The State of Health of the Welsh Springer Spaniel

Presented by Sandra Rohrbacher
Chair, WSSCA Health Committee
2016 National Specialty
Members of WSSCA Health Committee

- Catherine Carr Lee (Destiny)
- Mary Mandich Steigerwald (Middlebrook)
- Eric Hartelius DVM (Chestnut Sage)
- Chair-Sandra Rohrbacher (Rysan)
Topics

• CHIC Initiative
• Progress with CHD and CED
• Status of Eye Diseases
• Thyroid Disease Incidence
Health Issues in Our Breed

• When OFA asked which health concerns we wanted to monitor as part of the CHIC program, WSSCA decided to focus on the following:
  • Hip dysplasia
  • Elbow dysplasia
  • Eye disorders
  • Autoimmune thyroiditis

• This information is summarized yearly, statistical analysis is performed by OFA and information is posted to their website for all to see.
CHIC Data in Action

- The CHIC designation or awarding of a # is neither a title for the dog, an award for the owner or breeder, nor even a statement regarding the health of dogs awarded the number.

- A CHIC # is an affirmation of willingness to share information about the health of individual dogs. The data should be used as a bellwether to preserve the integrity of our gene pool, document where issues exist, and work to limit or eradicate health issues in the breed.

- We commend those owners and breeders who have released their dogs’ health testing to OFA or have chosen to complete CHIC requirements.
CHIC Benefits

• For breeders, CHIC provides a reliable source of information regarding dogs they may use in their breeding programs. Using CHIC, breeders can analyze the pedigrees of a proposed breeding for **health strengths and weaknesses** as well as conformation, type, and performance strengths and weaknesses.

• For buyers, the CHIC program provides accurate information about the **results of a breeder's health testing**. For diseases that are limited to phenotypic evaluations, (i.e. how something appears) there are no guarantees. However, the probability that an animal will develop an inherited disease is reduced when its ancestry has been **tested normal**.
Canine Hip Dysplasia Stats

Studies done between 1/1974 and 12/2015

<table>
<thead>
<tr>
<th>WSS Rank</th>
<th># Evals</th>
<th>% Abnormal</th>
<th>% Normal</th>
<th>% Equivocal</th>
<th>% Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 out of 177</td>
<td>2240</td>
<td>11.5</td>
<td>87.4</td>
<td>1.1</td>
<td>16</td>
</tr>
</tbody>
</table>

Breed with #1 incidence HD: Bulldog with 73.4% dysplastic/ 0.3% Excellent

Breed with #177 incidence HD: Ital Greyhound 0% dysplastic/58.7% Excellent
How are WE Doing on Hips?

Impression-We are doing exceedingly well on improving the prevalence of Excellent ratings AND decreasing the incidence of hip dysplasia.
# Canine Elbow Dysplasia Stats

Studies done between 1/1974 and 12/2015

<table>
<thead>
<tr>
<th>WSS Rank</th>
<th># Evals</th>
<th>% Abnormal</th>
<th>% Normal</th>
<th>% Grade 1</th>
<th>% Grade 2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>88 out of 117</td>
<td>847</td>
<td>1.8</td>
<td>98</td>
<td>1.8</td>
<td>0</td>
</tr>
</tbody>
</table>

Breed with #1 incidence ED: Chow Chow with 47.9% dysplastic/ 6.7% Grade 3

Breed with #117 incidence ED: Siberian Husky 0% dysplastic
How are WE Doing on Elbows?

Impression-We continue to do well in reducing the trend of abnormal ED findings, but #s indicate this is NOT a major health issue in the breed.
How do we compare to a ‘popular breed’?

- This breed ranks 14/117 in ED incidence.
- Very slow trend towards improvement over the past 20 yrs.

