

## Report on Pyruvate Dehydrogenase Phosphatase 1 Deficiency (PDP1) Screening Project

The Clumber Spaniel Club commenced this project in 2007 to investigate the extent of this condition in the UK population; it was made possible by a generous grant from the Kennel Club Charitable Trust and offered free testing for 100 dogs. The project concluded in 2012 and we are now able to evaluate the results.

This scheme has tested 100 dogs and 12 were tested prior to this scheme with partial funding from the Club; some dogs were tested outside of this scheme and there are a total of 166 dogs tested for PDP1 as at early March 2013.

It had been agreed that priority for testing would be given dogs/bitches that had already been bred from and then to those that were to be bred from, however many of the dogs that had applied for testing were found to be hereditarily clear by the testing of their parents and this caused a delays in assembling the last two groups for testing. Four carriers in a related group have been identified and all others have tested clear. All of the results are available on the Club's website on the health pages. Within the last group we researched using the BRS for individuals that would give us as much information as possible; several were identified and we invited the owners to test e.g. one bitch had been bred on four occasions, each time to a tested dog, and her daughters had also been bred to tested dogs and by testing her we now have the known status of 41 progeny.

Registration data to the end of 2012 is now available and we can determine the full extent of the screening programme for the breed from 2001 to 2012. By testing older breeding stock we were able to identify hereditarily clear litters as far back as 2001 however only 4 litters are determined for 2001 and 2002 with the majority being from 2003 onwards. The results are as follows:

	2001 – 2006	2007 – 2012
Litters registered:	185	238
Litters hereditarily clear:	40 (22%)	119 (50%)
Puppies registered:	1012	1289
Puppies hereditarily clear:	237 (23%)	687 (53%)

The percentages relate to the number registered and are rounded to the nearest whole number.

It is evident from this that as we move forward there is a significant increase in the numbers of dogs being born as hereditarily clear however there is still a large proportion of the population that is still untested.

From the dogs tested and identified as hereditarily clear we now have the known status of 1090 Clumbers; with only 4 carriers identified this gives an incidence rate of just 0.36% which is extremely good for the breed and is markedly better than the United States where their initial research found their population to have 25% carriers.

We continue to recommend that all breeding stock is tested for PDP1. The Animal Health Trust will give a discount on group submissions and we are facilitating this offer to all.