AN INITIATIVE OF
Making More From Sheep

Department of Primary Industries and Regional Development
GOVERNMENT OF WESTERN AUSTRALIA

awi Australian Wool Innovation Limited

mla MEAT & LIVESTOCK AUSTRALIA

Healthy and contented sheep

Brown Besier

Brown Besier
Parasitology,
Albany

EVENT SUPPORTERS:

Elders

LANDMARK

SHEEP CRC

Overview – what we'll cover

Economic effects of sheep disease – relative costs

Sheep worm control
- Prime lambs
- Drench resistance update and management

Flystrike

Lice

Pain relief – new options

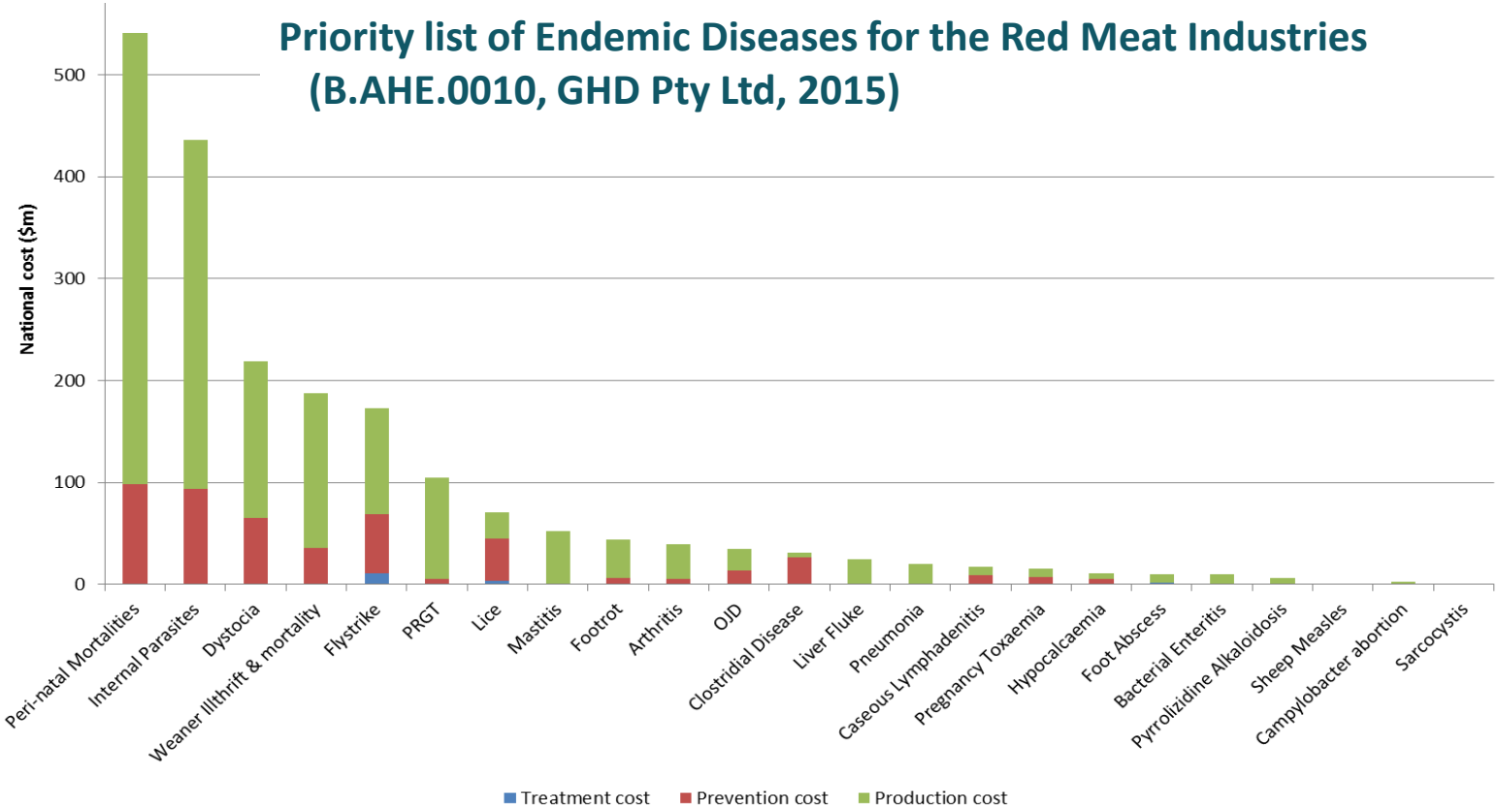
Biosecurity

Key messages

Signposts

No product or manufacturer mentioned in this presentation is specifically endorsed

Animal health costs - sheep



Animal health costs - sheep

Neonatal mortalities	$540
Internal parasites	**$436**
Dystocia	$219
Weaner ill-thrift	$186
Flystrike - body & breech	**$173**
Perennial ryegrass staggers	$105
Lice	**$81**

Mastitis, Footrot, Arthritis, Johnes Disease, Clostridial diseases: $30 – 50 M

Worm control in prime lambs

- What does it cost and how can we manage it ?

