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The prevalence of lameness on New Zealand dairy farms: A comparison of farmer perception and mobility scoring

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2012
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A thesis presented in partial fulfilment of the requirements for the degree of

Master of Veterinary Studies

Institute of Veterinary, Animal and Biomedical Sciences

Massey University

Palmerston North, New Zealand

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2012
Abstract

Several studies have compared the prevalence of lameness as perceived by farmers with the prevalence of lameness assessed using locomotion or mobility scoring. However all of these studies have been undertaken in housed cows; cows at pasture have not been studied. This study was designed to identify the difference between farmer perception of lameness and that identified by mobility scoring under New Zealand conditions in cows kept at pasture. Data were collected from 60 herds, 27 in the South Island and 33 in the North Island. All farms were visited on one occasion at the expected peak time for lameness, i.e. October/November for North Island farms and January / February for South Island farms. Data were collected via a questionnaire which included details on farm size, productivity and reproduction as well as general health. The latter included a farmer estimate of the number of lame cows which were currently on-farm. Whole herd mobility scoring, using the DairyCo 0 – 3 scale, was then used to estimate herd lameness prevalence. In the North Island, average herd size was 294 and average production was 357 kgMS/cow/year, while in the South Island the figures were 580 and 406 kgMS/cow/year, respectively. Of the 60 farms, lame cows were treated by farm staff only on 38 farms, by a combination of veterinarian and farm staff on 21 farms, and on one farm by veterinarians only. On average, farmers estimated that 2.2% of their herd was lame (range 0 to 20%), while mobility scoring identified that, on average, 8.1% of the herd was lame (mobility score ≥2) (range 1.2 to 36%). This means that on a herd basis, only 27.3 % (range 0 to 95%) of the cows with reduced mobility had been identified as lame by farm staff. There was no significant effect on herd size on this percentage (P=0.8), nor was there a significant differences between the two islands (South Island 28% ± SEM 4.2; North Island 23% ± 2.6). The prevalence of lameness in this study was much lower than that reported in housed cattle, but the percentage of cows with reduced mobility recognised as lame was very similar, even though in pasture-based cattle, farmers spend more time watching cows walk (to and from milking). This study shows that there is significant room for improvement in the detection of lameness on New Zealand farms, and suggests that routine mobility scoring, particularly at critical periods, could be a valuable tool for identifying lame cows.
Acknowledgements

I am whole-heartedly thankful to my supervisor, Richard Laven, whose guidance, encouragement, supervision and support throughout this process has enabled me to develop a concrete understanding of lameness. Also, I am grateful for him providing me with funding, farms in the Manawatu region and contacts throughout New Zealand. His assistance with my statistical analysis is also very much appreciated.

I would like to show my gratitude to Neil Chesterton for opening his beautiful home to me while I was in the Taranaki region and setting me up with farms in his area. Also, I truly appreciate Mark Bryan welcoming me to the South Island and his assistance with accommodation and farmer contacts on the South Island.

Thank you to all of the farmers for their cooperation in allowing me to visit their dairy farms and collect data. Without their assistance and time, my thesis would not have been made possible. To my grandparents and parents, I am thankful to have had such a loving and grounded upbringing. Your support and encouragement has provided me with the opportunity to continue on with my studies, for which I am forever grateful.
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