



**Resource guide
for sheep reproduction**

About this guide

This handy collection of AWI and MLA resources, tools and workshops provides producers and advisors with key information for all stages of the sheep reproduction cycle.

The resources are split into four topics to make them easier to find:

1. Reproduction
2. Sheep health
3. Feedbase & nutrition
4. Breeding & selection

Many of the resources are available to download directly by clicking on their title or scanning the QR code, but most can also be ordered by contacting AWI or MLA via the details below:



Australian Wool Innovation

02 8295 3100

info@wool.com

Level 3, 24 York St SYDNEY NSW 2000



Meat & Livestock Australia

1800 023 100

info@mla.com.au

Level 1, 40 Mount St NORTH SYDNEY NSW 2060

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Breeding & selection	16

Resource type



Podcast



Video or webinar



Book or PDF



Website



Tool



App



eLearning



Face-to-face
workshop

Reproduction

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



Productivity and Profitability series

This series of podcasts presents new and topical information to help producers increase the success of their businesses.



The Yarn

A series of podcasts covering many seasonal topics across sheep production and the wool supply chain.



AWI Change Makers

A seven-part video series centred around sheep reproduction. Tune in to hear a range of practical ways growers can influence sheep reproduction with the latest research and tools informed by the AWI-funded research and development outcomes.



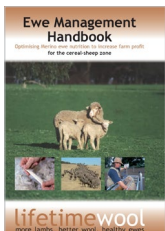
Productivity and Profitability series

This series of webinars presents new and topical information to help producers increase the success of their businesses.



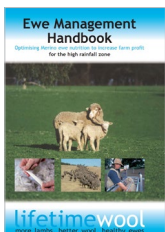
Joining ewe lambs decision support tool

A fact sheet explaining how to use the Joining Ewe Lambs decision support tool. The tool helps to inform the adoption of the practice within their business and optimise management strategies when ewe lambs are being joined.



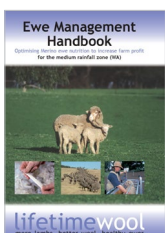
LifetimeWool Ewe management handbook – cereal-sheep zone

The interactions between pasture growth patterns, stocking rate, time of lambing and production are complex. The guidelines outlined in these handbooks give wool producers an optimum strategy for managing ewes ‘year in, year out’ to maximise production, ensure healthy ewes and deliver efficient feed allocation.



LifetimeWool Ewe management handbook – high rainfall zone

The interactions between pasture growth patterns, stocking rate, time of lambing and production are complex. The guidelines outlined in these handbooks give wool producers an optimum strategy for managing ewes ‘year in, year out’ to maximise production, ensure healthy ewes and deliver efficient feed allocation.



LifetimeWool Ewe management handbook – medium rainfall WA

The interactions between pasture growth patterns, stocking rate, time of lambing and production are complex. The guidelines outlined in these handbooks give wool producers an optimum strategy for managing ewes ‘year in, year out’ to maximise production, ensure healthy ewes and deliver efficient feed allocation.

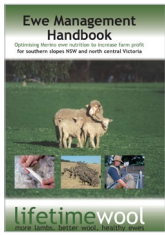


Reproduction

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



LifetimeWool Ewe management handbook – southern slopes NSW and north central Victoria

The interactions between pasture growth patterns, stocking rate, time of lambing and production are complex. The guidelines outlined in these handbooks give wool producers an optimum strategy for managing ewes ‘year in, year out’ to maximise production, ensure healthy ewes and deliver efficient feed allocation.



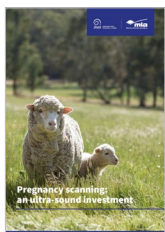
Managing breeding ewes in containment areas

This guide for producers details how to successfully maintain breeding ewes in containment to cost-effectively achieve high sheep welfare and optimal lamb marking rates.



