Old English Sheepdog Club Of America
2009 Breed Health Survey Report

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OESCA Health and Research Committee

Health Survey Subcommittee

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Introduction

The OESCA (Old English Sheepdog Club of America) Health & Research Committee (HRC) is committed to conducting an Old English Sheepdog (OES) health survey approximately every 5 years to profile health patterns and problems affecting the breed. Questions were asked to determine the frequency of health issues affecting the breed, to establish whether there was a relationship between the sex of the animal and health problems, and to identify similarities in the breed's health concerns and problems between global populations.

Materials and Methods

The Health and Research Committee set four primary objectives for the 2009 OESCA Breed Health Survey. Objectives were to: 1) determine a profile of the breed's health; 2) to update and compare current health problems to those reported by the 2004 OESCA Breed Health Survey; 3) to help inform breed research and education priorities; and 4) to encourage open discussion and sharing of information on breed health issues worldwide.

This survey was conducted via the internet to broaden the health baseline for OES owners and to encourage the International community to participate. The questionnaire was designed to survey genetic and potentially genetic health problems of the breed. Respondents were asked to report on all OES who lived with them in the ten year period from 1998-2008. Survey instructions emphasized the importance of reporting dogs with health problems as well as those without health problems. The survey was available online from September 15, 2008 until May 26, 2009.

The survey was presented in two sections. The first section was the respondent demographic section. It asked respondents how many years they had owned an OES and how many they owned. It also asked their areas of interest with their dog(s), if they were affiliated with any dog clubs, their top three health concerns within the breed and how they had heard about the survey.

Respondents were asked to complete the first section only once even though they often entered multiple dogs. This was accomplished by using skip logic from the first question with an option to revisit the survey to enter additional dogs. By answering that they had visited the survey at a prior time, they were directed to the second section of the survey to enter data on individual dogs.

The individual dog section asked the dog’s gender, age, if deceased, age at death and cause of death. They were asked if dogs were neutered/spayed and at what age. Questions focused on where they acquired their dog(s), the degree to which health screenings were used, and if they registered the test results with a health registry. In addition, questions were asked about the use of vaccine protocols and if dogs had any negative reactions. The final part of the dog section asked for specific health data for each animal.

A variety of methods were used to encourage OES owners to participate in the survey. Notices, open letters and reminder bulletins were published in OES magazines, posted on websites and on OES e-lists. Emails were sent to OESCA members and the importance of the health survey was discussed at national and international breed conferences. Outreach efforts resulted in 813 respondents (692 North American; 121 International) reporting on the 1,856 OES who lived with them during the ten year period surveyed.

Survey Results

Section I: Respondent Data

The total number of survey respondents was 813. Geographically, 692 (85%) respondents lived in North America and 121 (15%) respondents lived in International continents. Slightly over 64 percent of the respondents owned an Old English Sheepdog for eleven years or more; 24.4 % have owned an OES for 10 years or less. The average number of years respondents have owned an OES was 17.2, with a median number of 15.0. The average number of OES currently living with the respondents was 2.1 with a median number of 1.5. Respondents were asked to check all primary interest areas of involvement with their dog(s). From 1,672 responses, pet/companion was the most frequent response (680); followed by rescue (220); conformation (209); and breeding (129). Over 60 percent of respondents belong to one or more dog club with 259 (total 813) belonging to Local and Regional OES Clubs and 240 (total 813) belonging to a National OES Club.

When asked how the respondents were informed of the OESCA Breed Health Survey, the most frequent responses indicated they were informed via an email, a website, a friend and a dog club.

At the conclusion of Section One, prior to viewing the categories of health issues, respondents were asked to give their opinion on the most important health issues facing the breed. The three most frequent responses were: 1) hip dysplasia, 2) cancer and 3) allergies and skin problems.

Section I: Tables: Respondent Data

Total Number of Unique Respondents - 813

Continent	Count
North America	692
Europe	58
British Isles	37
Australia & New Zealand	22
Asia	2
Africa	1
South & Central America	1
Total	813

Table 1: Geographic Data: by continent

How many years have you owned an OES?	Count	
11-20 Years	196	
20-30 Years	181	
Over 30 Years	151	
1- 5 Years	139	
6-10 Years	119	
Under 1 year	27	
Summary	***Average***	***Median***
Years Owned OES	17.2	15.0

Table 2: Years Owned OES

How many OES do you have currently living with you?	Count	
1-2 OES	590	
3-4 OES	97	
0 OES	63	
5-8 OES	51	
Over 8 OES	12	
Summary	***Average***	***Median***
OES Living with You	2.1	1.5

Table 3: Number of OES currently living with you

Primary Interests (Check all that apply)	Count
Pet/ Companion	684
Rescue	220
Conformation	209
Breeding	129
Therapy	111
Obedience/Rally	109
Agility	84
Herding	67
Other	49
None	10
Total	1,672

Table 4: Primary Interests

Membership in Dog Clubs (Check all that apply)	Count
None	320
Local or Regional OES Club	259
National OES Club (example: OESCA, OES Owners of Canada, etc.)	240
Other Dog Club	120
All Breed Dog Club	95
Dog Training Club	70
Herding Club	15
Total	1,119

Table 5: Membership in dog clubs

How did you hear about the Old English Sheepdog Health Survey? (check all that apply)	Count
From an email	383
From a website	237
From a friend	149
Dog Club	51
In a magazine	25
Breeder	18
Forum / List	16
Internet	8
OESCA Annual Meeting	6
On HRC	4
Total	897

Table 6: Heard about the OES health survey

What do you feel are the most important health issues in the Old English Sheepdog? (Choose 1-3 issues only):	Count
Hip Dysplasia	480
Cancer	356
Allergies and Skin problems	229
Neurological Examples: (Example: Cerebella Ataxia, Epilepsy)	126
Auto Immune (Examples: Lupus, Hemolytic Anemia, Thrombocytopenia)	120
Temperament	109
Thyroid disease	108
Other Orthopedic problems (Example: OCD, Elbow Dysplasia)	91
Eye problems (Other than Juvenile Cataracts)	79
Deafness	77
Other	68
Cardiac (Heart)	61
I Don't know	49
Reproductive	29
Digestive	14
Juvenile Cataracts	9
Ear Infections	5
Kidney	4
Liver	2
Anal Glands	2
Diabetes	1
Total	2,019

Table 7: Most important health issues in OES

Section II: Dog Data

Sex	Count	Average Age
Female	995	6.55
Male	861	6.05
Total	1,856	6.3

Table 8: Age of Dogs

The total number of dogs in the survey was 1,856. There were 995 females with an average age of 6.55 years and 861 males with an average age of 6.05 years.

