

Report from the Kennel Club/
British Small Animal Veterinary Association
Scientific Committee

Summary results of the
Purebred Dog Health Survey
for Welsh Springer Spaniels

Warning: The results of this survey and particularly the breed-specific analyses should be interpreted with caution. The overall response rate was only 24% with breed-specific response rates from 4.5% to 64.7%.

Welsh Springer Spaniels

A total of 560 forms were sent out and 190 were returned, representing 363 live dogs. This breed had a 33.9% response rate (190/560) and it represented 1.38% of all returns (190/13,741).

Mortality data

A total of 157 deaths were reported and this represents 0.99% of all deaths reported in the survey (157/15,881). The median age at death for Welsh Springer Spaniels was 12 years and 7 months (min = 1 year and 5 months, max = 17 years and 7 months) and this was higher than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for Welsh Springer Spaniels. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Welsh Springer Spaniels.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	42	26.8	Carcinoma (mammary, bladder); type unspecified (mammary)
2 Old age	29	18.5	Old age & age combinations
3 Cerebral vascular	22	14.0	Stroke or cerebral vascular accident
4 Urologic	12	7.6	Kidney failure (chronic > acute)
5 Neurologic	9	5.7	Vestibular syndrome; seizures; IVDD
6 Cardiac	7	4.5	Heart failure; heart attack; defect (unspecified)
7 Combinations	5	3.2	Multiple organ failure
8 Ocular	5	3.2	Glaucoma; blindness
9 Hepatic	4	2.5	Liver failure (chronic>acute); disease (unspecified)
10 Trauma	4	2.5	Unspecified; road traffic accident
11 Behaviour	3	1.9	Aggression
12 Gastrointestinal	3	1.9	Gastric dilatation/volvulus (GDV); pancreatitis
13 Other	2	1.3	Uncodeable
14 Reproductive	2	1.3	Pyometra
15 Unknown	2	1.3	
16 Collapse	1	0.6	
17 Endocrine	1	0.6	Hypothyroidism
18 Internal bleeding	1	0.6	
19 Poisoning	1	0.6	
20 Respiratory	1	0.6	Respiratory disease unspecified
21 Senility	1	0.6	
Total	157	100.0	

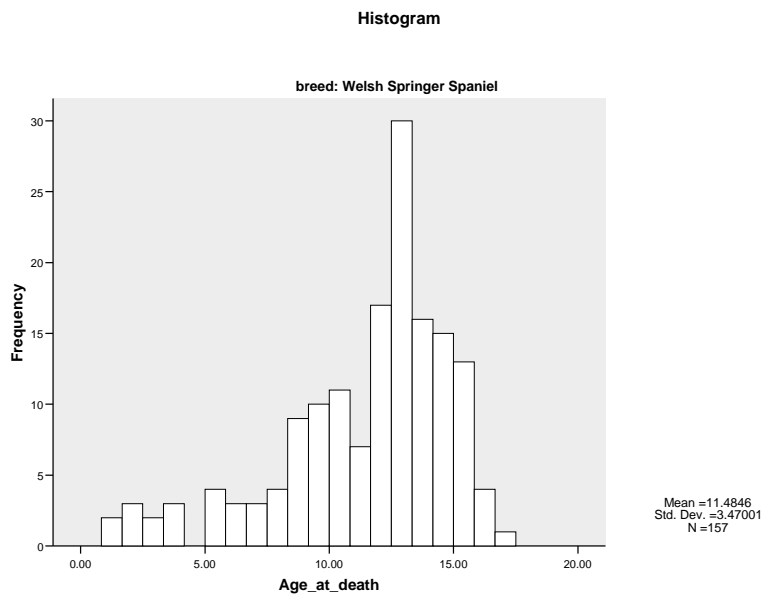


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 157 Welsh Springer Spaniel deaths with age at death reported.

