Health Survey, 1998

Elsa Sell, Health Committee Report, AGM, 1998, BCCA National Specialty

Renaissance Hotel, Bedford, MA, Annual General Meeting, October 2, 1998. Presented by Elsa Sell, Committee Chairperson

Committee Members:Linda Aronson, Mazie Blanks, Irene Carson, Elizabeth Coolidge-Stolz, Karen Drummond, Sharon Dunsmore, Teri Fleming, Susie Gauthier, Anne Gerber. Chris Walkowicz, Board Liaison.

Goals Accomplished, 1997-1998.

1. **Continue tracking of health problems, both new and updates on previously entered dogs**
2. **Educational articles via club publications and the Beardie Health Web Page**
3. **Health Research Project for Addison's Disease**
4. **Health Registries Proposal**

Mission Statement for 1998-1999.

1. **Health Registries. Work in conjunction with the board to establish these registries. A proposal was with the board but was tabled.**
2. **Education.**
3. **Establish a Bearded Health Foundation to fund research in Addison's disease and other health problems to be identified in the future.**
4. **Continue tracking health problems, as done for the last 2 years. Depending on board action on the proposed motion to close the 1996 health survey, it will be necessary to either renew that old system or to establish a new system for tracking health problems. This is an effective mechanism for being alerted to new problems and knowing is what happens to old problems. Until we have no more health problems of note, we must be dedicated to having a system for tracking health problems.**

Beardie health Web Site. Written and maintained by E. Sell for the benefit of Bearded Collie owners; this is not BCCA sponsored). This web site was initially established in November 1996 as a way to

submit health survey forms and to ask questions about health problems. It became also an educational forum in January 1998. Since my ISP began to provide information in April 1998, the average number of hits per day have increased from 282 to 513 during the first 3 weeks of September, 1998.

The articles most frequently hit (author name in ()) (a 4 month average) are as follows:

- **Genes (Bell) 85**
- **Autoimmune1 (Aronson) 80**
- **Arthritis (Aronson) 77**
- **Vaccination (on for 1 mo) (Aronson) 77**
- **Addison's (Lang) 73**
- **Worms (Aronson) 71**
- **Old dog (Aronson) 71**
- **Cryptorchidism (Aronson) 67**
- **Thyroid, aggression (Aronson) 67**
- **Heartworm (Sell) 66**

The remainder of this report consists of the data from the cumulative health survey for the years 1996-1998.

General Demographics

Number of Dogs	
1997	**1298**
1998	**1397 (81% USA; 11% Canadian; 8% foreign)**
Sex of Dogs	
Male	**Intact: 1997 - 60%. 1998 - 57%**
Female	**Intact: 1997 - 53.5%. 1998 - 50%**
Rescue	
1997	**19**
1998	**32**

Health Status, 1998 Cumulative Data

Total # of Dogs	1397
# Healthy	776
# with Health Problems	614
# with Autoimmune Health Problem	201
# with More than One A/I Problem	25
Deaths	269

Sex Distribution, 1998 Cumulative Data

Variable	Number of dogs	Percent
Male	617	44.6
Intact	352	57
Neutered	247	40
Unknown	18	3
Female	760	54.9
Intact	376	50
Spayed	366	48
Unknown	18	2

Age Distribution of Live Dogs

Age	1997 (n=1084)	1998 (n=1334)*
< 3 yr	24.6%	10.2%
3-5 yr	31.6%	30.2%
6-8 yr	21.5%	22.3%
9-11 yr	13.2%	15.7%
12-14 yr	7.9%	9.3%
>14 yr	1.4%	12.1%

Frequency of Flea and Heartworm Preventive Use

Heartworm Preventive (# reporting=1196)	% Reporting
None	39%
Interceptor	23%
Diethylcarbamazine products	11%
Heartgard plain and plus	24%
Other	3%
Flea Preventive (# reporting = 1275)	% Reporting
None	61%
Program	22%
Advantage/frontline	4%
Organophosphates	4%
Combinations	4%
Topicals and other	7%

Most Common Health Problems (# cumulative for 1998)

