The CTCA owner-breeder survey was instituted by the CTCA to describe owner-breeder characteristics and breeding practices, health status of purebred Cairn Terriers owned by CTCA members, and breeder-owner practices regarding nutrition, preventive health care and treatment, and health screening schedules. The data are reported in aggregate, and no members are identified.

This report discusses data from all six sections of the survey: Part 1 (General Information), Part 2 (Health and Related Concerns), Part 3 (Diet and Nutrition), Part 4 (Breeder Information), Part 5 (Health Screening and Open Comment), and Part 6 (Reported Health Problems).

The reports will present (1) important and non-missing data from respondents, and (2) some interpretation of the numbers. This report is in condensed format with several tables and graphics included. The lay reader may be rewarded by spending a bit of time on the text and graphics, teasing out meaning that may not have been initially apparent!

There were 163 respondents to the 2005 survey. The response rate for the survey was approximately 32% (163/500). Data concerning the exact number of surveys sent and the number returned by the US Postal Service as undeliverable (incorrect addresses) will permit a more accurate estimate of response rate.

The survey response is weak: both in terms of number of respondents and number of items answered by respondents. Some items, however, did attract attention and were completed by most of the sample. Strategies can be developed to strengthen members’ response to the next health survey.

Part 1: General Respondent Information

Respondents reported owning Cairns from two to sixty-six years and they own from zero to 23 Cairns. The graphic portrays the distribution of respondents across constructed categories (thirds) of these two variables:

![Figure 1. YEARS OF OWNING CAIRN TERRIERS by NUMBER OF CAIRN TERRIERS](image)

Members co-own Cairn Terriers to a lesser extent. Ninety-five respondents (58%) did not co-own any Cairn Terriers. The group of 68 respondents who did co-own, ranged from co-owning one to twelve Cairns, most of these (64) co-owning from one to six Cairn Terriers.
About three in four respondents reported a primary membership in a regional Cairn Terrier Club. Second, third, and fourth regional club memberships were noted by 18 respondents. Primary memberships were listed for fifteen clubs (Figure 2 and Table 1).

Table 1. Primary Reported Regional Club Memberships of Survey Respondents

<table>
<thead>
<tr>
<th>Club</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potomac</td>
<td>19</td>
</tr>
<tr>
<td>Denver</td>
<td>13</td>
</tr>
<tr>
<td>Northern CA</td>
<td>13</td>
</tr>
<tr>
<td>Su-Mac (MN)</td>
<td>13</td>
</tr>
<tr>
<td>Housatonic</td>
<td>12</td>
</tr>
<tr>
<td>Cascade (WA)</td>
<td>7</td>
</tr>
<tr>
<td>Chicago</td>
<td>6</td>
</tr>
<tr>
<td>CTCC-Canada</td>
<td>6</td>
</tr>
<tr>
<td>Southern CA</td>
<td>6</td>
</tr>
<tr>
<td>Trinity (TX)</td>
<td>6</td>
</tr>
<tr>
<td>Detroit</td>
<td>5</td>
</tr>
<tr>
<td>Florida</td>
<td>3</td>
</tr>
<tr>
<td>Columbia (OR)</td>
<td>2</td>
</tr>
<tr>
<td>Prairie</td>
<td>2</td>
</tr>
<tr>
<td>Sacramento Valley</td>
<td>2</td>
</tr>
<tr>
<td>Missing</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>163</td>
</tr>
</tbody>
</table>

Respondents reported their interests in breeding (n=114 or 70%), having Cairns as companions (109 or 67%), exhibiting dogs in conformation competitions (131 or 80%). Members also noted their interest in obedience (48 or 29%), agility (38 or 23%), earthdog tests (57 or 35%), or other pursuits (21 or 13%), notably tracking, flyball, rescue, canine freestyle, and therapy activities.
Part 2: Health and Related Concerns

These data include diseases or conditions, in order of importance, that respondents considered most important and dangerous to the breed of Cairn Terrier. Further items request information about whether respondents had encountered the identified diseases and conditions. Of all the data in this section of the survey, the first item (item 5), asking for a priority listing of important diseases, contains the most complete, non-missing responses.

The remaining data concerns data specific to each condition: whether the respondent owned and/or bred animals with the condition, relationships of the affected Cairn with ancestors, treatment and outcome, and the respondent’s awareness of a health screen for the condition. These data are less complete.

Follow-up analyses are presented in this summary for the five most commonly-indicated dangerous health conditions. In order of priority, they are:

(1) liver shunt (97 mentions across the five items),
(2) ocular melanosis (76 mentions),
(3) luxating patellae (49 mentions),
(4) renal dysplasia (42), and
(5) craniomandibular osteopathy (CMO) (34).

The next five conditions that were perceived to be important were globoid cell leukodystrophy (GCL) (25 mentions), atopic dermatitis (22 mentions), progressive retinal atrophy (PRA) (16 mentions), temperament-aggression (15 mentions), and juvenile cataracts (11 mentions).

Eye conditions, ocular melanosis, progressive retinal atrophy, and juvenile cataracts, taken together, had 103 mentions, indicating a value put on annual OM-CERF screens.

A complete and labeled accounting of all conditions will be available in the output to be forwarded to the survey team.

Note 1: Liver shunt had 97 mentions across five items each for “intra-hepatic” shunt (9), “extra-hepatic” shunt (10), and “liver shunt” generally (78 times).

Note 2: Ocular melanosis had 76 mentions across five items each for “ocular melanosis” (69) and “ocular melanosis with secondary glaucoma” (7).

Portosystemic Shunt

Respondents indicated that liver shunt; whether “intra-hepatic,” “extra-hepatic,” or “liver shunt” in general; was the most important and dangerous condition afflicting the Breed (Table 2). In fact, of the 97 respondents who mentioned liver shunt, 54 (56%) mentioned it first in order of priority.
Table 2. Portosystemic Shunt: Mentions in Order of Importance (item 5)

<table>
<thead>
<tr>
<th>Condition</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver shunt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Extra-</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>General-</td>
<td>48</td>
<td>14</td>
<td>13</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>19</td>
<td>15</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Additional data, on items 6-10, separate from the “in-order-of-importance” question, concerning respondents’ experience with liver shunt (did respondent own or breed a liver shunt Cairn), relationships with known animals, the clinical history (treatment and outcome), or respondents’ knowledge of a screen for liver shunt, were sparse. Data for presumed relatives of affected dogs were 60% to 100% missing and are not included. Nevertheless, the valid data are informative. Remaining data for mentions of liver shunt (items 6-10) are given in Table 3.

Table 3. Condition Data (items 6-10): Liver Shunt

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-</td>
<td>7</td>
</tr>
<tr>
<td>Extra-</td>
<td>8</td>
</tr>
<tr>
<td>General-</td>
<td>63</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Total mentions</td>
<td>78</td>
</tr>
</tbody>
</table>

Have you owned an affected Cairn?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
</tr>
<tr>
<td>Missing</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
</tr>
</tbody>
</table>

Have you bred an affected Cairn?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
</tr>
<tr>
<td>Missing</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
</tr>
</tbody>
</table>

Do you know of a relative(s) with this condition?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
</tr>
<tr>
<td>Unknown</td>
<td>13</td>
</tr>
<tr>
<td>Missing</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
</tr>
</tbody>
</table>
Was the condition treated successfully?
- Yes 20
- No 8
- Missing 50
- Total 78

What treatment was given?
- Surgery 15
- Diet 2
- Neutered 1
- “In treatment” 1
- “Shunt bad -euth” 1
- “Put down” 1
- Missing 57
- Total 78

Do you know of a diagnostic or genetic screen for this condition?
- Yes 35
- No 9
- Missing 34
- Total 78

Liver shunt is seen as the most important threat to Cairn Terrier health. Most respondents who answered the items used the general term and not the more specific “intra-hepatic” or “extra-hepatic” liver shunt. A minority of those entering comments about liver shunt had owned (8) or bred (17) an affected dog. Of those who had, the majority had some idea of a genetic connection to the dog. Most also appeared to indicate the treatments, including surgery (17) and diet (2), were successful (20).

**Ocular Melanosis**

Respondents indicated that ocular melanosis; whether generally or “ocular melanosis with secondary glaucoma,” was the second most important condition afflicting the Breed (Table 4). OM was most often mentioned second or third on respondents’ lists of priorities (Table 4). Of the 76 respondents who mentioned liver shunt, 65 (86%) mentioned it first, second, or third in order of priority.

<table>
<thead>
<tr>
<th>Table 4. Ocular Melanosis: Mentions in Order of Importance (item 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Ocular Melanosis</td>
</tr>
<tr>
<td>OM with Glaucoma</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Further information concerning respondents’ experience with ocular melanosis, is given below (Table 5).
Table 5. Condition Data (items 6-10): Ocular Melanosis.

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocular melanosis</td>
<td>61</td>
</tr>
<tr>
<td>OM glaucoma</td>
<td>5</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Total mentions</td>
<td>66</td>
</tr>
</tbody>
</table>

Have you owned an affected Cairn?
- Yes: 16
- No: 39
- Missing: 11
- Total: 66

Have you bred an affected Cairn?
- Yes: 9
- No: 37
- Missing: 20
- Total: 66

Do you know of a relative(s) with this condition?
- Yes: 14
- No: 14
- Unknown: 8
- Missing: 30
- Total: 66

Was the condition treated successfully?
- Yes: 11
- No: 8
- Missing: 47
- Total: 66

What treatment was given?
- Eyedrops: 5
- “Medication”: 1
- Remove eye: 1
- Missing: 55
- Total: 66

Do you know of a diagnostic or genetic screen for this condition?
- Yes: 28
- No: 6
- Missing: 32
- Total: 66

As a group, CTCA respondents consider ocular melanosis the second most important condition affecting the Breed. Missing data (items 6-10) prevents most conclusions, except
to say that some respondents have experience with affected dogs and that some members are aware that screening OM-CERF exams for the disease are available.