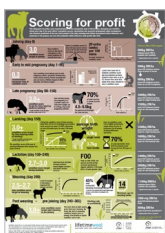
More lambs, more profit

Reproductive efficiency is important to the profitability of all sheep flocks and this booklet brings together a complete set of ‘best-practice’ management strategies to improve sheep reproduction.



Pregnancy scanning – an ultra-sound investment

Do you want to get the most out of your scanning results? Not yet scanning and want to know what all the fuss is about? This resource contains the most up-to-date benefit-cost analysis (BCA) for pregnancy scanning and a checklist to keep on track with key dates and opportunities in the reproduction calendar.



Scoring for profit

A poster detailing the condition score (CS) and feed on offer (FOO) targets for single- and twin-bearing ewes throughout the reproductive cycle.



Sheep producers' resource guide

MLA resources readily available to sheep producers looking for opportunities to enhance flock, pasture and business performance.



Reproduction

RESOURCE

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RESOURCE TYPE



The value of pregnancy scanning

The results are in! Pregnancy scanning is an essential tool for improved ewe and lamb survival. Scanning has a high return on investment when the information from scanning is used to make selection decisions and optimise nutrition. A benefit-cost analysis (BCA) has demonstrated that scanning for multiples returns an average profit of \$5.55/ewe and scanning for only pregnancy status returns \$2.65/ewe.



Tips & Tools: 45 x 7 Joining ewe lambs for more profit

Crossbred ewe lambs can be successfully joined at 7-9 months of age if they achieve a minimum live weight of 45 kg. This can significantly reduce the cost of growing out replacement ewes. Ewe genetics, nutrition and management are essential factors to focus on if you wish to maximise breeding success.



LifetimeWool Regional guidelines

A series of guidelines and recommendations for managing ewe flocks throughout the year.



MMFS Module 8 Turn Pasture into Product

Understanding and increasing the amount of pasture that is available to drive an animal production enterprise and your tactics and strategies for matching feed supply to animal demand, managing any consequences and exploring opportunities when feed supply does not match enterprise demand.



MMFS Module 10 Wean More Lambs

A framework and guidelines to set the important management steps to improve flock reproduction rates and lamb survival to weaning, enabling enterprise profits to be increased by 10-15% per ewe in flocks that are managed to appropriate condition score targets, on top of returns that can be made from optimising stocking rate.



AWI Management calendar

A template to map out your annual operations and assist in planning and managing your enterprise.



Ewe scanning and management checklist

An easy-to-use checklist for ewe scanning and management from joining to lambing, including tips and tricks for getting the most out of your scanner.



Fit to join

This guide outlines the benefits of assessing ewes before joining and guides you through the process of assessing ewes effectively and efficiently.



Reproduction

RESOURCE

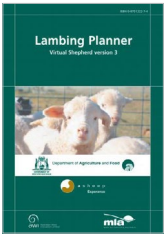
ACCESSED THROUGH

RESOURCE TYPE



Joining ewe lambs decision support tool

This tool allows sheep producers to assess the economic outcome of joining ewe lambs to inform the adoption of the practice within their business and optimise management strategies when ewe lambs are being joined.



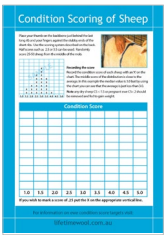
Lambing Planner

This tool provides a systematic basis for planning the management calendar for the breeding flock. The Lambing Planner is available as a hard copy or can be downloaded as an app.



Lifetime Ewe Management LTEM app

Assists sheep producers to proactively manage the nutrition of their ewe flock through the reproduction cycle utilising condition scoring and feed on offer (FOO) assessments.



LifetimeWool Condition scoring sheep

Use this handy guide to calibrate your understanding of condition scoring (CS) with descriptions of the feel of CS 1-5 and record the results for your mob.



RAMping Up Repo Checklist for pre-joining

Perform pre-joining checks 8-12 weeks prior to joining to ensure your ram team is fit and healthy before heading to the joining paddock.



