### **Annual Health and Genetics Committee**

## Report to the Membership IWSCA

## For the year 2010

#### **Health Statistics**

<u>Thyroid</u>: OFA reports that the rate of the genetic form of thyroid disease, Autoimmune Thyroiditis, is 1% in the Irish Water Spaniel. This rate has been constant over several years and the IWS ranks in the bottom 10% of all breeds with autoimmune thryroiditis.

<u>Heart</u>: As of 2010, the Irish Water Spaniel has had 53 cardiac evaluations with a percent affected rate of 3.8%. This ranks the IWS number 2 all AKC breeds with greater than 50 evaluations. This seems alarming but 3.8% of 53 evaluations equal two Irish Water Spaniels who have had their abnormal results listed in the OFA database. Other breeds have a higher incidence of cardiac abnormalities than the IWS, but it seems that they are not being reported in the OFA database at this time, which skews the cardiac statistics.

<u>CERF</u>: No statistical information for 2009 and 2010 are available because CERF is being reorganized. We have hope that this reorganization will make the data base more useful to breeders.

<u>Hips</u>: The Irish Water Spaniel's 11.9% non-passing rate continues to place in the middle rank of AKC breeds. While this number is larger than we would like it to be, our rate of excellent hips continues to increase. From 1985 through 1989, the rate of excellent evaluations was 8%. In the next 5 years it rose to 17%, then to 19% in the following 5 years. From January 2000 to the end of 2004 the rate was 28%, and it was 29% the following five years. This is a record of which our breeders can be very proud. The 2010 hip evaluation statistics are in the table below.

### Total hip evaluations = 33

Excellent = 5 (15.2%)

Good = 24(60.5%)

Fair = 4 (12.1%)

Borderline = 1 (3.0%)

Mild = 3 (9.1%)

Moderate = 0

Severe = 0

<u>Elbows</u>: Our elbow dysplasia rate, however, is not a matter for pride. We have an average rate of 17.4% which places us 12<sup>th</sup> worst among the 104 AKC breeds evaluated. This means that 88% of breeds have a lower incidence of elbow dysplasia than the Irish Water Spaniel. The Irish Water Spaniel has the highest Elbow dysplasia rate of all the sporting breeds. The 2010 elbow statistics are in the table below.

#### Elbow evaluations =37

Normal = 26 (70.3%)

Dysplastic = 11 (29.7%)

Grade I = 7 (63.6%)

Grade II = 3 (27.3%)

Grade III = 1 (9.1%)

**CHIC Compliance:** CHIC, is a centralized canine health database jointly sponsored by the AKC/Canine Health Foundation (AKC/CHF) and the Orthopedic Foundation for Animals (OFA). CHIC, working with participating parent clubs, provides a resource for breeders and owners of purebred dogs to research and maintain information on the health issues prevalent in specific breeds.

The essential component of CHIC is that the owner of the dog agrees to reveal all health test information no matter what the results. The more owners that agree to this the more information breeders have on which to base good breeding decisions. In 2010, 33 hip evaluations were preformed and 8 owners chose not to publish the results. Similarly, 37 elbow evaluations were preformed and 8 owners chose not to publish the results. The IWSCA Health and Genetics Committee congratulation all owners who did publish non-passing results and we hope to see more published in the future.

# **IWSCA Sponsored Research**

**Rabies Challenge:** For several years the club has funded the Rabies Challenge being conducted with private funding by Ron Schultz, DVM at the University of Wisconsin. The first challenge will be Sept-October of 2012. Health and Genetics committee will match funds from the Breeders Education committee up to \$500.

**Thyroid Study:** Lorna Kennedy, PhD., professor at the University of Manchester, UK, is investigating a class of genes that might be responsible for autoimmune thyroiditis in dogs including the Irish Water Spaniel. Results to date on the IWS are not conclusive we believe that the research may ultimately provide tests that might be effective on our dogs to diagnosis carriers of autoimmune diseases. Therefore the Health and Genetics committee is encouraging any IWS diagnosis with autoimmune thryoiditis and non-affected relatives of dog's diagnosis with autoimmune thyroiditis to submit blood samples for DNA analysis to Dr Kennedy's laboratory. Blood samples with a DNA consent form can be sent to Hemopet. All information and forms can be found at:

http://iwsthyroidstudy.com/

**Epilepsy Study:** The Health and Genetics committee continues to fund an epilepsy study headed by Gary Johnson, DVM PhD, at the University of Missouri. While it is unlikely that they will work with IWS samples in the near future, their research may result in DNA tests developed for other breeds that may also work on IWS.

# **Health Survey**

**Geographic responses**: With a total of 819 valid responses to our 2010 Health Survey, we totaled 507 dogs from North America, 215 from the United Kingdom, and 74 from the rest of Europe. It is likely that all three areas are sufficiently well represented that we can do comparisons.

**Top Ten Health Issues**: We have tabulated the top 10 health issues in three geographic areas.

N. Am	UK	Europe (exc. UK)
Tumors	Tumors	Tumors
Chronic Ear Infect.	Id. Alopecia	Infect. Disease
Seizures	Cystitis	Id. Alopecia
Infect. Diseases	Chronic Ear Infect.	Seizures
Food Allergy	Seizures	Chronic Ear Infect.
Hip Dysplasia	Bloat/Torsion	Atopic Dermatitis
Distichiasis	Infect. Diseases	Cystitis
Id. Alopecia	Food Allergies	Contact Allergies
Hypothyroidism	Entropion	Incontinence
Contact Allergy	Hip Dysplasia	ACL Injuries

Clearly IWS share some of the same health issues no matter what the geography; but the frequency of those issue is dramatically different from area to area. Cancer is the major killer of all dogs so it is not a surprise that it was the major health issue in all geographic areas. Perhaps more surprising is that seizures were reported more often in North American dogs than in European dogs. Ideopathic alopecia, which may include follicular dysplasia that simply has not been diagnosed, seems much more prevalent in Europe than in North America. GDV, or bloat, did not even make it into the top 25 for North America, but ranked 6 for the UK.

These results, with percentages and further discussion will be featured in an up-coming article in our newsletter, Rattails.

**Future Work for the Health Survey**: the committee will continue to examine descriptive statistics and will present them in a series of "First Look" articles in the IWSCA newsletter, Rattails. A final summary will be produced, hopefully early next year.

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