

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

Summary results of the
Purebred Dog Health Survey
for Flatcoated Retrievers

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%.

Flatcoated Retrievers

A total of 1556 forms were sent out and 472 were returned, representing 926 live dogs. This breed had a 30.3% response rate (472/1556) and it represented 3.43% of all returns (472/13,741).

Mortality data

A total of 610 deaths were reported and this represents 3.84% of all deaths reported in the survey (610/15,881). The median age at death for Flatcoated Retrievers was 9 years and 10 months (min = 4 months, max = 16 years and 11 months) and this was lower than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for Flatcoated Retrievers. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Flatcoated Retrievers.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	331	54.3	Unspecified type (liver,spleen, unspecified)
2 Old age	54	8.9	Old age
3 Cardiac	38	6.2	Heart failure; heart attack; cardiomegaly
4 Gastrointestinal	36	5.9	GDV; foreign body; megaesophagus
5 Combinations	18	3.0	
6 Other	17	2.8	Uncodeable
7 Trauma	15	2.5	Road traffic accident; unspecified
8 Immune mediated	13	2.1	Unspecified; AIHA
9 Neurologic	11	1.8	Seizures; IVDD
10 Cerebral vascular	9	1.5	Stroke or cerebral vascular accident
11 Unknown	9	1.5	
12 Endocrine	8	1.3	Cushings; Addisons; diabetes mellitus
13 Hepatic	8	1.3	Chronic liver failure; unspecified
14 Musculoskeletal	8	1.3	Arthritis
15 Urologic	8	1.3	Chronic kidney failure; juvenile nephropathy
16 Perioperative	6	1.0	
17 Collapse	3	0.5	
18 Infection	3	0.5	Leptospirosis; viral infection
19 Internal bleeding	3	0.5	
20 Reproductive	3	0.5	Pyometra; prostatic disease
21 Respiratory	3	0.5	Laryngeal paralysis; respiratory failure
22 Sudden death	2	0.3	
23 Portosystemic shunt (PSS)	1	0.2	
24 Behaviour	1	0.2	Aggression
25 Dermatologic	1	0.2	Chronic otitis
26 Died	1	0.2	
Total	610	100.0	

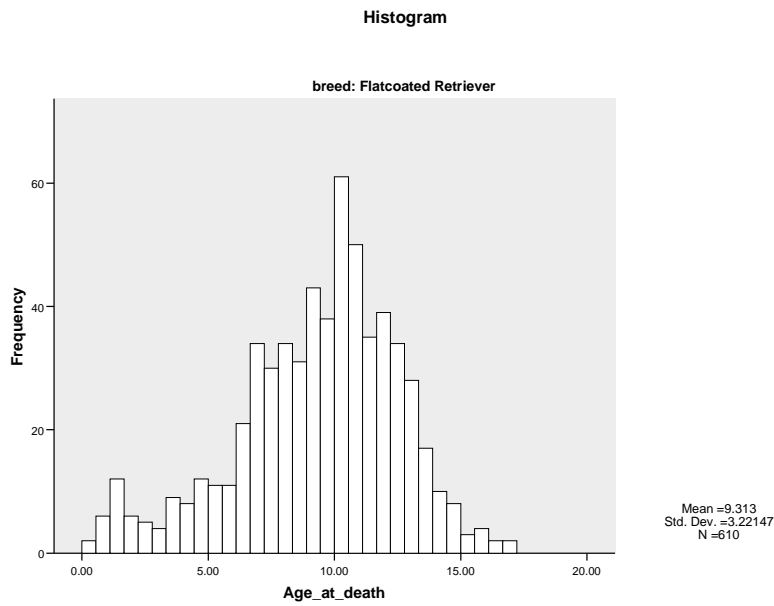


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 610 Flatcoated Retriever deaths with age at death reported.