RAMPing Up Repo™

zoetis

RAMPing Up Repo scrotal tape

A tape to measure the scrotal circumference of your rams to identify if they are within the normal range based on their age.



Weaner management checklist

Contains a checklist of the key management practices and targets for a thriving weaner mob. The checklist allows you to enter key weights and dates for your operation to customise the information for your flock.



Reproduction

RESOURCE

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MMFS Module 8 Turn Pasture into Product

This module is about getting the best alignment between animal demand and pasture supply so as much pasture as possible ends up as animal product, without jeopardising the feedbase or natural resources. Increases in pasture utilisation must be made in ways that not only increase animal production but also reduce costs and account for natural resource management risks.



MMFS Module 10 Wean More Lambs

This module outlines the important management steps to improve flock reproduction rates and lamb survival to weaning.



Lifting Lamb Survival

This PGS package is delivered as a mix of workshops and on-farm coaching to assist you in building your own plan to improve lamb survival within your business. The first step is knowing where you have come from, then knowing your potential, and identifying your opportunities for improvement.



AWI

RAMping Up
Repro™



RAMping Up Repro™

Hands-on workshop focused on improving ram performance and working longevity in commercial sheep enterprises. The workshop is designed increase the skill of producers across the key components of ram performance and impacts on overall breeding enterprise performance, including anatomy, physiology, spermatogenesis, metabolic demands, health, disease & biosecurity and the financial impact of the ram team.



AWI

Winning
With
Weaners™

Winning With Weaners™

Designed for woolgrowers and is aimed at improving weaner management of their Merino flock, targeting 95% weaner survival to one year of age. WWW identifies key practical actions and tools for commercial enterprises to implement on farm to achieve this performance aim.



AWI



Lifetime Ewe Management (LTEM)

The course is delivered in small groups of 5-7 sheep producers that meet six times per year with a professional trainer. During these hands-on sessions, the group visits each participating farm and learns skills in condition scoring, pasture assessment and best practice ewe and lamb management to increase reproduction efficiency and wool production, mainly through reducing ewe and lamb mortality.



Sheep health

RESOURCE

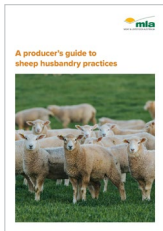
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RESOURCE TYPE



Productivity and Profitability series

This series of webinars and podcasts presents new and topical information to help producers increase the success of their businesses.



A producer's guide to sheep husbandry practices

The aim of this booklet is to describe best-practice techniques for a number of husbandry skills required when managing sheep.



Anaesthetics and analgesics at lamb marking

This fact sheet provides an overview of the available pain relief products for use in sheep and which animal husbandry operations they are suitable for.



Improving internal parasite control in sheep with nutrition

This fact sheet provides a summary on using nutritional management to control internal parasites in sheep.



Is the animal fit to load?

A national guide to the pre-transport selection and management of livestock.



Low-worm risk pastures for sheep

An important part of an integrated approach to parasite management in sheep and are especially important for lambing ewes, weaners and prime lambs being finish for sale. This fact sheet outlines several different ways of preparing low-risk worm paddocks for sheep.



Pain mitigation in sheep

This fact sheet outlines best practice recommendations for specific husbandry practices for sheep, and considerations for alternatives of some of these practices.



Sheep health

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



Plan, prepare and conduct best welfare practice lamb marking procedures

Details the preparation and planning, marking and mulesing equipment, chemical and animal health product use and mulesing procedures that meet the welfare standards in the Code of Practice for the Welfare of Animals.



Targeted drenching of adult ewes

This fact sheet provides a summary of internal parasite control for sheep in southern Australia, where targeted drenching of adult ewes can reduce drench use by between 48–58%.



Vaccination in sheep flocks

This fact sheet provides information and background on vaccines, vaccine handling and a provides a guide to decision making for livestock vaccination programs.



