

AN INITIATIVE OF

*Making More From Sheep*



# Healthy and Contented Sheep

Associate Professor Bruce Allworth

Fred Morley Centre



EVENT SUPPORTERS:



# Overview

- ❑ Animal health is important \$\$
- ❑ Management /season interacts with health
- ❑ Key issues:
  - perinatal lamb losses
  - worms
  - trace elements
  - biosecurity
  - flies/lice
  - “the rest”
- ❑ Key points
- ❑ Sign posts



# What is important for healthy sheep

- ❑ Nutrition, nutrition, nutrition
- ❑ Worms, flies and lice
- ❑ Everything else!
- ❑ Interaction between health and management
  - Often need to change management OR
  - Watch when change management

## 1. Almost all health problems associated with management



# Effect of Season

- Most diseases seasonally based
- Warm, moist conditions favour
  - Pasture growth
  - Bacterial survival
  - Worm, fly development

So if dry, nutrition is real issue (ENERGY)

**2. If good season, diseases the problem!**

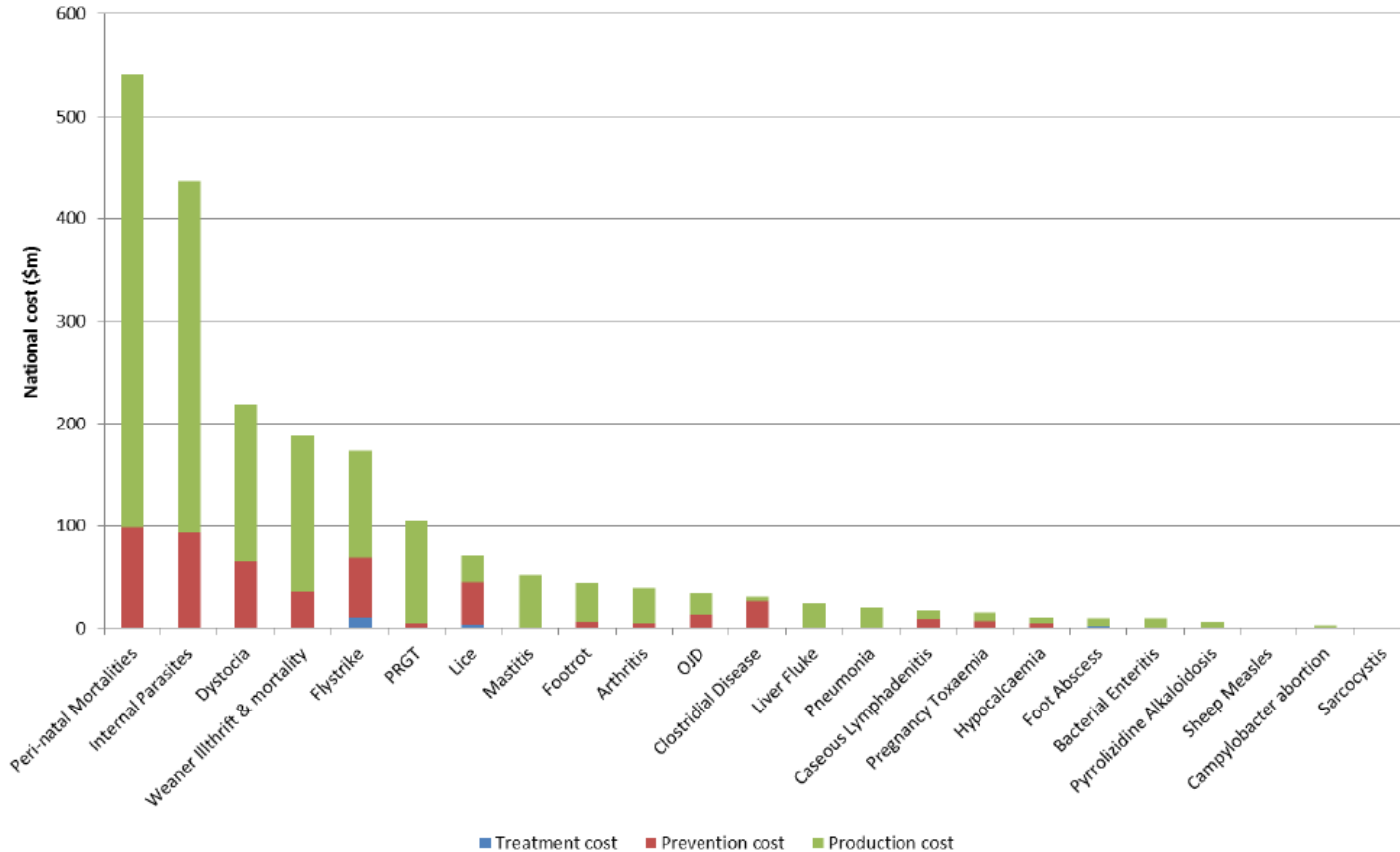
**(Farming is FUN)**



# Relative Disease Importance

GHD Report 2015

Sheep

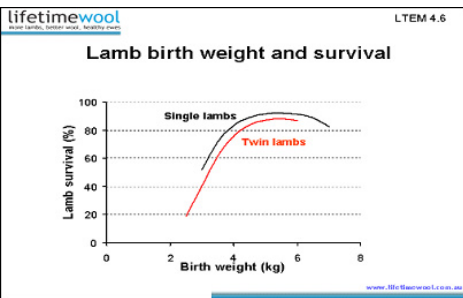


- Not region specific
- Not farm specific

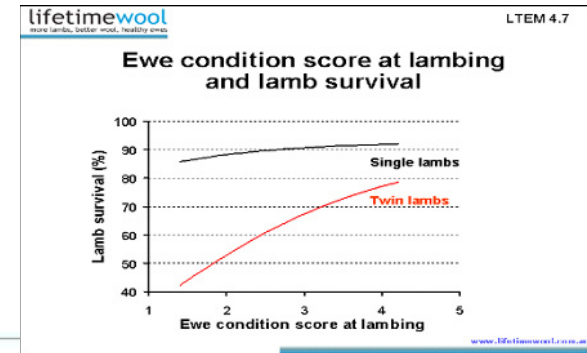
# Perinatal lamb mortality



- ❑ Difficult, costly, industry risk
- ❑ Best practice- ewe nutrition, scan, differentially manage singles and twins, shelter, nutrition, Merinos!
- ❑ Surveys in Riverina show even with best practice, 10% singles, 20-30% twins.

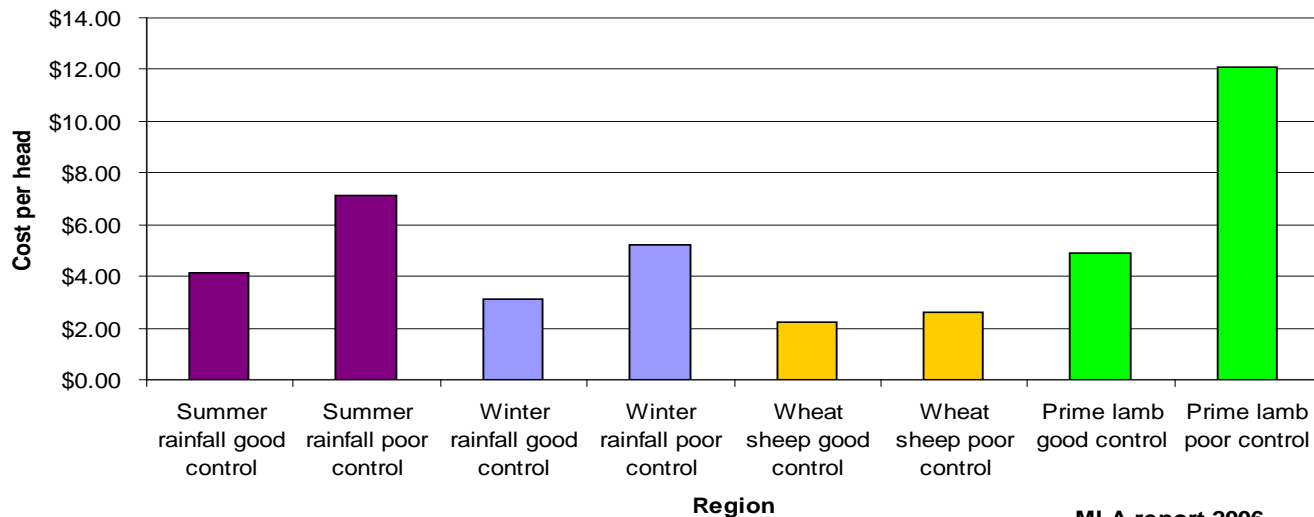


## 3. Manage ewes for lamb survival



# Worms have a major financial impact

Cost of worms (\$/head)