- This breed ranks 39/177 in HD incidence
- Unable to sustain a trend towards reducing HD over the past 20 yrs
- Slow upward trend in # of Excellent ratings over 30 years
Eye Disorders

- Blue Book of Eye Disorders continues to indicate we should NOT breed Welsh Springers with:
  - Glaucoma
  - PPM (other than Iris-to-Iris)
  - Cataract
  - Retinal Atrophy

- Our most common ocular disorders:
  - PPM iris-to-iris (26-28% since 2000)
  - Distichiasis (9-14% since 2000)

- Drill-down on PPM incidence since 1991
Persistent pupillary membranes are strands of tissue in the eye. They are remnants of blood vessels which supplied nutrients to the developing lens of the eye before birth. Depending upon the location and extent of these strands, they may interfere with vision. PPM at any location other than iris-to-iris is considered a ‘Do Not Breed’ condition due to cataracts or development of vision impairment.
Persistent Pupillary Membrane

PPM is suspected to be inherited, but because iris-to-iris PPM does not represent a potential compromise of vision or other ocular function, it is listed as a ‘Breeder Option’ ocular finding.

**Hard Questions:**
Do you consider PPM findings when making breeding decisions?
Should you exclude a dog with PPM in your breeding program?
Should you breed a PPM dog to another PPM dog?
Increase in PPM Iris-to-Iris

PPM findings have gone from an incidence of 7% to now appear in more than a quarter of the eye exams submitted to OFA. The rise in incidence was abrupt, and it has continued in the past 6 years to rise.

**Hard Questions:**
What is the cause of increased finding of PPM?
What are the implications if we continue doing the same as we are now?
Is there any interest in exploring ways to reduce incidence in the breed?
Thyroid Disease Incidence

Studies done between 1/1974 and 12/2015

<table>
<thead>
<tr>
<th>WSS Rank</th>
<th># Evals</th>
<th>% Autoimmune Thyroiditis</th>
<th>% Idiopathic Hypothyroid</th>
<th>% Equivocal</th>
<th>% Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 out of 112</td>
<td>948</td>
<td>9</td>
<td>1.2</td>
<td>11</td>
<td>78</td>
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</tbody>
</table>

Breed with #1 incidence Thyroiditis: English Setter with 26.3% thyroiditis, 0.4% hypothyroidism, 18.6% equivocal & 54.7% NORMAL

Breed with #112 incidence Thyroiditis: Yorkshire Terrier 0% thyroiditis, 0% hypothyroidism, 13.6% equivocal & 86.4% NORMAL
Impression-There is VERY LITTLE CHANGE in the trend of abnormal thyroid results over the past 15 years. Average rate is 10% abnormal, 11% equivocal.
## What are the diagnostic criteria?

### Normal
- Free T4 within normal range
- cTSH within normal range
- TgAA is negative

### Positive autoimmune thyroiditis
- Free T4 less than normal range
- cTSH greater than normal range
- TgAA is positive

### Positive compensative autoimmune thyroiditis
- Free T4 is within normal range
- cTSH is greater than or equal to normal range
- TgAA is positive

### Idiopathically reduced thyroid function
- Free T4 is less than normal range
- cTSH greater than normal range
- TgAA is negative

All other results are considered EQUIVOCAL

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### Hard questions:
- Do you consider thyroid findings when making breeding decisions?
- Should you exclude a dog with abnormal results from a breeding program?
- Should you breed a dog with abnormal results to a dog with equivocal results?
Recap

• Hip Dysplasia - we’re doing great things!

• Elbow Dysplasia - do we even have a problem?

• PPM - are we jeopardizing our gene pool if we don’t make some changes?

• Auto-immune Thyroiditis - are we jeopardizing our gene pool if we don’t make some changes?
Health Committee Plans

• Eric Hartelius, DVM will be presenting a proposal to the WSSCA Board to study incidence of narrow iridocorneal angles in Welsh Springer Spaniels
  – study will require gonioscopy
  – hope to hold eye clinic with gonioscopy at several future large-entry shows
  – need breeders & owners willing to participate and submit gonioscopy results to the study
  – Eric will have an article for an upcoming Starter Barks

• Future Starter Barks articles to include
  – To Spay/Neuter or Not to Spay/Neuter
  – Ticks and their Health Impact
  – OFA Health Survey Considerations
  – Canine Health Foundation Initiatives
  – Bred with H.E.A.R.T Program
Thank you!