Worm control in southern prime lamb production systems

This fact sheet provides a summary of worm control practices for prime lamb production systems in southern Australia.



MMFS Module 11 Healthy and Contented Sheep

An effective approach to managing the health and welfare of your flock in a cost-effective manner to maximise enterprise profitability by implementing effective health management programs, taking a proactive approach to sheep health and welfare, having healthy sheep that are exposed to fewer chemicals and adopting strategies that minimise chemical use and delay development of chemical resistance by sheep parasites.



ParaBoss

A national information hub for advice on managing internal and external parasites across Australia. Relevant information for sheep is contained under its WormBoss, FlyBoss and LiceBoss programs.



Sheep health

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



ParaBoss

A myriad of tools to assist in managing internal and external parasites in different environments across Australia. Relevant information for sheep is contained under its WormBoss, FlyBoss and LiceBoss programs.



Sheep health tool

Assess the physical and financial impacts of common endemic diseases of sheep to your flock and business.



MMFS Module 11 Healthy and Contented Sheep

This module outlines the importance of managing the health and welfare of your flock. This module also outlines how to manage sheep parasites and diseases in a cost-effective manner to maximise enterprise profitability.



Pain relief use in sheep

The provision of pain relief with routine husbandry practices is now an expectation, and producers need to consider the use of pain relief products in their animals, but also alternate husbandry procedures and management practices. This module outlines available products, their costs and when they are suitable to use, as well as best practice recommendations for specific husbandry practices, and considerations for alternatives to some current husbandry practices.



Vaccination in sheep flocks

This module outlines the different types of vaccines, how to store and handle vaccines, why you should consider vaccinating, common sheep diseases and the vaccines currently available for sheep in Australia.



Feedbase & nutrition

RESOURCE

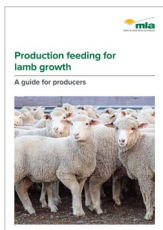
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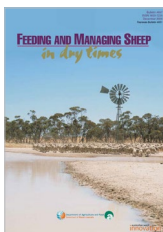
Productivity and Profitability series

This series of webinars and podcasts presents new and topical information to help producers increase the success of their businesses.



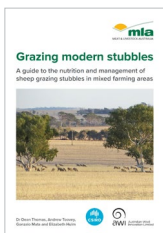
Production feeding for lamb growth

This guide provides information on the most important aspects of intensive lamb finishing, specifically related to growth.



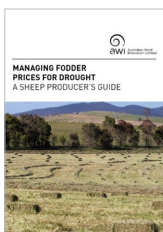
Feeding and managing sheep in dry times

A practical guide for farmers finishing lambs, feeding due to drought, designing a feedlot and much more.



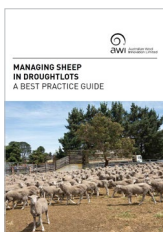
Grazing modern stubbles

A guide to the nutrition and management of sheep grazing stubbles in mixed farming areas.



Managing fodder price for drought

Preparation for, and successful management during, a drought not only requires a sound knowledge of the amount and type of feed you'll need, but also forward planning and decision-making on how much fodder will be stored in advance on-farm and fodder buying strategies during a drought.



Managing sheep in droughtlots

This publication aims to highlight the purpose, benefits and experiences of sheep producers managing sheep in containment areas during drought.



Releasing sheep from containment feeding

AWI's resource on managing the transition from containment areas to pasture to minimise the risk of animal health issues, as well as ensuring that wool quality is not affected.

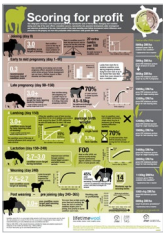


Feedbase & nutrition

RESOURCE

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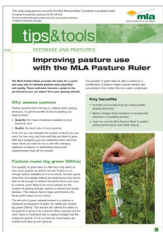
Scoring for profit

A poster detailing the condition score (CS) and feed on offer (FOO) targets for single- and twin-bearing ewes throughout the reproductive cycle.



