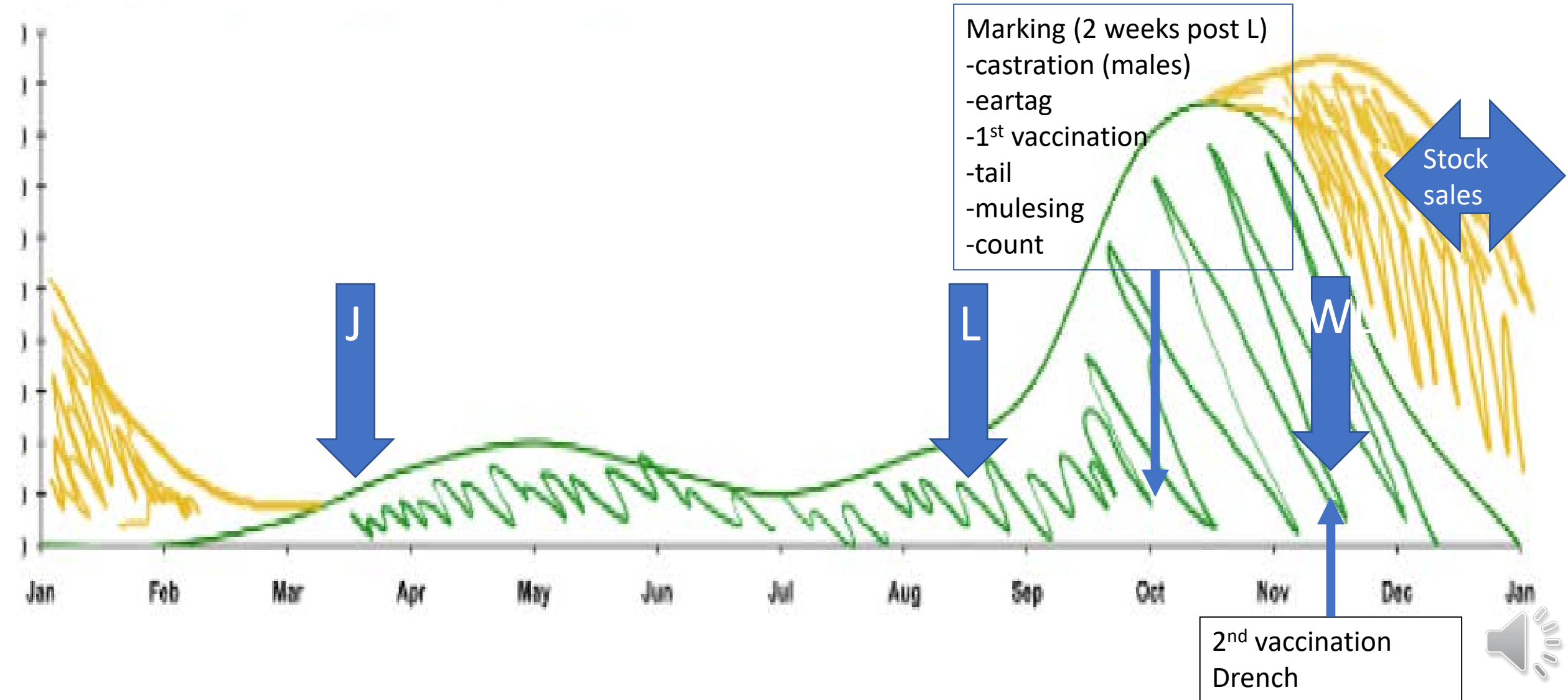


# Planning a management calendar

- We will start with a self replacing Merino property as this is a useful model for other enterprises as most are similar in timing with slight variations
- As already noted the first decision to make in a self replacing enterprise is lambing or kidding time (if rams/bucks are left in all year round then this decision comes down to natural breeding season and/or availability of feed to allow breeding to occur e.g. pastoral zones where feral goats are harvested)



# Merino enterprise



# Time of lambing/kidding chosen first

- Biggest driver of stocking rate
- Other management procedures flow from date of parturition
- Merino's: 3-4 months before pasture dry off (senescence)
- Store lambs: 4 months before pasture senescence
- Finished lambs: 5 months before pasture senescence
- Balancing act – lamb/kid as late as possible to maximise stocking rate but issue with finishing lambs or managing lambs over early summer
- Ideally expect 70-75% ewes pregnant per cycle so get >90% in two
- Tight joining (5 weeks) makes management easier
- Some enterprises (prime lamb particularly) may join longer

