

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

Summary results of the  
Purebred Dog Health Survey  
for Maremma Sheepdogs

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%.

## Maremma Sheepdogs

A total of 64 forms were sent out and 13 were returned, representing 35 live dogs. This breed had a 20.3% response rate (13/64) and it represented 0.09% of all returns (13/13,741).

### Mortality data

A total of 19 deaths were reported and this represents 0.12% of all deaths reported in the survey (19/15,881). The median age at death for Maremma Sheepdogs was 10 years (min = 1 year and 2 months, max = 14 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 Maremma Sheepdogs. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Maremma Sheepdogs.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	8	42.1	Ttype unspecified (liver, unspecified)
2 Cardiac	4	21.1	Heart failure; heart attack; cardiomegaly
3 Combinations	1	5.3	
4 Immune mediated	1	5.3	Unspecified
5 Neurologic	1	5.3	Seizures
6 Old age	1	5.3	Old age
7 Respiratory	1	5.3	Laryngeal paralysis
8 Sudden death	1	5.3	
9 Unknown	1	5.3	
Total	19	100.0	

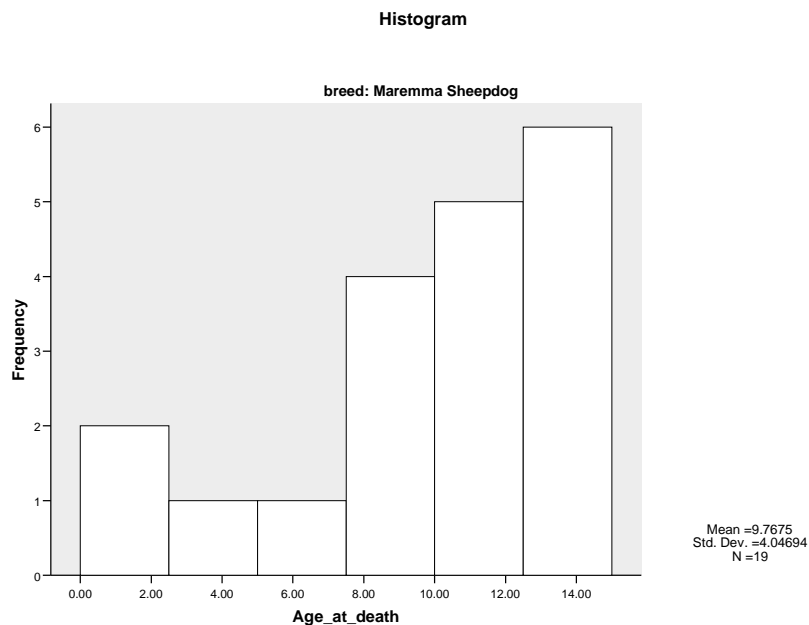


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 19 Maremma Sheepdog deaths with age at death reported.