**Luxating Patellae**

Luxatting patellae is considered by respondents to be the *third* most important condition to the Breed (Table 6). There was only one response code for this item, hence one line of data in the Table.

<table>
<thead>
<tr>
<th>Condition</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxating Patellae</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>16</td>
<td>7</td>
</tr>
</tbody>
</table>

As with the previous important conditions, fewer respondents completed additional items concerning luxating patellae (Table 7). The information available, however, indicates that luxating patellae have been encountered by four in five respondents (37 of 45) reporting the condition as important. Almost three in five of the 45 respondents said they had bred a Cairn with luxating patellae.

**Table 6. Luxating patellae: Mentions in Order of Importance (item 5)**

**Table 7. Condition Data (items 6-10): Luxating Patellae.**

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxating Patellae</td>
<td>45</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Total mentions</td>
<td>45</td>
</tr>
</tbody>
</table>

**Have you owned an affected Cairn?**

| Yes | 23 |
| No  | 14 |
| Missing | 8 |
| Total  | 45 |

**Have you bred an affected Cairn?**

| Yes | 12 |
| No  | 14 |
| Missing | 19 |
| Total  | 45 |

**Do you know of a relative(s) with this condition?**

| Yes | 12 |
| No  | 7  |
| Unknown | 14 |
| Missing | 12 |
| Total  | 45 |
Was the condition treated successfully?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>

What treatment was given?

<table>
<thead>
<tr>
<th>Treatment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>11</td>
</tr>
<tr>
<td>Diet - alt care</td>
<td>4</td>
</tr>
<tr>
<td>Watchful waiting</td>
<td>4</td>
</tr>
<tr>
<td>Glucosamine</td>
<td>2</td>
</tr>
<tr>
<td>Palliative care</td>
<td>1</td>
</tr>
<tr>
<td>Massage - hydro</td>
<td>1</td>
</tr>
<tr>
<td>Missing</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>

Do you know of a diagnostic or genetic screen for this condition?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
</tr>
<tr>
<td>Missing</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>

Renal Dysplasia

Renal dysplasia is considered by respondents to be the *fourth* most important condition to the Breed (Table 8). There was only one response code for this item, hence one line of data in the Table.

<table>
<thead>
<tr>
<th>Condition</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal Dysplasia</td>
<td>14</td>
<td>16</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

As with the previous important conditions, fewer respondents completed additional items concerning renal dysplasia (Table 9). The information we can present, however, indicates that some respondents treated the condition successfully (diet) and were aware of diagnostic exams to detect renal dysplasia.

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal Dysplasia</td>
<td>36</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Total mentions</td>
<td>36</td>
</tr>
</tbody>
</table>
Have you owned an affected Cairn?
Yes 9
No 21
Missing 6
Total 36

Have you bred an affected Cairn?
Yes 5
No 21
Missing 10
Total 36

Do you know of a relative(s) with this condition?
Yes 13
No 5
Unknown 4
Missing 14
Total 36

Was the condition treated successfully?
Yes 4
No 7
Missing 25
Total 36

What treatment was given?
Diet 5
Watchful waiting 2
Missing 29
Total 36

Do you know of a diagnostic or genetic screen for this condition?
Yes 17
No 8
Missing 11
Total 36

Craniomandibular Osteopathy (CMO)

Craniomandibular Osteopathy (CMO) is considered by respondents to be the fifth most important condition to the Breed (Table 10). There was only one response code for this item, hence one line of data in the Table.
Table 10. Craniomandibular Osteopathy (CMO): Mentions in Importance (item 5)

<table>
<thead>
<tr>
<th>Condition</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMO</td>
<td>3</td>
<td>10</td>
<td>6</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

As with the previous important conditions, fewer respondents completed additional items concerning CMO (Table 11). The information we can present, however, indicates that a few respondents treated the condition successfully (medication and diet) and were aware of diagnostic exams to detect CMO.

Table 11. Condition Data (items 6-10): CMO.

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMO</td>
<td>31</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Total mentions</td>
<td>31</td>
</tr>
</tbody>
</table>

Have you owned an affected Cairn?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
</tr>
<tr>
<td>Missing</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>

Have you bred an affected Cairn?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>

Do you know of a relative(s) with this condition?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
</tr>
<tr>
<td>Unknown</td>
<td>6</td>
</tr>
<tr>
<td>Missing</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>

Was the condition treated successfully?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Missing</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>
Parts 1 & 2: Summary

Most respondents completed items concerning their histories caring for Cairn Terriers and their perceptions of the most important diseases and conditions in the Breed. The sample varies widely in experience with Cairns, up to 66 years, and the number owned, up to 23 dogs. The cells in the cross-tabulation (Figure 1) indicate that a striking number of respondent-members have been “hooked” on the Breed, some keeping more than a dozen Cairns and for over five decades. Still, two of three respondents keep five or fewer Cairns and have done so for 27 years or less.

Reported primary regional club memberships indicate that the health survey is geographically representative.

The central findings of this first report are that members clearly perceive that liver shunt, ocular melanosis, luxating patellae, renal dysplasia, and craniomandibular osteopathy are the most important conditions affecting Cairn Terriers. These results indicate that the research programs concerning these conditions are "on track."

Again, because eye conditions, ocular melanosis, progressive retinal atrophy, and juvenile cataracts, taken together, had 103 mentions, the importance of annual OM-CERF checks for Cairn Terriers is supported.

These perceptions, of course, do not necessarily reflect actual disease prevalence, but reflect, rather, a keen interest in these conditions and breeders' and the CTCA's abiding responsibility to control them.

Many of the common causes of mortality and morbidity in Cairn Terriers; for example, normal degeneration, cancers, cardiac events, kidney and liver failure, and trauma; are less amenable to control. Survey respondents are less interested in their and the national breed club's responsibility to control these more "normal" or "random" events or "accidents."

The ten most important conditions noted by the Survey respondents have been associated with some form of genetic transmission and often debilitate and shorten the lives of affected Cairn Terriers. These conditions are subject to genetic research, marker development, and control. Supporting these strategies is of particular interest to breeders and the CTCA.

Note 3: Kennel Club of the United Kingdom and the British Small Animal Veterinary Association Scientific Committee: Summary of Results of the Purebred Dog Health Survey for Cairn Terriers (2005).

info@the-kennel-club.org.uk
Part 3: Diet and Nutrition

In this section of the Health Survey, respondents were asked to describe what they fed their Cairn Terriers, what supplements and preventive medications they gave, if any, and what digestive problems their Cairn Terriers encountered. Regarding commercial foods, owners indicated, as a group, that they fed quite a wide variety of commercial brands to their adult dogs. Most (83%) respondents indicated a brand, and Table 1 presents the major labels reported. There were 43 brands of dog food noted by the 135 Cairn Terrier owners who completed this item. A complete listing of responses to all items is available on request from Bell Hulbert Associates (see contact information below).

Table 1. What commercial brand of food do you feed adult dogs?

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 135 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purina Pro Plan</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Solid Gold</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Nutro Ultra</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Wellness</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Canidae</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>IAMS</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Other brands</td>
<td>74</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100</td>
</tr>
</tbody>
</table>

Follow-up items indicated that virtually all of respondents fed dry commercial food only or fed it in combination with commercial canned food.

Table 2. What forms of commercial brand of food do you feed adult dogs?

<table>
<thead>
<tr>
<th>Form</th>
<th>Number (“Yes”)</th>
<th>Valid</th>
<th>Percent (of those responding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry food</td>
<td>139</td>
<td>140</td>
<td>99</td>
</tr>
<tr>
<td>Canned Food</td>
<td>50</td>
<td>52</td>
<td>96</td>
</tr>
</tbody>
</table>

When asked if they fed homemade food, exclusively or in combination with commercial food, only six respondents said they fed solely homemade food to their Cairn Terriers. Twenty-one said they fed commercial dry food with homemade meals, and three used canned food with homemade food.

Regarding pups, seventy-five owners reported feeding a similar variety, twenty-eight brands, of commercial food. Similar proportions of owners said they fed dry (100% of the 116 respondents) or canned puppy food (97% of the 35 who answered that item). Only four persons said they fed homemade food solely to pups.
Table 3. What commercial brand of food do you feed puppies?

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 75 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purina Puppy</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Eukanuba</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Wellness</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>IAMS</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Other brands</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

Nutritional Supplements

Respondents were asked if they fed nutritional supplements to their Cairns, and almost two in three (99 responses of 163 surveys) indicated they did so. Again, there was a wide variety of supplements. “Other” supplements included glucosamine, Missing Link, brewer’s yeast, cottage cheese, yogurt, and raw vegetables.

Table 4. What Nutritional Supplements Do You Feed?