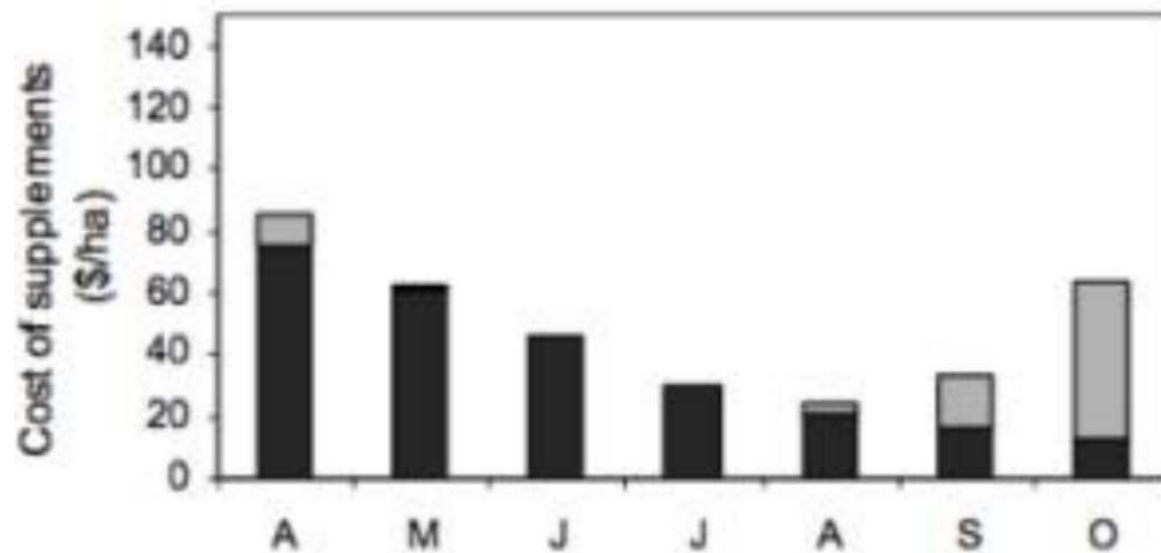


# Carrying capacity and lambing time

- Eg. How many animals could a farm in 650mm annual average rainfall carry?
- French model
- $SR = 1.3 * (65 - 250) / 2.5$
- $SR = 20.8 \text{ DSE/Ha}$
- Requires good pasture and fertility
- Winter = pasture limiting time in southern Australia, so estimated winter stocking rate
- What does 21 DSE/Ha translate to for different lambing times?
- AUTUMN lambing = 2.4 DSE in winter (lactating)  
 $21 \text{ DSE} / 2.4 = 8.75 \text{ ewes/Ha}$   
SPRING lambing = 1.7 DSE in winter when pregnant  
 $21 / 1.7 = 12.4 \text{ spring lambing ewes}$   
Can carry about 50% more ewes (more wool and lambs produced)