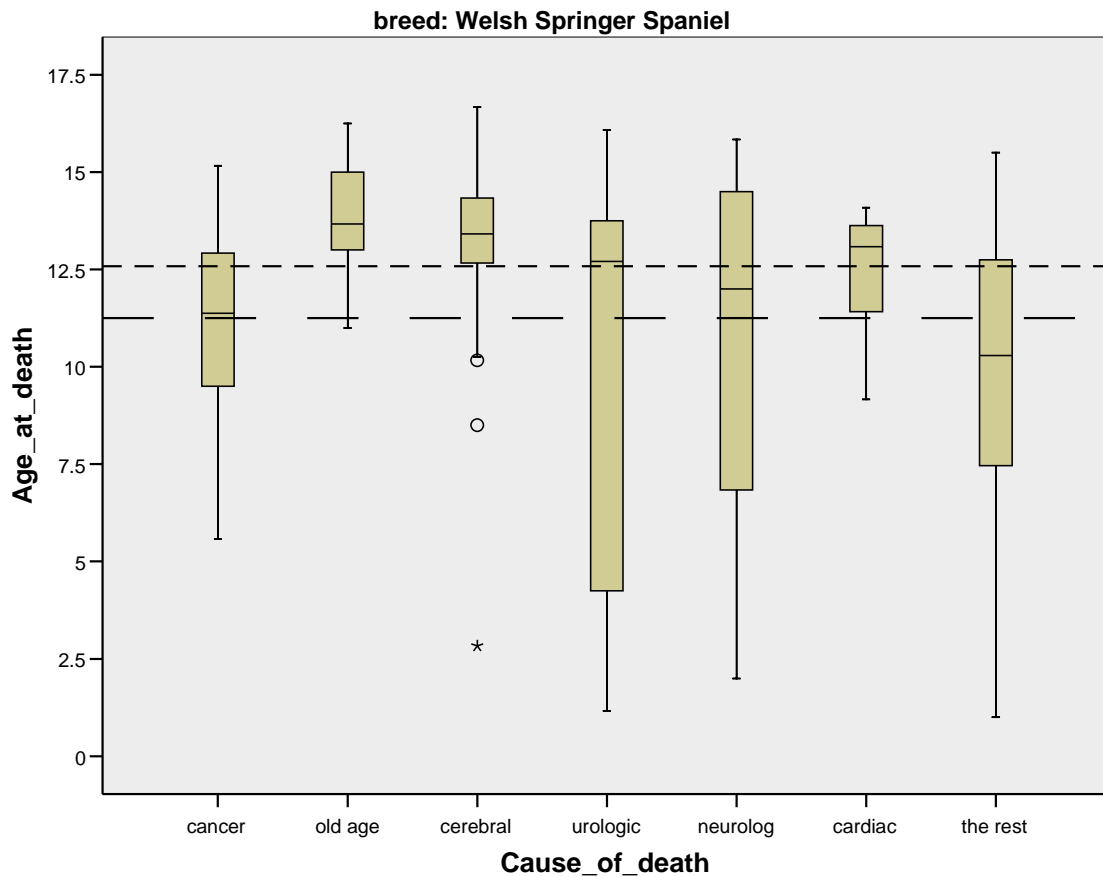


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Welsh Springer Spaniels (N=157). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Welsh Springer Spaniels. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 362 live dogs with a reported age was 5 years and 8 months (min=2 months, max=15 years and 4 months, Figure 3). Health information was reported for 363 live dogs of which 218 (60%) were healthy and 145 (40%) had at least one reported health condition, resulting in a total of 251 reported conditions with a median of 1 condition/dog (min=1, max=12).

The median current age of all healthy dogs with a reported age (N=218) was 4 years and 1 month (min=2 months, max=14 years and 4 months). The distribution of gender and neuter status is shown in Table 2.