Sex	Average age at Death	Median Age	Minimum	Maximum
Female	10.8	12	0.3	17
Male	9.9	11	0.7	17

Table 9: Age at Death

Cause Of Death/Euthanized	Female	Male	Total
Cancer	93	72	165
Old Age	52	38	90
Other	20	28	48
Arthritis	15	19	34
Heart problems	17	14	31
Skeletal problems	17	9	26
Unknown	15	8	23
Autoimmune	10	9	19
Gastric Torsion (Bloat)	13	4	17
Euthanized for non specific issues	8	8	16
Temperament	3	10	13
Liver problems	3	8	11
Accident	7	3	10
Kidney problems	4	6	10
Total	277	236	513

Table 10: Cause of Death

The total number of deceased dogs reported was 513 dogs. There were 277 deceased females whose average age at death was 10.8 years; the youngest age at death was 0.3 years, the oldest age was 17 years. There were 236 deceased males whose average age at death was 9.9 years; the youngest age at death was 0.7 years, and the oldest age was 17 years.

The most frequent causes of death was Cancer at 165 dogs, 93 females and 72 males; followed by Old Age with 90 dogs total, 52 females and 38 males; and Other with 48 dogs total, 20 females and 28 males.

Age At Spay/Neuter	Female	% of Female	Male	% of Male	Total	% of Total
Not Spayed/Neutered	285	28.70%	297	34.66%	582	31.46%
6-9 months	101	10.17%	104	12.14%	205	11.08%
3-6 months	106	10.67%	77	8.98%	183	9.89%
Unknown	65	6.55%	62	7.23%	127	6.86%
1 year	58	5.84%	51	5.95%	109	5.89%
2 years	56	5.64%	51	5.95%	107	5.78%
9-12 months	39	3.93%	62	7.23%	101	5.46%
3 years	40	4.03%	31	3.62%	71	3.84%
5 years	49	4.93%	16	1.87%	65	3.51%
7 years	40	4.03%	20	2.33%	60	3.24%
4 years	35	3.52%	24	2.80%	59	3.19%
6 years	41	4.13%	14	1.63%	55	2.97%
8 years	44	4.43%	11	1.28%	55	2.97%
9 years	8	0.81%	19	2.22%	27	1.46%
0-3 months	10	1.01%	16	1.87%	26	1.41%
10 years	11	1.11%	2	0.23%	13	0.70%
over 10 years	7	0.70%	4	0.47%	11	0.59%

Table 11: Age Spayed/Neutered

Data reported 31.46% of dogs were not spayed or neutered, 285 females and 297 males for a total of 582 dogs. The most common age to spay/neuter was 6-9 months of age with 11.08% of surgeries completed during this age range on 101 females and 104 males.

How Did You Acquire Your Dog?	Female	% of Female	Male	% of Male	Total	% of Total
Breeder- shows in conformation	316	31.82%	308	35.94%	624	33.73%
I am the breeder	257	25.88%	159	18.55%	416	22.49%
Rescue/Shelter	189	19.03%	211	24.62%	400	21.62%
Breeder- does not show in conformation	157	15.81%	127	14.82%	284	15.35%
Other	61	6.14%	38	4.43%	99	5.35%
Pet store/Flea market	15	1.51%	18	2.10%	33	1.78%

Table 12: Acquired Dog

Respondents were asked how they acquired their dog. The top answer was "from a breeder who shows in conformation" for a total of 624 dogs (33.73%), 316 females and 308 males. Second in frequency was "I am the breeder" for a total of 416 dogs (22.49%), 257 females and 159 males. OES acquired from " rescue/shelter" was 21.62%; "breeder-does not show in conformation" was 15.35%, and Other was 5.35%. Dogs acquired from a pet store/flea market represented 1.78%.

Health Screenings	Female	% of Female	Male	% of Male	Total	% of Total
Hip x-rays	625	62.94%	477	55.66%	1102	59.57%
Eyes	494	49.75%	367	42.82%	861	46.54%
Thyroid Test	298	30.01%	225	26.25%	523	28.27%
None	171	17.22%	157	18.32%	328	17.73%
Hearing (BAER)	173	17.42%	110	12.84%	283	15.30%
Unknown	100	10.07%	113	13.19%	213	11.51%
Elbow x-rays	103	10.37%	90	10.50%	193	10.43%
Cardiac Screening	100	10.07%	81	9.45%	181	9.78%
Other	51	5.14%	55	6.42%	106	5.73%
Neurological Test (by a board certified neurologist)	22	2.22%	31	3.62%	53	2.86%
MDR1 Gene Mutation	23	2.32%	20	2.33%	43	2.32%

Table 13: Health Screenings

Health Screenings Submitted to Registry	Female	% of Female	Male	% of Male	Total	% of Total
None	577	58.11%	570	66.51%	1147	62.00%
Hip x-rays	385	38.77%	268	31.27%	653	35.30%
Eyes	301	30.31%	202	23.57%	503	27.19%
Elbow x-rays	65	6.55%	48	5.60%	113	6.11%
Hearing	47	4.73%	27	3.15%	74	4.00%
Thyroid	47	4.73%	25	2.92%	72	3.89%
Cardiac	12	1.21%	14	1.63%	26	1.41%

Table 14: Health Screening Registrations

When asked if dogs had any health screenings and if those tests were submitted to a health registry, respondents were allowed to choose as many tests and registries as were applicable. Hip x-rays were the most common test utilized at 59.57% for a total of 1,102 dogs, 625 females and 477 males. Data revealed that 563 hip x-rays (385 females and 268 males) were submitted to a health registry.

The next most common health screening was for eyes at 46.54%, for a total of 861dogs, 494 females and 367 males. Data reveals that 35.30% of respondents submitted 503 total dogs (301 females and 202 males) to a

health registry.
The third most frequency test was thyroid with 28.27% of the 523 dogs (298 females and 225 males). Data reveals that 72 dogs, 3.89% (47 females and 25 males), submitted their thyroid tests to a health registry.
Note that the most common answer to whether or not they submitted any tests to a health registry was none, 62%. Respondents report that there were tests completed on 1,147 dogs and not reported to a health registry. It should be noted that some of the dogs in the sample may be too young for a given health screening.