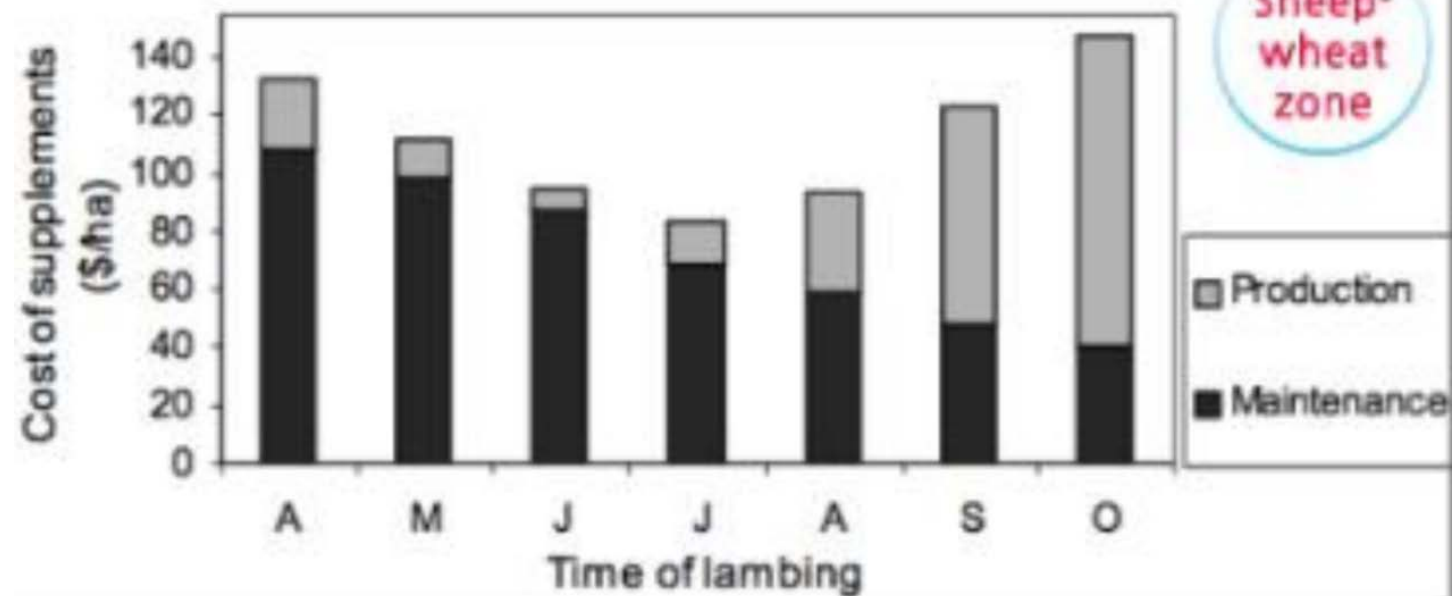


# Mortlake



High rainfall zone

# Rutherglen



Sheep-wheat zone



# Marking

- 2 weeks after lambing finishes (reduce mismothering)
  - First vaccination
  - Castration
  - Tail docking (3<sup>rd</sup> joint at tip of vulva, ring or knife/heat)
  - Count – marking % (lambs present / ewes)
  - Marking % can vary – 70-150%, breed, time of year, nutrition, CS etc
  - Mulesing?



# Sheep vaccinations

- Almost all killed vaccines need two doses (4-6 weeks apart) and then yearly
- Exception = JD vaccine (Gudair)
- 5 in 1
- 6 in 1
- Erysipelas
- Scabigard (single shot)
- Gudair (single shot)
- Campyvax (campylobacter)
- Barbervax (*H. contortus*)



# Weaning

- 12-16 weeks post lambing start (5 week lambing)
- At 12 weeks Merino ewe lactation decreased – may leave other breeds longer as lactation longer
- Get lambs away from parasites and onto high quality grass/feed
- Youngest lambs >6 weeks for functional rumen
- 2<sup>nd</sup> vaccination
- Drench (almost always have parasites)
- May snatch rear goat kids for disease control – wean once eating enough solid feed





# Prime lamb sales

- Start from about 16 weeks of age
- Lambs sold straight from dams are called “suckers”
- Other lambs weaned, sell all before first adult teeth in wear
- Might sell as “store” lambs, not finished
- Store lambs may go onto grain, grass, stubbles etc
- Higher rainfall favours finishing systems hence stock may move from pastoral to wheat/sheep or wheat/sheep to high rainfall for “finishing”



# Retained weaners (Merino)

- How to feed over summer?
  - Containment/feedlot
    - High energy, protein
  - Check random sample every 4-6 weeks for growth



# Strategic treatments

- Designed to control pathogens at critical life cycle stages
- Eg. Summer drenching
  - Winter worms come from late spring/summer pasture contamination, so give 2 summer drenches in Dec/Feb
  - Apply fly chemical to sheep in early spring to reduce following fly generations
    - covert strikes reduced
  - Monitor over strike period
- Lice – often treated off shears in case lice present (can be hard to detect)



# Culling

- Age
  - Teeth
  - Wool
  - Other (type)
- 
- Often done in early summer – stock in maximum condition and wont require supplementary feed. Generally shorn prior to sale. Optimal age of ewes generally 6 years (varies from region to region)



## What About Wethers? Issues of Flock Structure

- Prime lamb-focussed flock has lots of ewes, lambs & weaners but no mature wethers (all eaten)