The median current age of all dogs with one or more disease conditions and a reported age (N=134) was 7 years and 8 months (min=7 months, max=15 years and 4 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=237) was 4 years and 6 months (min= 2 months, max= 15 years and 3 months, Figure 4). Table 3 shows the disease conditions for Welsh Springer Spaniels. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 361 Welsh Springer Spaniels with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	181	56	237 (66%)
Male	101	23	124 (34%)
Totals	282 (78%)	79 (22%)	361 (100%)

There was no association between gender and neuter status (P=0.2676).

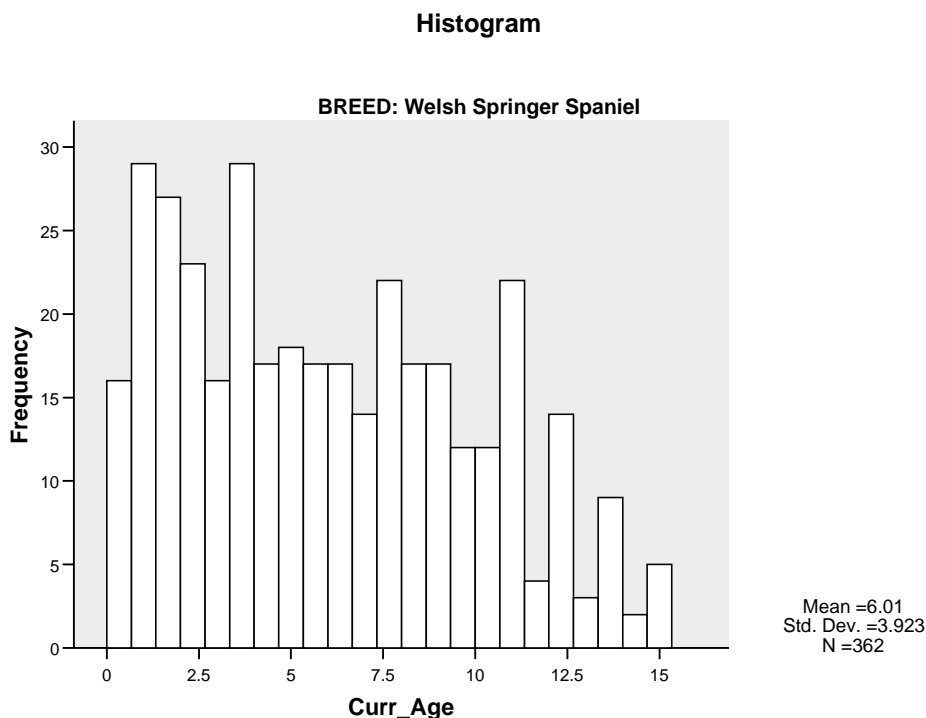


Figure 3. Histogram showing frequency of current age in years for the 362 live Welsh Springer Spaniels with age reported.