MLA & DPIRD - funded project, B.AHE.0072

- 2013- 2016, 14 farms, Great Southern and Esperance
- Measured effect of worms in prime lambs, monthly from marking to turn-off, worm-suppressed versus producer program
- Results:
  - growth rates, dollar value, worm counts

Worm control in prime lambs

- Results

- Losses due to worms: some in 86% cases, stat. significant in 28% :

  In worm-effect mobs:

  - Average worm effect loss of **2.1 kg** by 22 weeks (20 gm/hd/day)
  - Average $ loss in mobs checked: **$5.76** at slaughter

  BUT

  - *Can't predict which farms will be affected*
  - *Drench after loss occurs didn't re-gain lost weight*

Worm control in prime lambs

- Results

- No worm effect in fast-growing lambs

  if consistently over **240 gm/head/day**

  from marking to 14 weeks

Worm control in prime lambs

- Messages

Ewes:

- Ensure low worm counts before lambing
    - Low-worm risk paddocks
    - Check worm counts - pre-lamb drench ?

Worm control in prime lambs

- Messages

Lambs: Control worms at 3-4 months of age !

- Routine drench at 14 weeks (ideally, weaned then)
- OR
- Check worm counts at 10 weeks after lambing, drench at 14 weeks if 250 +

And:

- Check counts 4 weekly after drench (esp. where less than 240 gm/hd/day)
- Ideally, wean and move lambs out of lambing paddock at 14 weeks

Drench resistance update

- What drenches still work ?

Forget older drenches -white (benzimidazoles), clear (levamisole), ivermectin

- Abamectin
- Moxidectin
- Triple combinations
- “Startect”, “Zolvix”

Drench resistance update

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- ~~Abamectin~~ ?
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Drench resistance update

- Sustainable summer drenching

Summer drenching selects strongly for drench resistance – need to modify

- **Young sheep** (weaners and yearlings):
  - Low worm resistance and tolerance
  - No change - summer drenches to all in the mob
- **Adult sheep**
  - Worm resistant and tolerant
  - Drench to ensure some non-resistant worms survive (“refugia”)

Drench resistance update

- Sustainable summer drenching

Adult sheep strategic programs:

EITHER

- Autumn drench: late March/early April

OR

- "Targeted treatment":

Caution in Barbers Pole worm risk areas

Summer drench,

but leave 10 – 20% undrenched (condition score 3.5+)

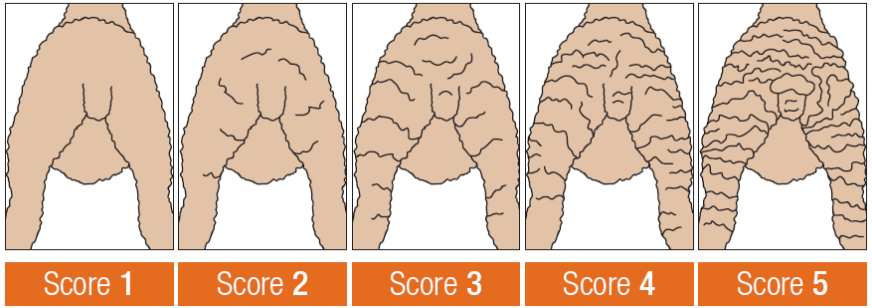
Flystrike management

Key management basis:

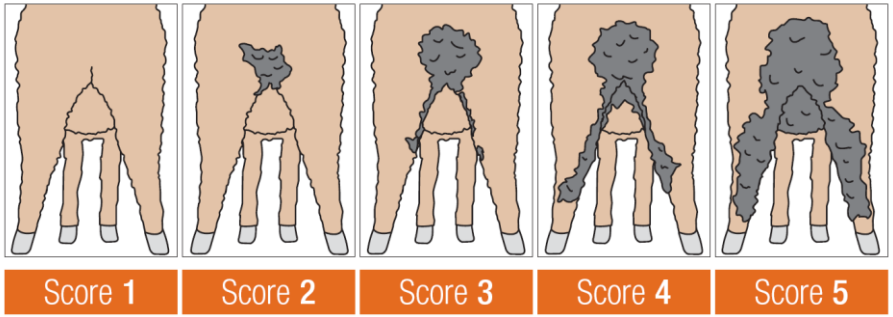
Reducing the susceptibility of sheep to flystrike

- Dag management tactics
- Genetics for dag, wrinkle, **body strike factors**

Breech Wrinkle



Dag



Flystrike management

Key management basis:

Reducing the susceptibility of sheep to flystrike

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- Genetics for dag, wrinkle, body strike factors

Preventative options within the season

- Routine long-acting treatment, or wait until evidence of strikes occurs ?