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 99 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-vitamin</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Omega 3 oils</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Seameal</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Other supplements</td>
<td>45</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>100</td>
</tr>
</tbody>
</table>

Problems Caused by Food

At this point, the survey asked owners if their Cairns had experienced problems with particular foods. Thirty-nine (24%) of the respondents said their dogs had problems with a variety of foods. Of the 23 brands reported, each was mentioned only one or two times, and no food emerged as “real trouble.” Problems mentioned were diarrhea, skin irritation, weight gain, “malnourishment,” “greasy coats,” allergic reactions, and “teeth got dirty.”

Prescription Foods

Thirty-six owners said they used prescription dog foods and, again, the result was a varied, “flat” distribution of foods listed, with no more than seven (Hill’s Science diet “kd”) respondents indicating a prescription food.
Table 5. What prescription foods do you feed?

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 36 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hill’s Science “kd”</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Hill’s Science “wd”</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Eukanuba “skin probs”</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Hill’s Science “cd”</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Hill’s Science “ld”</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Hill’s Science “colitis”</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>“Diabetic diet”</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Other foods</td>
<td>16</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

Supplements to Dogs’ Drinking Water?

Twenty-one respondents said they supplemented their dogs’ drinking water, mentioning ten materials. “Oxyfresh” was reportedly used by 9 (43%); distilled, filtered, or bottled water by 6 (29%); and apple cider vinegar by 2 (10%).

Food Sensitivities and Food Intolerances

Sixteen people reported their Cairn Terriers had food sensitivities, and twelve reported food intolerances. Sensitivity to corn was mentioned by three (20%), to chicken by two (13%), to lamb by two (13%), and wheat by two (13%) owners. Two respondents noted their dogs’ intolerance to beef (18%) and another two (18%) mentioned a lactose intolerance.

Heartworm and Flea-Tick Preventive Medication

The final items in this section concerned worm and flea preventive medication. Over three in four respondents (123 of 159 or 77%) reported giving their dogs a heartworm preventive, most (97 or 80%) gave this medication monthly. Other owners provided the preventive daily (1%) or seasonally (19%). In contrast to the food market, heartworm preventive is dominated (84%) by two products.
Table 6. Heartworm Preventive Medication

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 93 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heartguard</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Interceptor</td>
<td>38</td>
<td>41</td>
</tr>
<tr>
<td>Sentinel</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>“Ivermectin”</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Revolution</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>“Mix my own”</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Iver-hart</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pro-Heart</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

Seventy-three of 88 (83%) respondents said they used heartworm medication on their “breeding stock,” 37 (44% of respondents to this item) use it with bitches in whelp, 57 (80%) on studs.

Almost two-thirds (101 of 155 respondents or 65%) reported giving their dogs a seasonal (57%) or monthly (42%) flea preventive. Two brands dominate this market, also. Fifty-two of 71 responding said they give flea-tick preventive to breeding dogs, mostly to stud dogs (77% of 62) and not to bitches (13% of 67).

Table 7. Flea-Tick Preventive Medication

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent (of 81 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frontline</td>
<td>48</td>
<td>59</td>
</tr>
<tr>
<td>Advantage</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Top-Spot</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Bio-Spot</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Interceptor</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Revolution</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sentinel</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other brands</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100</td>
</tr>
</tbody>
</table>

Lifespan of “Oldest” and “Youngest” Cairns

A final set of items in this section asked owners about the completed life spans of their “oldest” and “youngest” Cairns, and respondents indicated the number of years lived. The means for each item are associated with wide distributions. The ranges are for “oldest,” 1 to 21 years, and for “youngest,” stillborn to 16 years. The median of “oldest” Cairns indicates that as many of the 109 reported “oldest” Cairns lived more than 16 years as lived less than 16 years.
Table 8. Lifespans of “Oldest” and “Youngest” Cairns

<table>
<thead>
<tr>
<th></th>
<th>Mean (yrs)</th>
<th>Standard Deviation (yrs)</th>
<th>Median (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Oldest” Cairns (109)</td>
<td>15.3</td>
<td>2.97</td>
<td>16</td>
</tr>
<tr>
<td>“Youngest” Cairns (104)</td>
<td>7.1</td>
<td>5.60</td>
<td>8</td>
</tr>
</tbody>
</table>

Part 4: Breeder Information

This section asked CTCA members about their experience breeding Cairn Terriers. Of course, not all CTCA members are Cairn Terrier breeders. Of the 163 respondents, 117 (72%) indicated they had bred at least one litter. This percentage may not represent the true proportion of breeders in the CTCA, because breeders may have been more, or less, likely to respond to the Health Survey.

Litters Bred

As noted, about three in four respondents reported they had bred at least one litter. The four categories indicating the number of litters bred appear to portray a natural “winnowing” of first-timers as they complete their first Cairn Terrier breedings, with some discontinuing and others continuing to breed more litters. The participation in the Health Survey of 39 breeders of 10 or more litters is a major success: The information provided by these experienced people enhances the validity of the responses to items concerning breeding practice.

Table 9. “How Many Litters Have You Bred? (Categories)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 117 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 litters</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>4 to 6 litters</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>7 to 9 litters</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>10 or more litters</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>100</td>
</tr>
</tbody>
</table>

Breeders indicated the total number of Cairn bitches they have bred, and again, there appears to be a separation between breeders with moderate experience and those with long experience.
Table 10. “How Many Bitches Have You Bred? (Categories)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 111 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 bitches</td>
<td>51</td>
<td>46</td>
</tr>
<tr>
<td>4 to 6 bitches</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>7 to 9 bitches</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>10 or more bitches</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>100</td>
</tr>
</tbody>
</table>

The diverse experience of the sample is even more evident when the total number of puppies bred, including those stillborn, is considered. On the low end, the data may reflect a “freshman class” or “tried it once or twice” group. On the high end, seven breeders reported having produced 100 to 162 pups, and two breeders reported they had whelped 230 and 235 pups respectively. Only 88 members responded to this item, however.

Table 11. “How Many Pups Have You Produced (including stillborn pups)? (Categories)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 88 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 8 pups</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>9 to 21 pups</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>22 to 43 pups</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>44 to 235 pups</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Size of Litters

With 113 respondents, litter size data provides a fair representation of Cairn Terrier breeder experience. The range of “largest” litter is from one pup to nine, with the mean at 5.89, standard deviation at 1.64, and the median at 6 pups. “Smallest” litters are reported to have included from zero (presumed stillborn) to six pups, with a mean of 1.86, a standard deviation of 1.12, and a median of 1.50. Almost half (49% of the 106 respondents) of the “smallest” litters included one puppy, and another 43% included two or three pups.
Table 12. Size of “Largest” Litters

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 113 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pup</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2 pups</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3 pups</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>4 pups</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>5 pups</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>6 pups</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>7 pups</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>8 pups</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>9 pups</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>113</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 13. Size of “Smallest” Litters

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 106 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero pups</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1 pup</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>2 pups</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>3 pups</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>4 pups</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5 pups</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6 pups</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100</td>
</tr>
</tbody>
</table>

Stud Dogs and Brood Bitches Owned Now

Most respondent breeders appear to be relying on studs owned by others (29%) or on one or two studs kept at home (53%). Keeping more than two studs appears to be rare. Brood bitches, of course, are more popular. Over four in five respondents to the item keep from one to four brood bitches.

Table 14. “How Many Stud Dogs Do You Own Now?”

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 114 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero studs</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>1 stud</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>2 studs</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>3 studs</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>4 studs</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5 studs</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 15. “How Many Brood Bitches Do You Own Now?”

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent (of 113 valid responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero bitches</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>1 brood bitch</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>2 brood bitches</td>
<td>38</td>
<td>34</td>
</tr>
<tr>
<td>3 brood bitches</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>4 brood bitches</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>5 to 11 brood bitches</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>113</td>
<td>100</td>
</tr>
</tbody>
</table>

Breeding Management

Respondents indicated brood bitches were bred the first time at two to three years of age and for the last time around six years of age. Mean age at first breeding was 2.25 yrs, with a standard deviation of 0.52 yrs, and a median of 2 yrs. Mean age at last breeding was 5.92 yrs, with a standard deviation of 1.27 yrs, and a median of 6 years of age.

Table 16. Age at Bitches’ First Breeding

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent (of 115 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Two years</td>
<td>86</td>
<td>74</td>
</tr>
<tr>
<td>Three years</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Four years</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 17. Age at Bitches’ Last Breeding

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent (of 101 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Two years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Three years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Four years</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Five years</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Six years</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>Seven years</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Eight years</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Nine years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100</td>
</tr>
</tbody>
</table>
The number of bitches requiring artificial insemination (AI) and Caesarian sections were enumerated. Most respondents reported either no bitch or one bitch had required an AI or a C-section.

### Table 18. How Many of Your Bitches Have Required an Artificial Insemination?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 94 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>One</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Two</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Three</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Four</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 19. How Many of Your Bitches Have Required a Caesarian Section?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 118 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>52</td>
<td>44</td>
</tr>
<tr>
<td>One</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>Two</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Three</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Four</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Five</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Six</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

Respondents provided information about the extent their bitches experienced uterine inertia, eclampsia, mastitis, pyometra or metritis, ruptured uterus, irregular seasons, and missed breedings. Uterine inertia is most commonly encountered (29%) and ruptured uterus the least commonly encountered emergency.

