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

Summary results of the Purebred Dog Health Survey for Scottish Terriers

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%.

# **Scottish Terriers**

A total of 278 forms were sent out and 47 were returned, representing 152 live dogs. This breed had a 16.9% response rate (47/278) and it represented 0.34% of all returns (47/13,741).

## **Mortality data**

A total of 59 deaths were reported and this represents 0.37% of all deaths reported in the survey (59/15,881). The median age at death for Scottish Terriers was 10 years and 3 months (min = 6 months, max = 17 years and 6 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 Scottish Terriers. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Scottish Terriers.

| Cause of death |                  | N  | %     | Most common specific causes in descending order          |  |  |  |
|----------------|------------------|----|-------|--|--|--|--|
| 1              | Cancer           | 28 | 47.5  | Type unspecified (liver, pancreas, mammary)              |  |  |  |
| 2              | Old age          | 7  | 11.9  | Old age  |  |  |  |
| 3              | Urologic         | 4  | 6.8   | Kidney failure; bladder stones; urethral obstruction     |  |  |  |
| 4              | Combinations     | 3  | 5.1   |  |  |  |  |
| 5              | Endocrine        | 3  | 5.1   | Cushings disease; Addisons disease                       |  |  |  |
| 6              | Hepatic          | 3  | 5.1   | Liver failure (chronic & acute); liver disease (unspec,) |  |  |  |
| 7              | Cardiac          | 2  | 3.4   | Heart failure  |  |  |  |
| 8              | Dermatologic     | 2  | 3.4   | Unspecified  |  |  |  |
| 9              | Gastrointestinal | 2  | 3.4   | Foreign body obstruction                                 |  |  |  |
| 10             | Infection        | 1  | 1.7   | Bacterial (unspecified)                                  |  |  |  |
| 11             | Neurologic       | 1  | 1.7   | Seizures   |  |  |  |
| 12             | Other            | 1  | 1.7   | Uncodeable   |  |  |  |
| 13             | Perioperative    | 1  | 1.7   |  |  |  |  |
| 14             | Respiratory      | 1  | 1.7   | Respiratory failure                                      |  |  |  |
|                | Total            | 59 | 100.0 |  |  |  |  |

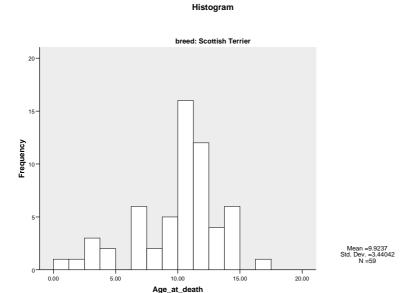


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 59 Scottish Terrier deaths with age at death reported.

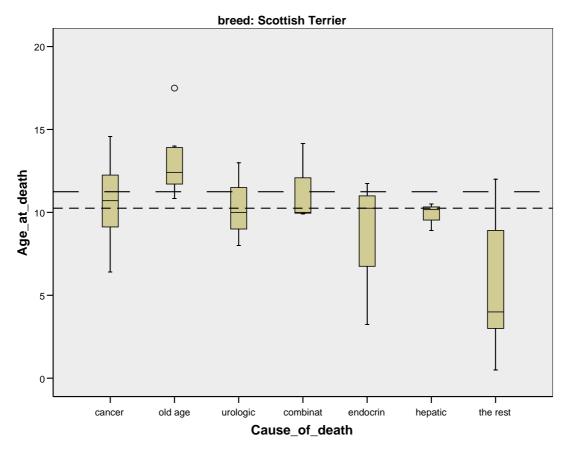


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Scottish Terriers (N=59). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Scottish Terriers. The solid line within each grey box represents the median age at death from the condition.

### Morbidity data

The median current age of the 152 live dogs with a reported age was 4 years and 11 months (min=3 months, max=13 years and 8 months, Figure 3). Health information was reported for 152 live dogs of which 82 (54%) were healthy and 70 (46%) had at least one reported health condition, resulting in a total of 120 reported conditions with a median of 1 condition/dog (min=1, max=6).

The median current age of all healthy dogs with a reported age (N=82) was 3 years and 11 months (min=3 months, max=13 years and 8 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=64) was 6 years and 1 month (min=1 year, max=12 years and 3 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=113) was 3 years and 10 months (min= 1 month, max= 11 years and 3 months, Figure 4). Table 3 shows the disease conditions for Scottish Terriers. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 150 Scottish Terriers with reported gender and neuter status.

| Neuter status |           |          |            |  |  |  |  |  |
|---------------|-----------|----------|------------|--|--|--|--|--|
| Gender        | Intact    | Neutered | Totals     |  |  |  |  |  |
| Female        | 73        | 25       | 98 (65%)   |  |  |  |  |  |
| Male          | 46        | 6        | 52 (35%)   |  |  |  |  |  |
| Totals        | 119 (79%) | 31 (21%) | 150 (100%) |  |  |  |  |  |

Significantly more females were neutered (P=0.0443).

