

AN INITIATIVE OF

*Making More From Sheep*



# Healthy and Contented Sheep

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EVENT SUPPORTERS:

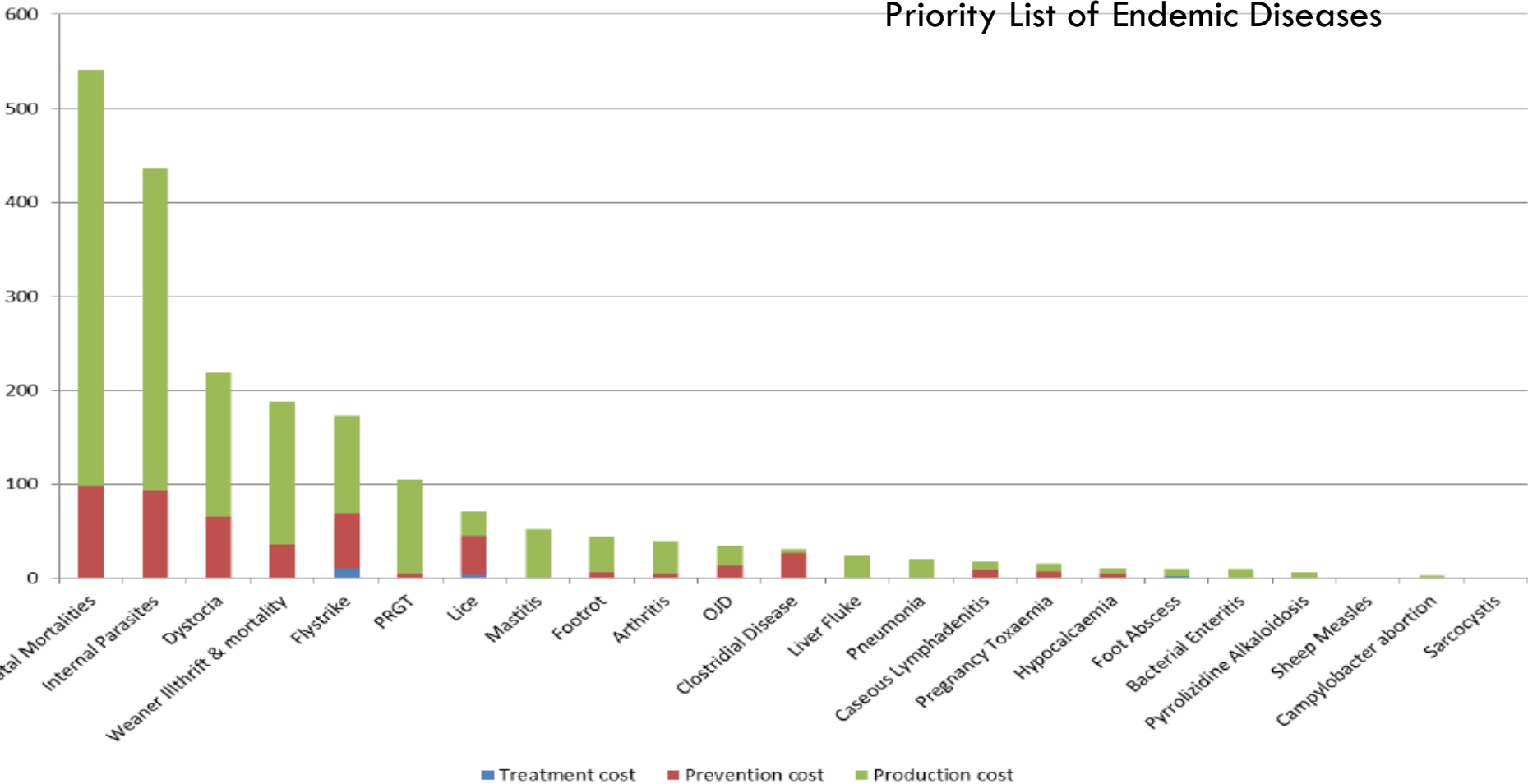


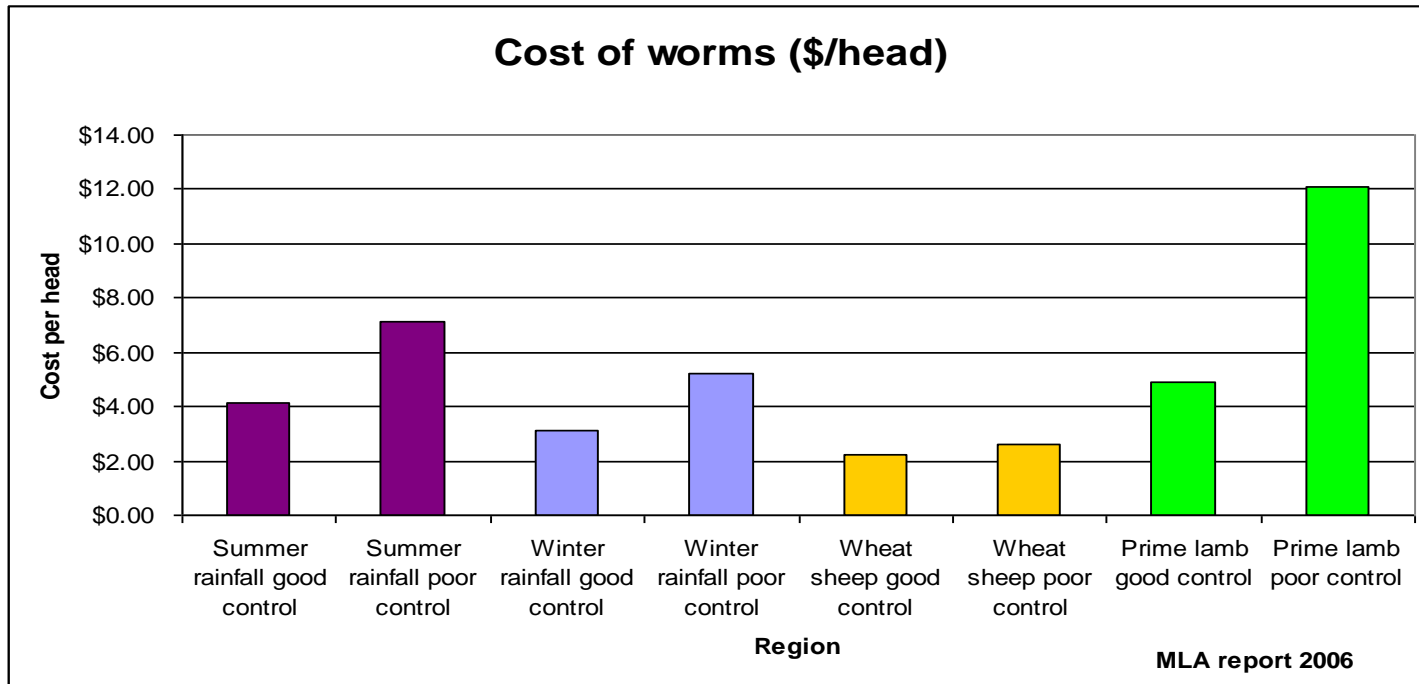
## Take Home messages

1. Quarantine drench needs 4 actives – Triple combination + another chemical
2. Know you are using an effective drench
3. Worm Egg Count is only way to time drenches effectively
4. Footrot and lice management starts with your biosecurity
5. Options for pain relief for mulesing and marking
6. Footrot vaccine – A part of the eradication program
7. Sheep mortality rates are in your hands

# Sheep

## Priority List of Endemic Diseases





1. Most costs associated with lower production
2. Reduced liveweight and yield
3. Higher mortality
4. Reduced fertility
5. Reduced wool cut

# Effectiveness of Single Active Chemicals

| Chemical   | % of properties that these actives are effective on |
|------------|---|
| BZ         | 9%  |
| Lev        | 57%   |
| Ivermectin | 25%   |
| Abamectin  | 90%   |
| Moxidectin | 80%   |

Data taken from the most recent 15 drench resistance tests done by Livestock Logic in local Hamilton region.