### Table 20. How Many of Your Bitches Have Had Uterine Inertia?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 106 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>One</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Two</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Three</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 21. How Many of Your Bitches Have Had Eclampsia?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 58 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>50</td>
<td>86</td>
</tr>
<tr>
<td>One</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 22. How Many of Your Bitches Have Had Mastitis?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 60 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>48</td>
<td>80</td>
</tr>
<tr>
<td>One</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Two</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Three</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 23. How Many of Your Bitches Have Had Pyometra or Metritis?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 62 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>49</td>
<td>79</td>
</tr>
<tr>
<td>One</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Two</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 24. How Many of Your Bitches Have Had a Ruptured Uterus?

<table>
<thead>
<tr>
<th>Bitches</th>
<th>Number</th>
<th>Percent (of 54 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>53</td>
<td>98</td>
</tr>
<tr>
<td>One</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 25. Have You Had Bitches With Irregular Seasons?

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent (of 114 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>51</td>
<td>45</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 26. Have You Had Bitches Whom Have Missed Breedings?

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent (of 113 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60</td>
<td>53</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>113</td>
<td>100</td>
</tr>
</tbody>
</table>

Age at Bitches’ First Season

Most (78%) respondents indicated their bitches came into season at between seven and ten months of age. The range of ages extended from 5 months old to thirty-six months. Some respondents mentioning ages older than 12 months noted that they may have missed the first season. Mean age at first season was 8.57 months, with a standard deviation of 2.12 months, and a median of 8 months.

Table 27. “Average” Age of Bitches At Their First Season

<table>
<thead>
<tr>
<th>Age in Months</th>
<th>Number</th>
<th>Percent (of 87 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Seven</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Eight</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Nine</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Ten</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Eleven</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Twelve and older</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>100</td>
</tr>
</tbody>
</table>
Do You Assist Bitches During Whelping?

The overwhelming proportion of respondents said they did assist their bitches during whelping.

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percent (of 117 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>111</td>
<td>95</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>100</td>
</tr>
</tbody>
</table>

Spaying and Neutering

Most respondents said they spayed bitches and neutered dogs after their use in breeding.

<table>
<thead>
<tr>
<th>a. Spay Females?</th>
<th>Number</th>
<th>Percent (of 116 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>110</td>
<td>95</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Neuter Males?</th>
<th>Number</th>
<th>Percent (of 109 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>89</td>
<td>82</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>100</td>
</tr>
</tbody>
</table>
Stillborn Puppies

Regarding stillborn pups, breeders indicated, with numbers and margin comments, they had a clear idea of how many they lost in whelping and what had happened that may have caused the stillbirths. Eighty-four respondents said they had had stillborn pups, and 79 reported numbers of pups lost.

Table 30. Have You Had Stillborn Pups and, if so, How Many?

<table>
<thead>
<tr>
<th>a. Stillbirths?</th>
<th>Number</th>
<th>Percent (of 116 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>84</td>
<td>72</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Stillborn Pups</th>
<th>Number</th>
<th>Percent (of 78 Respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>Two</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Three</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Four to five</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Six to ten</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Eleven to twenty</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100</td>
</tr>
</tbody>
</table>

Fading Pups

Forty-three (39%) of 109 members indicated they had had fading pups. These respondents reported numbers of fading pups, and five said they each had seven or more fading pups.

Table 31. Have You Had Fading Pups and, if so, How Many?

<table>
<thead>
<tr>
<th>a. Fading Pups?</th>
<th>Number</th>
<th>Percent (of 109 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>43</td>
<td>39</td>
</tr>
<tr>
<td>No</td>
<td>66</td>
<td>61</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Fading Pups</th>
<th>Number</th>
<th>Percent (of 43 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Two</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>Three</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Four to six</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Seven to ten</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Eleven to fifteen</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>
Finally, the section ends with questions concerning breech (tail and backside presented first) births. Two in three reported having one or more breech births, but many of these were unsure of the number. “I didn’t keep track,” was a common comment. Half reported one or two breech births, but the numbers ranged from one to thirty breech births.

Table 32. Have You Had Breech Births and, if so, How Many?

<table>
<thead>
<tr>
<th>a. Breech Births?</th>
<th>Number</th>
<th>Percent (of 109 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Breech Pups</th>
<th>Number</th>
<th>Percent (of 51 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Two</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>Three</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Four to six</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Seven to ten</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Eleven to thirty</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100</td>
</tr>
</tbody>
</table>

Part 5: Health Testing Protocols

This section of the survey asked respondents to provide information about their current health testing protocols and on their use of existing databases or registries to document the findings of the exams. In addition, these items asked respondents if they were in favor of the CTCA’s developing recommendations for minimal health screening protocols. Finally, there were several opportunities provided to encourage respondents to give the CTCA their open comments.

Current Health Testing Protocols

Survey data concerning current health testing protocols indicate that routine and general veterinary exams are currently the most common method of health care screening. Most of the approximately 152 respondents to the items report they include general routine testing of puppies (110 or 72%), before placement of puppies (67 or 44%), before breeding adults (71 or 47%), and routine exams of adults (103 or 68%).

Currently available disease-specific or system-specific screening exams are much less commonly used by respondents. Of the screening protocols identified, fewer respondents reported they had their Cairns tested specifically for eye, cardiac, musculoskeletal, liver, GCL, thyroid, and von Willebrand’s diseases.

Preventive blood screenings, especially before-breeding bile acid, GCL, and thyroid panels, ranked close seconds overall. Before they used their Cairns as breeders, 42 (36% of
152) respondents indicated they had tested their animals for GLC (globoid cell leukodystrophy), 27 (18%) reported getting thyroid panels, and 25 (16%) identified bile acid exams as part of their before-breeding protocols. In addition, 19 respondents reported they have bile acid testing conducted on puppies from 0-3 months old, and, in all 33 (22%) indicated the bile acid exam is the primary diagnostic blood test performed on puppies, between birth and one year afterward.

Eye screening CERF (Canine Eye Registry Foundation) exams were conducted before breeding and annually, for example, by one in four (24%) of the respondents. Independently of the CERF exams, 32 (21%) reported they have ocular melanosis screens conducted annually, and 26 (17%) report they have OM screens done on their Cairns before they are bred.

Of the musculoskeletal exams, the test for patellar luxation was the most-commonly-reported orthopedic screening. About two-in-five (57 or 38%) respondents identified that their current health testing protocols including a patellar luxation exam on puppies (birth to one year), and before breeding 33 (22%).

Use of Databases or Registries to Manage Health Testing Data

Survey results indicate that 38 (23%) of 163 CTCA Survey respondents currently use an existing database to manage their health testing data. CERF and OFA were the most commonly used national databases. Of the 100 (61%) of the respondents who do not use a database, 60 made comments as follows: 25 (42%) expressed a lack of knowledge about the existing databases, how to use them, or had no time to use them. Another 21 (35%) perceive no current need to health test or use any database, 10 (16%) currently health test but keep the records themselves or at their vet. Expense was a factor for 5 (8%) of respondents not currently using a database.

Usefulness of CTCA Health Screening Recommendations

Almost three in four respondents (117 or 72% of 163) respondents say they are in favor of the CTCA’s developing recommendations for minimum health screening protocols. Of the 60 open comments offered in support of CTCA recommendations, 44 (73% of the 60) strongly supported the concept of CTCA screening recommendations, ten (16%) offered support for recommendations with voluntary compliance, and six (10%) supported the idea of CTCA recommendations and added comments about breeder compliance and breeder ethics.

Of the 25 (15% of 160) respondents who reported they were not in favor of the CTCA’s developing minimum health screening recommendations, 20 offered comments in the following areas: six cited breeders’ rights; six cited testing selection, accuracy and cost issues; four cited disagreements with the National Club and lack of confidence in the Club; and four cited concerns with breeders’ compliance, expertise and lack of personal knowledge.

Seventy (43%) of the 163 CTCA Survey respondents wrote additional comments in the following areas: 16 commented on testing standards and managing the test data and 13 were concerned with breeding practice, breeder knowledge, and educational expectations of the members. In addition, 14 commented on other aspects including the CTCA Foundation, the CTCA Board of Governors, breeder ethics, and on the Health Survey itself.

The results tabulated from the closed- and open-ended comments section concerning health testing protocols are presented in the Appendix.
Part 6: Reported Health Problems

In the final section, on page 6 of the Health Survey, respondents were asked to document any experience they had with the listed (46) health conditions or with health conditions they listed in an open response. These items call for report of actual occurrence of disease, rather than for respondents’ perception of the importance of disease (part 1, items 5-10).

These data were collected on the final page of an ambitious survey. Because fewer respondents may have answered these items, the data, especially the numbers of salient conditions, need to be interpreted with caution.

Diseases reported to be more commonly encountered include atopic dermatitis, crooked tail, luxating patella, dental structural problems, temperament issues, adult cataract, ocular melanosis, heart murmur, cryptorchidism and monorchidism, and umbilical hernia.