Wethers are

- More worm-resistant
- Able to be grazed harder
- Produce more wool
- Less labour-intensive
- More wethers = more wool income
- More ewes = more meat income

i.e., flock structure varies with markets

Flock structure 6,500 dse flock

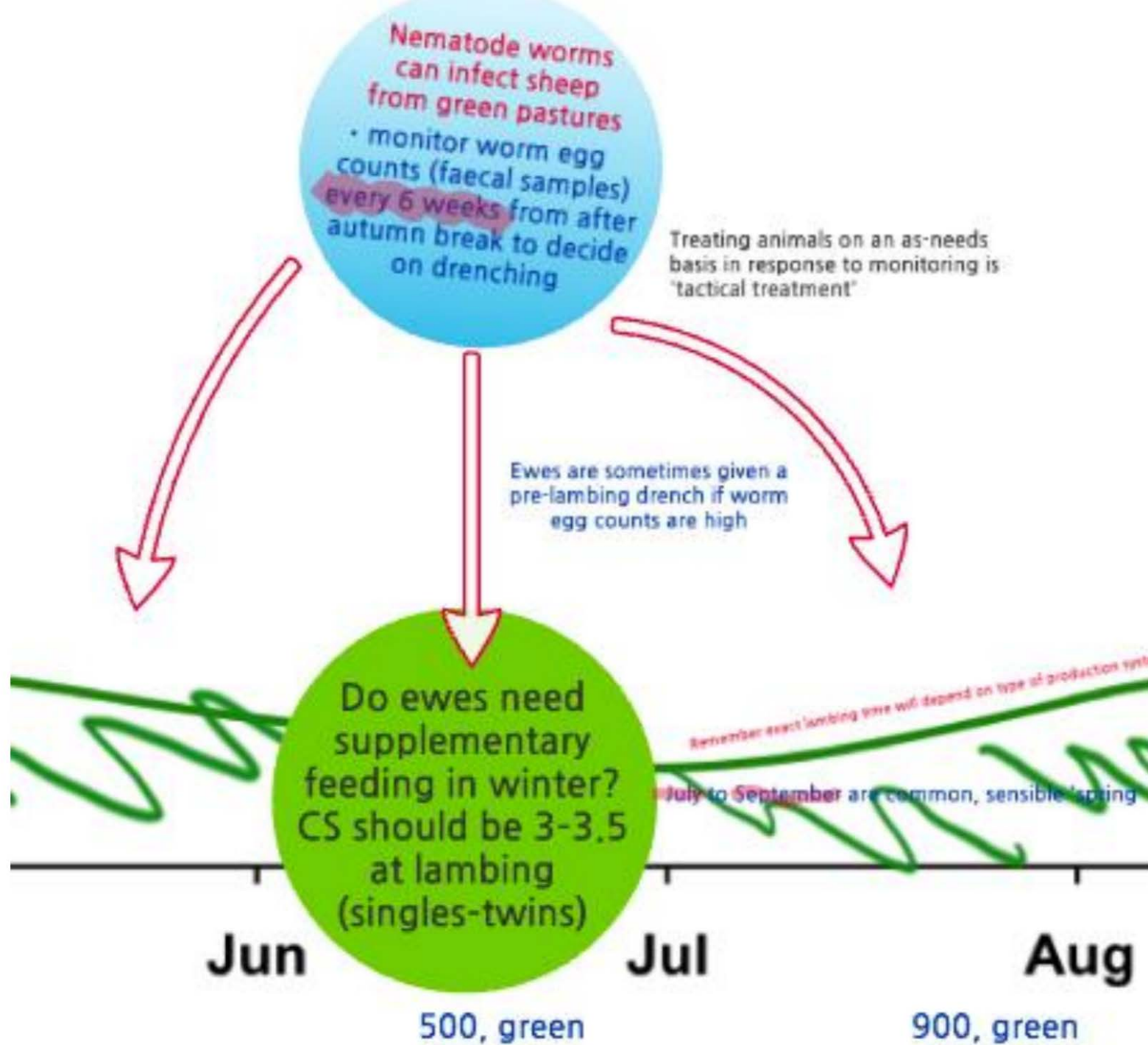
Age sell wethers	Ewes	Hoggets	Wethers	Total
2.5	2300	1730	780	4810
3.5	2040	1550	1380	4970
4.5	1850	1400	1850	5100
5.5	1700	1280	2240	5220
6.5	1570	1190	2550	5310



# Condition score targets

- Ewes need to be CS 3 at mating (not too fat but good fertility)
- Monitor CS pre-joining
- Manage nutrition as necessary (care with \$, budget)
- Breeding soundness exam for rams







# Managing fly risk

- Blowfly activity increases into spring (warmth, moisture)
  - ?chemical prophylaxis
  - Crutching
  - Shearing





# Shearing

- Generally done once annually, some properties may reduce to every eight months – need to get adequate length of wool
- Often summer or early autumn
- If lice are present, apply eradication insecticide “off shears”
- Apply long wool preparation to limit damage if necessary (depends on \$ as to best option)