Effective if >95% reduction in worm egg count

# Know Your Own Status

Which Property below are you

| Chemical   | Property A | Property B |
|------------|------------|------------|
| BZ         | 76%        | 83%        |
| Lev        | 98%        | 92%        |
| Ivermectin | 99%        | 94%        |
| Abamectin  | 100%       | 98%        |
| Moxidectin | 100%       | 95%        |

# Testing Your Drench Efficacy

Full Drench Resistance Test is the Gold standard

- Recommended every 3 years
- Best way to know actual effectiveness of all products

Post Drench Tests

- Everyone should do this at least twice a year
- Test 10 individuals 10-14 days after drenching
- Times to use this strategy
- Winter, summer and after long acting products are used

# Quarantine Drenching

Needs 4 actives

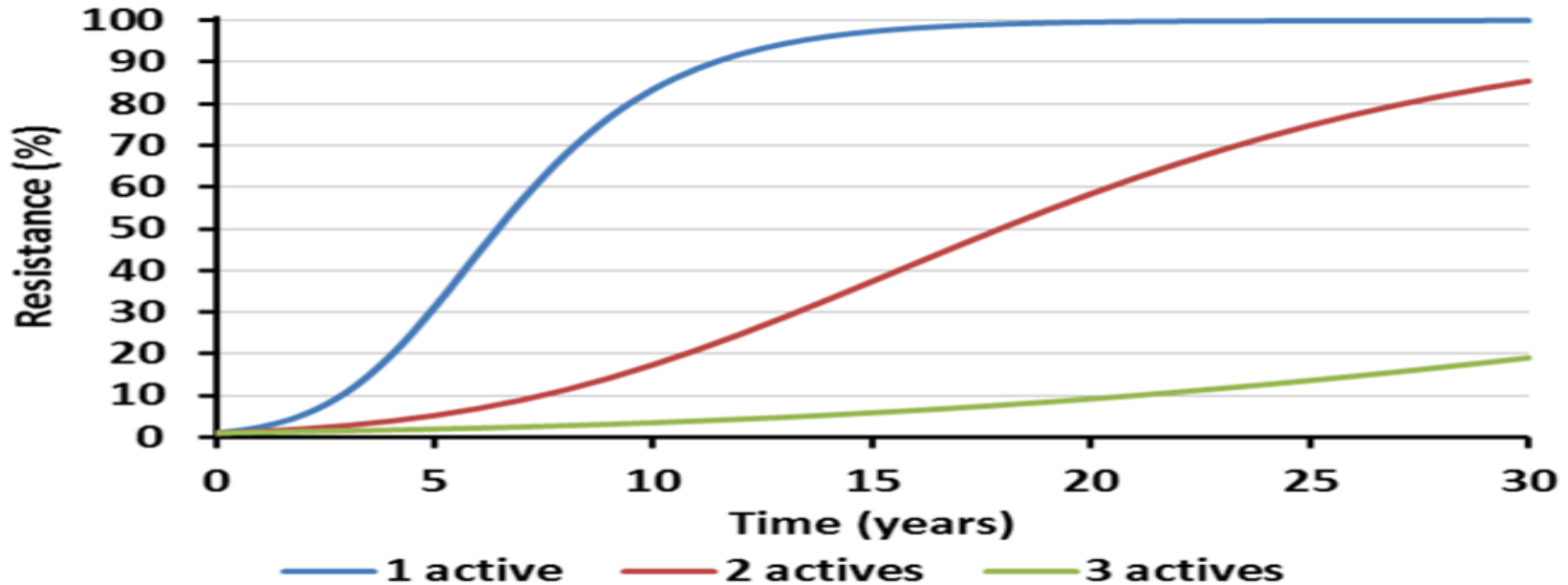
- Zolvix + Triple Combination or Q drench
- Startect + BZ/Lev
- NAPfix + Lev