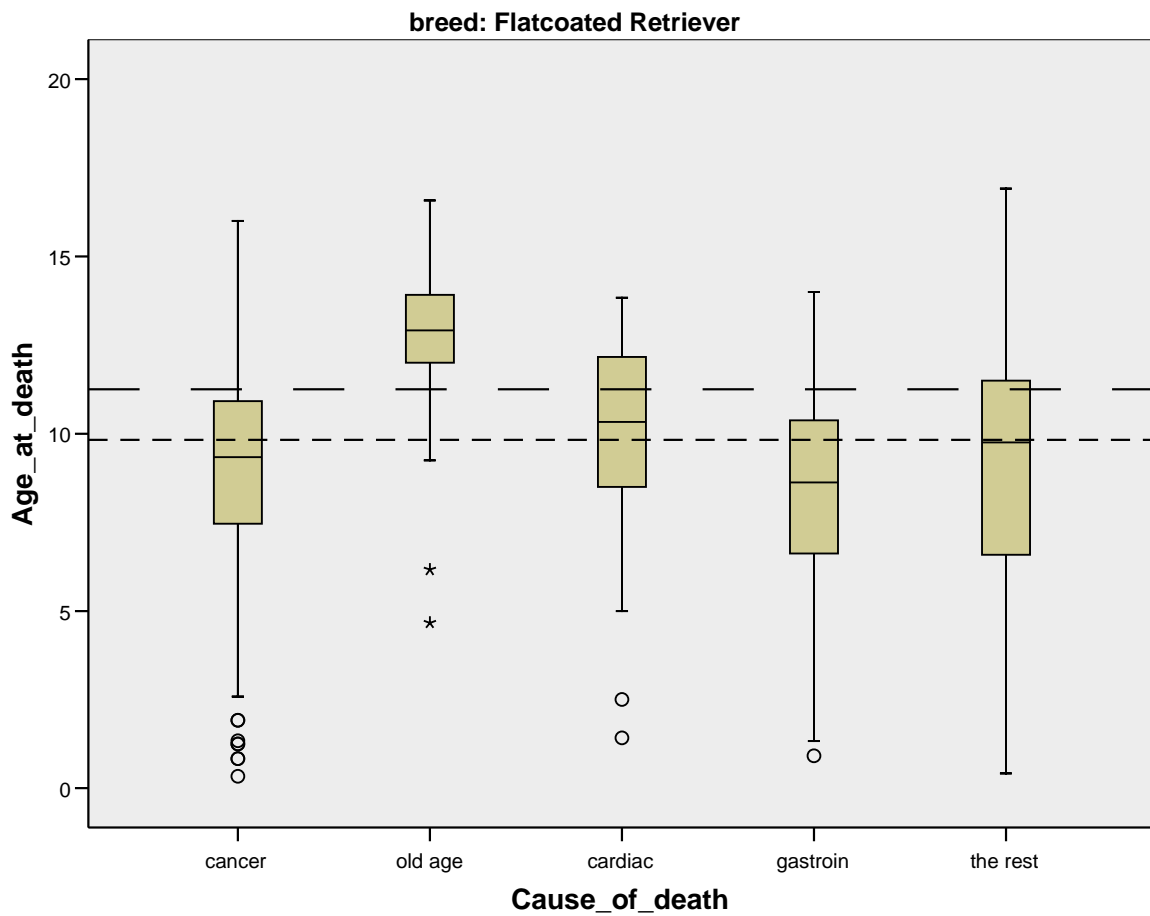


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Flatcoated Retrievers (N=610). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Flatcoated Retrievers. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 926 live dogs with a reported age was 5 years (min=2 months, max=14 years and 10 months, Figure 3). Health information was reported for 926 live dogs of which 549 (59%) were healthy and 377 (41%) had at least one reported health condition, resulting in a total of 666 reported conditions with a median of 1 condition/dog (min=1, max=9).

The median current age of all healthy dogs with a reported age (N=549) was 3 years and 11 months (min=2 months, max=13 years and 11 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=377) was 6 years and 9 months (min=10 months, max=14 years and 10 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=649) was 3 years and 8 months (min= 1 month, max= 12 years and 9 months, Figure 4). Table 3 shows the disease conditions for Flatcoated Retrievers. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 915 Flatcoated Retrievers with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	370	193	563 (62%)
Male	252	100	352 (38%)
Totals	622 (68%)	293 (32%)	915 (100%)

There was no association between gender and neuter status (P=0.0640).

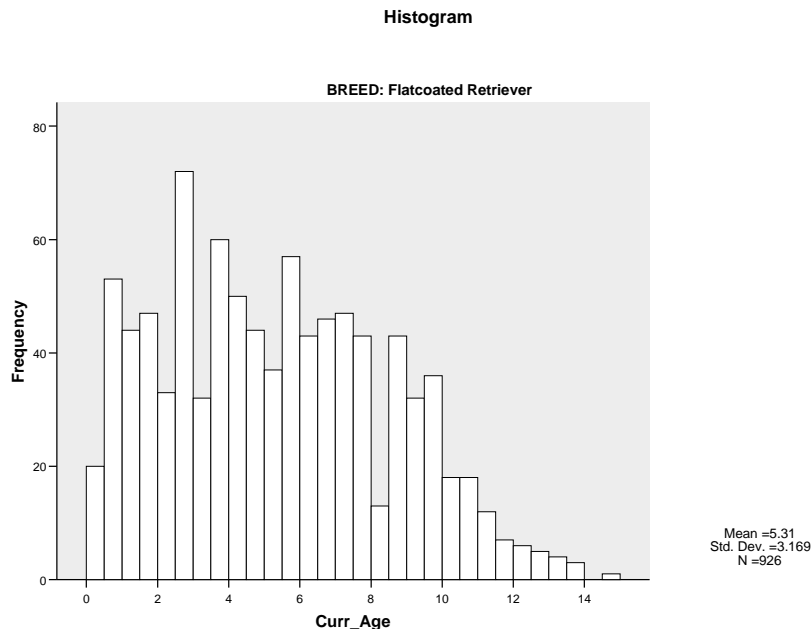


Figure 3. Histogram showing frequency of current age in years for the 926 live Flatcoated Retrievers with age reported.

