

Grass-Eating Behaviour in the Domestic Dog, *Canis familiaris*

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Certificate

I certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree or qualification.

I certify that any help received in preparing this thesis and all sources used have been acknowledged in the thesis.

Samantha Bjone

Date

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“A blade of grass a day keeps the vet away.”

~Unknown Dog

Abstract

There is a paucity of information on grass eating in the domestic dog, *Canis familiaris*. Various explanations have been proposed for grass-eating behaviour including grass as an emetic, laxative, or as self-medication of gastrointestinal distress. In addition, grass-related commercial products are marketed as digestive aids for dogs. However, there is no known explanation for grass-eating behaviour as there have been no controlled experiments that investigate it. Several aspects and theories of grass eating were explored in a series of five studies for the current thesis. Grass-eating behaviour was common among dogs observed in their home environment and dogs observed throughout the controlled studies: 95 of the 99 dogs that were observed ate grass. There were 2,769 observed grass-eating events during 1,444 minutes (24.1 hours) of time spent eating grass. It was found that grass eating is an innate behaviour that can be influenced in 5- to 7-week-old puppies by their mother's grass eating habits. Two self-medication theories were investigated and dogs in the current project did not eat grass to self-medicate a naturally harboured nematode burden or to moderate a mild gastrointestinal disturbance. The high frequency of grass eating compared with the very low incidence of vomiting also did not support the theory that dogs eat grass as an emetic. However, the prevalence of grass-eating behaviour in wolves, puppies, and adult dogs suggests a possible biological purpose. Grass may be seen as a food source as dogs were less likely to eat grass when satiated. Similarly, dogs spent more time eating grass the longer it had been since their daily meal. Further research could investigate the chemical composition of grass and the putative laxative effects of grass or its various components.

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