Vaccination Protocols

Frequency of Rabies Vaccination	Female	% of Female	Male	% of Male	Total	% of Total
Every 3 years	467	47.03%	392	45.74%	859	46.43%
Yearly	246	24.77%	222	25.90%	468	25.30%
Every 2 years	139	14.00%	136	15.87%	275	14.86%
Never	89	8.96%	69	8.05%	158	8.54%
Sporadic	41	4.13%	25	2.92%	66	3.57%
Titer tested	13	1.31%	17	1.98%	30	1.62%

Table 15: Frequency of Rabies Vaccination

Frequency of Distemper/Hepatitis Vaccination	Female	% of Female	Male	% of Male	Total	% of Total
Yearly	554	55.79%	461	53.79%	1015	54.86%
Every 3 years	149	15.01%	121	14.12%	270	14.59%
Every 2 years	127	12.79%	125	14.59%	252	13.62%
Sporadic	78	7.85%	63	7.35%	141	7.62%
Titer tested	59	5.94%	63	7.35%	122	6.59%
Never	28	2.82%	28	3.27%	56	3.03%

Table 16: Frequency of Distemper/Hepatitis Vaccination

Frequency of Leptospirosis Vaccination	Female	% of Female	Male	% of Male	Total	% of Total
Yearly	415	41.79%	350	40.84%	765	41.35%
Never	271	27.29%	240	28.00%	511	27.62%
Every 2 years	105	10.57%	77	8.98%	182	9.84%
Every 3 years	93	9.37%	74	8.63%	167	9.03%
Sporadic	82	8.26%	69	8.05%	151	8.16%
Titer tested	29	2.92%	51	5.95%	80	4.32%

Table 17: Frequency of Leptospirosis Vaccination

Reaction to Vaccination	Female	% of Female	Male	% of Male	Total	% of Total
No	966	97.28%	825	96.27%	1791	96.81%
Yes	29	2.92%	36	4.20%	65	3.51%

Table 18: Reaction to Vaccination

Reaction to Vaccination Type	Female	% of Female	Male	% of Male	Total	% of Total
Unsure which vaccine caused reaction	18	1.81%	17	1.98%	35	1.89%
Rabies	8	0.81%	14	1.63%	22	1.19%
Distemper- Hepatitis	6	0.60%	7	0.82%	13	0.70%
Leptospirosis	4	0.40%	7	0.82%	11	0.59%

Table 19: Reaction to Type of Vaccine

The preceding series of tables tabulated results of vaccination protocol frequency, including dogs' reactions to those vaccinations. The majority of dogs, 96.81%, did not have any reactions. A total of 1791 dogs, 966 females and 825 males reported no reaction. Respondents report that the cause of the reactions was unsure for 35 dogs, 18 females and 17 males.

*Note that not all vaccine protocols are applicable around the world.

Frequency of Heartworm	Female	% of Female	Male	% of Male	Total	% of Total
Monthly	582	58.61%	556	64.88%	1138	61.51%
Never	235	23.67%	171	19.95%	406	21.95%
Sporadic	172	17.32%	130	15.17%	302	16.32%
Daily	6	0.60%	4	0.47%	10	0.54%

Table 20: Frequency of Heartworm Control

Respondents reported that 61.51 use monthly heartworm medications for 1,138 dogs (582 females and 556 males).

Produced Offspring	Female	% of Female	Male	% of Male	Total	% of Total
No	702	70.69%	706	82.38%	1408	76.11%
Yes	293	29.51%	155	18.09%	448	24.22%

Table 21: Produced Offspring

The final question in this section of the survey asked if the dog had produced offspring. No, was the response for 76.11% of respondents. Of the dogs who had produced offspring, 293 were females and 155 were males.

Health Issues in Old English Sheepdogs 1998-2008

It is important to note that an average of 38.86% of the 1,856 OES reported in this survey had no major health problems. Data on identified health problems is reported by disease categories in the following charts. The top three most frequent categories for OES in the ten year reporting period were Cancer/Tumors, Musculoskeletal and Allergy-Environmental.

The following charts provide frequency data via raw numbers, averages for males and females and average for total dogs. In addition, p-values were tabulated by using a chi-square test to analyze the data. A p-value less than or equal to 0.05 was considered statistically significant and indicated a difference between males and females and the frequency of health problems. Statistically significant gender differences have been identified by a shaded, p-value box on each disease chart.

Health Problems	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
No major health problems	370	37.26%	349	40.72%	719	38.86%	0.14
Cancer & Tumors	176	17.72%	128	14.94%	304	16.43%	0.10
Musculoskeletal (Muscles & Bones)	159	16.01%	135	15.75%	294	15.89%	0.86
Allergy- Environmental (Scratching, Redness, Sneezing)	123	12.39%	109	12.72%	232	12.54%	0.85
Skin/Coat	86	8.66%	64	7.47%	150	8.11%	0.34
Bladder/Kidney (Stones, Incontinence)	105	10.57%	31	3.62%	136	7.35%	0.00
Endocrine (Hypothyroid, Diabetes)	64	6.45%	68	7.93%	132	7.14%	0.22
Gastrointestinal/Dental (Digestive Tract)	65	6.55%	63	7.35%	128	6.92%	0.51
Ears/Hearing	63	6.34%	48	5.60%	111	6.00%	0.49
Eyes	59	5.94%	35	4.08%	94	5.08%	0.07
Female Reproductive	91	9.16%	0	0.00%	91	4.92%	N/A
Neurological (Seizures, Cerebellar Abiotrophy)	35	3.52%	39	4.55%	74	4.00%	0.27
Cardiovascular (Heart)	33	3.32%	34	3.97%	67	3.62%	0.47
Autoimmune Diseases (Hemolytic Anemia, Thrombocytopenia)	32	3.22%	25	2.92%	57	3.08%	0.70
Allergy- Sensitivities (to Drugs, Vaccines)	13	1.31%	22	2.57%	35	1.89%	0.05
Respiratory	14	1.41%	18	2.10%	32	1.73%	0.26
Liver & Bleeding Disorders	15	1.51%	16	1.87%	31	1.68%	0.56
Male Reproductive	0	0.00%	20	2.33%	20	1.08%	N/A