Treatment options if strikes are seen

FLYBOSS website

- Effective chemicals, length of protection, withholds

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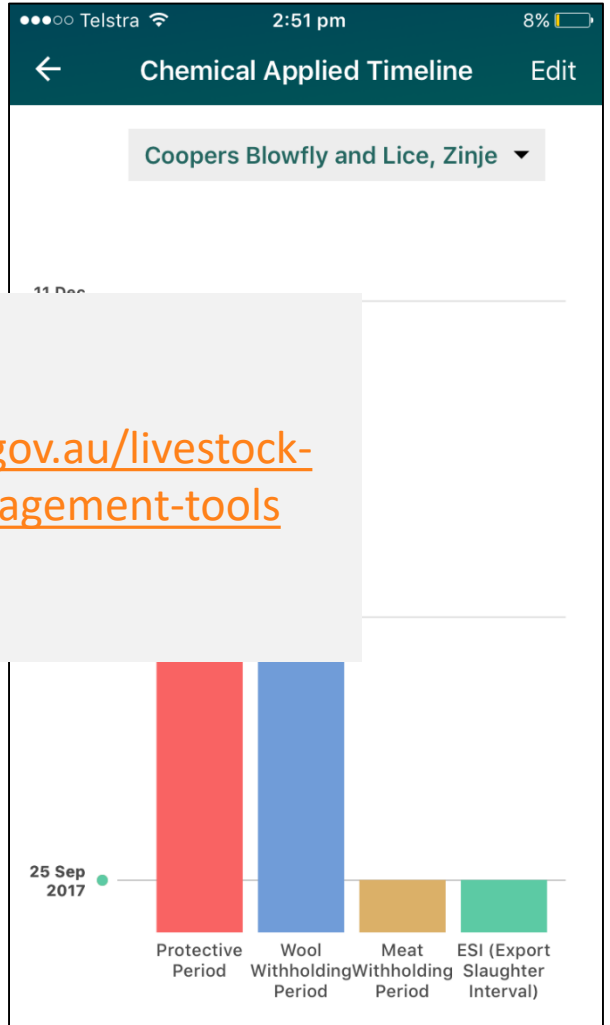
Flystrike Assist

App store, or

https://www.agric.wa.gov.au/livestock-parasites/flystrike-management-tools



Body lice control

Key issues

- **Is routine annual treatment justified ?**
  - Flock risk situation
  - Length of protection
  - Long wool treatments
  - Chemical withholds
- **What chemicals are effective ?**
  - Resistance by lice to chemicals
  - Method of application
- LICEBOSS website

Courtesy Jenny Cotter, DPIRD

Pain relief for management procedures – some new options

PRODUCT	TRISOLFEN (Anaesthetic)	BUCCALGESIC (Analgesic)	METACAM 20 (Analgesic)
Indications	Pain relief- mulesing, castration, tailing	Analgesic - Alleviation of pain/inflammation from castration and tailing	Analgesic - Alleviation of pain and inflammation (lambs over 14 days)
Purchase	Open seller or vet	Veterinarian	Veterinarian
Application	Gel - spray onto area after procedure	Oral paste, before procedure	Injection under skin, before procedure
Withhholding - ESI	90 days	10 days	11 days
Price 10 -15 kg lamb (AWI, March 2017)	$1.50	$0.72	$1.24

Biosecurity

Your flock will be free of many common diseases – keep them out

- **Virulent Footrot**
- **Johnes Disease**
- **Ovine Brucellosis**
- **Lice**

National Sheep Health Declaration

NATIONAL SHEEP HEALTH DECLARATION

Completing this National Sheep Health Declaration (NSHD) will assist prospective buyers to make an informed decision about the health status and management history of these sheep. The NSHD is mandatory for all sheep movements in SA and for sheep being moved into NSW and Tasmania. It is voluntary in other states ***(Version 5, May 2017).***

Property Identification Code (PIC) of this property
This MUST be the PIC of the property that the stock is being moved from

Attached to accompanying NVD/Waybill No.

