



UNIVERSITY OF NEW ZEALAND



New Zealand working farm dogs: Population features and prevalence of

clinical findings.

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Introduction

There are two main types of working farm dogs in New Zealand,



Heading dogs and Huntaways (Figure 1) with each used for different forms of livestock work. Despite working farm dogs being considered essential to livestock farming there is limited knowledge about their health status, or risk factors that can influence health and/or working careers. TeamMate is a longitudinal study designed to investigate these risk factors. Presented are the population features of 628 working farm dogs enrolled in TeamMate and the proportion of dogs with abnormalities detected on clinical exam.

Methods

Dog owners and all their dogs older than 18 months of age and in full work were recruited from a pool of Vetlife[™] clients and enrolled in the program. Information was collected about the farm, owner and individual dogs. Clinical examination of all dogs were performed by veterinarians on enrolment and on follow-up visits approximately every 6 months. All abnormalities were recorded independently of clinical significance. This poster presents data collected at each dog's initial clinical examination.

 Table 1: The number and proportion of dogs of each breed, males and females, and neutered dogs

Figure 1: Examples of a New Zealand Heading dog (left) and Huntaway (right).



of each sex.

Variable	Number of dogs	Proportion (%)
Type of dog		
Heading dog	308	49.0%
Huntaway	301	47.9%
Other	19	3.1%
Sex and neuter status		
Females	292	46.5%
- neutered	29	9.9% of females
Males	336	53.5%
- neutered	12	3.5% of males

 Table 2: Prevalence of clinical abnormalities found in 628 NZ working farm dogs.

Body system affected	Number of dogs	Prevalence	95% CI
Musculoskeletal	266	42%	39% - 46%
Skin	220	35%	31% - 39%
Teeth	177	28%	25% - 32%

Figure 2: Histogram with density plot showing the proportion of body weights in working farm dogs. Vertical lines indicate the median body weights in each breed.



Eyes	66	11%	8% - 13%
Reproductive	45	7%	5% - 9%
Other	27	4%	3% - 6%

Results

The median age was 4 years (Range: 1.5 - 14 years). Owners had a median of 4 adult dogs in work. The ratio of Heading dogs to Huntaways was 1.0 (Table 1). Heading dogs were lighter on average (Figure 2), however body condition scores (BCS) did not vary significantly between types. 65% of dogs had a BCS of 4 or 5, which is considered ideal (Figure 3). Clinical abnormalities were recorded in 435 dogs (72%). Musculoskeletal problems were the most common with 67 of 266 also being lame on trot (Table 2).

Body condition score (1 - 9)

Figure 3: Histogram showing the distribution of body condition scores on a 1 to 9 scale where 4 to 5 is considered ideal (WSAVA, 2013). Dashed line indicates the median.

Discussion

This is the first time the health of working farm dogs has been surveyed directly without relying on owner reports or clinical records. A majority of dogs were in good body condition. Neutering dogs was found to be rare. Many dogs had abnormal findings on clinical exam, but this does not equate disease and further investigation is needed. Musculoskeletal system, skin and teeth abnormalities are common in working farm dogs and should be investigated as possible risk factors for further illness, reduced welfare, retirement or death.