Stock water – a limited resource

Details for performing a water audit on your property by assessing water quantity, quality and reliability.



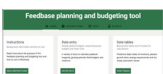
Tips & Tools: Improving pasture use with the MLA Pasture Ruler

This fact sheet explains how to use the MLA Pasture Ruler. The Pasture Ruler provides the basis for a quick and easy way to estimate pasture mass (quantity) and quality. These estimates become a guide to the performance you can expect from your grazing animals.



MMFS Module 7 Grow More Pasture

The productivity and profitability of many grazing enterprises in the high rainfall and sheep-wheat zones of Australia can be greatly improved by increasing the amount of pasture grown. The quantity and quality of pasture, and when it can be grown, underpins strategic decisions such as time of lambing, flock structure, stocking rates and target markets.



Feedbase planning and budgeting tool

Plan rotational grazing systems, determine appropriate stocking rates, determine how long your paddocks will last and calculate the most economical ration for your stock.



Feed budget tables for Merino weaners

Feed budget tables for Merino weaners, including how to calculate target weaning weight (TWW) for your flock, weaner liveweight targets at various ages and feeding requirements.



Feed on Offer (FOO) Library

The FOO Library allows users to estimate FOO and nutritive value of their pastures based on a series of pasture samples that have been photographed, cut, collected, tested and analysed. While it's not possible to have records for every pasture in every location, you should be able to find pastures that are similar to those on your farm.

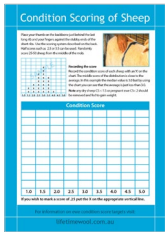


Feedbase & nutrition

RESOURCE

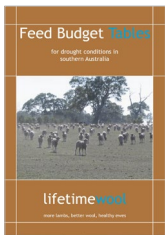
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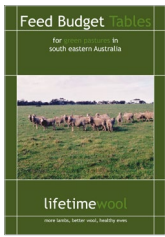
LifetimeWool Condition scoring sheep

Use this handy guide to calibrate your understanding of condition scoring (CS) with descriptions of the feel of CS 1-5 and record the results for your mob.



LifetimeWool Feed budget tables for drought conditions in southern Australia

View feed budget tables based on feed on offer (FOO) for annual clover-based pastures and mixed perennial and annual pastures.



LifetimeWool Feed budget tables for green pastures in south eastern Australia

View feed budget tables based on feed on offer (FOO) for annual clover-based pastures and mixed perennial and annual pastures.



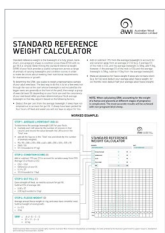
LifetimeWool Feed budget tables for the break of the season in annual pasture systems of southern Australia

View feed budget tables based on feed on offer (FOO) for annual clover-based pastures and mixed perennial and annual pastures.



MLA Pasture Ruler

A basis for a quick and easy way to estimate pasture mass in kilograms dry matter per hectare (kg DM/ha). Also available is the pasture ruler Tips & Tools which shows you how to use the ruler.



Standard reference weight calculator

Determining the standard reference weight (SRW) of your flock provides a useful comparison across a range of animals of varying liveweights and condition scores in order to make decisions about meeting their nutritional requirements for maintenance or growth.



Stocking rate calculator

Determine the number of cattle or sheep you should put into a paddock based on its carrying capacity.



Feedbase & nutrition

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



Lifetime Ewe Management LTEM app

Assists sheep producers to proactively manage the nutrition of their ewe flock through the reproduction cycle utilising condition scoring and feed on offer (FOO) assessments.



MMFS Module 7 Grow More Pasture

This module contains three topics designed to help sheep producers grow more and better-quality pastures. Getting these procedures right will allow them to make best use of their farm's physical resources such as rainfall, sunlight and soil type.



