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FarmLink Research Report 2018

Exclusion Feeding for Lambs in Drought

Trial Site Location FarmLink region

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Introduction

Livestock producers are exploring all options to optimise feed utilisation to ensure animal welfare, pasture and soil preservation and production issues are effectively managed.

Early introduction of lambs to grain and the use of exclusion feeders are proven strategies to maximise lamb production per kilogram of supplementary feed supplied, especially during periods of extended dry conditions (Alcock, D, July 2006; White, A & Hegarty, R, 2014). Alcock (2006) reported that exclusion feeding could increase lamb weight gain by 7.2kg compared to non-exclusion feed lambs, with lambs reaching sufficient weight to ensure good post-weaning survival.

Widescale adoption of these strategies has not occurred in the mixed farming zone of southern NSW. Producers typically supplementary feed when pasture is short using feeders or trail feeding ewes and lambs together. In this situation the ewes receive a disproportionate amount of feed and lamb weight gain, weaning times and profitability can suffer.

FarmLink and SheepMatters are endeavouring to investigate the difference in performance of lambs and the best management practices for weight gain to a market specification.

Project Partners



Funding Partners



Background

In times of drought when there is reduced productive pasture to graze, sheep graziers are becoming increasingly reliant on supplementing the diet of stock with grain. Enterprises are looking increasingly to finish lambs in intensive/ feedlots to reduce stocking pressure, gaining the ability to maintain production during periods of reduced pasture quality, allowing greater flexibility through seasonal conditions as well as opening up opportunities to expand existing markets and turn over a more consistent product.

The challenge to producers is remaining financially viable and reducing the costs of inputs in their production system and also meet market specifications in a time efficient manner.

Studies indicate that early introduction of foods to lambs before weaning increases feed acceptance, conditioning the rumen villi to feed concentrates. By incorporating the use of creep feeding systems, farmers can reduce grain consumption by allowing selective access of lambs to feed, whilst excluding the dams. This method significantly reduces the cost of inputs.

By introducing grain into the diets of lambs before weaning, we test will test the hypothesis that lambs will gain weight more quickly, attain a more efficient conversion rates, and meet market specifications in a shorter turnover period.

The impact of the results pertaining to this research will improve the bottom lines of producers Australia-wide who are using grain finishing – this would be achieved by improving the efficiency and economy of time and resources needed to get lambs to market.



Image 1- some of the participants in the Exclusion Feeder Trial inspect the creep feeding panels.

Methodology

The following approach will be taken at the six sites over the course of this project this year:

- Pre-lambing two ewe mobs will be created & treated equally with the exception that one mob (trial) will receive their supplementary feed via the exclusion feeder system.
- FarmLink will provide 1 creep feeding panel to each participant and farmers will be assisted in the setting up of the exclusion feeder.
- Participants involved in the exclusion lamb feeder trial will all follow the same methodology outlined in the protocol to measure lamb weight/ weight gain while they are on their dams (ewes) and through to weaning and post weaning in both the control mob (no exclusion) and trial mob (exclusion). The ewe's body weight and condition score to be measured at pregnancy scanning and weaning.
- Feed provided to stock is to be recorded and documented, including that of 'control' flocks without grain in order to accurately compare the difference in performance.
- All sheep in the trial (ewes and lambs) will be tagged with an electronic ear tag (eID) to record performance. A maximum of 200 ewes for each mob (control and trial mobs). Both mobs must be either both twin or single bearing ewes, or an equal mix of twin and single ewes. The tags for the project are donated by Shearwell Australia.
- The ewes will be inducted with their eID tag at pregnancy scanning with their age, genetic background, ram numbers /genetics joined to, pregnancy status, body weight and condition score recorded. Date of joining, percentage of rams and how long rams were in with ewes will also be recorded.
- Paddocks will be assessed by producers with the support of Sheepmatters at pre-lambing, lamb marking, weaning and post weaning for paddock size, pasture type and KG/ DM/ HA (FOO). Any movement of mobs into new paddocks to be recorded by the grower on a document supplied by Sheepmatters.
- The lambs will be inducted with an eID tag at lamb marking with their body weight, trial/ control mob and sex recorded.
- All supplementary feed to be used will need a feed test (grain / pulses / pellets / hay / straw etc). All feed testing will be done by the same independent feed testing laboratory, Agrifood Technology. Cost of the feed test covered by Sheepmatters to a maximum of 2.
- Information and experience will be captured throughout the program to support communication and monitoring and evaluation activities. ■