All sheep purchases immediately on arrival, ideally empty them out for 24 hours in yards or shearing shed and then move to a dirty paddock to expose them to worms on your farm

This dilutes the surviving worms



# Why we use drenches in combination



# Summer Drenching

Getting the timing correct is a combination of

- Worm Egg Count Monitoring
- Watching for the pasture to hay off and/or faeces to firm up

## Why we want faeces to harden up

- 50 X higher larvae survival from firm faeces compared to sloppy
- Eggs excreted in sloppy faeces do not last the summer
- Eggs/larvae from hard faeces last >6months
- Aim is to minimise the amount of eggs/larvae that will emerge post autumn break from firm faeces

# Long Acting Drenches

Livestock Logic is currently carrying out a trial to determine production benefits from capsule versus short acting drench pre lambing

We all know there are benefits from long acting products

BUT

They increase pressure on drenches

THEREFORE

How can we use them smartly

High risk mobs

1. Twin bearing
2. Light condition score
3. Low FOO (Feed On Offer)
4. Maidens

## Why Worm Egg Count

How else do you know if sheep need a drench???

- Wait for clinical disease – Scouring, ill thrift
- Then already missed the boat
- If drench without a WEC then unnecessary use of chemical
- If summer, you have no idea the level of contamination that paddocks are building up without an egg count

# Interpretation of WEC

- They are 3 weeks old
- It takes 17-21 days for ingested larvae to lay eggs in the faeces so it is a guide to the worm ingestion levels >3 weeks ago
- Must consider this, especially if sheep were drenched in last 5 weeks

# Lice and Footrot

These are diseases caused by poor biosecurity practices

Before attempting ERADICATION change your practices

- Biosecurity of property

- Quarantine practices

- Improve boundary fencing

- Work with neighbours, everyone is part of the problem



# Lice and Footrot

**These are diseases caused by poor biosecurity practices**

If you are a trader then expect to have issues

**BUT**

Quarantine stock for 30 days during footrot spread conditions  
Inspect thoroughly for lice



# Footrot

Footrot vaccine is available  
It is a custom made vaccine

## Process

- Requires a vet to culture lesion
- Syd Uni lab determines what serogroups of Footrot there are on your property
- Virulence is then determined
- Vaccine developed within a fortnight





# Footrot Vaccine

## Costs

- \$1500-\$3500 for culture depending on number of serotypes
- Vaccine costs \$1.30 if 1 serotype (Unlikely)
- \$2.50 if 2 serotypes

The vaccine will not eradicate footrot on its own

It will minimise the cases therefore reducing the effects of footrot

## This means

- Less production loss
- Less animals that are dirty on first inspection – less culls and less time foot trimming

# Footrot Vaccine

There is the potential to utilise the vaccine as a control measure

Eg Annual vaccination

To recover cost of 1 dose you only need a 1kg liveweight response

Easily achievable in lambs with bad feet in the spring

Vaccinating ewes pre lambing gives reasonable coverage of lambs throughout the spring

WATCH THIS SPACE

# LPA Requires a Biosecurity Plan for all Properties by 1<sup>st</sup> October 2017

Must address each point:

- (a) Manage and record the introduction and movement of livestock to minimise spreading infectious diseases
- (b) Minimising the potential for property contamination from people and plant
- (c) Prevent and control animal diseases on-farm by regularly monitoring and managing livestock.