Health Problem	# of Cases
Hypothyroid	83
Cancer	74
Addison's	61 (+6)*
Arthritis	47
Allergic skin disease	43
Skin problems, other	37
Kidney disease/failure	33
Hip dysplasia	30
Infectious disease	27

*** The additional 6 cases with Addison's disease were reported by phone or e-mail during September and the owners have not yet gotten in their health survey forms.**

Less common health problems. These are listed in order of decreasing numbers of cases, with the # in parentheses: diarrhea (26), bladder infection (25), ear infection (23), urinary tract infection (21), liver disease (19), food allergies (18), anemia (18 - some of these were autoimmune hemolytic anemia), benign tumors (14), colitis (14), depigmentation (14), cataracts (13), seizures (12), aggressive behavior (11), vaginitis (11), stroke (11), anal gland problems (10), cryptorchidism (10), sterility (9), bladder stones (6), pancreatic insufficiency (3).

Other Autoimmune Health Problems
(# cumulative for 1998)

Health Problem	# of Cases
Nail disease1	20 (+3)*
Inflammatory bowel disease	14 + 12 suspect**
Systemic lupus erythematosus	11 + 4 suspect (+1)*
Hemolytic anemia	8 + 5 suspect
Thrombocytopenia (low platelets)	5 + 2 suspect
Rheumatoid arthritis	4

*** Numbers in parentheses are cases reported in September and owners have not yet gotten in their health survey forms.**

**** These diseases are difficult to definitively diagnose at times; some dog's diagnoses were therefore suspect because all diagnostic criteria had not been met. They may be at some time in the future.**

1 Nail problems included various diagnoses: pemphigus, lupoid onychodystrophy, infection, unknown. Nail biopsy is needed to establish a diagnosis of lupoid onychodystrophy; bacterial and fungal cultures are necessary to rule out infection. Sometimes two causes can occur (e.g., infection and lupoid onychodystrophy).

Cases and Frequency of Addison's Disease
(The dogs in each survey year different, based on year of birth, sex, and reproductive status)

1992 Health Survey
18 Addisonian dogs
804 total dogs
Frequency of Addison's disease = 2.2%
1996 Health Survey (dogs born after 1989)*
22 Addisonian dogs
805 total dogs
Frequency of Addison's disease = 2.7%

*** There is no difference in frequency of Addison's disease between the two surveys. An important feature of this table is that the frequency of Addison's disease is not low; the normal dog population frequency of Addison's disease is reported to be 0.1%. It is also important to know that the two surveys were designed for different purposes, the forms for reporting were different, and the health chairpersons were different. The previous health chair provided birth years, sex, and reproductive status of the 92 Addisonian dogs to me (no owner or dog identification was revealed). I removed any dogs from the 96 Addison's group (for the above table only) who had the same birth years, sex, and reproductive status as an Addisonian dog in the 92 survey in an attempt to assure that the calculated frequency of Addison's used different dogs.**

Clinical Presentation of Bearded Collies with Addison's Disease (cumulative data for 1996-1998). There were 61 Addisonian dogs with health survey forms; 23 (37.7%) were male and 37 (60.7%) were female; 1, unidentified sex. At the time of Addison's diagnosis 12 (19.7%) were reproductively intact; 15 (27.3% were neutered males; 25 (45.5%) were spayed females; in 9, reproductive status was not known. There were 40 (65.5%) living; the others were deceased. The age of onset ranged from 6 months to 11 years, with the average age at 3.9 years. 27/30 with information on onset age

were four years of age or less at time of Addison's disease. So, this is occurring in relatively young dogs.

Thirty-four owners reported presenting symptoms and/or laboratory work. All 8 who reported lab work had "renal failure" (elevated blood urea nitrogen - BUN, and elevated creatinine). All except one were reported to have one or more symptoms: poor appetite in 16, vomiting in 12, diarrhea in 11, weakness in 10, lethargy in 7, sound sensitivity in 6, less than normal activity in 4, weight loss in 3, coat loss in 3, stress intolerance in 2, discoordinated movements in 2, shivering in 2, depigmentation in 2, and seizures or aggression, 1 each.