### Histogram

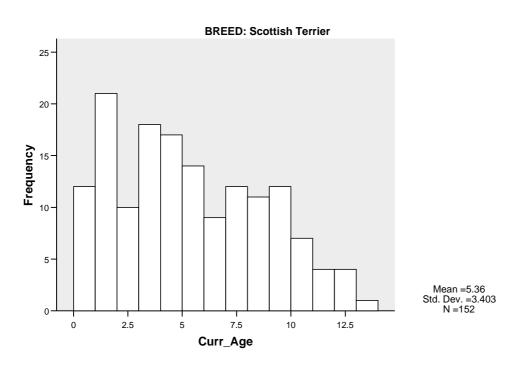


Figure 3. Histogram showing frequency of current age in years for the 152 live Scottish Terriers with age reported.

# Histogram

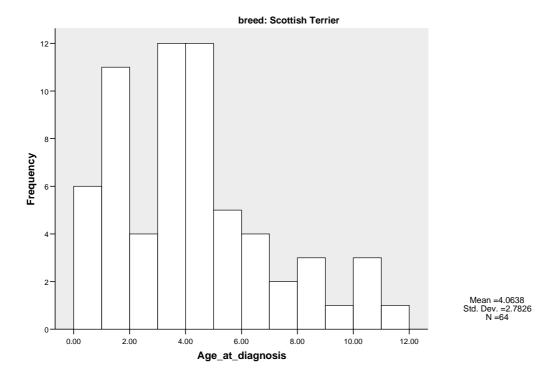


Figure 4. Histogram showing frequency of age at diagnosis for the 64 Scottish Terriers with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

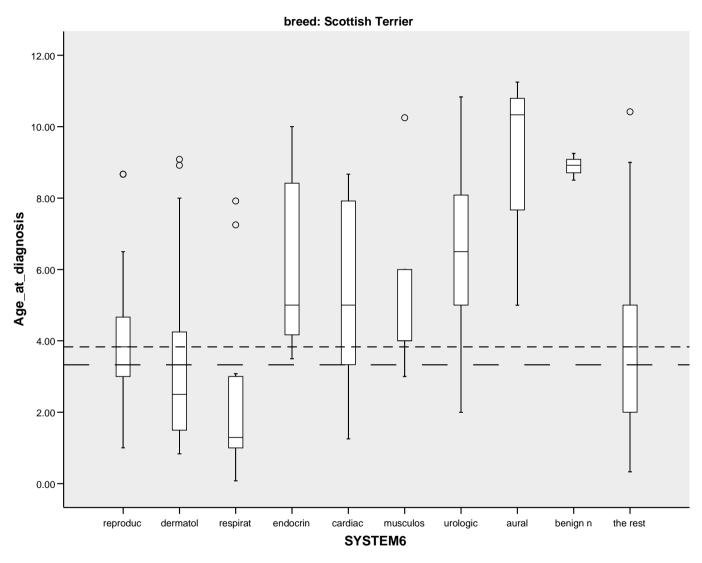


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Scottish Terriers (N=64 dogs with 113 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (---) is the overall median age at diagnosis for Scottish Terriers. 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 Scottish Terriers.

| -                 |                  | All con | ditions |  |
|-------------------|------------------|---------|---------|--|
| Disease condition |                  | N       | %       | Most common specific conditions in descending order  |
| 1                 | Reproductive     | 34      | 28.3    | Dystochia (uterine inertia>physical blockage); infertility; pyometra; agalactia; vaginitis |
| 2                 | Dermatologic     | 18      | 15.0    | Dermatitis; parasites (unspecified); recurrent pyoderma; seborrhoea                        |
| 3                 | Respiratory      | 14      | 11.7    | Kennel cough; noisy breathing  |
| 4                 | Endocrine        | 7       | 5.8     | Cushings disease; hypothyroidism   |
| 5                 | Cardiac          | 5       | 4.2     | Heart murmur (without clinical signs>unspecified); arrhythmia                              |
| 6                 | Gastrointestinal | 5       | 4.2     | Diarrhoea; campylobacter; foreign body obstruction; pancreatitis                           |
| 7                 | Musculoskeletal  | 5       | 4.2     | Patellar luxation; CLR; DJD; elbow dysplasia   |
| 8                 | Neurologic       | 5       | 4.2     | Seizures; cerebellar atrophy; weakness   |
| 9                 | Urologic         | 5       | 4.2     | Cystitis; kidney disease unspecified; incontinence (unspecified)                           |
| 10                | Dental           | 4       | 3.3     | Dental disease; defect other than extra teeth; retained puppy teeth                        |
| 11                | Immune mediated  | 4       | 3.3     | Gluten-sensitive enteropathy; flea allergy; food allergy; allergy (unspecified)            |
| 12                | Ocular           | 4       | 3.3     | KCS; corneal foreign body; persistent papillary membrane (PPM); unspecified                |
| 13                | Aural            | 3       | 2.5     | Otitis externa   |
| 14                | Benign neoplasia | 3       | 2.5     | Adenoma (mammary); histiocytoma (skin); lipoma   |
| 15                | Hepatic          | 3       | 2.5     | Enlarged liver; hepatitis; polycystic liver disease  |
| 16                | Unknown          | 1       | 8.0     | Undiagnosed illness  |
|                   | Total            | 120     | 100.0   |  |