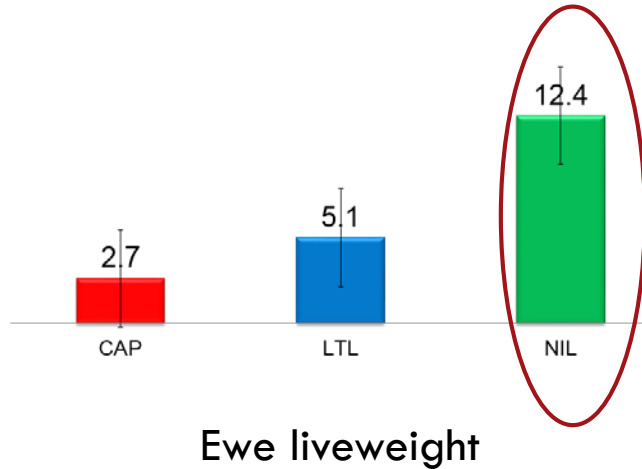
MLA report 2006

- 80-90% of loss associated with lower production
- Lower liveweight and yield ~ 2 kg carcass weight
- Higher death rate and lower fertility
- Lower fleece values



# Local data

Mean wt loss NSW2



## Effect on lamb weight

Wt loss	11-Sep
CAP	-0.4
<u>LTL-prelamb</u>	0.8
NIL	-4.9





# Worms

- ❑ Major cost to sheep producers
- ❑ Pasture survival favoured if mild, cool, wet
- ❑ Balancing act- worm control + drench resistance
- ❑ Need to control worms!



# Worm Control – The System

- ❑ Summer drench(es) – for all ewe and lamb Merino flock
- ❑ If prime lambs, cropping, cattle, may have different needs – eg pre-lamb drench, depending on season, time of lambing
- ❑ Most lambs need a drench by 12-16 weeks
- ❑ Monitoring is best way to know
- ❑ Think about grazing options / strategies



## 4. Monitor young sheep for worms

# Monitoring (WFEC)

- Takes 17-21 days for ingested worm to lay eggs
- So WFEC tells you what was happening 3-4 weeks ago
- Best in younger sheep, or to assess contamination
- Not very useful in adult sheep (unless there is a problem or with Barber's Pole (*Haemonchus*))



# Drench Resistance

- ❑ Widespread
- ❑ Individual flock test (FECRT) only way to know
- ❑ Can check 10-14 days post drenching
- ❑ Drenching when low pasture contamination is real problem
- ❑ No ideal answer (dose to correct weights, check gun etc)
  - leave some sheep undrenched
  - Leave some mobs undrenched



## 5. Think when drenching what the effect is!

White (BZ)	>90%
Clear (Lev)	>80%+
Combinations	>60%
MLs (mectins)	30-80%

# Which drench to use?

- ❑ Effectiveness, cost, time of year
- ❑ Long-acting versus short acting
- ❑ Capsules
- ❑ Long duration drenches
- ❑ **NZ work shows sensible use of effective drench is key**



# Trace Elements

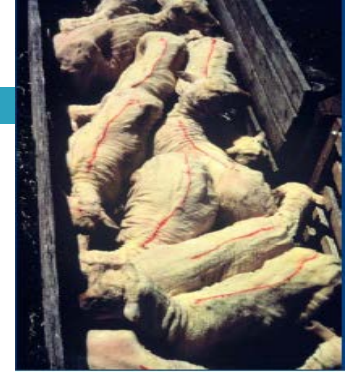


- ❑ Usually not a problem, easy to fix
- ❑ Se now in most drenches (watch dose in vaccines)
- ❑ Test in winter (copper), spring (cobalt, selenium)
- ❑ Se test usually mimics status 90 days earlier – blood
- ❑ Energy (+protein) and worms more likely or spread joining!

