AN INITIATIVE OF







Sheep Health is Your Wealth

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Asked to Present on

- <u>Content</u>
- Costs of sheep health issues
- Good health is a building block of a profitable sheep enterprise
- Worms including Barber's Pole
- Lice & flies (balance as per local issue priority & focus on prevention)
- Johnes Disease
- Health issues when hand feeding
- Genetic selection for welfare traits & WEC
- Reproductive diseases inc. Brucellosis and Campylobacter
- Anthrax
- Effective vaccination programs
- Biosecurity Plans
- Completing NVDs and health declarations correctly importance of withholding periods



Will Present On

• Parasitism and worm control.

Campylobacter and brucellosis.

• General vaccination strategy.

• Supplementary feeding and winter cereals.



2 Cardinal Rules of Treatments and Interventions

Sackett's rule of animal health interventions:
 "Just because there is a treatment available doesn't mean you have to use it."

Have evidence of a condition and the cost-benefit of intervention.

 Nilon's rule of animal health interventions:
 "If you use a product make sure it is going to work": Know your drench resistance status. Use direct methods rather than indirect.



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Worms in Ewes







A Few Thoughts on Worm Control: Merinos

- Always drench merino ewes prelambing.
- Drench with a short-acting (multi-active, unless you have current resistance status) if: Lambing onto likely contaminated paddocks, ewes struggling a bit or feed is marginal.
- Drench with a prolonged action drench if:
 - > evidence of gross contamination (parasitic deaths before lambing);
 - \succ if the ewes are light (CS<2.5) and/or have inadequate pasture;
 - > and/or prodigiously wet year.



A Few Thoughts on Worm Control: XBs

• Drench with a short-acting (multi-active, unless you have current resistance status) unless you have current drench resistance status.

• Drench with a prolonged action drench if:

- > evidence of gross contamination (parasitic deaths before lambing);
- ➢ if the ewes are light (CS<2.5) and/or have inadequate pasture;</p>
- > and/or prodigiously wet year.
- > Should rarely be necessary

Consider not drenching if:

- > No evidence of barbers pole
- Ewes CS3 or better and have adequate pasture. No evidence of gross contamination, i.e. not grazed by weaners dying of worms.
- > Fall back position is to drench at lamb marking.



Barbers Pole: An Emerging Issue





Barbers Pole

- Mostly a problem on irrigated grass but has the potential to be an issue on mixed perennial pastures. Legumes more robust.
- Suspect barbers pole if you have high egg counts (say > 1000), little or no scouring +bottle jaw. In reality may have a mixed infection.
- If the BP susceptible paddocks will be grazed by lambing ewes:
 - ➢ Winter spelling.
 - ➢ Graze with cattle
 - ➢ Graze under protection of an LA (including closantel).
- Always give a pre-lambing drench.



Hypocalcaemia

- Occurs in the last month of pregnancy as a result of sudden changes of food, or stressors such as prolonged cold off-shears. Critical event is insufficient circulating calcium to maintain neuromuscular function. Determinants include:
 - > Chronic grass syndrome. grass < cereals<winter wheat.
 - Change from dry to lush pasture in late pregnancy.
 - > Yarding, handling, transport.
 - Chronic grain feeding without Ca supplement. Chronic exposure to irrigated green grass or winter cereals.
- Sheep go down suddenly, appear relatively bright and alert, at least in early stages. A
 proportion have a characteristic frog-leg position. 10's to hundreds.
- Diagnosis on response to treatment with Calcigol/Flopaks.



Hypocalcaemia cont

• **Treatment:** Treat with 150ml Calcigol/Flopak. Will get 60%+ up within an hour.

• Prevention:

- Deft, rapid handling of sheep at prelambing treatments.
- Sheep on dry tucker mid pregnancy should not receive Ca supps unless they are getting grain. Mixed perennial pastures: no Ca supps.
- Sheep on irrigated grass pastures, inc. winter cereals need a Ca supp.
- ➢ Grain supps should be spiked with limestone (2%) or dolomite (4%).
- Iodine an emerging issue on the same pastures as we get hypocalcaemia









Vaccination: Campy, JD and Clostridials

- Clostridials: prevalence of clostridial disease in Tasmania apparently very low but:
 - ➤ Underreported.
 - > Animal welfare standards.
 - ➢ Passive immunity for lambs.
 - ➤ Cheesy gland.
 - > Standard rec would be a 6 in 1 prelambing.
- Place of 8 in 1?
- JD is ubiquitous. Keep vaccinating all keepers (inc wether lambs likely to be slaughtered at >1yr) with Gudair. Role of cattle.



Campylobacter Abortion

- Two strains: *C. fetus fetus, C jejuni.* Latter more common in the sheep flock.
- Abortion storms (up to 40%) rare but spectacular. Low level background losses probably more common. NZ experience. Some Aus trial work.
- Vaccinate if:
 - Diagnosed with campy abortion.
 - Difference between scanning and marking results. Particularly did not lamb ewes. Role of serology.
 - > Supplementary feeding/controlled grazing/droughtlots.
- Re-emergence of Brucellosis



Nutrition of Winter Ewes

- Big difference between merino and prime-lamb ewes: need to run PL's at lighter body condition. Suggest lambing at 3 to 3.25. Heavy ewes have problems with:
 - Casting
 - Preg tox
 - Prolapse
 - Dystocia (particularly in singles)
 - Foot abscess
- Importantly, if your ewes are consistently > CS 3.5 you are probably understocked.
- Irony is: we run merinos in 2-3, and PL ewes > 3.5. Big dividends to run heavier merinos.



Nutritional Requirements.

Class and Type	MJ ME/day	Pasture Requirement
Pregnant: 1-130d. Merino/XB; Twins and singles	8-12 MJ	700kg
Merino Single Lactation Day 20	16mj	1000 -1100kg
Merino Twin Lactation Day 20	22MJ	1400 kg
XB Single lactation day 20	22MJ	1300kg
XB Twin lactation Day 20	30MJ	1600kg









Supplementation.

- If you need to *supplement* to maintain or improve BCS, *grain is the only option* (unless you have silage >10MJ).
- You should test all feeds, but particularly long feeds.
- Hay is a good supplement if you do not need to supplement.
- Legume hay is a good option for protein supplementation during lactation. Most legume hays fall disappointingly short in energy density.
- A trickle of grain (100g/hd/day) is a good way to ward off preg tox in fat twin bearing ewes.









Key Points

• Parasitism:

- Prelambing drench almost universal.
- Limit use of LA's to keep mectins (particularly LA's) working.
- > Watch for emergence of barbers pole.
- Pasture targets:
 - ➢ Most merinos need increase BCS. Many XBs need fining down.
 - > If pasture is inadequate you need high energy supps (grain).
 - > Watch Ca nutrition on winter cereals and with grain supps.
- Vaccination:
 - ➢ 6 in 1 probably and JD definitely.
 - Campy if indications are there

