tips&tools

ANIMAL PRODUCTION

Winning against seeds

Seed contamination is the cause of significant financial losses for the sheep industry, for producers, processors and the entire supply chain. Awareness of seeds and proactive management of the issue are essential to remain profitable and competitive.

Why manage seeds?

Seed infested carcases can be downgraded by up to $1.50/kg or $30 per carcase. In addition, seed contamination can reduce sheep and lamb production, product quality and animal health, leading to reduced financial returns for primary producers. On top of this, further losses are incurred throughout the supply chain, with the potential to damage the image and value of the Australian lamb industry.

Key benefits

- Understand the grass seed issue and become familiar with the seeds affecting your sheep production system
- Increase productivity and profit by making better management decisions to produce seed-free products

Seeds are picked up in the animal's fleece and within days many of these seeds penetrate the skin and move into the carcase. This causes considerable discomfort for affected animals, reducing productivity and leading to the production of downgraded products.

> "Seed infestation continues to be the biggest single issue facing the prime lamb industry."
>
> *- Andrew Hay, Coles Supermarkets*

Impact of seeds

On-farm	During meat processing	During skin processing	Wool sales	Industry
• Reduced growth rates • Poor fibre production and quality • Deaths due to infection, tetanus and flystrike • Reduced reproduction rate • Animals become more susceptible to health problems • Physical damage to eyes, ears, feet and mouth	• Trimming to remove seeds • Reduced throughput • Downgraded product • Potential loss of export market	• Puncture marks • Scarring • Abscesses	• Increased vegetable matter, seed and shrive	• Damaged image • Loss of customers and markets
↓	↓	↓	↓	↓
• Lower production levels • Lower quality product • Reduced income	• Loss of product weight • Lower price received	• Reduced market options • Lower price received	• Lower price received	• Influences supply and demand cycle • Affects price

Major weed contaminants of lamb, sheepmeat and skins in Australia

Barley grass

Brome grass

Chilean needle grass

Silver grass

Spear grass

***Erodium* spp. (Storksbill)**

Wire grass

Grass seed management strategy

A four-point plan has been developed to assist producers to understand their particular grass seed issue and a strategy to tackle it.

Four-point plan to manage grass seeds

1. **Develop an awareness of the grass seed issue and its impact on the sheep industry**
   - Understand the potential scope of the problem throughout the supply chain from the farm to the end product.
   - Identify problem plant species and their risk period.
2. **Determine the impact and cost of seeds to your business**
   - Monitor stock for seed infestation.
   - Obtain feedback through a trial seed kill.
   - Identify losses in production and profit as a result of seeds.
3. **Develop and implement a grass seed management strategy**
   - Explore all management options available for seed reduction and seed avoidance.
   - Determine the most effective and profitable strategies for your business.
4. **Obtain feedback, monitor and review your management strategy and make changes where required**
   - Keep accurate records on key indicators so you can measure your performance.

Management options

There are a wide range of options available to manage seeds in sheep and lamb production, however there is no single management strategy that can be applied to all situations. The key is to look at all the options available and develop an integrated approach that is best suited to your system giving you the most effective and profitable outcome.

While seeds only pose a threat to livestock over a few months of the year, your control program needs to be a year-round focus. There is always something to consider in relation to grass seed management regardless of the time of year. Thinking about seeds only during the risk period is inefficient and will not control the problem in the long-term.

Common seed management strategies include:

- Grazing management – stocking density, grazing rotation
- Agronomic management – pasture manipulation, sown fodder crops, fodder conservation
- Stock management – feedlotting, time of shearing, genetics, time of lambing
- Target market and turn-off time – production of feeder lambs

The whole farm does not have to be seed free, just enough clean paddocks (2–3) to get lambs through to turn-off or to carry them through to stubbles or other clean feed.

Your management strategy should focus on eliminating the core of the problem – the weeds. This can be achieved through the strategic use of seed reduction with the support of short-term and avoidance strategies in the interim.

Short term feedlotting can be a viable option to carry lambs through the grass seed risk period until clean paddock feed becomes available.

An irrigated pasture system is an option to minimise the risk of grass seed contamination.

Strategy	Short-term	Long-term
Winter cleaning	✓	✓
Grazing	•	✓
Spray topping and spray grazing	•	✓
Irrigation	•	✓
Feeder lambs	•	✓
Crop rotation	✗	✓
Genetics	✗	✓
Pasture improvement	✗	✓
Target market	✗	✓
Flock structure/ lambing time	✗	✓
Fodder conservation	✓	•
Confinement/forage crops	✓	•
Feedlotting	✓	•
Shearing lambs and weaners	✓	✗
Harrowing and slashing	✓	✗

✓ = Yes ✗ = No • = Sometimes

> “Seed infestation of only one or two seeds in primal cuts can cause the carcase to be downgraded”
>
> *- Dale Cameron, JBS Australia*

Trial seed kill

Many processors offer a trial seed kill service, where a portion of a consignment or mob is randomly selected and sent to the processor. These animals are monitored closely through the slaughter process and assessed for seed contamination. A grass seed report similar to that shown below should be received for each trial kill.

Most processors will provide a similar feedback report to producers whenever a grass seed penalty is given on a consignment of lambs. Such a report will often be accompanied by photographs of the seedy carcases.

Carcase contaminated with small black seed heads

GRASS SEED REPORT

LOT No: 120 **KILL DATE:** 23/7/12

VENDOR: Smith & Sons **PIC:** NK991234 **NO. KILLLED:** 31

Level of grass seed infestation in carcase

Carcase location	NIL	LIGHT	MEDIUM	HEAVY
Loin	✓			
Hindquarter	✓			
Forequarter			✓	

Was seed infected? Yes / (No)

Comments: 20% of carcases required medium trimming

New season sucker lamb skins can be discounted by as much as 50% for grass seed penetration and vegetable matter contamination of the wool.

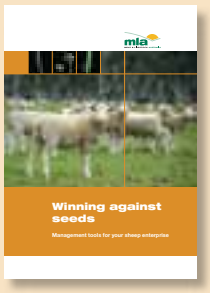
Take action!

The production of clean lambs can be achieved through forward planning, an integrated approach and persistence. The key is to establish a production system that manages seeds while maximising profit per hectare. Seeds can be controlled without compromising productivity or reducing product quality.

Further information

The MLA publication *Winning against seeds* takes a whole-of-farm approach to managing seeds in lamb and wool production, from identifying the seeds on your property, to control options and how to integrate these into the farm management program.

www.mla.com.au/winningseeds



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