Histogram

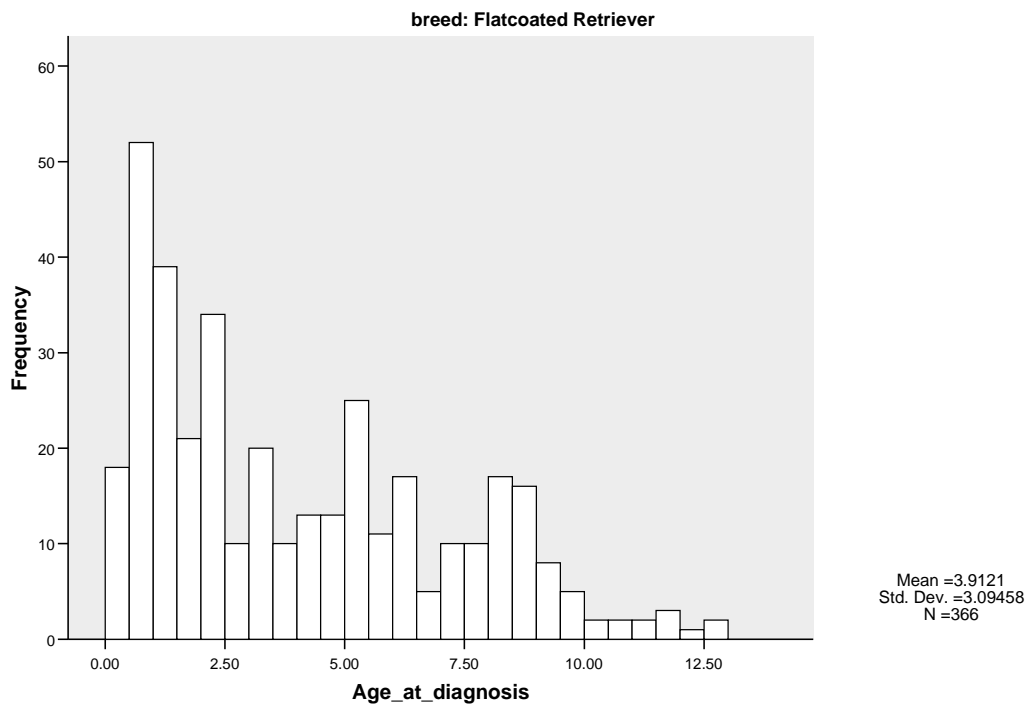


Figure 4. Histogram showing frequency of age at diagnosis for the 366 Flatcoated Retrievers with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