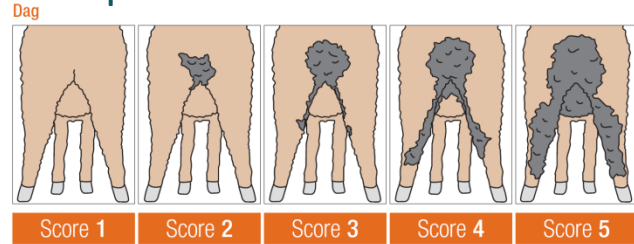
# Genetic Selection for Welfare Traits

## WEC

Reduced worm egg count means fewer drenches required

## Dag Score

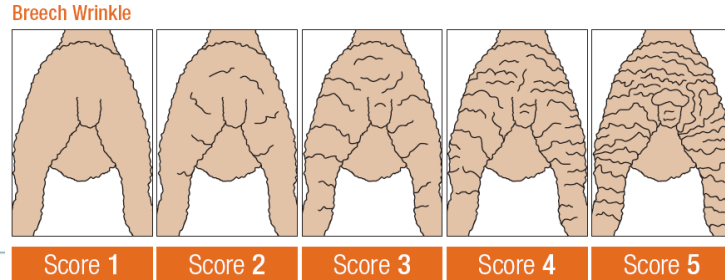
Independent of WEC



Must use both traits above, as otherwise potential to have negative affect on the other trait due to hypersensitivity scours

## Breech Wrinkle

Reduce breech strike



# Genetic Selection of Welfare traits

Use in balance with important economic traits

- Growth
- Wool cut and micron
- Fertility

- Get the focus on the right ram choice, that is where the big gains are to be made

Buying the right rams for your flock?



# Pain Relief Options for Mulesing

Not is Pain relief an option

Which option for pain relief are you using – Talk to your local vet to discuss options

## Trisolfen

- Topical local anaesthetic, antiseptic and adrenaline
- Gives 24 hour pain relief

## Metacam

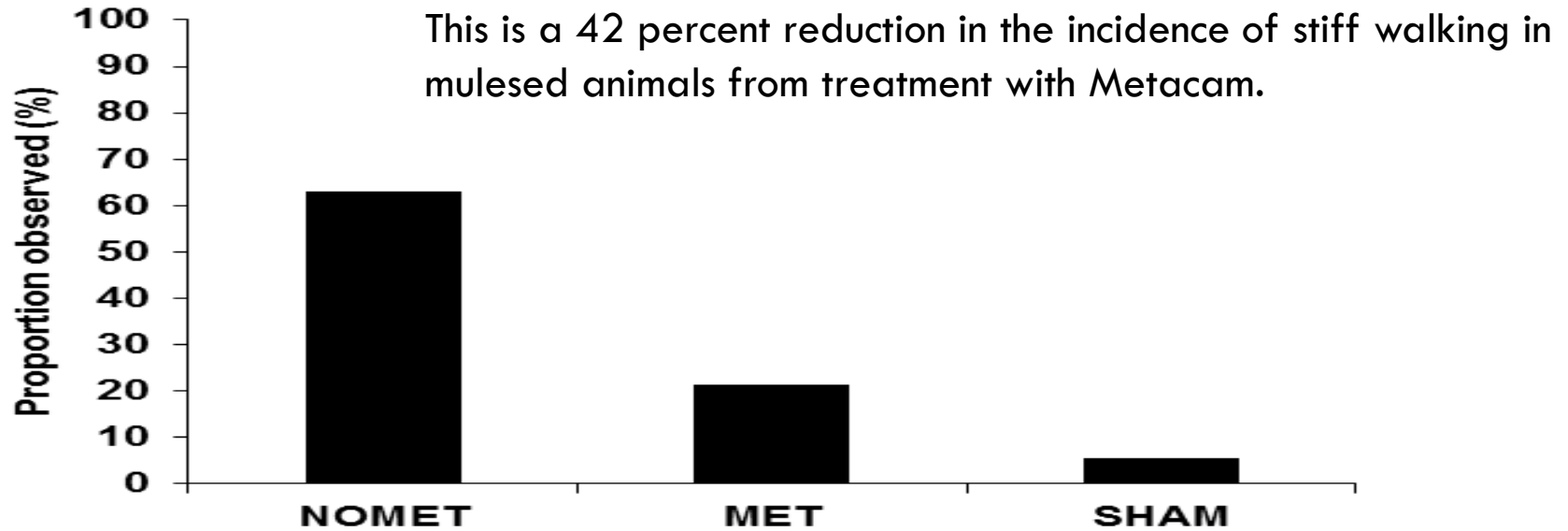
- Injectable anti-inflammatory and gives ~48 hrs pain relief