The complete list is given in Table 1.
Table 1. Diseases or Conditions Encountered In the Past Five Years

<table>
<thead>
<tr>
<th>Disease/Condition</th>
<th>Number Bred</th>
<th>Number Owned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autoimmune System Diseases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addison’s Disease</td>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Atopic Dermatitis</td>
<td>17</td>
<td>38</td>
<td>55</td>
</tr>
<tr>
<td>Autoimmune Hemolytic Anemia</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Autoimmune Thyroiditis</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Demodetic Mange</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lupus Erythematosus</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Pemphigus</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Puppy Strangles (Juv. Pyoderma)</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Hard Tissue Diseases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleft Palate</td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Craniomandibular Osteopathy (CMO)</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Crooked Tail (congenital)</td>
<td>43</td>
<td>16</td>
<td>59</td>
</tr>
<tr>
<td>Hip Dysplasia</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Legg-Perthes</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Luxating Patella</td>
<td>38</td>
<td>38</td>
<td>76</td>
</tr>
<tr>
<td>Osteo Condroitin Dessicans (OCD)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Panosteitis</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Teeth Overshot (cases)</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Teeth Undershot (cases)</td>
<td>46</td>
<td>8</td>
<td>54</td>
</tr>
<tr>
<td>Teeth Missing (cases)</td>
<td>50</td>
<td>40</td>
<td>90</td>
</tr>
<tr>
<td><strong>Neurologic Disease</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globoid Cell Leukodystrophy (GCL)</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Multisystem Chrom. Neuronal Degen.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Temperament Issues (aggression, shyness)</td>
<td>38</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td><strong>Ocular Disease</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cataract – Adult Onset (&gt; 1 year)</td>
<td>22</td>
<td>51</td>
<td>73</td>
</tr>
<tr>
<td>Cataract – Juvenile onset (≤ 1 year)</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Entropion</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Keratoconjunctivitis Sicca</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Glaucoma (primary)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ocular Melanosis</td>
<td>11</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Ocular Melanosis with Sec. Glaucoma</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Progressive Renal Atrophy (PRA)</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Soft Tissue Diseases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anasarca</td>
<td>10</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Cardiac Disease (unspecified)</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Cardiac Disease – Heart Defect</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Cardiac Disease – Heart Murmur</td>
<td>28</td>
<td>30</td>
<td>58</td>
</tr>
<tr>
<td>Cryptorchidism</td>
<td>36</td>
<td>5</td>
<td>41</td>
</tr>
<tr>
<td>Monorchidism</td>
<td>60</td>
<td>9</td>
<td>69</td>
</tr>
</tbody>
</table>

Diabetes Mellitus  3    7    10
Hernia Inguinal  13    5    18
Hernia Umbilical  21    7    28
Hepatoportal Microvasc. Dysplasia  5    1    6
Hypothyroidism  2    6    8
Portosystemic Shunt (Intra)  7    6    13
Portosystemic Shunt (Extra)  10    5    15
Pyruvate Kinases Deficiency  0    0    0
Von Willebrand’s Disease  0    1    1
Others
Cancer (Kidney, liver, stomach, etc.)  4    6    10
Renal Dysplasia / Aplasia  5    4    9
Renal Failure  4    5    9
Cushing’s Syndrome  0    8    8
Liver Disease (unspecified)  0    6    6
Torn ACL  2    2    4
Peridontal Disease  0    3    3
Pancreatic Insufficiency  1    1    2
Irritable Bowel Disease  2    0    2
Chirrhosis  0    2    2
Lymphoma  1    1    2
Persistent Pupillary Membrane (PPM)  0    1    1
Kidney Stones  0    1    1
Interstitial Cystitis  1    0    1
Arthritis  0    1    1
Masticatory Muscle Myotis  1    0    1
Autism  0    1    1
Scotty Cramp  0    1    1
Copper Toxicity  0    1    1

Summary of Part 6

The data in Table 1 indicate that reported experience with diseases and conditions concerning:

1. Dental conditions (172 total mentions),
2. Ocular disease (113 mentions),
3. Cardiac conditions (79 mentions),
4. Luxating patella (76),
5. Liver diseases (42), and
6. Renal disease (20)

are important concerns for those respondents who answered these items.

More specifically, the data for each of these six general conditions can be partitioned:
**Dental Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total* Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teeth: Missing</td>
<td>90</td>
</tr>
<tr>
<td>Teeth: Undershot</td>
<td>54</td>
</tr>
<tr>
<td>Teeth: Overshot</td>
<td>25</td>
</tr>
<tr>
<td>Peridontal disease</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>172</strong></td>
</tr>
</tbody>
</table>

There were a large number of dental problems documented by respondents. 172 responses averaged 3 dogs affected per response.

**Ocular Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataracts - adult onset</td>
<td>73</td>
</tr>
<tr>
<td>Ocular melanosis</td>
<td>31</td>
</tr>
<tr>
<td>PRA</td>
<td>4</td>
</tr>
<tr>
<td>OM w/secondary glaucoma</td>
<td>2</td>
</tr>
<tr>
<td>Cataracts - juvenile onset</td>
<td>2</td>
</tr>
<tr>
<td>PPM</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>

**Cardiac Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac: Heart Murmurs</td>
<td>58</td>
</tr>
<tr>
<td>Cardiac: Heart Defect</td>
<td>12</td>
</tr>
<tr>
<td>Cardiac Disease</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

**Luxating patella**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxating Patella</td>
<td>76</td>
</tr>
</tbody>
</table>

Patellar luxation was the most frequently mentioned orthopedic condition, followed by crooked tail (59), CMO (18), and cleft palate (18).
Liver Disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS: Extra Hepatic</td>
<td>15</td>
</tr>
<tr>
<td>PSS: Intra Hepatic</td>
<td>13</td>
</tr>
<tr>
<td>MVD:</td>
<td>6</td>
</tr>
<tr>
<td>Liver Disease: Non Specific</td>
<td>6</td>
</tr>
<tr>
<td>Cirrhosis of the liver</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>

Many respondents were unable to define the location of the shunt and either chose extra hepatic or “liver disease.” Respondents who had never bred or owned a dog with diagnosed liver shunt often had serious questions about shunt. Examples of their concerns include: unexplained neonatal deaths, unexplained puppy deaths, and untimely/unexplained adult deaths. In addition, it is possible that some cases of reported “epilepsy” may involve Cairns with a compromised liver function, especially if the symptoms occurred immediately after a high-protein meal.

Renal Disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total Bred &amp; Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal Failure</td>
<td>9</td>
</tr>
<tr>
<td>Renal Aplasia/dysplasia</td>
<td>9</td>
</tr>
<tr>
<td>Kidney Stones</td>
<td>1</td>
</tr>
<tr>
<td>Cystitis (Interstitial)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Discussion:

The emergence of dental disease as the most frequently encountered set of conditions emphasizes that Cairn owners arrange regular dental check-ups and cleaning and/or do dental cleaning themselves. This information also lends further support to the importance of screening for ocular and liver disease and luxating patella. Finally, from these reports, we have documented that cardiac and renal disease are occurring in the breed and need to be discovered and treated as soon as possible.

Summary of the Report

This second and final report contains a great deal of useful information about the lives and health statuses of Cairn Terriers and the commitment of their owners to the Breed. The data indicate an inspiring amount of thought, money, and hard work are preserving the Breed and augmenting the hobby of purebred Cairn Terriers. Respondents reported a conscientious effort to locate and provide excellent nutrition, supplements, and preventive medication to their Cairns. The “oldest” lifespan report, with a distribution median of 16 years, provides excellent evidence that many owners are helping Cairns achieve the longevity of which they are capable.
The varied experience of breeders indicated there is room for the occasional breeders as well as the full-timers. As noted, the participation of 163 CTCA members was a success, and the participation of 39 members who have bred ten or more litters enhanced the validity of these findings. Nevertheless, future efforts will need to sample more than the 32% of the approximately 450 CTCA households we sampled in this Health Survey to be considered truly representative.

Breeding practices appeared standard, except for the occasional reports of bitches bred at one year of age or over eight years of age and the six reports that the breeder did not assist the bitch in whelping. The latter response, however, may only indicate that the breeder was present and ready, but no assistance was required.

Reading the anonymous surveys was a pleasure and inspiration. We were especially touched by comments in the margins and in the open comments reflecting, among other things, the continuing sadness and grief associated with the loss of an adult or puppy and the heartfelt pleas for more pro-active effort of the part of the CTCA to (1) get members to learn about and use available health screening protocols, and (2) to dramatically “ramp up” efforts to control genetically transmitted disease. It is noteworthy that almost three in four respondents were in favor of CTCA initiative to set voluntary recommendations for health screening practice.

We were honored to be asked to review and evaluate this information. It is our hope and plan to inspire a greater involvement of Club members in the next Health Survey.

Finally, as the next Health Survey is being planned, we would like to ask CTCA members to consider what “research questions” they would like to see answered by the next survey. We would like to ask also for members’ opinions concerning the practicality of asking them to respond to a series of brief, e-mailed surveys, sent out by us and received only by us. Brief, electronic surveys would be intended to replace longer, hardcopy surveys. The software we could use would collect and quickly process information in aggregate, even open-ended comments, anonymously, as “Person 1,” “Person 2,” and so on. Please feel free to contact us, in confidence, at JabberwockCairns@msn.com.

Comment

These findings constitute the report of the CTCA Health Survey (2005) for the Health-Related Concerns Committee and the Board Of Governors of the Cairn Terrier Club of America.

Joan Eastman and Bell-Hulbert Associates thank the CTCA and the HRCC for their confidence and kindness. No CTCA funding was used to pay Bell-Hulbert Associates or Joan Eastman for their time. Mailing and copying expenses will be reimbursed. The work is being completed pro bono, all three authors being members of the CTCA.

Joan Eastman, RN
Jim Hulbert, PhD
Sue Ellen Bell, RN, PhD
# Appendix

## Section 5: Cairn Terrier Club of America

### Health Testing Protocols

Please provide information on your health testing protocols by checking the box(s) that most accurately reflect what you currently do.

