

FITT Final Report (09.....) (Winter Ewe management workshops)

Years of trial: 2009

Group that proposed the trial: Southland and Otago Bearing Management Group

Region: Southland

Contact person(s): Keith Milne (farmer), John Scandrett (Farm Consultant)

(1) Introduction – background to the project

Sheep production systems continue to face rising costs and challenges. Traditional management of ewes from mating to scanning involving daily shifts on to new breaks has often resulted in a loss of liveweight and body condition score. Previous on-farm work supported by FITT on the South Otago Monitor farm has shown that an alternate feed management system can be used successfully.

The traditional winter management practice is to manage the feed supply available from April until lambing (mid August) using break feeding on pasture and brassica crops. Over the years this has often had an impact on ewe performance as the management focus is the feed supply not the animal requirement.

Farmers involved in the South Otago Monitor farm field days had noted that changing their early pregnancy feed management had resulted in a reduction in bearings. This raised the question as to how and why this might be the case especially when considering that the South Otago monitor farm (SOMF) had a history of significant vaginal prolapse (bearings) during the final month of pregnancy.

(2) Key aims – what was the project trying to achieve?

This project is part of a successful SFF application that continues the work previously completed on the South Otago Monitor Farm where feed management in early pregnancy resulted in a reduction in bearings.

As a result of the previous research it was apparent that there were wider benefits to farmers from this information than just reducing bearing incidence. Improved understanding of the relationship between winter ewe nutrition, feed management, productivity and profitability is critical to the sheep industry. Many farmers focus on ewe

management before pregnancy and again around lambing but lose sight of the importance of the weeks in between.

The objective was to run a series of workshops on feed management of ewes, focussing on early pregnancy and ewe nutrition.

These workshops were run as part of a winter seminar series by the Sheep and Beef Council called 'Banking the gains'. They were held in Gore, Mosgiel and Alexandra and reached an audience of over 200, mainly farmers and some agribusiness people.

(3) Key findings & recommendations for farmers

The seminar topics were developed from the results of the previous projects (supported by both SFF and Meat and Wool) that were based on different ewe grazing managements in early pregnancy (to scanning).

The farmers involved changed their winter management for a significant portion of their ewe flock. Using intensive feed budgeting they increased the size of the allocated break and reduced shifting of the mobs (either 2 day or 4 day shifts). The aim was to maintain the BCS and minimise any weight loss during the period. The hypothesis was that significant loss of condition or a series of physiological checks through temporary underfeeding could be contributing to the incidence of bearings. However as already outlined there were more benefits from this management including reduced cost (management time), improved feed management and utilisation and more settled sheep.

The work was successful on the South Otago Monitor farm as ewe liveweight was maintained around the target weight much better than in previous seasons. Bearing incidence was statistically significantly lower in the 4 day shift mob (0.9%) than in the traditionally managed ewes being shifted every two days (2.9%). It has been noted that the practice is spreading on to other farms without bearings problems so it is important for farmers to better understand the process and the objectives as it not simply 'throwing away the live strand'.

As a result the following two topics were developed and presented:

'Early Pregnancy feeding for sheep' – Dr David Stevens

'No more bearings' – John Scandrett

The key outcomes

Early pregnancy management

- Ewe requirements
- Body condition scoring and targets BCS
- Feed allocation

And understanding:

- Maintaining the ewes on an even plane of nutrition from pre tup to scanning
- Changing how feed is allocated to the stock over this time – ewes shifted less frequently (every 4 days)
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(4) Workshop questions

What were the issues and questions raised by the farmers at the workshops?

- How big can the mobs be?
- It wont work with small/big mobs?
- What happens on day 3/4 when the feed runs out?
- What happens when it's wet – don't they trample a larger area?
- How much hay do we need to allocate?
- What are the issues if we need to graze the swedes earlier than scanning?

Some of these questions were able to be answered by previous experiences but this reinforced the importance of the current SFF project that aims to provide some more answers when the practice is implemented on more intensive sheep farms with heavier soils.