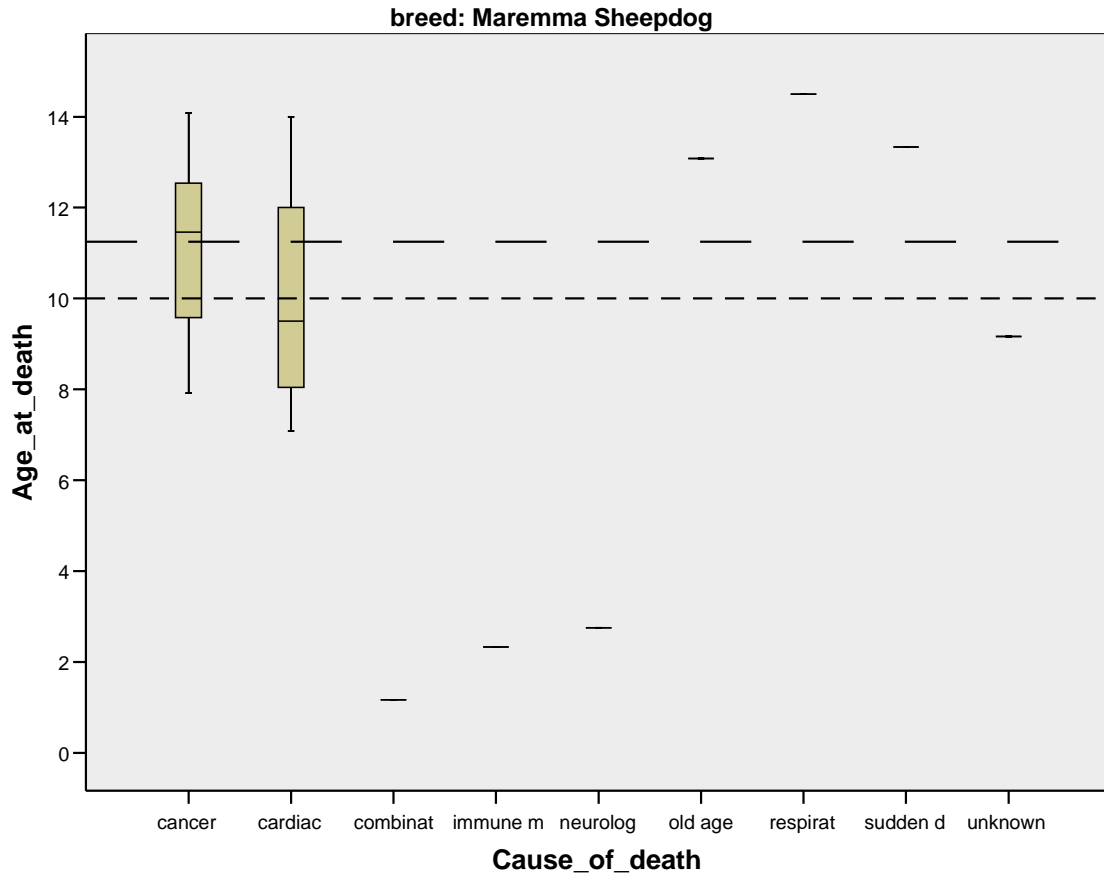


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Maremma Sheepdogs (N=19). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Maremma Sheepdogs. The solid line within each grey box represents the median age at death from the condition.

### Morbidity data

The median current age of the 35 live dogs with a reported age was 6 years and 9 months (min=1 year and 3 months, max=14 years and 10 months, Figure 3). Health information was reported for 35 live dogs of which 27 (77%) were healthy and 8 (23%) had at least one reported health condition, resulting in a total of 13 reported conditions with a median of 1.5 conditions/dog (min=1, max=3).

The median current age of all healthy dogs with a reported age (N=27) was 6 years and 5 months (min=1 year and 3 months, max=14 years and 10 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=7) was 8 years and 8 months (min=5 years and 5 months, max=11 years and 5 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=12) was 3 years (min= 5 months, max= 9 years, Figure 4). Table 3 shows the disease conditions for Maremma Sheepdogs. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 35 Maremma Sheepdogs with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	14	7	21 (60%)
Male	12	2	14 (40%)
Totals	26 (74%)	9 (26%)	35 (100%)

There was no association between gender and neuter status (P=0.2066).

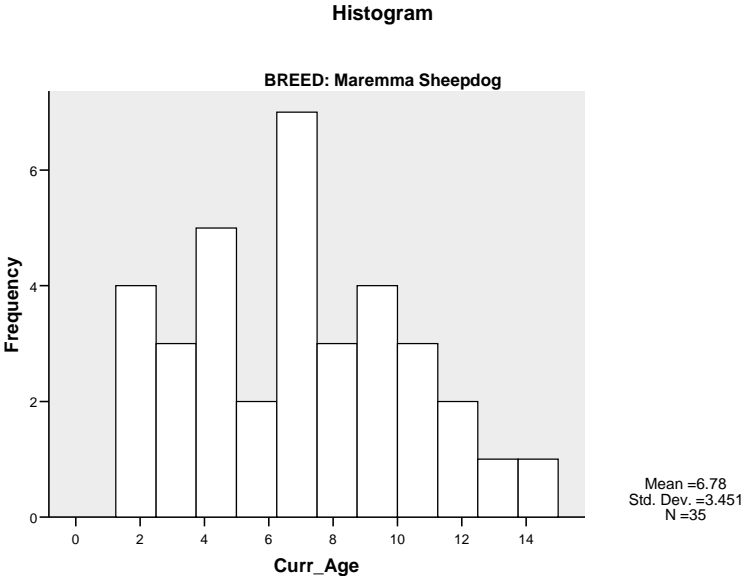


Figure 3. Histogram showing frequency of current age in years for the 35 live Maremma Sheepdogs with age reported.

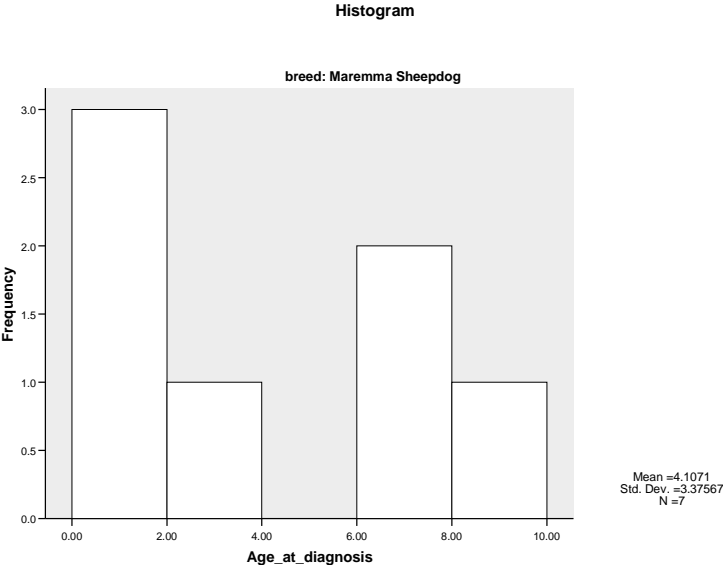


Figure 4. Histogram showing frequency of age at diagnosis for the 7 Maremma Sheepdogs with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

