Increasing number of lambs weaned / ewe unit

Producer case study: Jessica Horstman & Chris Hasleby, Mulga Springs

Introduction

Mulga Springs is a dynamic and progressive mixed family farming enterprise managed by Jessica Horstman and Chris Hasleby, located in Western Australia. Spanning 3,212 hectares with a labour force of 2.5 full-time equivalents, the operation maintains a balanced 70:30 crop-to-livestock ratio and runs approximately 3,500 adult sheep. Jessica and Chris manage both a commercial flock and a Merino stud. The enterprise places a strong focus on improving flock performance through strategic genetic management, nutrition, and the integration of technology. Mulga Springs participated in the Producer Demonstration Site (PDS) project, which aimed to increase the number of lambs weaned per ewe unit through precision ewe feeding.

This case study highlights key elements of the operation's breeding program, lambing and weaning practices, animal health management, and the use of technology to drive productivity and sustainability. It also outlines how Mulga Springs continues to adapt to climate and market variability while improving efficiency and profitability.

Background and operation overview

Mulga Springs is a mixed farming enterprise managing 3,212 hectares with 2.5 full-time labour units. The operation maintains a 70:30 crop-to-livestock ratio, running approximately 3,500 adult sheep. On average, PDS sheep are grazed across 130 hectares, consistent across all mobs. Jessica and her father, Chris, run both a commercial flock and the Mulga Springs Merino stud.

Image 1 Jessica Horstman, Primary Producer, Northampton, WA

The enterprise's Merino sheep have bloodlines from Glenlea Park, Nepowie, and its own Mulga Springs line. More recently, the flock has been genetically diversified through the inclusion of rams from Glenlea Park, Anderson, and Ella Matta, with a focus on improving traits related to fertility, constitution, meat, and wool quality.

Breeding objectives and genetic management

Jessica targets a balanced focus on both wool and meat production, with a strong emphasis on fertility and constitution. Key Australian Sheep Breeding

Values (ASBVs) used to guide ram and ewe selection include:

- Low Worm Egg Count (WEC)
- High Weaning Weight
- Increased Fleece Cut
- Positive Fat ASBVs

Visual assessment criteria for ewe selection include structural features such as feet, shoulders, and jaw structure, as well as wool qualities such as staple length, colour, and crimp. Jessica and Chris regularly conduct flock profiling to ensure their breeding.

Reproduction and culling

The property follow a 6-week joining period, with rams introduced on December 24 at a 2.5% ram rate. Pregnancy scanning has been implemented for over eight years to assess both pregnancy status and litter size. More recently, with their involvement in the PDS project, data is now also recorded to determine whether ewes are early or late lambers, with this information linked to individual ewes via Electronic Identification (eID).

eID has been in place since 2017 and plays an integral role in measuring, recording, and informing decisions on individual animal and flock performance. Key data captured includes pregnancy status, fleece weights, and visual classing results. For stud AI ewes, maternal lineage is recorded at lambing, and ram lambs undergo genomic testing.

In March, at approximately day 90 of pregnancy, ewes are split into single-bearing (180–250) and

Image 2 Scanning at Mulga Springs, Northampton WA

twin-bearing (200) mobs to ensure nutritional requirements are matched to production status. Lambing occurs in May, with ewes allocated to sheltered paddocks. The milder winters in the Mid-West region and shorter growing season make early lambing essential for setting weaners up for optimal spring growth.

Key culling practices include:

- Dry ewes culled post-scanning.
- Ram lambs classed at weaning and re-evaluated in December based on conformation.
- Ewes classed and culled in September/October or in line with shearing schedules (Mulga Springs is currently transitioning to a 6–8 month shearing cycle).

Feeding and pasture management

Feeding regimes at Mulga Springs are seasonal and closely tied to food on offer (FOO). Ewes are trail-fed pellets every two days and provide a calcium-sulfur loose lick to balance macro-minerals when grazing stubble from late summer through to lambing. Jessica prefers using complete pelleted feeds over straight grain and lupins, working directly with pellet companies to ensure safe, balanced nutrition. This also improves labour efficiency and ease of transition onto feed.

Summer feedbase

- **Ewes:** Wheat, barley, canola stubble, clover pasture, saltbush
- **Weaners:** Lupin stubble

Winter cereal grazing has not been used in recent seasons, but is being considered again, pending favourable growing conditions. Confinement feeding is also under review as a potential strategy for managing feed supply during dry periods.

Parasite management

Jessica employs a proactive, preventative approach to animal health, with a strong emphasis on parasite control. Regular Worm Egg Count (WEC) testing is used to guide drenching decisions and manage drench resistance. Rams are also selected for low WEC ASBVs to help reduce overall parasite pressure.

Enterprise challenges and development goals

The past season saw higher lamb mortalities between marking and weaning due to extreme wet weather, which increased parasite loads and flystrike pressure. Managing parasite control during this period is a key area of focus moving forward.

Current challenges:

- Efficiently managing mob sizes within a mixed farming system
- Ensuring successful weaning outcomes under variable seasonal conditions

Development priorities:

- Improving weaner survival
- Continuing to refine data-driven decision-making
- Exploring confinement feeding and cereal grazing to boost feed efficiency

Cashflow strategy:

- Ram purchases are the first to be reduced under financial pressure.
- Pregnancy scanning and supplementary feeding remain non-negotiable pillars of flock management.

Technology and tools

Jessica and Chris use a range of tools and technologies to assist with flock management, nutrition decisions, and labour efficiency:

- Lifetime Ewe Management app
- AgriWebb for digital record keeping and paddock monitoring.
- Tru-Test equipment (fleece weighing, body weight)
- Pratley auto-drafter

Conclusion

Mulga Springs demonstrates a thoughtful integration of genetics, nutrition, and technology in a large-scale mixed enterprise. With a clear focus on fertility, wool quality, structural soundness, and data-backed decision-making, the operation is well-positioned to adapt to seasonal and market variability. Through innovation, strategic planning, and a strong commitment to continual improvement, Mulga Springs is building a resilient and productive enterprise for the future.

For further information:

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