Lifetime Ewe Management (LTEM)

The course is delivered in small groups of 5-7 sheep producers that meet six times per year with a professional trainer. During these hands-on sessions, the group visits each participating farm and learns skills in condition scoring, pasture assessment and best practice ewe and lamb management to increase reproduction efficiency and wool production, mainly through reducing ewe and lamb mortality.



BredWell FedWell

A practical, one-day workshop highlighting the key production benefits of superior genetics, plus feed management for improved reproductive performance and livestock productivity.



Grass to Dollars

This PGS package assists producers in assessing pastures grown across southern Australia, condition scoring livestock, managing pasture grazing and optimising pasture utilisation.



Breeding & selection

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



Productivity and Profitability series

This series of webinars and podcasts presents new and topical information to help producers increase the success of their businesses.



How to shop for a high-performing sire

This booklet is designed to help you prepare carefully, choose wisely and care for this profit-maker once you get him home, providing a guide of what to do before, at and after the sale.



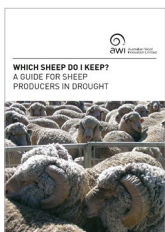
Making the most of mutton

Understand the processor specifications for a range of mutton products and be able to calculate how to optimise income from the mutton products produced on farm through developing skills in live animal assessment.



Sheep selection tools

To breed sheep that produce a lot of wool and lambs takes a combination of stockmanship and access to the latest available science and information, and there are a wide range of tools available for breeders to achieve their breeding goals.



Which sheep do I keep?

When confronted with a pasture shortage, you must determine whether to sell or supplementary feed all, some, or none of their flock. As each drought or feeding period brings its own unique circumstances, a disciplined approach to working out the best strategy at the time is essential.



MMFS Module 9 Boost Business with Breeding

Sheep breeding, in combination with good management and nutrition, provides an important opportunity for producers to optimise returns from their livestock production enterprises.



Sheep Genetics

Sheep Genetics is the genetic evaluation service of the Australian sheep industry. Sheep Genetics help you breed or buy animals using Australian Sheep Breeding Values (ASBVs) through LAMBPLAN and MERINOSELECT and produce tools and information to help you breed better animals.



Visual Sheep Scores Guide

Designed to provide a common language for visually assessed traits and a standard method of scoring and recording those traits.



Breeding & selection

RESOURCE

ACCESSED THROUGH

RESOURCE TYPE



Introduction to Sheep Genetics

This module provides a brief overview of the requirements and processes involved in getting started with Sheep Genetics. Gain an understanding of key requirements of the genetic evaluation and use the learning to collect trait data of interest relevant to your breeding objective.



How to shop for a high-performing ram

This eLearning module will assist you in selecting your next high-performing ram– factoring in what you can and can't see. It provides you with a guide of what to do before, at and after the sale.



Introduction to MateSel

MateSel does the selection and allocation in your flock. It is designed to aid in balancing genetic gain and genetic diversity by optimising mate selections for given male and female candidates. The Sheep Genetics MateSel utilises pedigree and ASBV information. This learning package will take you through the key things to know before starting to use MateSel.



MMFS Module 9 Boost Business with Breeding

This module provides producers access a range of breeding tools to help them breed animals that are fit for purpose, while introducing them to the concept of breeding objectives and animal selection.



BredWell FedWell

A practical, one-day workshop highlighting the key production benefits of superior genetics, plus feed management for improved reproductive performance and livestock productivity.



Lifting Lamb Survival

This PGS package is delivered as a mix of workshops and on-farm coaching to assist you in building your own plan to improve lamb survival within your business. The first step is knowing where you have come from, then knowing your potential, and identifying your opportunities for improvement.



Picking Performer Ewes™

Picking Performer Ewes™

Assists the commercial self-replacing Merino production sector in recognising and placing importance on the total lifetime productivity potential and value of their Merino ewes (fleece, meat and surplus stock) and identifying 'passengers vs. performers'.



If you would like to order any of these resources
in hard copy, please contact:



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