Table 22: Health Problems Overview

Tables For Each Disease Category: In Order Of Frequency

Cancer & Tumors	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	47	4.73%	43	5.02%	104	5.62%	0.78
Lymphosarcoma (cancer of lymph glands)	27	2.72%	25	2.92%	51	2.76%	0.8
Mammary Gland Cancer	47	4.73%	0	0.00%	47	2.54%	N/A
Lipoma (benign fatty tumors)	23	2.32%	21	2.45%	44	2.38%	0.85
Benign Histiocytoma (benign skin tumors)	22	2.22%	10	1.17%	32	1.73%	0.08
Osteosarcoma (bone cancer)	19	1.91%	15	1.75%	32	1.73%	0.79
Oral tumors	6	0.60%	9	1.05%	13	0.70%	0.29
Hemangiosarcoma (cancer of the blood vessels)	10	1.01%	8	0.93%	10	0.54%	0.87
Nasal Tumors	4	0.40%	6	0.70%	10	0.54%	0.38
Testicular Cancer	0	0.00%	8	0.93%	8	0.43%	N/A
Bladder Cancer	3	0.30%	4	0.47%	7	0.38%	0.57
Malignant Histiocytoma	3	0.30%	3	0.35%	6	0.32%	0.86
Perianal tumors (around the anus)	2	0.20%	4	0.47%	6	0.32%	0.32
Colon Cancer	2	0.20%	3	0.35%	5	0.27%	0.54
Leukemia (cancer of bone marrow)	3	0.30%	2	0.23%	4	0.22%	0.78
Mast Cell Tumor (type of skin cancer)	3	0.30%	0	0.00%	3	0.16%	0.11
Melanoma (type of skin cancer)	2	0.20%	1	0.12%	3	0.16%	0.65
Prostate Cancer	0	0.00%	1	0.12%	1	0.05%	0.28

Table 23: Cancer & Tumors

Cancer and Tumors: The most frequent health issue reported in this survey was cancer/tumors at 16.43 %. Incidents of cancer were higher in females due to mammary gland occurrences at 4.73 % and to higher incidents of benign histiocytoma (skin tumors) than males (Females at 2.22% to Males at 1.17%). The "other" category resulted from cancers identified by the respondents that were not listed in the question choices.

* Other: notable cancers in this category are Adrenal, Aprocine Duct Adenoma, Basal Cell Carcinoma, Brain, Fibersarcoma, Insulinoma, Intestinal, Kidney, Leiomysarcoma, Liver, Lung, Nerve Sheath Tumor, Pancreatic, Parathyroid, Stomach, Synovi Cell Carcinoma & Thyroid.

Musculoskeletal (Muscles and Bones)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Hip dysplasia	78	7.85%	66	7.70%	144	7.78%	0.90
OsteoArthritis (not rheumatoid)	60	6.04%	45	5.25%	105	5.68%	0.46
Spondylosis (arthritis of spine)	29	2.92%	18	2.10%	47	2.54%	0.26
Other	18	1.81%	18	2.10%	36	1.95%	0.66
Anterior Cruciate ligament tear (ACL)	6	0.60%	5	0.58%	11	0.59%	0.95
Osteochondritis dissecans (OCD) separation of immature cartilage from bone	6	0.60%	5	0.58%	11	0.59%	0.95
Exertional Myopathy (exercise intolerance)	9	0.91%	1	0.12%	10	0.54%	0.02
Muscle Cramping (Muscle restriction)	4	0.40%	3	0.35%	7	0.38%	0.85
Elbow dysplasia	3	0.30%	2	0.23%	5	0.27%	0.78
Panosteitis (inflammation of the bone-growing pains)	4	0.40%	1	0.12%	5	0.27%	0.24
Bone Cysts (Benign Bone disease)	1	0.10%	2	0.23%	3	0.16%	0.48
Wobbler's syndrome (cervical malformation)	2	0.20%	0	0.00%	2	0.11%	0.19
Luxating Patellas (dislocation of knee caps)	1	0.10%	0	0.00%	1	0.05%	0.35
Premature Closure of the Ulna (Ulna stops growing before the Radius)	1	0.10%	0	0.00%	1	0.05%	0.35

Table 24: Musculoskeletal (Muscles and Bones)

Musculoskeletal (Muscles and Bones): Musculoskeletal concerns were reported for 15.89 % of the survey sample. The two most frequents problems in this health category were: Hip dysplasia at 7.78% and OsteoArthritis at 5.68%. Exertional Myopathy (exercise intolerance) was significantly more frequent in females than males, p-value of 0.02.

Allergies - Environmental (Scratching, Redness, Sneezing)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Unknown Origins	47	4.73%	56	6.53%	103	5.57%	0.09
Food	45	4.53%	30	3.50%	75	4.05%	0.26
Contact Allergies	30	3.02%	27	3.15%	57	3.08%	0.87
Inhalant Allergens	27	2.72%	17	1.98%	44	2.38%	0.30
Fleas	20	2.01%	13	1.52%	33	1.78%	0.42
Other	12	1.21%	12	1.40%	24	1.30%	0.72

Table 25: Allergy-Environmental (Scratching, Redness, Sneezing)

Allergy-Environmental (Scratching, Redness, Sneezing): Respondents' report that 12.54% of OES in the survey had allergy problems. Data shows 5.57% are of unknown origin. Food allergies were the most frequent known origin at 4.05%.

Skin/Coat	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	37	3.73%	27	3.15%	64	3.46%	0.50
Sebaceous Cysts (benign retention cyst; like a zit)	20	2.01%	19	2.22%	39	2.11%	0.76
Lick Granuloma (Behavioral)	17	1.71%	12	1.40%	29	1.57%	0.59
Demodectic Mange	16	1.61%	8	0.93%	24	1.30%	0.20
Sebaceous Adenitis (type of inflammation of skin)	8	0.81%	14	1.63%	22	1.19%	0.10
Interdigital Cysts (infection lumps between toes)	3	0.30%	4	0.47%	7	0.38%	0.57
Vitaligo (Loss of Pigment)	0	0.00%	1	0.12%	1	0.05%	0.28

Table 26: Skin/Coat

Skin/Coat: Skin and coat problems were reported for 8.11% of dogs. The most frequent response was "other*." A review of "other" comments identified hot spots and seasonal alopecia as issues. Note that most veterinarians report conditions such as hot spots and seasonal alopecia as symptoms of allergic animals diagnosed or otherwise. They report Sebaceous Adenitis as an immune mediated skin disease that is inherited. Sebaceous Cysts at 2.11% and Lick Granuloma (behavioral) at 1.57% are the most frequent skin/coat problems.