These are non-specific clinical findings, meaning that more than one disease can cause them. If you have a young Beardie who suddenly becomes ill with a combination of these findings and your veterinarian diagnoses "renal failure", tell the veterinarian about what is presently known of Addison's in Bearded Collies. Copy and give him/her a copy of this article. There is a diagnostic test for Addison's disease - the ACTH stimulation test, in which cortisol levels are drawn before and after injection of ACTH.

Age of Death (# of dogs with age or death reported = 257; av. age=10.3 yr)

Age Group	% Deaths for Age Group	Cumulative %*
< 3 yr	7.0	-
3-5 yr	9.7	13.3
6-8 yr	16.4	30.0
9-11 yr	16.7	47.1
12-14 yr	38.1	88.2
> 14 yr	12.1	100.0

*** Cumulative percentage excludes accidental deaths which occurred most often in the two youngest age groups.**

The previous table shows that a quite high proportion of Beardies die before the age of nine years. Of course, the data are

representative only of the population in the survey and should not be generalized to all Beardies. Even so, is it not worrisome to have 30% dying before the age of nine years? I think the answer is yes. The next table shows which health problems were responsible for the deaths of these younger dogs, excluding accidental deaths.

Causes of Death in Bearded Collies Younger Than Nine Years

Health Problem	# <9yr/total # Deaths from that Health Problem	% < 9yr
Autoimmune	19/29	65.5%
Kidney disease/failure	9/25	36%
Cancer	18/63	29%
Aggression	5/5	100%
Infection	4/4	100%

Several points deserve comment. First, autoimmune health problems claim more than 50% of their deaths before the age of 9 years. If those health problems could be prevented from happening, wouldn't that be progress? Among the autoimmune problems, 9 were Addison's disease, 3 had more than one A/I problem, and 1 had inflammatory bowel disease. An additional 2 had pancreatic insufficiency (which may or may not be an A/I disease) and these 2 were not counted as autoimmune problems in the figures above.

The second point is that Addison's disease usually presents as kidney failure in the first laboratory workup done on the dog who suddenly becomes very ill. This is because of mineral imbalance in Addison's disease and the resulting dehydration and shock. Addison's disease is probably not a cause for kidney failure which is chronic and long term before death; if it were, it would have been diagnosed. So, if you have the misfortune to have a young Beardie die suddenly of kidney failure please ask your veterinarian to perform a necropsy and have the kidneys and adrenal glands sent for pathology evaluation.

Causes of Death in Other Age Groups.

In the 9-11 year age group (#=43; information available on 39), cause of death was: cancer (#=18, 42.6%); Addison's (#=5; 12.8%); kidney disease (#=4; 10.3%); cardiac (#=2; 5.1%); 1 each for anemia, arthritis, liver disease, seizures, stroke, pancreatic insufficiency, accidental, infection. Two had very rare diagnoses.

In the 12-14 year age group, (#=98); information available on 93), cause of death was: old age (#=29; 31.2%); cancer (#=24; 25.9%); kidney disease (#=10; 10.8%); stroke suspected (#=6; 6.5%); cardiac (#=5; 5.4%); arthritis (#=3; 3.2%); rare diagnoses (#=3); Addison's (#=2; 2.2%); accidental (#=2); liver disease (#=2); one each for colitis, diarrhea, hip dysplasia, infections disease, seizures, pancreatic insufficiency, multiple autoimmune diseases.

In the > 14 year age group, (#=31), cause of death was: old age (#=20; 64.5%); stroke (#=5; 16.1%); cancer (#=3; 9.7%); kidney disease, 2; Cushing's disease 1.

Types of Cancer in All Age Groups Combined. The number of cases by organ system are listed below: bone, 12; hemangiosarcoma, 8 (5 in <9 yr group); mammary, 8; 4 each, liver and abdominal; 2 each, testicular, nasal, liver, stomach, nerves; 1 each, melanoma, leukemia, throat, sweat gland, mouth, lung, prostate, thyroid and adrenal combined, lymph glands, basal cell, lymphosarcoma, lymphoma, multiple myeloma; unspecified, 13.

I hope that this information will be useful to you. Elsa Sell, previous BCCA health chairperson.