

## GOLDEN RETRIEVER HIPS AND ELBOWS - 2012

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There are now some 2,230 golden retriever records on the ANKC database. These are predominantly from 2004 onwards. The AVA records have been incorporated as well. Records from Australia were sent to Willis well up until early 2004. However, from 2005 onwards our records are fairly complete.

The current five (5) year rolling breed average for golden retrievers until the end of 2011 is sitting at 10.9.

Willis Grade Mean	AVA Grade Mean	No of Dogs Scored	Current Grade Mean	2007	2008	2009	2010	2011	5 Year Breed Mean
14.8	15.2	2,230	11.8	11	12	12	10	9.5	10.9

The breed average has come down from the AVA grand mean of 15.2 and the Willis grand mean of 14.8, which were derived from the pre 2004 results. The heavy weight of those results then hides the effectiveness of breed improvements over time. Shifting whole breed averages genetically takes quite a long period, particularly within numerically large breeds.

Despite this, the scheme has been very effective as seen by the figures above. The five (5) year rolling average at the end of 2009 was 12. This has been further reduced to 10.9, a steady shift within in the space of two (2) years. The single breed average for one (1) year has, for the first time, come under 10, and is sitting at a very respectable 9.5 for 2011. The lower the breed average goes, the slower progress becomes, but the results are usually more predictable (ie consistent!)

In order to gain the best results from breed improvement schemes, breeders need information not only of current breed averages, but of sire statistics for both hips and elbows. Having this information allows breeders to make decisions not only on the sires that are producing good looking progeny, but also producing good hips and elbows. Having this information is vital to allowing breeders to make valued decisions on what they can afford to do with their bitches and how to get sounder progeny, which is vital not only for their kennels future but for the general public as well.

### Sire Progeny Results

The hip and elbow results (*in the data for 39 sires\**) are divided into two (2) groups, as was done by Malcolm Willis. Those sire results with greater than 20 progeny scored are more reliable, those with 10-20 results are less reliable.

### Hips:

The average sire within the golden retriever results has around 6-8 progeny. With the more current or active sires, they should appear on the list within the next year. Older sires, those that are deceased or no longer in use, can gradually be removed from the list and placed into an inactive list over time. This keeps the list current and more relative

for breeders to use. The data, even for inactive sires, can inform breeders of the averages behind their own breeding stock.

The tighter the range of results, generally the better the hip producer. However, popular sires get bitches from all backgrounds and this is where greater than 20 progeny gives a fairly stable result of the sire's abilities in this area. A wider range of results in a less prolific sire (<10 progeny) can indicate the progeny results may be more unreliable, ie harder to estimate. If using one of these sires, use bitches with lower scores.

### **Elbows:**

Overall, there would be around about a 25 per cent incidence of elbow dysplasia within the breed. I have loosely graded the results as:

- Excellent - no affected progeny, or, less than 10 percent affected and only in grade 1.
- Very good - grade 1 and/or grade 2 elbows but less than 50 percent of the progeny affected (ideally less than 30 per cent).
- Good/sufficient - 50 percent or more of progeny scored are affected and include Grade 3 affected dogs.

Ideally, Grade 3 affected dogs should only be bred with great care if really needed, preferably as the numbers are small, they should be gradually removed from breeding programs. Grade 2 affected dogs should be bred to normal partners and breeders should gradually lower the percentage of these dogs used in breeding programs. Both Grade 2 and 3 elbow arthritis is highly inherited and should be used with care.

Grade 1 animals are safer, but again, ideally, should be put to clear partners. Elbow problems are slower to eradicate and it takes considerable time to lower the percentage of affected animals. Keeping a close eye on the decreasing incidence of Grade 2 and 3 animals generally is the best indicator that breed control schemes are gradually becoming effective.

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