Bladder/Kidney (Stones, Incontinence)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Female Urinary incontinence (leaking urine)	85	8.56%	0	0.00%	85	4.59%	N/A
Cystitis (bladder infections)	24	2.42%	4	0.47%	28	1.51%	0.00
Other	8	0.81%	10	1.17%	18	0.97%	0.43
Kidney failure from unknown causes	6	0.60%	6	0.70%	12	0.65%	0.80
Bladder stones	2	0.20%	7	0.82%	9	0.49%	0.06
Male Urinary incontinence (leaking urine)	0	0.00%	9	1.05%	9	0.49%	N/A
Renal Dysplasia	0	0.00%	1	0.12%	1	0.05%	0.28

Table 27: Bladder/Kidney (Stones, Incontinence)

Bladder/kidney: Bladder/Kidney problems account for 7.35% of health issues in the sample population. It was statistically significant that cystitis (bladder infections) was more frequently reported for females than for males. Likewise, Female Urinary Incontinence appeared in 8.56% of females; Male Urinary Incontinence appeared in 1.05 % of males. Note: Veterinarians report female rates of incontinence are much higher in spayed females.

Endocrine (Hypothyroid, Diabetes)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Hypothyroid (low thyroid)	58	5.84%	63	7.35%	119	6.43%	0.19
Pancreatitis (inflammation of the Pancreas)	5	0.50%	3	0.35%	8	0.43%	0.62
Diabetes Mellitus (insulin dependent)	4	0.40%	2	0.23%	6	0.32%	0.52
Cushing's Disease (hyperadrenalcorticism)	1	0.10%	4	0.47%	5	0.27%	0.13
Other	4	0.40%	1	0.12%	5	0.27%	0.24
Addison's Disease (hypoadrenalcorticism)	0	0.00%	1	0.12%	1	0.05%	0.28
Exocrine Pancreatic Insufficiency (low bile excretion)	0	0.00%	0	0.00%	0	0.00%	N/A

Table 28: Endocrine (Hypothyroid, Diabetes)

Endocrine (Hypothyroid, diabetes): Endocrine (Hypothyroid, Diabetes) was reported in 7.14 % of the population. Hypothyroid was the most frequent health problem in the category. Results showed 5.84% of females and 7.35% of males (average of 6.43%) experienced problems with low thyroid.

Gastrointestinal/Dental (Digestive Tract)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Gastritis (upset stomach)	28	2.82%	28	3.27%	56	3.03%	0.58
Irritable Bowel Syndrome (IBS)	21	2.11%	20	2.33%	41	2.22%	0.75
Other*	17	1.71%	24	2.80%	41	2.22%	0.90
Bloat with torsion (dilation and twist of stomach)	7	0.70%	1	0.12%	8	0.43%	0.05
Idiopathic Canine Colitis	3	0.30%	4	0.47%	7	0.38%	0.57
Bloat without torsion (no twist)	1	0.10%	3	0.35%	4	0.22%	0.25
Megaesophagus (enlarged/dilated esophagus)	3	0.30%	1	0.12%	4	0.22%	0.39
Esophagitis (inflammation of the esophagus causing vomiting)	1	0.10%	2	0.23%	3	0.16%	0.48
Protein Losing Enteropathy (intestinal malabsorption)	1	0.10%	0	0.00%	1	0.05%	0.35
Megacolon (enlarged/dilated colon)	0	0.00%	0	0.00%	0	0.00%	N/A

Table 29: Gastrointestinal/Dental (Digestive Tract)

Gastrointestinal/Dental (Digestive Tract): Gastrointestinal/Dental health issues were concerns for 6.92% of the survey sample. The top two issues reported in this category were Gastritis (upset stomach) at 3.03% and Irritable Bowel syndrome at 2.22%. Third most frequent response was *"other"; chronic diarrhea and inflammatory bowel disease were listed as health problems. There was statistically significant gender difference in bloat with torsion (7 females to 1 male), p-value of 0.05.

Ears/Hearing	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	39	3.93%	30	3.50%	69	3.73%	0.63
Deafness (both ears)	18	1.81%	15	1.75%	33	1.78%	0.92
Deafness (one ear)	8	0.81%	5	0.58%	13	0.70%	0.57

Table: 30 Ears/Hearing/Deafness

Ears/Hearing/Deafness: Ears and Hearing/Deafness represented 6.00% of health concerns. Deafness in both ears was 1.78%; deafness in one ear was .70%. Comments submitted for "other*" show Age Acquired deafness was indicated for 4 females and 1 male; an additional 52 dogs (30 females and 22 males) were reported with ear infections.

Eyes	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Geriatric Cataracts	24	2.42%	9	1.05%	33	1.78%	0.03
Other*	18	1.81%	7	0.82%	18	0.97%	0.06
Entropion (eyelid turn inward)	5	0.50%	5	0.58%	10	0.54%	0.82
Juvenile Cataracts	4	0.40%	4	0.47%	8	0.43%	0.83
Progressive Retinal Atrophy	2	0.20%	3	0.35%	5	0.27%	0.54
Distichiasis (abnormal eyelashes)	1	0.10%	3	0.35%	4	0.22%	0.25
Persistant Pupillary Membranes (PPM) (Strands of tissue in the eye)	2	0.20%	2	0.23%	4	0.22%	0.88
Retinal Detachment	2	0.20%	2	0.23%	4	0.22%	0.88
Dry Eye (KCS or Keratoconjunctivitis sicca)	3	0.30%	0	0.00%	3	0.16%	0.11
Glaucoma (increased interior eye pressure)	1	0.10%	2	0.23%	3	0.16%	0.48
Prolapsed 3rd Eyelid ("Cherry eye")	3	0.30%	0	0.00%	3	0.16%	0.11
Ectropion (eyelid turns outward)	0	0.00%	2	0.23%	2	0.11%	0.13
Retinal Dysplasia (Retinal Malformation)	1	0.10%	1	0.12%	2	0.11%	0.92
Non-healing Ulcer	1	0.10%	0	0.00%	1	0.05%	0.35
Microphthalmia (abnormally small eyeball)	1	0.10%	0	0.00%	0	0.00%	0.35
Microcornea (abnormally small cornea)	0	0.00%	0	0.00%	0	0.00%	N/A
Uveodermatologic Syndrome UDS (loss of pigment around the eye with eye pain)	0	0.00%	0	0.00%	0	0.00%	N/A

Table 31: Eyes

Eyes: Eye problems represented 5.08% of health problems. The most frequent eye problem was Geriatric Cataracts with an average of 1.78% of total dogs. There were two statistically significant gender differences in this health category. The first was geriatric cataracts. A frequency of 2.42% was reported for females; the frequency of 1.05% was reported for males, p-value of 0.03.In the “other*” category, SARDS (Sudden Acquired Degenerative Syndrome) was reported for 7 females and 0 males, a statistically significant gender difference, p-value of 0.01. At this time, SARDS is not believed to be a genetic disease.

