Prevalence of low virulent footrot in murry region of nsw

Project Title:[G1]Pilot study on the prevalence of low virulent footrot in Murry region of NSW.[G2]

Hypothesis

Low virulent footrot has production, economic and social impacts on affected properties

Objectives of the study[G3][G4][G5]

The primary objective of this pilot study is to find out if low virulent footrot is seen as a problem by the farmers in the Murray Area of NSW and to what extent the disease impacts the farms economically and socially. The study also aims to determine if the affected farmers have been able to deal with the impacts of the disease, and the cost of implementing treatment and control methods.[G8]

Importance of the study

Ovine footrot is a clinically significant disease known to have negative welfare impacts and economic consequences (Marshall et al., 1991, Rather et al., 2011). Virulent footrot causes severe underrunning of the hoof resulting in severe lameness in affected sheep and subsequent social and economic impacts (Stewart et al., 1986, Dhungyel et al., 1013). The low virulent strains, however, do not tend to progress as far and therefore the impacts of this form are less apparent (Stewart et al., 1986). It appears that because these less severe low virulent forms do not have as significant of an impact on the production levels of a farm or the related social and economic aspects, there has been very little research conducted on this form. The

majority of literature available on footrot focuses on the virulent strains, and therefore the social and economic impacts of the low virulent forms are largely unknown.[G9][G10][G11][G12][G13]

This project aims to address this gap in the literature and determine if low virulent footrot is a common problem faced by farmers in the area and the exact impact it has on them. Surveying farmers that have had a history of footrot on their properties will give more insight on the costs of preventing and controlling the disease. The study will show the impacts this disease has had on the sheep industry and whether the farmers feel that implementing treatment and control methods or undertaking an eradication scheme is worth the cost.

The study will also determine a link between footrot prevention and control methods used on different properties to the prevalence of the disease. These results will be important to the sheep industry by determining which methods have the highest level of success in controlling the disease. This information can be utilised by farmers when implementing control schemes on their properties.

Experimental design

The study will involve surveying sheep farmers in the Murray area of NSW. As this is a pilot study, participating farmers will be selected based on contact with local district veterinarians and animal health officials as well as their individual willingness to participate in the survey.

10 to 15participants will be interviewed during an on-farm visit. Questions will involve the history of footrot on the property, past and present[G14][G15][G16]prevention, treatment & control methods and eradication schemes, the quarantine protocols in place and the cost of implementing these strategies. In order to determine the social and economic impacts of the disease and also individual attitudes towards footrot, questions will also be asked about[G17]each farmers experience with the disease on their property.[G18][G19]

Statistical Evaluation

As the study involves surveying the participant's experiences with footrot much of the data collected will be qualitative rather than quantitative. Where possible the data will be analysed for basic[G20]summary statistics and, depending on the data collected, basic linear regression analysis may be required.

Timetable

Date	Task
Februa ry – 20 March 2017	Work with district vets to find participants for the study[G21][G22] Schedule on-farm visits to conduct the survey[G23][G24]

15 March 2017	Research Proposal
18 March 2017	Finalise Survey
20 March – 7 April 2017	Data Collection
28-31 March	Holbrook-Albury-Deniliquin farm visits
1-7 April	Telephone surveys if necessary
10 April – 20 April 2017	Statistical evaluation
20 March	Conference Paper – Draft complete by May

– 18

May   18

2017

1 June   Final Conference Paper

2017   submission

5 – 9

June   Oral Presentation of

         study findings
2017

Budget

The main costs associated with the study are those involved with travelling

to the farms to conduct on-farm visits.

$500 – Travel and accommodation charges for conducting the field survey

Human Ethics approval for conducting the survey

Approval No: 2016/557

References

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