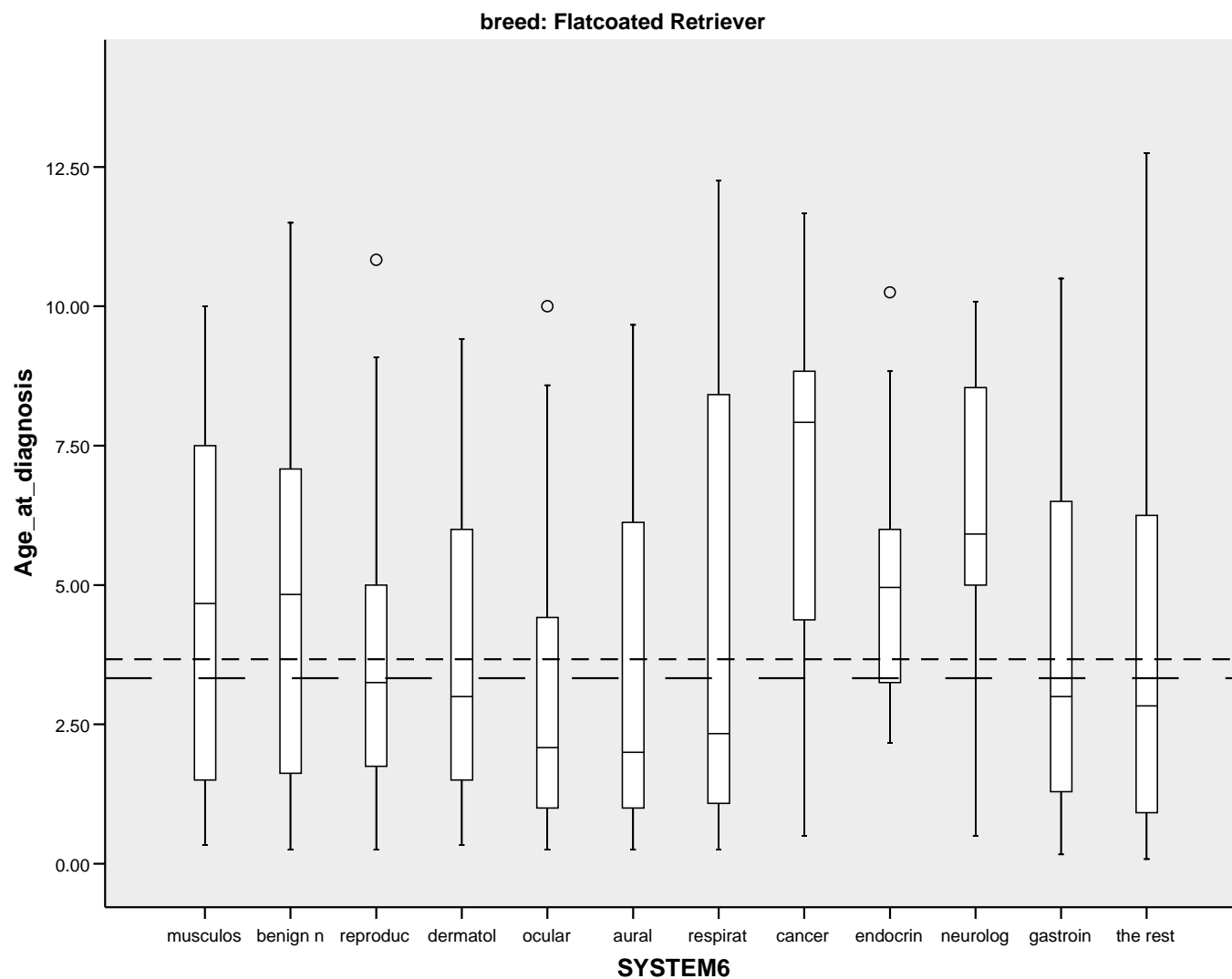


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Flatcoated Retrievers (N=377 dogs with 649 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Flatcoated Retrievers. 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 Flatcoated Retrievers.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Musculoskeletal	102	15.3	Arthritis; patellar luxation; lameness (forelimb>hindlimb); CLR; CHD; spondylitis
2 Benign neoplasia	87	13.1	Lipoma; histiocytoma; cysts; adenoma; fibroma; granuloma; unspecified
3 Reproductive	80	12.0	False pregnancy; pyometra; irregular heat cycles; dystochia (physical blockage>uterine inertia)
4 Dermatologic	65	9.8	Dermatitis; mites (cheyletiella>sarcoptes>demodex); alopecia; sebaceous cysts
5 Gastrointestinal	55	8.3	Gastric dilatation/volvulus (GDV); colitis; foreign body obstruction; pancreatitis
6 Ocular	52	7.8	Distichiasis; goniodysgenesis; entropion; red eye; conjunctivitis; glaucoma
7 Aural	33	5.0	Otitis externa
8 Respiratory	33	5.0	Kennel cough; laryngeal paralysis; coughing; pneumonia
9 Cancer	29	4.4	Unspecified; sarcoma; squamous cell carcinoma (SCC)
10 Endocrine	24	3.6	Hypothyroidism; diabetes insipidus
11 Immune mediated	21	3.2	Flea allergy; food hypersensitivity; atopy; gluten-sensitive enteropathy; dust mite allergy
12 Neurologic	15	2.3	Seizures; deafness; meningitis; sacroiliac disorder; vestibular disease
13 Urologic	13	2.0	Cystitis; incontinence
14 Dental	12	1.8	Retained puppy teeth; dental disease; extra teeth; other dental deformity
15 Trauma	11	1.7	Hindlimb; forelimb; reproductive; dermatologic; spine
16 Unknown	10	1.5	Undiagnosed illness
17 Other	8	1.2	Uncodeable
18 Cardiac	7	1.1	Heart murmur; pulmonic stenosis
19 Anal gland	4	0.6	Anal sacculitis
20 Haematopoietic	3	0.5	Anaemia (unspecified); platelet disorder (unspecified)
21 Cerebrovascular	1	0.2	Stroke or cerebral vascular accident
22 Hepatic	1	0.2	Unspecified
Total	666	100.0	