(5) Conclusions – what are the 'take home' messages?

Early Pregnancy Feeding

- Start planning early to balance the needs for feed before mating and in the winter
- Consider the need for maintaining BCS
- Know the value of the feed compared to the need to use BCS as a buffer
- Early pregnancy feeding sets the scene for this seasons performance and lifetime performance
- Changing the pattern of feeding may help prevent metabolic problems

No more Bearings

The 4 day shift approach is now being trialled on 3 Southland intensive sheep properties. Early results indicate similar outcomes to the South Otago experiences. These included reduced labour inputs, settled sheep and maintained liveweight pre scanning.

- On the SOMF the 4 day feeding regimen resulted in settled sheep contrary to farmer expectation. Observation suggested that sheep were not bingeing which was supported by the fact that the added supplement wasn't always utilised even though the feed budget suggested it was needed.

Bearing incidence was studied in detail on the SOMF over 4 seasons

- There was no relationship found between liveweight, liveweight change or body condition score in the last 6 weeks of pregnancy and the incidence of bearings
- Focussing on maintaining an even liveweight and body condition score profile in early pregnancy (to scanning) through accurate feed budgeting was effective in reducing the incidence of bearings

- The 4 day shift approach shows significant promise as a tool for hill country farmers to help further reduce the incidence of bearings while providing an easy to use feed budgeting and management approach.

(6) How will the group apply the project results?

The seminar series forms part of the communication objective of the SFF project and it is important that we reach interested farmers at the beginning of the project and therefore aim to keep them better informed of the results over the life of the funding.

(7) Contact points for more information

Dr David Stevens, AgResearch, Invermay

John Scandrett, Scandrett Rural, Invercargill

Randall Aspinall, PGG Wrightson Consulting, Invercargill

References for Bearings

- McLean, JC (1956, 57, 59, 60) completed a number of experiments regarding the incidence of bearings.
- A paper by David Noakes (1999) presented a long list of factors thought to be involved in the disorder.
- Litherland et al (2000) considered bearings when looking at “Management systems for optimising reproductive performance in breeding ewes” (MWNZ project 98PR/44).
- Hilson et al. (2002) “An Epidemiological study of vaginal prolapse in ewes” (funded by AGMARDT, WoolPro, and Meat NZ) was completed over 2000-2002. This surveyed 140 farms in Southland and the Hawke’s Bay for bearing incidence, and monitored specific factors thought to be involved.
- Dolby, Dr R (2005 unpubl. paper). Bearings: What Contributes to These?
- FITT Project 2005: 05FT168 “Reducing Bearings on High Performance Sheep Farms”
- SFF Project 2006: L06/064 “Reducing Bearings on High Performance Sheep Farms”
- FITT project in Hawkes Bay (06FT176) – “Grazing management to reduce bearings” Ewes (140) were exchanged between 2 properties to be fed different amounts of autumn saved pasture in late pregnancy

(8) Appendices –extra information

The two presentations are attached.

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Prepared by: M Casey, PGG Wrightson and Dr David Stevens, AgResearch
Efforts have been made to quantify the extent of the problem and an average rate of 3 to 7% of the flock has experienced a bearing between 2002 and 2005.

An initial study of the flock in 2005 found no relationship between liveweight, liveweight change or body condition score in the last six weeks of pregnancy and the incidence of bearings. Blood samples taken at the time of the prolapse were paired with samples from unaffected ewes at the time of birth. There were no significant relationships between blood metabolic parameters and bearing incidence that would explain bearing incidence.

A further study was done in 2006 (funded by the SFF) to examine anecdotal evidence that feeding during early pregnancy may help reduce the incidence of bearings. Ewes were split into two mobs in mid-May and fed either on 2 or 4 day shifts until pregnancy scanning, both at the same allowance. The mobs were bought back together from mid-July until lambing and bearing incidence recorded. This produced a promising result with bearing incidence being 3.0% in the 2 day shift mob but only 0.7% in the 4 day shift mob, even though liveweight and BCS changes were similar in both flocks.

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