Reproductive - Female	Female	% of Female
Pyometra (Infected Uterus)	31	3.12%
Infertility (failure to conceive)	27	2.72%
False pregnancy	14	1.41%
Other	14	1.41%
Irregular heat cycles	11	1.11%
Failure to carry to term	7	0.70%
Failure to have a heat cycle	5	0.50%
Required C-section	5	0.50%
Mastitis (Infected Milk Glands)	4	0.40%
Silent heat cycles	4	0.40%
Uterine inertia (unable to push pups out)	4	0.40%
Brucellosis	1	0.10%
Uterine prolapse (Falls out of Vulva)	1	0.10%
Insufficient Milk	0	0.00%
Poor mothering instinct	0	0.00%
Vaginal Hyperplasia (protrusion of vaginal tissue during heat cycle)	0	0.00%

Table 32: Reproductive Female

Reproductive Female: Female reproductive problems represented 4.92% of females in the survey. Pyometra (3.12%) and Infertility (2.72%) were the two most frequent problems.

Neurological	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	9	0.91%	11	1.28%	20	1.08%	0.43
Seizures of unknown origin	9	0.91%	14	1.63%	23	1.24%	0.16
Idiopathic Vestibular Disease (stroke like symptoms- vertigo)	12	1.21%	4	0.47%	16	0.86%	0.09
Cerebellar Abiotrophy (CA) (Diagnosed by Neurologist or Vet only)	2	0.20%	7	0.82%	9	0.49%	0.06
Seizures of known origin	3	0.30%	4	0.47%	7	0.38%	0.57
Dementia (senility)	5	0.50%	0	0.00%	5	0.27%	0.04
Degenerative Disc Disease	2	0.20%	2	0.23%	4	0.22%	0.88

Table: 33 Neurological (Seizures, Cerebellar Abiotrophy)

Neurological (Seizures, Cerebellar Abiotrophy): Neurological problems were 4.0% of reported health issues. "Other*" neurological concerns were identified at 1.08. Diseases listed for "other" includes multiple cases of both demyelinating diseases and degenerative myelopathy. Seizures of unknown origin were 1.24% of the total sample. The Cerebellar Abiotrophy frequency was 0.49%. A statistically significant gender difference was reported for dementia, 5 females and 0 males were identified with the disease, p-value of 0.04.

Cardiovascular (Heart)	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Cardiomyopathy, Unknown type (Congestive Heart Failure)	8	0.81%	12	1.40%	20	1.08%	0.22
Heat Murmur - over 1 year of age	6	0.60%	8	0.93%	14	0.76%	0.42
Heart Failure (unknown reason)	5	0.50%	5	0.58%	10	0.54%	0.82
Cardiomyopathy, Dilated (chamber enlarged)	5	0.50%	4	0.47%	9	0.49%	0.91
Cardiomyopathy, Hypertrophic (heart muscle enlarged)	4	0.40%	5	0.58%	9	0.49%	0.58
Other	4	0.40%	4	0.47%	8	0.43%	0.83
Mitral Valve Defect	3	0.30%	2	0.23%	5	0.27%	0.78
Atrial Septal Defect	2	0.20%	1	0.12%	3	0.16%	0.65
Subaortic Stenosis (SAS)	2	0.20%	0	0.00%	2	0.11%	0.19
Patent Ductus Arteriosus (PDA)	1	0.10%	0	0.00%	1	0.05%	0.35
Pulmonic Stenosis	0	0.00%	1	0.12%	1	0.05%	0.28
Tricuspid Valve Dysplasia	1	0.10%	0	0.00%	1	0.05%	0.35
Aortic Stenosis	0	0.00%	0	0.00%	0	0.00%	N/A

Table 34: Cardiovascular (Heart)

Cardiovascular (Heart): Cardiovascular Heart problems represent 3.62% of health problems. Cardiomyopathy (Congestive Heart Failure) was reported at 1.08% of the sample. Heart murmurs,-over one year of age, were reported at 0.76%. Other cardiovascular issues reported established no pattern of responses.

Autoimmune Diseases	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Hemolytic Anemia (red blood cell disorder)	20	2.01%	7	0.82%	27	1.46%	0.03
Thrombocytopenia -ITP (clotting cells disorder)	11	1.11%	8	0.93%	18	0.97%	0.71
Other	2	0.20%	4	0.47%	15	0.81%	0.32
Myasthenia Gravis (neuromuscular disease)	1	0.10%	2	0.23%	3	0.16%	0.48
Systemic Lupus Erythematosis- SLE (a.k.a. lupus; affects multiple systems)	1	0.10%	1	0.12%	2	0.11%	0.92
Discoid Lupus Erythmematosus DLE (Benign Skin disorder)	0	0.00%	1	0.12%	1	0.05%	0.28
Polyarthritis (rheumatoid arthritis)	0	0.00%	0	0.00%	0	0.00%	N/A
Polymyositis (affects muscles)	0	0.00%	0	0.00%	0	0.00%	N/A

Table 35: Autoimmune

Autoimmune: Autoimmune was reported as a problem for 3.08% of the sample. Hemolytic Anemia (red blood cell disorder) at 1.46% and Thrombocytopenia (ITP, a clotting cell disorder) at 0.97% were the two most frequent problems in this health category. There is a statistically significant gender difference in Hemolytic Anemia; 20 females were reported compared to 7 males, p-value of 0.03.