<table>
<thead>
<tr>
<th>Routine Care</th>
<th>Puppy: 0 – 3 months</th>
<th>Before Placement</th>
<th>Before 1 year</th>
<th>Before Breeding</th>
<th>Annually</th>
<th>1 year – to geriatric</th>
<th>Other intervals describe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Physical (general practitioner)</td>
<td>110</td>
<td>67</td>
<td>38</td>
<td>71</td>
<td>103</td>
<td>61</td>
<td>8</td>
</tr>
<tr>
<td>Routine Dental check up</td>
<td>28</td>
<td>24</td>
<td>15</td>
<td>9</td>
<td>70</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>Other: variations of routine vet care..</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other:</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Eyes

| CERF Eye exam by ophthalmologist | 11 | 5 | 13 | 37 | 39 | 18 | 10 |
| OM (Ocular Melanosis) Exam | 2 | 1 | 5 | 26 | 32 | 16 | 14 |
| Other: | 2 | 1 |

### System Exams

| Congenital Cardiac Exam by Board Certified Cardiologist | 1 | 3 | 6 | 2 | 3 | 8 |
| Other: | 2 | 2 | 1 | 4 | 1 |
| Other: | |

### Musculo Skeletal Exams

| X Ray: Elbow Dysplasia | 1 | 1 | 9 | 3 | 4 |
| X Ray: Hip Dysplasia | 1 | 1 | 18 | 2 | 2 | 4 |
| X Ray: Legg-Calve-Perthes | 1 | 2 | 11 | 1 | 4 |
| Patella: Patellar Luxation | 26 | 19 | 12 | 33 | 16 | 5 | 7 |
| Other: | 1 | 1 | 1 | 1 | 2 | 1 |
| Other: | |

### Disease Prevention Diagnostic Testing

| Bile Acid Testing (for Portal Systemic Shunt) | 19 | 8 | 6 | 25 | 6 | 6 | 5 |
| Blood: Globoid Cell Leukodystrophy (GCL) | 7 | 3 | 42 | 1 | 3 | 6 |
| Blood: Thyroid Panel (for AutoImmune Thyroiditis) | 2 | 2 | 4 | 27 | 6 | 3 | 7 |
| Other: VWD or CBC | 3 | 2 | 1 | 7 | 4 | 1 | 1 |
| Other: | |

Do you document your test results on any existing database type registry?

- **YES** 23% (38)
- **NO** 61% (100)

If YES, which registry do you use? 36 Responses: CERF 18, OFA 15, GDC 6, OM study Peterson-Jones 5

If NO, why not? 61 Responses – Common Themes: 25 Lack of knowledge of databases, how to use, lack of time, 21 Don’t perceive a current need to use or test, keep records elsewhere, expense

Are you in favor of the CTCA developing recommendations for minimum CTCA breeder Health Screening standards at a national level?

- **YES** 72% (117)
- **NO** 15% (25)

If YES, any comments? 60 Comments

If NO, why not? 20 Comments
Are there any other health comments or concerns you want the CTCA to address?

70 additional comments: Common Themes: (16) Health Testing Standards and Managing the Test Data, (13) Breeding/Breeder Knowledge & Education, (18) Specific Diseases/Conditions, (4) BOG, (3) Breeder Ethics, (2) Survey Process

Health Testing Protocols
Comments

Routine Care
Dew claw removal
Spay or neuter, shots and worming before placement
Dental at 6 months
Dental at 2 – 3 years
Dental every 3 years
Handsacle teeth myself
I clean teeth myself
Geriatric dental
Dental when they need it
Each dog is microchipped and has DNA screen/Registry
10 years full geriatric exam
Routine physical every 6 months
Routine physical at 6 months
Routine physical every 3 years

Eyes
Varies with dog, after 4 annually
Glaucoma at 6 months
OM every 2 years
OM At specialty
OM if a concern
OM for dogs over 5 years (2 responses
OM every 3 years
OM one dog every 3 months
OM no – not until we know more about it, CERF every 2 years
OM and CERF Try to take advantage of clinics
CERF and OM when available
CERF once per dog
CERF over 6, OM over 5
CERF and OM every 2 years (2 responses)
CERF at 5 years
Biannual CERF and OM Exams
Eyes Stud dog every 2 years
Annually after age 6
Breeding stock only
Every 2 years

Systems
Renal:
Blood pressure for renal disease – every 3-4 mo.
Blood panel check renal disease every 3-4 mo.
**Heart:**
Cardiologist: Checked several individuals
Cardiologist only if murmur detected > grade 1
Cardiac: Try to take advantage of Clinics
Cardiologist: Never (2 responses)
Vet cardiac exam each animal annually
All pups tested by vet for heart murmur, Cardiologist if murmur detected (2 responses)
Cardiologist: never for any dog bred or owned
Cardiologist: If needed (6 responses)
EEG only if symptoms or vet hears irregularity

**Thyroid**
Thyroid before breeding
When symptoms physical or behavioral suggest
When necessary (5 responses)
Check individuals if suspicious (3 responses)
Once negative
Once
Only when coat shows problems

**Bile Acid**
Not yet
When necessary (5 responses)
Breeding stock only before breeding
Quarterly
I resent this, Bile acid shows more than PSS – the liver has many problems as well as PSS
On imports or unfamiliar dogs

**GCL**
NA/ All are clear
I test new dogs if it is not already done
Did one GCL clinic – all my GCL clear
Breeding stock tested
All negative dogs bred to negative dogs
Stock cleared by testing – so do not do every puppy
Breeding stock if I suspect a problem
Breeding stock only before breeding
If parents not clear
All breeding stock tested years ago and clear, only breed tested dogs so puppies are clear
Clear all breeding dogs thus all babies are clear
My dogs are clear by parentage
All stock negative
If necessary (4 responses)

**Blood**
Each dog gets a complete chem. screen 1 – 2 years before breeding
Blood Panel at least every 2 years
CBC profile annually
Blood panel annually
Senior panels (blood profile)
Blood Panel 10+
Start CBC and semi annual physical at age 10
**Musculo-Skeletal**
Hips are X rayed before breeding
Patellar Luxation done once with hip Xray before breeding – no more x rays after age 2-3
Patellar Luxation done on my pet and stud dog
Geriatric X rays if there is a problem
Biannual Patellar luxation
So far verified by vet no X rays indicated
Breeding stock only before breeding
Hips OFA on studs
Diagnostic x rays:never
Diagnostic x rays:no
Cruciate Ligament Surgery – 3 year old

**Disease Prevention Diagnostics**
Skin punch for sebaceous adenitis/atopic dermatitis
Cancer Checks: when lumps observed
Routine Care Only – others only if a problem
I took my cairn to the vet when I got him. We go every year for teeth, vaccines and routine exam. We go to the vet anytime I feel it is necessary
Open Comment

Verbatim Responses to Open Questions (page 5)

Question:
Do you document your (health) test results on any existing data base type registry?
Yes 36
No 100
No Response 25
Both yes and no 2

Sub Question:
If Yes (You use an existing data base type registry to document your test results), which registry do you use?
- CERF (8 same responses)
- CERF but only occasionally
- Some of them, CERF
- CERF and OFA (2 same responses)
- CERF and GDC
- CERF, OFA, PennHip
- CERF & AKC
- OFA (6 same responses)
- OFA for some (stud dogs)
- OFA, AKC DNA Registry, CERF
- OFA & CERF sometimes
- OFA/GDC
- OFA – it is reasonable, convenient and user friendly. The CTCA can encourage data submission by determining criteria for the OFA CHIC program
- GDC until it folded
- GDC, U of CA Davis
- Open Cal Davis – not recently
- GDC once for luxated patella
- GDC (2 same responses)
- OM Study by CTCA, CERF
- Dr. Peterson-Jones registry for relatives of dogs with OM.
- Sometimes, OFA, Dr. Peterson-Jones
- Ocular Melanosis, Dr. Peterson-Jones (2 similar responses)

Sub Question:
If NO (you do not use an existing data base registry), why not?

Common Theme: Lack of Knowledge of Existing Databases, Lack of Time
- Unaware of most appropriate place to record
- I would use one if I knew how to do it
- Don’t know of a data base type registry
- Don’t know where since GDC is gone, CERF yes
- Have not been asked
- Did not know there was one
• Not aware of any database registry
• I know I should – my fault I guess
• I didn’t think it was that important
• There is not a central Cairn health registry. Existing registries are not being widely used by breeders
• I would use the OFA if the CTCA would recommend it for all members. I have called them for information already.
• Used to register with the GDC but few others do
• Not that I know of
• Just Lazy
• Lack of time
• Hadn’t though about it – very small breeder
• I know the dogs behind my dogs back many generations
• Have not had any problems
• Haven’t had much to report yet
• Didn’t realize this existed
• Just never got around to sending record to UC-Davis
• Don’t know
• CERF requires tattoo or permanent ID
• Just haven’t
• I didn’t know this option existed

Common Theme: Don’t Perceive a Current Need to Use a Database or to Health Test
• Would only register affected dogs
• Nothing yet to document but would
• I do not do any of them (tests)
• None in the last 5 years that required registry – would if necessary
• Results to date have been WNL within normal limits
• Haven’t had results to document
• No register-able tests
• I have only bred 2 litters in 6 years and their parents tested clear – GCL and PSS
• Disinterest of the majority of breeders which makes a registry almost useless.
• Not currently breeding
• Not done except dysplasia when I was breeding
• I am not a breeder
• Only had two very healthy litters
• I have not had to do any special exams so far
• Since I don’t breed, figured it didn’t matter
• None of my dogs are being bred
• Seldom breed, no stud service given
• I rarely have a dog with a problem, especially in the last 5 years
• Haven’t had any trouble
• I am about to discontinue breeding after 25 years in the sport
• Don’t breed enough

Common Theme: Keep Records Elsewhere – at my home or at the vet
• Keep records on disk and on file at vet’s office
• Home Records
• Kept with my dogs file and made available
• My vet keeps detailed records and advises me on the necessary testing
I keep the records of these exams and share the results with any prospective breeding partners. I do not feel the need to register these results at further expense (and in US dollars because I am Canadian). I have the documentation and will share it.

