Quality wool production at lower cost

Peter Metcalfe
peter.metcalfe@agric.wa.gov.au

Follow this and additional works at: http://researchlibrary.agric.wa.gov.au/journal_agriculture4

Part of the Nutritional and Metabolic Diseases Commons, Sheep and Goat Science Commons, Sustainability Commons, and the Veterinary Infectious Diseases Commons

Recommended Citation
Available at: http://researchlibrary.agric.wa.gov.au/journal_agriculture4/vol35/iss1/3
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
For the wool industry to maintain its significance in Western Australia, other wool growers will need to improve the productivity of their systems (see Kelly and Marshall 1993). This improved productivity will be driven by a change to later lambing, which offers three main benefits:

• Supplementary feed for ewes is eliminated in most years.
• Stock numbers can be increased.
• Less tender wool is produced.

The change to a later time of lambing needs to be integrated with pasture management; grass seed control; worm, blowfly and lice control; shearing; and ewe, ram and weaner management.

Making a profit from wool

There are many specialist wool growers who are making a profit at 1993 prices. They have adopted the following features in their wool production systems:

• ewes lambing in late winter;
• large numbers of sheep per unit of labour;
• quality sheep;
• quality pastures;
• low cost, sheep husbandry;
• good production records; and
• good market and sales information.

Low wool prices are forcing farmers to reduce their sheep management costs but, fortunately, cost cutting is not resulting in lower wool production, poorer wool quality or lessened sheep care on the best wool growing properties.

By Peter Metcalfe, Specialist Sheep and Wool Extension Officer, South Perth

Lambs are weaned early—12 weeks from the start of lambing—to allow ewes to gain body weight while still on green feed.
Ewe management
A five-week February-March mating is recommended for best management of ewes. Ewes lamb onto selected high quality feed paddocks, which have minimal worm contamination as a result of being grazed by wethers only.

Lambs are weaned early—12 weeks from the start of lambing—to allow ewes to gain body weight while still on green feed.

Weaner management
Late winter-dropped lambs have the ability to obtain higher growth rates than early-born lambs because their mothers are on better feed and produce more milk. By the end of October these lambs are usually only 2 kg lighter than autumn-born lambs. Good quality worm-free pastures must be available for weaners, and grass control is essential.

Feeding lupin grain has overcome problems previously associated with weaner management at the end of the growing season. Lupin grain is easily handled and provides an ideal supplement for weaners. The low cost production system involves feeding lupins according to feed availability and weaner weight. Low rates fed early are more effective than high levels of grain feeding when weaners reach critically low weights.

Weaners require a low lupin supplement of 30–50 grams per head per day when half of the subterranean clover pasture hays off and up to the time that stubbles or fodder crops become available. As the grain is eaten out of stubbles, weaners need lupins at 30–50 grams per head per day, and are moved from stubbles onto pasture to be fed low rates of lupins until the break of season. The maximum rate of lupins fed to weaners at any stage is 150 grams per head per day.

Buying lupins directly from the header during harvest can result in significant savings in the cost of supplementary feed.

Feeding lupin grain. Buying lupins directly from the header during harvest can result in significant savings in the cost of supplementary feed.

Animal health
Opportunities need to be taken to monitor sheep health to improve the effectiveness of disease and pest control treatments. For example, weaner weights taken to help farmers decide on grazing and feeding strategies can be used to monitor weaner health.

The Department of Agriculture's Northam office has developed an innovative weighing trailer so that groups of farmers can monitor sheep body weights in their flocks.

Designed by adviser Trevor Lacey, the weighing trailer will be available for use by farmers in the Avon District, but there is potential for its use in other wool growing areas. By using the trailer, farmers will know the average liveweights of a sub-group of the flock, and will be in a better position to make management decisions for that flock.
The wool industry needs to improve its productivity to lift its profitability. Fortunately, leading wool growers are making a profit at 1993 wool prices; others can improve profitability by following their lead to change to a late winter lambing.

A change in the time of lambing, however, needs to be integrated with cropping and pasture management, grazing and feeding strategies, sheep husbandry and sheep health programs.

Feeding lupins has overcome problems associated with lightweight weaners over summer.

Low cost quality wool production requires improved monitoring of feed available, sheep condition, disease and pest status.

To maximise income, growers must attend to the quality of wool produced and to clip preparation to meet market specification.

Clip preparation
Wool growers are paying more attention to the preparation of their clip.

Classing criteria are set to ensure that the pieces do not exceed the percentage of bellies (one bale of pieces to 12 bales of wool); there is not an excessive amount of bulk class; and the number of fleece lines developed is reasonable. Backs are not removed and very superior lines are not produced.

Large lines of similar types of wool are put together to generate a high percentage of fleece wool in the clip to increase the average price per kilogram of wool produced.

The Clip Analysis Service provides the information required to maximise returns. See “Careful clip preparation will increase profit” on page 7.

Wool quality
With late winter lambing, feed is not limited during pregnancy and lactation. Lambs have the potential to produce better wool with a higher ratio of secondary to primary follicles.

Studies have measured a higher percentage of tender fleece in autumn lambing ewes, even when high rates of grain have been fed.

Summary
The wool industry needs to improve its productivity to lift its profitability. Fortunately, leading wool growers are making a profit at 1993 wool prices; others can improve profitability by following their lead to change to a late winter lambing.

Cheesy gland (Caseous lymphadenitis, CLA) levels can be monitored by consigning some cull sheep direct to an export abattoir for prevalence assessment.

The worm status of sheep should be monitored through the use of faecal egg counts to determine if a drench is necessary and to check its effectiveness. Drench effectiveness is based mainly on whether resistant worms are present. All sheep receive an effective drench as pasture hays off.

Where possible, weaners and ewes should be drenched onto stubble or fodder crops. A faecal egg count just before weaning may show that a weaning drench is not required. In most cases, wethers should be drenched onto pastures and usually require a second summer drench (as determined by egg counts) no later than mid-February.

Clip preparation
Wool growers are paying more attention to the preparation of their clip.

Classing criteria are set to ensure that the pieces do not exceed the percentage of bellies (one bale of pieces to 12 bales of wool); there is not an excessive amount of bulk class; and the number of fleece lines developed is reasonable. Backs are not removed and very superior lines are not produced.

Large lines of similar types of wool are put together to generate a high percentage of fleece wool in the clip to increase the average price per kilogram of wool produced.

The Clip Analysis Service provides the information required to maximise returns. See “Careful clip preparation will increase profit” on page 7.

Wool quality
With late winter lambing, feed is not limited during pregnancy and lactation. Lambs have the potential to produce better wool with a higher ratio of secondary to primary follicles.

Studies have measured a higher percentage of tender fleece in autumn lambing ewes, even when high rates of grain have been fed.

Summary
The wool industry needs to improve its productivity to lift its profitability. Fortunately, leading wool growers are making a profit at 1993 wool prices; others can improve profitability by following their lead to change to a late winter lambing.

Shearing in October-November or January-February is recommended for a late winter lambing flock. Late autumn shearing is not recommended owing to the increased risk of fleece rot and dermatitis, and the conflict with the cropping program on most properties.

Further reading