eyes and the dogs eyes to "night adapt" to the darkness for a few minutes.
- You should be able to see with the red light.
- Have a friend release the dog/puppy from across the room. Call the dog to you.
- The dog should be able to come to you directly and avoid all the obstacles.
- If there is a slow, hesitant approach or the dog accidentally brushes or touches the objects in its path there is a definite problem with night vision. You need to seek further expert help.

Conditions which cause night blindness in Irish Setters

1. PRA rcd-1 This condition has been virtually eradicated from the breed and so should not provide a cause of concern.
2. Late onset PRA(LOPRA). Two cases of this condition were found by Prof Bedford in 2007. The condition was written about in the 2007 Annual Review. So far, to our knowledge, no further cases have been identified. There may be more cases as yet not identified and it is important to have your dogs' eyes tested at an eye clinic, preferably at least every other year. LOPRA can be identified with an ophthalmoscope.
3. Possible stationary night blindness(SNB). This can only be identified with the use of an ERG.

What Should You Do?

- Ideally we would like every Irish Setter owner to become more aware of their dogs' night vision and to try the tests outlined.
- If you suspect poor night vision, the first step is to have your dog checked with an ophthalmoscope by a KC/BVA/ISDS eye panel vet (the ISCW are holding an eye clinic at their Championship show this year in April and the ISAE will probably be holding one at their show in October). If your dog is cleared for LOPRA, see your own vet and ask for a referral to the Royal Veterinary College to see Professor Peter Bedford for an ERG.
- If you wish, your ISAE Health Representative, Gillian Townsend, would be happy to talk to you in confidence (tel: 01242 521872 or email: townsend@waitrose.com).

Summary

1. Sadly, we may have a new eye condition in the breed.
2. The only way of detecting it is by ERG examination. Prof Bedford recommends that it is carried out at the RVC. It is a difficult result to interpret and, therefore needs to be carried out under anaesthetic.
3. It is an expensive examination, costing around £350.00.
4. The ideal age for testing is between 4 and 8 years. After 8 years the eye begins to deteriorate and the test becomes more difficult to interpret.
5. At this stage there are only 3 identified cases. **There may or may not be more in the breed . The condition may or may not be hereditary.**
6. We understand that the condition is described as stationary because the dog's day vision remains good; the night vision may deteriorate over time.
7. If we find there are 12 or more affected cases, it should be possible for the AHT to develop a DNA test, as for PRA rcd-1 and CLAD.
8. Please do not hide a problem. If there is a problem, there will be a solution. There is no place for scare-mongering.