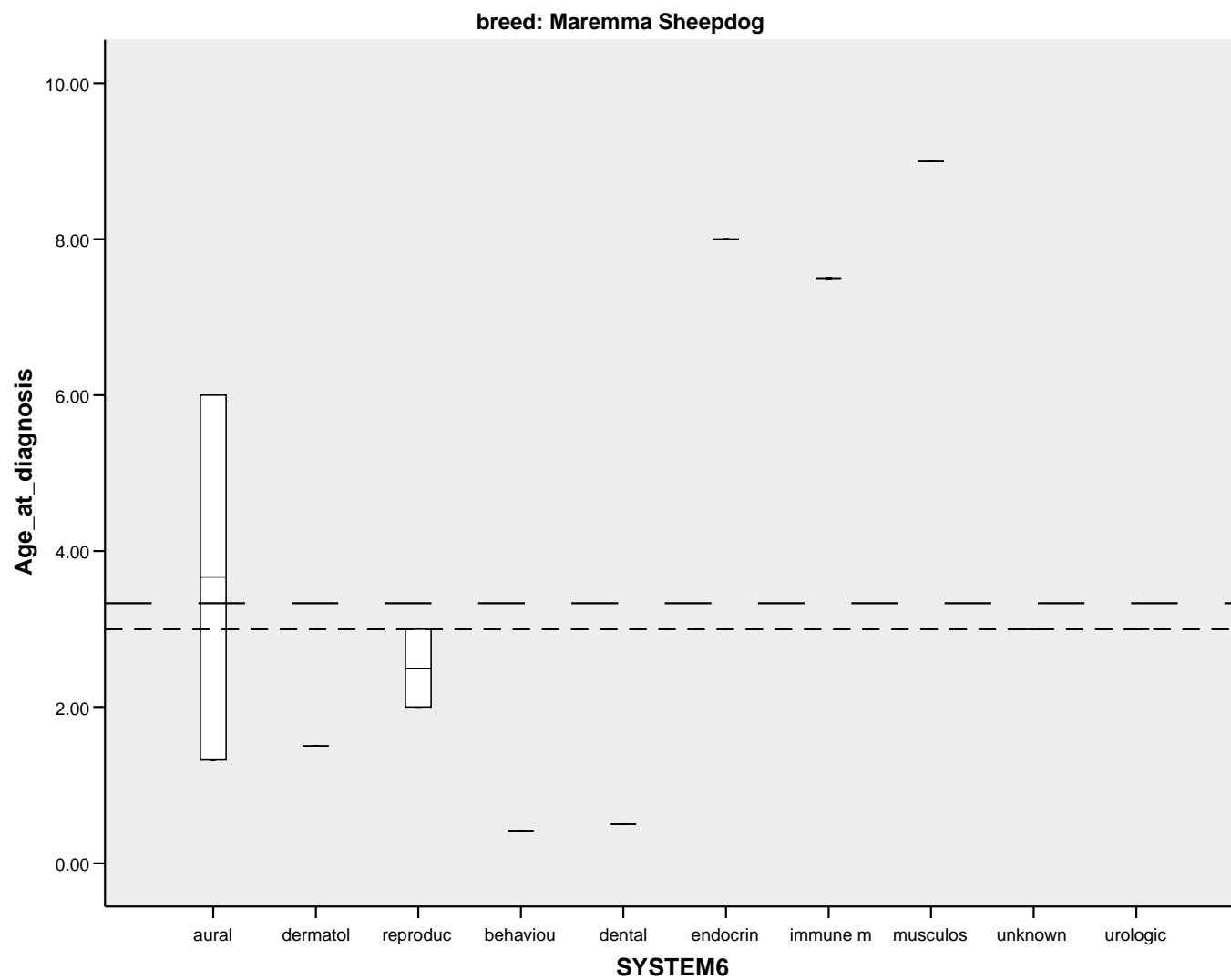


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Maremma Sheepdogs (N=7 dogs with 12 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Maremma Sheepdogs. 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 Maremma Sheepdogs.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Aural	2	15.4	Otitis externa
2 Dermatologic	2	15.4	Dermatitis; pyotraumatic dermatitis
3 Reproductive	2	15.4	False pregnancy; inability to breed
4 Behaviour	1	7.7	Unspecified
5 Dental	1	7.7	Retained puppy teeth
6 Endocrine	1	7.7	Hypothyroidism
7 Immune mediated	1	7.7	Unspecified
8 Musculoskeletal	1	7.7	Arthritis
9 Unknown	1	7.7	Undiagnosed illness
10 Urologic	1	7.7	Cystitis
Total	13	100.0	