- No good reason, results are in file and available
- CERF but only occasionally – I have the documents
- Use for my information – make available to all who buy mine or use mine
- GCL results are documented
- Use personal database

**Common Theme: Expense**

- Cost prohibitive at present
- Cost
- Needless expense of time and money
- Expense – we register stud dogs
- Expense, general confusion over the directions

---

**Question:**

*Are you in favor of the CTCA developing recommendations for minimum CTCA breeder Health Screening standards at the national level?*

<table>
<thead>
<tr>
<th>Answer</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>117</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
</tr>
<tr>
<td>Undecided</td>
<td>1</td>
</tr>
<tr>
<td>No Response</td>
<td>20</td>
</tr>
</tbody>
</table>

**Comments of Respondents who answered “Yes” to CTCA recommending minimum Standards for Health Screening**

**Common Theme: Strongly Agree the CTCA should recommend minimal testing standards**

- The national must take the lead on testing standards. CTCA must use all its power, resources and influence to encourage breeders to health screen and document that testing.
- Leadership in health screening standards is the only way to bring general membership into active testing to prevent disease.
- Recommend developing CHIC criteria
- I think it would be great for the CTCA to set a minimum standard
- OFA, it is reasonable, convenient and user friendly. The CTCA can encourage data submission by determining criteria for the OFA CHIC program
- It is imperative that the CTCA develops nationwide standards ASAP. Not to do so is just making problems worse for all breeders and members. People often just don’t know what is expected and the CTCA needs to take the lead with new breeders and old breeders alike.
- New breeders need this direction
- Many breeders are unaware of what to test for
- People have no idea what they should be doing, thus are doing nothing.
- To become aware of all the things there are to check for.
- I feel it is quite important to do this. The better the health of breeding stock, chances are the healthier the pups
- Full, honest disclosure will save the breed.
- It should be a requirement for any dog or bitch shown in conformation.
- Clubs should be proactive testing and Educating breeders
- This is so important if we are to have a healthy breed
• Anything to promote healthier Cairns
• For the benefit of the breed.
• We should strive to breed healthy Cairns
• Help improve breeding stock
• Greatly improve health and put everyone on the “same page” – great need to do away with hiding problems across the board!!
• For new breeders, etc, would be helpful to know and maybe then all breeders would be more forthright
• Yes!!
• As long as few test and report, we will never get a handle on any of this
• May reduce the rumor mills and have more honest and healthier pups. Keeps them on the up and up.
• It sets a “higher standard” which makes us different from puppy farms
• Anything that helps us produce healthy puppies can only be a good thing
• Information regarding congenital disorders
• Anything to help make healthier dogs!
• Post health testing breeders on website as a reward
• Depends on how many and cost – tests for those diseases there are markers for.
• This is an excellent way to keep the breed sound.
• I think recommendations and updates would be very important to keep everyone up to date and the breed healthy
• General outline of what tests and when needed.
• We follow our veterinarian recommendations – perhaps we need more
• At the current cost of a new puppy, there should be some process to ensure (as much as possible) a healthy puppy.
• Why not pet owners, too, at least as a guide

**Common Theme: Yes, including suggestions on potential screening standards..**

• Standards should give indications for mandatory testing e.g. sire or dam with history of producing PRA, etc.
• I believe every dog should have GCL, Patellas, Legg Perthes and Bile Acid
• Eyes / bi annual and Bile Acids when the costs come down
• Include all major screenings! (OM-CERF, etc)
• GCL, CMO, Patella check, OM screening
• Bile acid level only – to me everything else is so rare in my cairns that the cost of additional testing doesn’t warrant doing it.
• Blood Panels, Eyes, GCL, Micoplasma, Brucellosis should be minimum requirements. Not in favor of routine X rays should be done only as necessary
• GCL should be mandatory! Bile Acid encouraged until a marker is found and a test can be done to detect, then it should be mandatory. If a test can be done then is should be mandatory.

**Common Theme: Yes, develop recommendations but...Keep it at “recommendations” only**

• I would not want it to be mandatory for a person to be a club member
• As long as they are OPTIONAL... suggestions are OK
• Only if they are recommendations, NOT requirements
• Should be recommendations, not compulsory. Testing results should be available on assessable health data base.
• Just suggestions: no forcing anybody to do anything.
• Recommendations, yes but it depends. I don’t know enough about what the standards would be. I am in favor of not over vaccinating our dogs. If it would require too much vaccination and medical intervention when not needed then no.
• Only if your line has a history of the illness
• Wouldn’t want mandatory testing, only recommended, especially for affected lines.
• I am ambivalent. It may seem strange but I follow my vet’s advice and I breed only within my proven lines and families.
• Yes, but not necessary when no health issue exists

**Common Theme: Yes to recommendations: Ethics, Honesty, Disclosure and “Other”**

• This supposes that everyone will participate and I don’t think they will. Some will pay lip service. The dedicated are already doing screening and sharing results. Try as we may we cannot legislate honesty and disclosure.
• Make sure people doing recommendations have a clue what is important and not just a fad or scare.
• Too many breeders do not accurately represent the health background of their dogs. The puppy I bought had to be euthanized due to cardiac disease – the breeder knew it – had others with the same problem I found out later.
• Most of the problems are with rescue dogs, don’t know who breeders are
• There are health problems so widespread we’ve got to do it. However, there are breeders who’s attitude is that they don’t need to test
• My wonderful Cairn female has both a soft, silky coat (which I love) and the patellar luxation. Do they go together?

**Comments of Respondents who answered “NO” to CTCA recommending minimum Standards for Health Screening**

**Common Theme: Breeders Rights**

• If a breeder has a problem it is up to them to test for it in their stock. I would be 100% against ANYONE telling me I had to test for something I have never had in my dogs.
• CTCA is not the breeding police
• CTCA nor AKC have any regulatory authority in which to control breeding practices or ethics
• You can’t tell people what to do
• CTCA is a club not a legal governing body capable of enforcing laws which vary state to state. Hopefully ethics are good of all members. Most “tests” are not indicated for healthy Cairns. Bitches and “dogs” should be neutered if genetic health problems occur – also their existing offspring.
• It should be between breeders what they require. Breeder should be able to choose for themselves.

**Common Theme: Testing Selection, Accuracy and Cost**

• Health screenings should reflect the needs and concerns of the individual breeder for the disorders possible/present in their breeding area.
• Screening tests aren’t foolproof and I’m afraid too many breeders/organizations will depend on them too much
• Almost all diagnostic tests have too large an error rate
• Not all lines have the same health concerns
• I agree for health screen standards only for breeding animals. It would be too expensive to test all puppies born.
• Some tests are OK but some need an indication

**Common Theme: It would cause disagreement in the club, Lack of confidence**

• Would cause too much squabbling in the group
• Unlikely to reach accord!
• It doesn’t appear that the CTCA can agree on anything. Why should I rely on them to set a standard for something this important?
• Because CTCA can’t seem to get their act together to do it well and so few breeders have a track record of line breeding.

Common Theme: Compliance, Expertise and Lack of Knowledge
• You will never get all members to do even basic testing.
• The members are not experts in this area
• I need to know more about it.
• Rescue dogs – (neutered/spayed) no breeding history.

Question:
Are there any other health comments or concerns you want the CTCA to address?

Additional Comments 70
No Additional Comments 93

Common Theme: Comments Related to health testing standards, managing data
• Why can’t the CTCA be as proactive as other parent clubs in regards to setting health testing standards? Many other clubs have established CHIC criteria already and their members are using OFA to manage their health testing program data. Too many members give lip service to testing and are not actually doing it. Other countries are way ahead of us in requiring members to test for basic diseases like cardiac, bile acid testing and eye exams.
• Please make recommendations for minimal health testing standards. Include Cairn Specific diseases and basic canine disease that is prevalent in all breeds and reasonable to test for: OFA Cardiac, OFA Auto Immune Thyroiditis, OFA Patellar Luxation, Bile Acid Testing and OFA GCL.
• Get rid of the hide problems mentality. A basic minimum test requirement- maybe post on CTCA breeder referral. Educate public to buy pups that have had eyes checked – bile acid done, etc.
• The development of a health pedigree database open to the public would help researchers and owners and breeders of Cairn Terriers world wide.
• As available technology evolves, it is so useful to do substantial amounts of screening on breeding stock.
• I think it should be done, without question, where a standing protocol is set-up regarding recommended health screening tests, when to do them, where to register the results. A protocol regarding new updated info on giving vaccinations.
• Please be pro active concerning the health issues of our dogs. We must find markers for all of the problems. If you are pro-active, the breeders will come forward with their issues and problems and carriers will stop infecting our dogs.
• Wish that all dog breeders (even those that sell to pet stores) were tracked so we would know who is breeding in the problems we are seeing. Probably only possible at a state or national level!
• Glad CTCA finally had an OM Screening. Wish people wouldn’t be so secretive about health problems because it damages our breed.
• It should be mandatory that all breeding stock be cleared of diseases (if possible) before breeding or breeder must clear all pups of disease if parent is carrier.
• There is a need for a “Cairn Health Registry” with open input from breeders and pet owners – testing results clears and carriers would be available to all.
• I hope that the problems that we spend money to find the causes of and tests for are the ones that are the most deadly first. If we had unlimited money it would be great to have tests available for every disease, but that’s not likely – so spend the money on what cripples and kills.
• Perhaps a requirement in yearbook to show dogs used for breeding must submit test results before yearbook ad can be accepted.
• Costs associated with testing are becoming prohibitive and treatment expenses may even be worse if a Cairn has a disease. The AKC should try to make health screening and diagnostic testing part of a canine health insurance program. Pet health insurance is out there but very expensive as there is no “group rate”. Registration of test results is also costly.  
• I have only bred 2 litters of puppies (not Cairns) but I think it is great that CTCA is addressing health issues.  
• Pet owner… have not done some of these tests.