Histogram

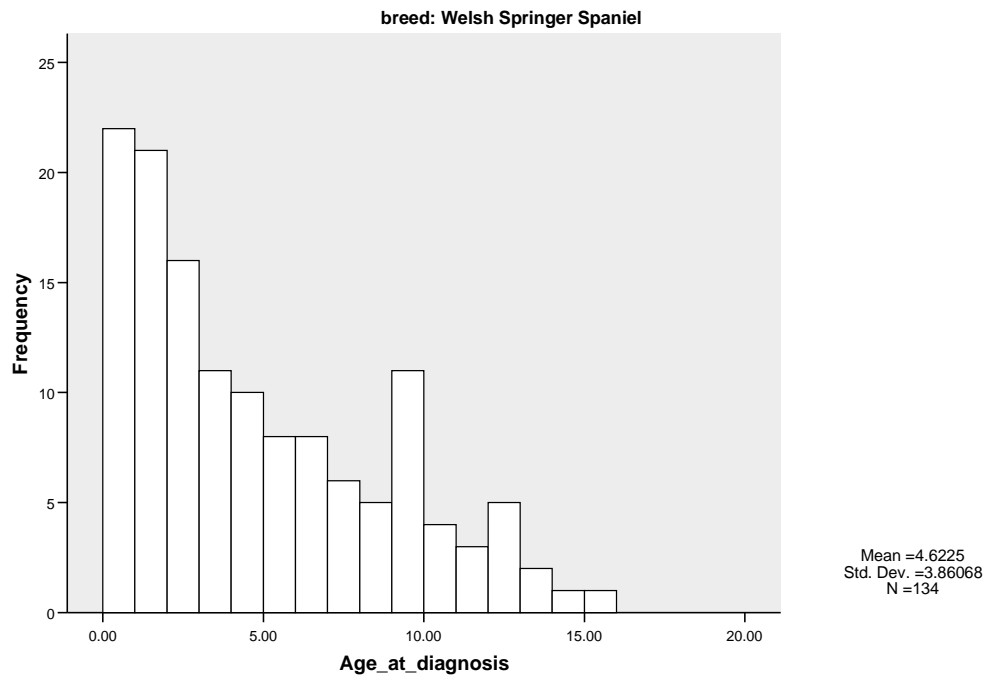


Figure 4. Histogram showing frequency of age at diagnosis for the 134 Welsh Springer Spaniels with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