Allergies - Sensitivites ie; Drugs, Vaccines	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Vaccine Reaction	6	0.60%	9	1.05%	15	0.81%	0.29
Other*	3	0.30%	10	1.17%	13	0.70%	0.05
Antibiotics	1	0.10%	4	0.47%	5	0.27%	0.13
Flea prevention products	3	0.30%	1	0.12%	4	0.22%	0.39
Ivermectin	3	0.30%	0	0.00%	3	0.16%	0.11
Heartworm preventative	2	0.20%	1	0.12%	3	0.16%	0.65
Anesthesia	0	0.00%	2	0.23%	2	0.11%	0.13

Table 36: Allergy (Sensitivities (Drugs, Vaccines)

Allergy (Sensitivities (Drugs, Vaccines): Allergies represented 1.89% of reported health issues. The two most frequent conditions reported were vaccine reactions at 0.81% and "other" responses at 0.70%. Upon examination of "other*" comments, no pattern of allergies was evident; however, there were statistically significant gender differences in the number of allergies reported in "other*", (3 females and 10 males) for a p-value of 0.05.

Respiratory	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	8	0.81%	11	1.28%	19	1.03%	0.31
Chronic Aspiration Pneumonia	5	0.50%	5	0.58%	10	0.54%	0.82
Chronic Bronchitis	3	0.30%	6	0.70%	9	0.49%	0.22

Table 37: Respiratory

Respiratory: Respiratory problems represented 0.70% of reported health issues. Respondents checked the "other" category with the highest frequency at 1.03 %. A review of "other*" comments showed that laryngeal disease was reported for 5 dogs (2 females and 3 males). There were no additional patterns of data identified.

Hepatic (Liver) Bleeding Disorders	Female	% of Female	Male	% of Male	Total	% of Total	p-Value (<0.05)
Other*	11	1.11%	7	0.82%	18	0.97%	0.52
Cirrhosis (scarring and fibrosis of the liver)	2	0.20%	4	0.47%	6	0.32%	0.32
Portosystemic Shunt (Vascular bypass of the liver)	0	0.00%	4	0.47%	4	0.22%	0.03
Copper Toxicosis (excess copper in the liver)	1	0.10%	1	0.12%	2	0.11%	0.92
Hemophilia	1	0.10%	0	0.00%	1	0.05%	0.35
Von Willebrand's Disease (slow blood clotting)	0	0.00%	0	0.00%	0	0.00%	N/A
Disseminated Intravascular Coagulation (DIC) (excess clotting that results in excessive bleeding)	0	0.00%	0	0.00%	0	0.00%	N/A
Thrombosis (abnormal blood clot formation)	0	0.00%	0	0.00%	0	0.00%	N/A

Table 38: Liver and Bleeding Disorders

Liver and Bleeding Disorders: Liver and bleeding represent 1.68% of reported health problems. An examination of respondents' comments under "other*" showed no pattern of data. A statistically significant gender difference existed for portosystemic shunts (females 0; males 4) a p-value of 0.03.

Reproductive - Male	Male	% of Male
Cryptorchidism (one testicle missing)	5	0.58%
Benign Hypertrophic Prostitis (enlarged prostate/BPH)	4	0.47%
Low sperm numbers	4	0.47%
Abnormal sperm (large numbers of only)	3	0.35%
Lack of Libido (Low sex drive)	3	0.35%
Testicular atrophy (decrease in size)	3	0.35%
Other	2	0.23%
Brucellosis	0	0.00%
No sperm	0	0.00%
Both testicles missing	0	0.00%

Table 39: Reproductive-Male

Reproductive-Male: 1.08% of the males in the survey reported reproduction problems. Crytorchidism (one testicle missing) at 0.58% was the most frequent reproductive problem. This issue was reported for 5 males. Total reported males with reproductive problems were 24.

Comparative Data for the 2009 Health Survey

Males vs. Females

One of the survey objectives was to examine whether there was a relationship between the gender of the dogs and their health problems. Individual health data was entered for 995 females and 861 dogs for a total of 1856.

The average age of dogs included in the survey was 6.55 for females and 6.05 for males. The average and median age of death was 10.8 and 12 respectively for females; and was 9.9 and 11 respectively, for males. The first and second causes of death were cancer and old age, for both males and females.

In the 18 categories of health problems, Bladder/Kidney and Allergy Sensitivities to Drugs and Vaccines were the only two major categories where there was a sex link to these issues. With a p-value of 0.00, females were found to have more Bladder/Kidney issues than males. In the Allergy Sensitivities category, males were found to have a statistically significant occurrence, with a p-value of 0.05.
In each of these 18 categories, sub-issues were further delineated. A sex link to disease was identified in 8 health sub-issues; 6 were more frequent for females; 2 were more frequent for males. See list below:

Musculoskeletal	Exertional Myopathy	Females	p-Value = 0.02
Bladder/Kidney	Cystitis	Females	p-Value = 0.00
Gastrointestinal	Bloat with Torsion	Females	p-Value = 0.05
Eyes	Geriatric Cataracts	Females	p-Value = 0.03
Neurological	Dementia	Females	p-Value = 0.04
Autoimmune Disease	Hemolytic Anemia	Females	p-Value = 0.03
Allergy Sensitivities	Other	Males	p-Value = 0.05
Liver/Bleeding	Portosystemic Shunt	Males	p-Value = 0.03

Comparative Data on OES from North America vs. Non-North America

Of the 1856 dogs in the survey, 1310 dogs were from North America and 324 dogs were from Non-North American continents. Non-North American Continents were as follows:
Europe, British Isles, Australia and New Zealand, Asia, Africa and South and Central America.

No conclusions such as Non-North American dogs are healthier than North American dogs should be made. Additional data and study is needed, only anecdotal observations can be formed.

Continent	Total
Non-North American	324
North America	1532
Grand Total	1856

Table 40: Totals For All OES By North America (NA) and Non-North America (NNA)

Continent	Female	% Female	Male	% Male	Grand Total	% Total
North America	804	80.80%	728	84.55%	1532	82.54%
Europe	97	9.75%	54	6.27%	149	8.03%
British Isles	45	4.52%	42	4.88%	87	4.69%
Australia & New Zealand	42	4.22%	32	3.72%	74	3.99%
Asia	5	0.50%	2	0.23%	7	0.38%
Africa	2	0.20%	2	0.23%	4	0.22%
South & Central America	0	0.00%	1	0.12%	1	0.05%
Grand Total	995	N/A	861	N/A	1856	N/A