SECTION A – BIOSECURITY INFORMATION

1. All consigned sheep were born on the consignment property. Yes ☐ No ☐
2. The number of different sources of sheep that have been **INTRODUCED** onto the consignment property in the last 5 years is:
   0 (closed flock) ☐ 1- 5 ☐ 6+ ☐ Rams Only ☐
3. All consigned sheep are from a property with a livestock biosecurity plan [1].
   If Yes, Property Plan ☐ Regional Biosecurity Plan ☐.....*(name)*
   Yes ☐ No ☐

www. farmbiosecurity.com.au

SECTION B – FOOTROT/LICE/OVINE BRUCELLOSIS

1. All consigned sheep are from a **flock that is free** of VIRULENT FOOTROT [3].
2. All consigned sheep are from a **flock that is free** of L
3. All consigned sheep are from a flock in an OVINE BR accreditation scheme.
   If Yes, Flock Accreditation No. (except Qld) .....

SECTION C – JOHNES DISEASE (JD)

1. (a) All consigned sheep are Approved Vaccinates [4].
   (b) If Yes, I have been continuously vaccinating all re lambs in the consignment flock against JD for ..... years.
2. All consigned sheep are from a SheepMAP flock [5]. Yes ☐ No ☐
   If yes, Status ..... Year commenced in SheepMAP.....
3. All consigned lambs are NLIS 'T' tag (terminal) lambs [6]. Yes ☐ No ☐
4. JD is suspected or known to occur in the flock of the consigned sheep [7]. Yes ☐ No ☐
5. All consigned sheep are from a flock with a negative test for JD [8]. If Yes, which test? Yes ☐ No ☐

Faecal 350 within the past 24 months ☐ Abattoir 500 within the past 24 months ☐
Abattoir 150 within the past 12 months ☐ Other [9] ☐.....

6. Sheep **INTRODUCED** onto the consignment property in the last 5 years were from a flock with [4, 5 and 8]: *(multiple answers may be applicable)*

SheepMAP accreditation ☐ Negative Faecal 350 ☐
Negative Abattoir 500 ☐ Negative Abattoir 150 ☐
All Approved Vaccinates ☐ Unknown status ☐
Other [10] ☐ .....

SECTION D. TREATMENT INFORMATION OF CONSIGNED SHEEP

Treatments	Product	Date of last treatment
External Parasite Treatment		

Drench resistant worms:

– multi-drench quarantine treatments

sheep in this consignment and all the information on this Sheep Health Declaration is true and correct:
Signed: .....Date: ..... /..... / 20.....
Phone number: ..... Fax/Email: .....

Producers are advised to retain appropriate records to support this declaration. Persons making false statements may be liable under fair trading and other relevant state legislation.

www. agric.wa.gov.au

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Agriculture and Food

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Biosecurity & quarantine › Biosecurity › Livestock biosecurity › Farm biosecurity checklist for sheep producers

- Biosecurity & quarantine
- Biosecurity
  - Invasive species
  - European house borer
  - Livestock biosecurity
  - Livestock movement & identification
  - Wildlife biosecurity
  - State Barrier Fence
  - Plant biosecurity

Farm biosecurity checklist producers

Western Australia has a relatively disease-free status co world. Good biosecurity practices minimise the potential sheep flock and reduce the chance of disease spreading flocks. Following the sheep biosecurity checklist greatly reduces the risk of an emergency disease such as foot-and-mouth disease or scrapie being able to enter your flock, as well as diseases which do occur in WA such as ovine Johne's disease and footrot.

- DAFWA sheep NLIS helpdesk
- Foot-and-mouth disease: recognise and report the signs
- Information for producers - Subsidised Disease Investigation Pilot Program (Royalties for Regions)

External Links

- Farm biosecurity
- Farm biosecurity for sheep producers

Key messages

- Worms commonly reduce prime lamb growth rates – plan to reduce loss
- Resistance affects almost all drenches – resistance management plan
- Flystrike risk: reduce by sheep management, genetics & best-practice chemical use
- Lice infestations are common – need appropriate treatments and effective application
- Pain relief for management procedures – different options
- Biosecurity to keep serious sheep diseases off the property – plan, prevent, report

Signposts

Making More From Sheep – Healthy and Contented Sheep (Module 11)

MLA and AWI websites (Pain relief: Beyond the Bale, March 2017)

DPIRD website (Livestock Parasites, Livestock Disease)

Farmbiosecurity.com.au (Animal Health Australia) – NSHD

ParaBoss (WormBoss, FlyBoss, LiceBoss)

Flystrike Assist App (DPIRD website)