**Common Theme: Comments Related to breeding/breeder knowledge/education:**

• The function of a specialty club is to educate. To do so we need the research and information on the breed problems and of course the cooperation of all breeders large and small.  
• Yes, begin to develop programs that will benefit breeders: make known to breeders resources available to them. More interest on practical concerns: less on pursuing research that historically has proven little or nothing. Identify our genetic/health problems – let AKC do the rest.  
• No test in the world will take the place of really knowing and understanding pedigrees and conformation.  
• Until we develop a good mentoring program to develop breeders skills and genetic knowledge, we will not make good headway in resolving the health problems of the Cairn  
• My dogs appear very healthy. I believe that sound puppies are of the utmost importance. Pet or show equally  
• EDUCATION – not just at national specialties but info in the newsletters eg thyroid exams (some tests are inconclusive – waste of money – who are the experts eg Jean Dodds. How many OM exams are necessary (is one enough)? How do we test Bile Acids in our pups – what machines can do the job? How rare is GCL these days now that a DNA test is available to prevent it?  
• Yes, the continuing use of line and in breeding decreasing genetic diversity and fixing in health problems. Overuse of the popular sires causing harm in future generations.  
• If breeders do their own shots, how are they checking for heart murmurs in their puppies? All of my pups are taken into vet for shots and are checked at each visit for heart problems, eye problems.  
• I have no real objection to testing but I wish the CTCA would emphasize good pedigree and health research before breeding. I like Patricia Trotter’s book, etc and I feel fortunate to have known the dogs back in my pedigrees.  
• Keep the genetics manual up dated. Mail updates to members every year at least.  
• There is not enough effort put into Alternative Health information. Not enough info on diet and nutrition. Instead of chasing after genetic research, spend money on education regarding how to have healthy dogs, not just treating sick ones. Lawn care with chemicals, exposure to pesticides and treated lumber, cleaning chemicals, bad diets, over inoculation are all making dogs sick. The CTCA is doing a great disservice to breeders by focusing only on genetics with the mistaken idea that it will eliminate disease.  
• I like Cairns because they are a hardy little dog. My Cairns are happy and healthy dogs.  
• I have been very lucky with my Cairn. He has been very healthy. I have not experienced any health problems.

**Common Theme: Comments Related to Specific Diseases:**

• I believe that renal dysplasia and related kidney conditions are more wide spread than the Cairn world would like to admit. I have 3 affected Cairns all going back to a prominent line bred on the west coast.  
• I would like to see them move forward on research for PSS  
• Yes, the renal problem that everyone is NOT talking about. This problem has been around since the early 80’s. Keep the Foundation  
• Allergies – seem to be more common and more varied. Need to ascertain why if possible. Musculoskeletal – concerns about more severe patellar luxations and shoulder problems. These are still working dogs and must be able to perform job.  
• Luxating Patellas, CMO
• Try and get genetic markers for CMO
• CMO marker, OM Marker, PSS research and collection
• If this survey counts like it says, please require our members to do cardiac testing at least before breeding
• Support as much as possible projects for PSS, CMO, and OM
• I would like to see a genetic test for PRA like there is in poodles: genetic testing for renal dysplasia, but most of all, some general marker test for ocular melanosis which shows up late in life.
• Liver shunts, kidney problems
• Temperament – possible rage syndrome
• Re-do Von Wildebrand’s Disease testing at the Specialty or offer other testing at the specialty.
• Herpes
  1. Cancer, 2. Titer Tests: we are over vaccinating! After puppies receive their 4 shots all my dogs get titer test done and Rabies 3 years.
• Gum disease, Pancreatitis. My vet told me years ago these were most common health problems with Cairns
• The only major health issue my cairn has experienced (thankfully) is a torn cruciate ligament believed to be a degenerative cause rather than a specific trauma. I’d like to see this issue on the radar for Cairn health issues
• My two Cairns have been on Raw diet since they were weaned. Their mother was as well. They have had NO health problems – This is in stark contrast to the Westie we had with numerous problems – some of which improved when we changed her diet to Lamb and Rice – added fish oil supplement and added ¼ tsp of Ambrotose to her food each day. With the addition of the Ambrotose she regained much energy and the cataracts on her eyes gradually “melted” away over the course of a few weeks. Ambrotose is a supplement intended for people – Available from Mannatech Inc. Cappe,, TX. It provides nutrients that have been processed out of our foods over time. Essential nutrients instrumental in cell to cell communication

Common Theme: Comments Related to the Foundation:
• Don’t destroy the CTCA foundation. Only a breed specific Foundation can look out for breed specific diseases.
• Kidney Issues. Keep the FOUNDATION!!!
• Get the CTCA and the Foundation on the same page and get rid of the political/personality garbage.
• Continue our Foundation!
• Foundation should support as much medical research as possible for as many conditions as possible.

Common Theme: Comments Related to the BOG
• The present scenario on the BOG is disgusting. Where are the Board members who care about the future of the breed? It comes across as a group of troublemakers who enjoy creating chaos – I feel sorry for the next nominating committee
• Good Job!
• Doing a very fine job
• The CTCA needs to consider the “health” of the membership of the Board and the club.

Common Theme: Comments Regarding Breeders Ethics
• Truthfulness concerning congenital disorders in breeder’s line.
• Breeders Ethics/Responsibility to contact owners of dogs they bred when illness/disease is discovered in the line so that pet owner can seek appropriate treatment for pet.
• Information needs to be out in the open not hidden, work together, own your information, no secrets.
Common Theme: Comments Related to the Survey Process

- Question #35 badly written and will alter results, #6 does not include 0 as an option
- There are many other problems Cairns have that should be addressed besides “pet projects” of a few. Temperment should be a major breeding concern and that is genetic as well. You are merely surveying the tip of the iceberg

And comments as written by one member:

As an individual who has had a deep interest in the Cairn since 1980 and growing into becoming a breeder and exhibitor now for about 25 years, I have been “around the horn” a few times with national concerns regarding the health of the Cairn, the first being about Von Willebrands Disease. We still do not have a genetic marker in this for the Cairn. I have spent a lot of money and time over the years trying to support efforts to keep the Cairn healthy.

I had high hopes and expectations for the breed when ____ and ____ were highly active in this area and when we had the booklet made about genetics, Dr. Padget as a consultant, and the beginnings of the screening programs from UC Davis. This was about the time the CTCA Foundation was formed.

The ball has been dropped in many areas and the effort has been fragmented to say the least. Why has this happened?

I think part of the problem is that we as a National Club have not formally demanded mentoring from the “serious” breeders as a whole, to the newcomers to encourage them and educating them to establish a line of their own. How can we get a good “bead” on the genetics in the Cairn if we as a whole do not line breed and establish more lines in this country?

Money is always an issue in regard to research and with lack of coordination at the national level, we have not accomplished very much from when we began to address these issues about twenty years ago.

CTCA has had many problems with poor cooperation among Board members in the past and the Board as a whole has been at cross purposes for whatever all the reasons were for people not to work together as a unit. Our Cairns have suffered for it.

Based on what I have done in my breeding program, as I near the end of breeding years, I can honestly say that in the dogs I have brought forward through the years: they have propagated no harm to the breed as a whole. I have culled some breedable animals to keep my line from producing a same problem as I have moved along over the years. One needs a line going in order to do this and still have something a breeder can breed in good conscience.

This latest survey, I believe could have been put together in a better way. I am not very personally concerned about the feeds we feed if the food is a known good quality commercial dog food. I am not convinced going back only five years is enough history

With the influx of foreign dogs coming into this country: with their inherent genetics, the health problems become further complicated by factor of their health histories not always being known very well.

I do hope the CTCA gets back to emphasis being put on the dogs and the breeding of quality and healthy dogs. If this is not done, we will continue the expansion of having more and more health issues to deal with.

To truly help the health of the Cairn we need to set up a long range program appointing people educated in the areas of genetic diseases to oversee these projects over the long haul. We cannot afford to lose follow through and continuity in this endeavor, otherwise it will be a waste of time and resources.

We as a Club had begun a study of Subluxation of the patella in the Cairn. This project never came to a fully accurate conclusion. Is this project worth salvaging? I haven’t heard about VWD in years. It all now seems to be about the liver diseases, Ocular Melanosis and kidney dises.

With sincerity my comments are just a very general overview of from where I sit, but I do hope it provokes some food for thought.