Table 41: Totals For All OES By Gender AND By Continent

Health Issues	Non-NA	% Non-NA	North America	% North America	Total	% Total
No major health problems	150	46%	569	37%	719	39%
Cancer & Tumors	58	18%	246	16%	304	16%
Musculoskeletal (Muscles & Bones)	39	12%	255	17%	294	16%
Allergy- Environmental (Scratching, Redness, Sneezing)	31	10%	201	13%	232	13%
Skin/Coat	21	6%	129	8%	150	8%
Bladder/Kidney (Stones, Incontinence)	12	4%	124	8%	136	7%
Endocrine (Hypothyroid, Diabetes)	13	4%	119	8%	132	7%
Gastrointestinal/Dental (Digestive Tract)	13	4%	115	8%	128	7%
Ears/Hearing	12	4%	99	6%	111	6%
Eyes	6	2%	88	6%	94	5%
Female Reproductive	30	9%	61	4%	91	5%
Neurological (Seizures, Cerebellar Abiotrophy)	11	3%	63	4%	74	4%
Cardiovascular (Heart)	10	3%	57	4%	67	4%
Autoimmune Diseases (Hemolytic Anemia, Thrombocytopenia)	2	1%	55	4%	57	3%
Allergy- Sensitivities (to Drugs, Vaccines)	7	2%	28	2%	35	2%
Respiratory	5	2%	27	2%	32	2%
Male Reproductive	5	2%	15	1%	20	1%

Table 42: Health Issues By Gender For Non North American (NNA) OES and North American (NA) OES

Limitations of the Study

In any breed health survey there are limitations that may influence the data and therefore the conclusions of the survey. One of the main limitations of this particular health survey is that the data is dependant upon the recollections of respondents, as well as their understanding of key terminology and questions. One way to limit this drawback would be to require veterinary documentation confirming any reported disease. This would quite likely result in a significant decline in participation.

The primary focus of the 2009 OESCA Health Survey was to consider diseases and conditions which are genetic, or potentially genetic, in origin. Since not all medical conditions are perfectly understood, canine health care experts were consulted to share their best understanding of what does and does not have a genetic basis.

The 2004 and 2009 OESCA Breed Health Surveys differ in two important ways: the 2004 survey was limited to OESCA members, and it was strictly a paper survey. The 2009 Health Survey was primarily conducted online, though a paper survey was available upon request, and it was open to anyone who had owned an Old English Sheepdog in the past ten years regardless of geography and club affiliations.

Because of the closed nature of the 2004 survey it was possible to calculate the response rate. Given that no set number of surveys where sent out to a specifically targeted group of people for the 2009 Health Survey, it is not possible to calculate a response rate for this survey.

The open format of the 2009 Health Survey allows for a greater number of respondents whose native language is not English than the 2004 OESCA Health survey did. One of the main reasons for the open format was precisely to encourage international participation. Other differences from country to country are the canine health requirements and protocals. It is impossible to accurately gauge what effect language and differences in health protocals may have had on the data.

The 2004 Health Survey had 435 respondents with a reported 1685 dogs, while the 2009 Health Survey had 813 respondents with 1856 dogs. Because of the change in format, care should be taken when comparing the two surveys. Some key statistics remain consistent. In both surveys respondents listed Pet/Companion as their primary area of interest, and the most common causes of death was almost unchanged with cancer, old age, arthritis and heart problems topping the list.

The 2004 survey contained a number of questions directly related to temperament/behavioral issues. Canine health experts advise that because the terminology related to temperament is vaguely defined; such assessments can be difficult to interpret. This section was therefore omitted in the 2009 survey. While the 2009 Health Survey did not directly reference temperament, roughly 13% of respondents indicated that temperament remains one of their top three health concerns in the breed, see Table 7.

In some questions, the numbers reported are small. As an example, in Table 33 dementia appears to have a sex-linked basis. All of the dogs reported as having experienced this condition are female. It has a p-value of 0.04. Further examination reveals that there were only five dogs total that were reported as having dementia, less than 0.03% of the total dog sample. When numbers are small, no valid conclusions could be drawn without further investigation. Although survey data based on small numbers may show a trend or may be relevant when viewed with additional data, further study would be required to establish validity.
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Potential for Further Study

All raw data from the survey has been stored and will be available for study and research through authorized release. This database of health information will serve as a resource providing seemingly limitless possibilities for analysis and further study.

The OESCA Health and Research Committee is particularly eager to continue studying data for its usefulness in educating owners and breeders, monitoring disease prevalence, identifying and supporting research and measuring breed health progress.

Strengths of Survey

The primary strength of the breed health survey was its ability to identify health issues and inherited diseases that are of greatest concern to the breed. Continued, regularly scheduled breed health surveys allow OESCA to build and maintain a database on multiple generations of dogs, an invaluable resource available for owners, breeders and scientists to assist in breeding and caring for healthier Old English Sheepdogs.

The completion of the OESCA 2009 Breed Health Survey fulfills the requirement of the AKC Canine Health Foundation which requests that each parent club have on file current health survey results which determine the major health concerns within the breed.

Global participation in this survey has resulted in increased breed health awareness. To complete the survey, respondents reflected on the health of their dogs as they examined past health problems, shared and gathered data on current concerns, and with survey results are able to analysis and identify the unique breed challenges likely to face future generations. Each respondent added perspective and information to the health discussion. The fancy is better informed and the breed knowledge base has increased. The wide reach of an electronic survey resulted in owner and breeder participation from seven continents. It became apparent that breed health problems were not isolated by country or area but were interrelated in genetic makeup and in breed management.

Respondents described the survey as user friendly. The survey was kept short and simple by showing respondents only those follow-up questions pertinent to each dog entered. It addition, survey design allowed respondents to enter a few dogs at a time with the option of being able to come back later and enter additional dogs.

Tabulations of results were managed by Robert Freiheit, Process analyst for PACCAR Inc. Robert volunteered hours of labor to determine and implement methods which produced the results reported for this health survey. On questions where respondents selected "other" as one of the preferred answers, accompanying comments were examined to determine if the response should be factored into survey data. The final decision was made by one or more veterinarians.

All survey data were aggregate and did not disclose identification of individual dogs. Raw data has been securely stored and available for additional reference and analysis. Survey data will be available to inform research and education decisions likely to improve the health of the breed. The complete OESCA 2009 Breed Health Survey Report has been made available online at www.oeshealth.org .

Acknowledgments:

The OESCA Health and Research Committee extends it thank you to all respondents and the OES they owned in the ten year period of this survey. Their shared information is a gift with the potential to improve and save the lives of current and future Old English Sheepdogs.

2009 Health and Research Committee

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