## Buccalgescic

- Anti-inflammatory administered into the gums (oral) gives ~48hrs relief



# Local Metacam Data



**Figure 1. Predicted means of the treatments for stiff walking.**

# Ewe Mortality Rates over Lambing

You are in control of these

Compare the pair

|                  | Property 1    |             | Property 2    |             |
|------------------|---------------|-------------|---------------|-------------|
|                  | Sheep Numbers | % Mortality | Sheep Numbers | % Mortality |
| Mature Singles   | 576           | 4.0%        | 1262          | 1.0%        |
| Mature Twins     | 1109          | 3.8%        | 1974          | 1.3%        |
| Ewe Lamb Singles | 533           | 2.8%        | 623           | 2%          |
| Ewe Lamb Twins   | 536           | 3.7%        | 689           | 1.3%        |
| Cost/Ewe         | 2754          | \$10/ewe    | 4548          | \$3.90/ewe  |



# Causes of Ewe Mortality

Tearing of the Vaginal Wall With Intestinal Prolapse in Pregnant Ewes



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Foot Abscess causes secondary preg tox



# Causes of Ewe Mortality



Dystocia

Cast ewes



# Causes of Ewe Mortality

## Vaginal Prolapses Pre Lambing



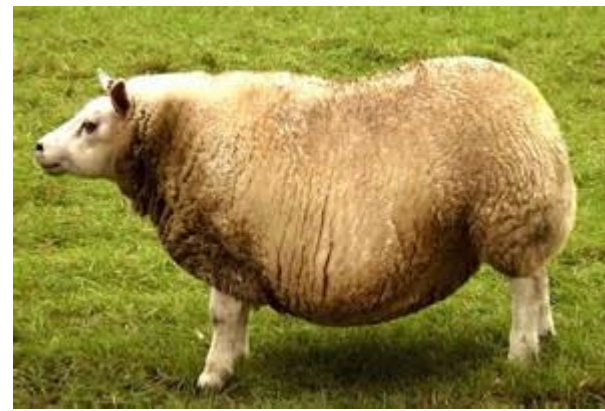
# Causes of Ewe Mortality

- Prolapses
- Vaginal tears
- Foot abscess
- Dystocia



**The real cause is overfat  
and  
overfed sheep**

We must run crossbreds and  
composites leaner and meaner





# Vaginal and Rectal Prolapses

Predisposed by tail removal to short

## Incorrect tail length



**Tail should go to the tip  
of the vulva**



Get the length right at lamb marking

# 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

[https://www.wool.com/globalassets/start/on-farm-research-and-development/sheep-health-welfare-and-productivity/sheep-health/breech-flystrike/latest-publications/gd2368-btb-70-march-2017\\_03-pain-relief\\_optim.pdf](https://www.wool.com/globalassets/start/on-farm-research-and-development/sheep-health-welfare-and-productivity/sheep-health/breech-flystrike/latest-publications/gd2368-btb-70-march-2017_03-pain-relief_optim.pdf)

Making More From Sheep

### MODULE 11: Healthy and Contented Sheep

What does this module do for you?



paraboss



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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.

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ON PAINT

## PAIN RELIEF FREQUENTLY ASKED QUESTIONS

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



Tri-Solften®, a topical local anesthetic and anti-inflammatory gel spray.

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

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

Numonut® being applied to the internal cheek of a lamb. R&D continues.

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