## 6. Monitor for trace elements in winter / spring

# Biosecurity

- ❑ Lice , Footrot
- ❑ OJD, liver fluke(?), Drench resistance (?)
- ❑ Brucellosis
- ❑ Look at what you have and control/ eliminate them
- ❑ Look at what you don't have – avoid them
- ❑ Need a biosecurity plan



**7. Keeping out diseases is always cost effective! Have a plan.**

# Biosecurity: Keep important diseases out

- Assess the disease risk: sheep health statement
- Drench new arrivals with a triple combination drench
  - ▣ WEC plus fluke
- Run new sheep in quarantine over spring
- Invest in secure boundary fences

Have a **WRITTEN** plan

**NATIONAL SHEEP HEALTH STATEMENT**  
(Version 2 - May 2009)

Attached to accompanying NVD/Waybill No.

**SECTION 1 - CONSIGNMENT INFORMATION**

Owner of sheep: \_\_\_\_\_  
Property/place where the journey commenced (full address): \_\_\_\_\_  
State: \_\_\_\_\_  
Property Identification Code (PIC) of this property:

Number	Year born (month, if known)	Description (in blood, sex and type)	Identification (eg. DO, brand, ear tag, if different to above)

Please attach a list if more information is required.

**SECTION 2 - OVINE JOHNE'S DISEASE (OJD)**

1. This consignment has an ABC score of: (circle and complete overleaf)

Category A - (Low Risk credits)     Category B - (Low credits)     Category C - (Medium credits)     Category D - (High low out credits)     TOTAL ABC SCORE

2. Were all these consigned sheep born on the above property? Yes  No   
If no, date introduced: \_\_\_\_\_ ABC score at time of introduction: (if known)

3. Have sheep of a lower ABC score than the consigned sheep been introduced into the flock in the last 2 years? Yes  No   
If yes, what is the lowest ABC score of introductions?

4. How many different sources of sheep have been introduced to the consignee's property in last 2 years? None  1-1  6-6  Rams only

5. Are any of the sheep in this consignment terminal "T" tag bands? Yes  No

6. Are these consigned sheep from a SheepMAP flock? Yes  No   
Status: \_\_\_\_\_ Expiry date: \_\_\_\_\_

**SECTION 3 - FOOTROT**

7. Have the sheep in this consignment been observed for, and any suspect sheep examined for, signs of FOOTROT during the past 14 days? Yes  No

8. To the best of your knowledge, are the sheep in this consignment free of VIRULENT FOOTROT? Yes  No

9. To the best of your knowledge, are all sheep and goats on the consignee's property free from VIRULENT FOOTROT? Yes  No

**SECTION 4 - OTHER HEALTH INFORMATION**

10. Is the flock accredited under a government administered OVINE BRUCELLOSIS accreditation scheme? Yes  No   
Flock Accreditation No.: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_

11. Has there been any evidence of sheep LICE at, or since, the last shearing? Yes  No   
Date of last shearing (if known): \_\_\_\_\_

12. Treatments:

External Parasite Treatment	Product	Date of last treatment
Drench	_____	_____
Vaccination other than OJD	_____	_____
Other	_____	_____

**SECTION 5 - DECLARATION**

As the owner and/or person responsible for the liability of the sheep in this consignment, I declare that the information in this statement is true and correct.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name (print): \_\_\_\_\_

Contact phone: \_\_\_\_\_

*Persons making false statements may be liable under fair trading and other relevant state legislation.*



# Ectoparasites



## Flies

- Timing of crutching
- Be aware of conditions – warm, moist
- Early treatment most effective

## Lice

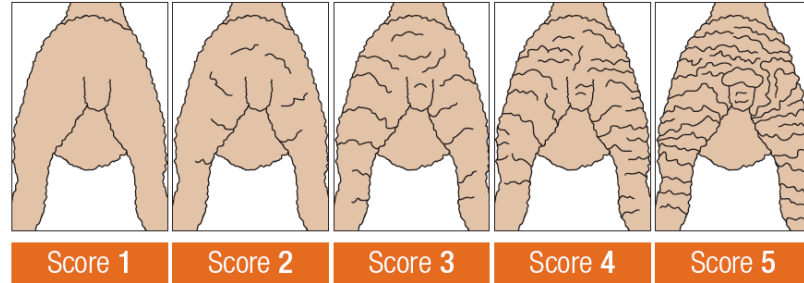
- Mustering, treating, monitoring!