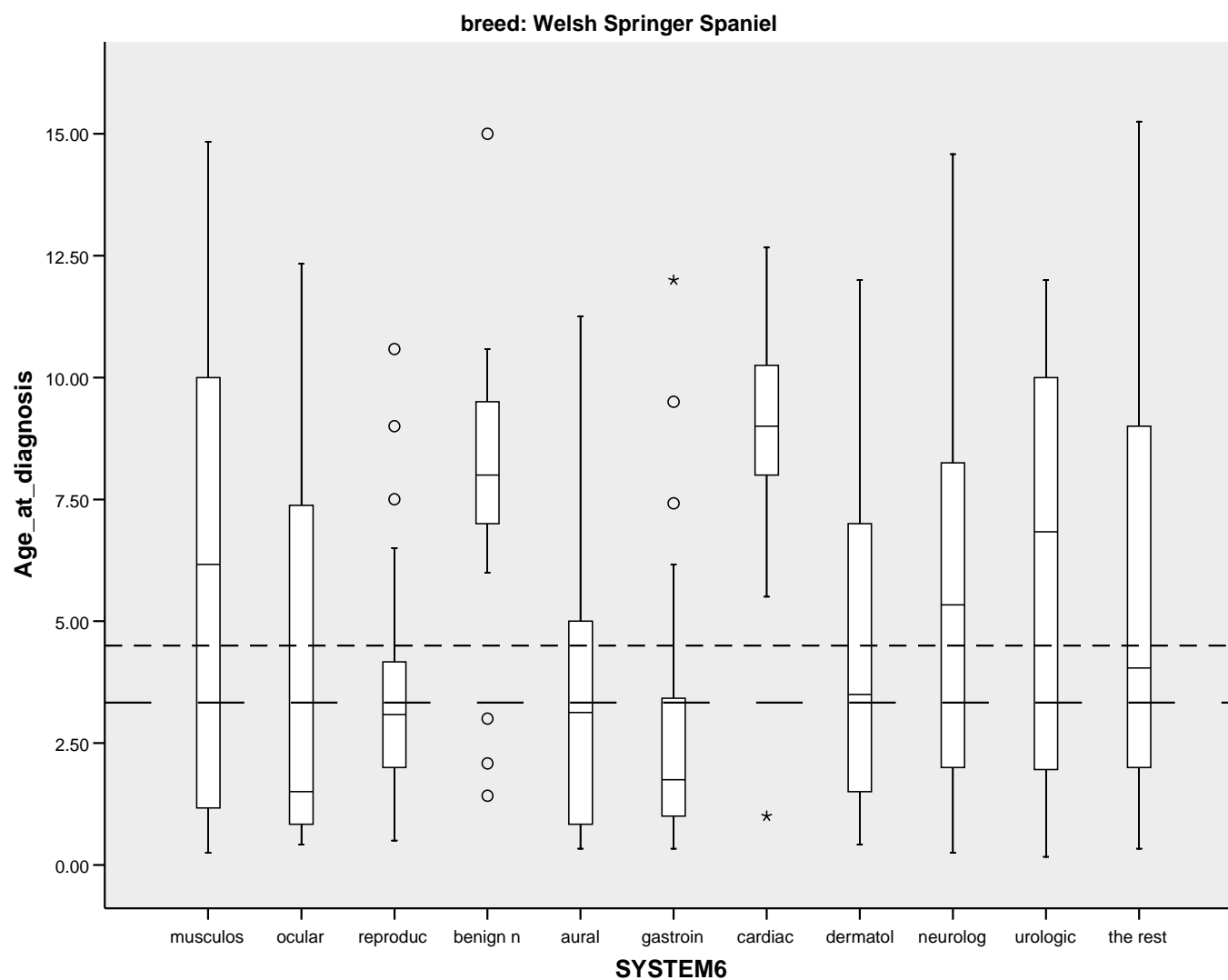


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Welsh Springer Spaniels (N=134 dogs with 237 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Welsh Springer Spaniels. The solid line within each grey box represents the median age at diagnosis from the condition.

Table 3. Disease conditions by organ system/category for Welsh Springer Spaniels.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Musculoskeletal	31	12.4	Arthritis (unspecified>spine>hindlimb=hip>rest); CLR; CHD
2 Ocular	27	10.8	Distichiasis; glaucoma; epiphora; cataracts; blocked tear duct; conjunctivitis; trichiasis
3 Reproductive	26	10.4	Infertility; pyometra; cryptorchid; irregular heat cycles; uterine inertia; false pregnancy
4 Benign neoplasia	20	8.0	Lipoma; adenoma (mammary; abdomen); histiocytoma (skin)
5 Aural	17	6.8	Otitis externa; excessive ear wax; aural haematoma
6 Gastrointestinal	17	6.8	Colitis; campylobacter; diarrhoea; GDV; foreign body obstruction; pancreatitis; vomiting
7 Respiratory	14	5.6	Kennel cough; rhinitis; coughing; long soft palate; other (unspecified)
8 Cardiac	13	5.2	Heart murmur (unspecified>grade 1=grade 3.grade 5=without clinical signs); CHF
9 Dermatologic	13	5.2	Dermatitis; other (unspecified); mites (unspecified=sarcoptes)
10 Neurologic	13	5.2	Seizures; IVDD (cervical); rage syndrome
11 Urologic	11	4.4	Cystitis; incontinence (unspecified>after spay); renal failure (chronic=unspecified)
12 Immune mediated	9	3.6	Atopy; food allergy; dust mite allergy; other allergy (unspecified); vaccine damage
13 Endocrine	8	3.2	Hypothyroidism; weight gain (undiagnosed); Cushing's disease
14 Anal gland	6	2.4	Anal sacculitis
15 Trauma	5	2.0	Other (unspecified); lungs; spine
16 Cancer	4	1.6	Unspecified (mammary; forelimb); adenocarcinoma (anal gland); melanoma
17 Unknown	4	1.6	Undiagnosed illness
18 Cerebrovascular	3	1.2	Stroke or cerebral vascular accident
19 Other	3	1.2	Uncodeable
20 Dental	2	0.8	Dental disease; retained puppy teeth
21 Haematopoietic	2	0.8	Von Willebrands Disease (VWD); bleeding disorder unspecified
22 Behaviour	1	0.4	Unspecified
23 Cardiopulmonary	1	0.4	Pulmonary oedema
24 Hepatic	1	0.4	Acute liver failure
Total	251	100.0	

CHF=congestive heart failure