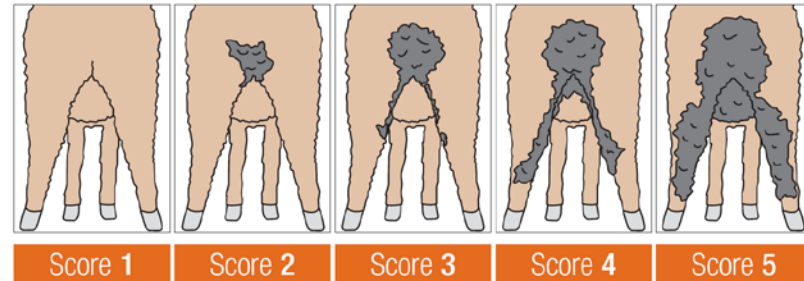
# Long term management: Genetics

- Worm egg count
  - ▣ Lower worm egg counts
  - ▣ Less drenching
- Breech wrinkle
  - ▣ Reduce below score 2
  - ▣ Reduce breech strike
- Dag score
  - ▣ Independent of WEC

Breech Wrinkle



Dag



# Long term management: Genetics



- ❑ Include as part of your selection criteria
- ❑ Slow progress but cumulative gains
- ❑ Most progress dependant on ram supplier
- ❑ Must balance important economic traits
  - ▣ Meat production traits
  - ▣ Wool production traits
  - ▣ Incorporate in selection index



## 9. Genetics for long term cumulative gains

# The rest



- ❑ Campylobacter- think about vaccination?
- ❑ OJD- vaccination, grazing management
- ❑ Bacterial enteritis- sulphadimidine, stress
- ❑ Foot abscess – wet muddy yards, late preg twins, rams
- ❑ Preg tox – from foot abscess, other stresses (nutrition), add NSAID into treatment?
- ❑ Hypocalcaemia- more common, watch lush grazing (winter crops), use licks?



# Key points



1. **Almost all health problems associated with management**
2. **If good season, diseases the problem!**
3. **Manage ewes for lamb survival**
4. **Monitor young sheep for worms**
5. **Think when drenching what the effect is!**
6. **Monitor for trace elements in winter / spring**
7. **Keeping out diseases is always cost effective! Have a plan.**
8. **Prevention is better than cure.**
9. **Genetics for long term cumulative gains**



# Sign posts

- Making More From Sheep
  - ▣ Module 11 Healthy and contented sheep
- Paraboss <https://www.paraboss.com.au/>
- MLA and AWI websites
- Your network of advisers

## Pain Relief FAQs

### 14 PAIN RELIEF FREQUENTLY ASKED QUESTIONS

There has been large scale adoption of post-operative pain relief (Tri-Solfen®) during the past ten years. New pre-operative products Buccalgescic® and Metacam 20® were released in 2016. Here we provide answers to some frequently asked questions about pain relief.



Tri-Solfen® a topical local anaesthetic and anti-inflammatory gel spray.

Metacam 20®, a subcutaneous injection high on the neck behind the ear.

Buccalgescic® being applied to the internal cheek of a lamb.

Numonix® prepping application. R&D continues.

Making More From Sheep



Home Modules Download Order a Copy Contact Us

SEARCH

MODULE 11: Healthy and Contented Sheep

What does this module do for you?



paraboss

HOME

NEWS

EVENTS

SUBSCRIBE

ParaBoss is a suite of three products developed for the management of blowflies, worms and lice. The WormBoss, FlyBoss and LiceBoss websites are sources of detailed management information and regional programs that will assist in managing the three major parasite risks for sheep and worms in goats. They have been developed by expert panels of parasitologists and veterinarians from across Australia.

Subscribe to ParaBoss News

flyboss

Find ParaBoss on Facebook

liceboss

wormboss

Making More From Sheep

