Managing Ewes through Pregnancy & Lambing

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What are the main causes of ewe and lamb death?

What can we control?

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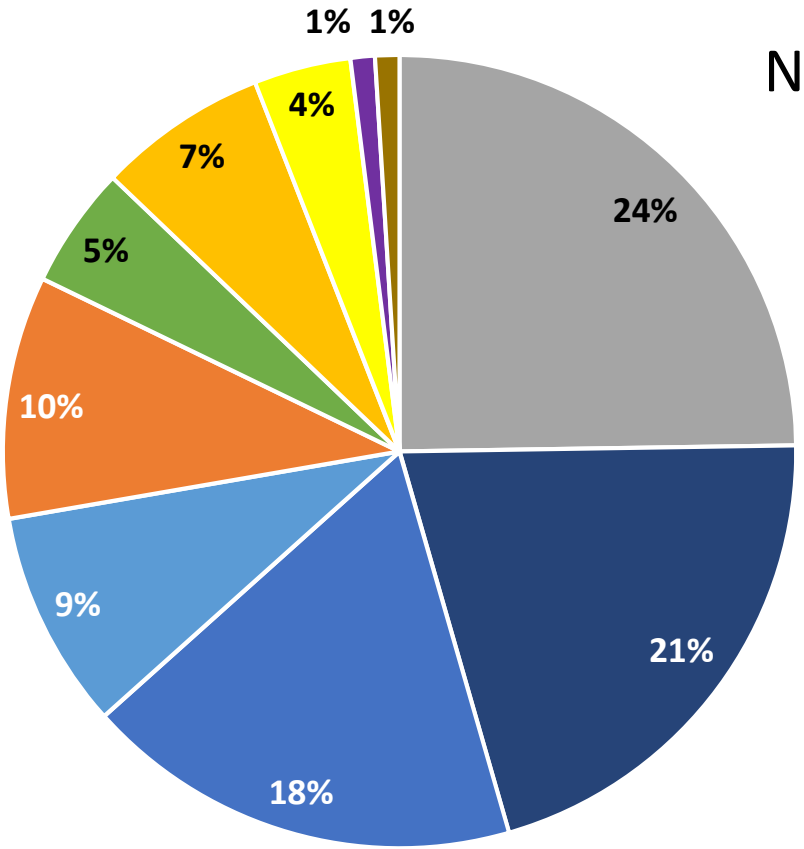
Neonatal Lamb Mortality - 2015
(Refshauge et al)



- Starvation / Mismothering
- Stillbirth
- Birth Injury
- Dystocia
- Prem / Dead in utero
- Exposure
- Primary Predation
- Undiagnosed
- Infection
- Misadventure

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MAIN DRIVERS OF EWE AND LAMB LOSS

Birthweight & Birth Type

EWE NUTRITION

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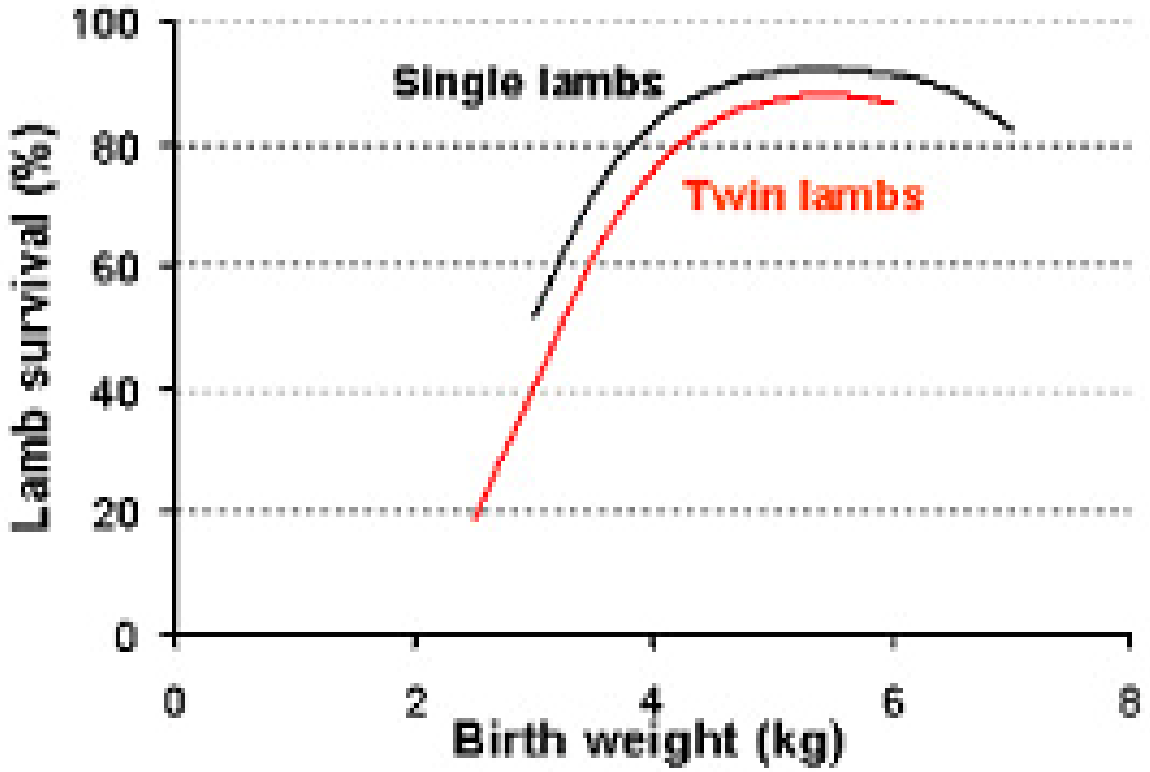
LAMB BIRTH WEIGHT AND SURVIVAL



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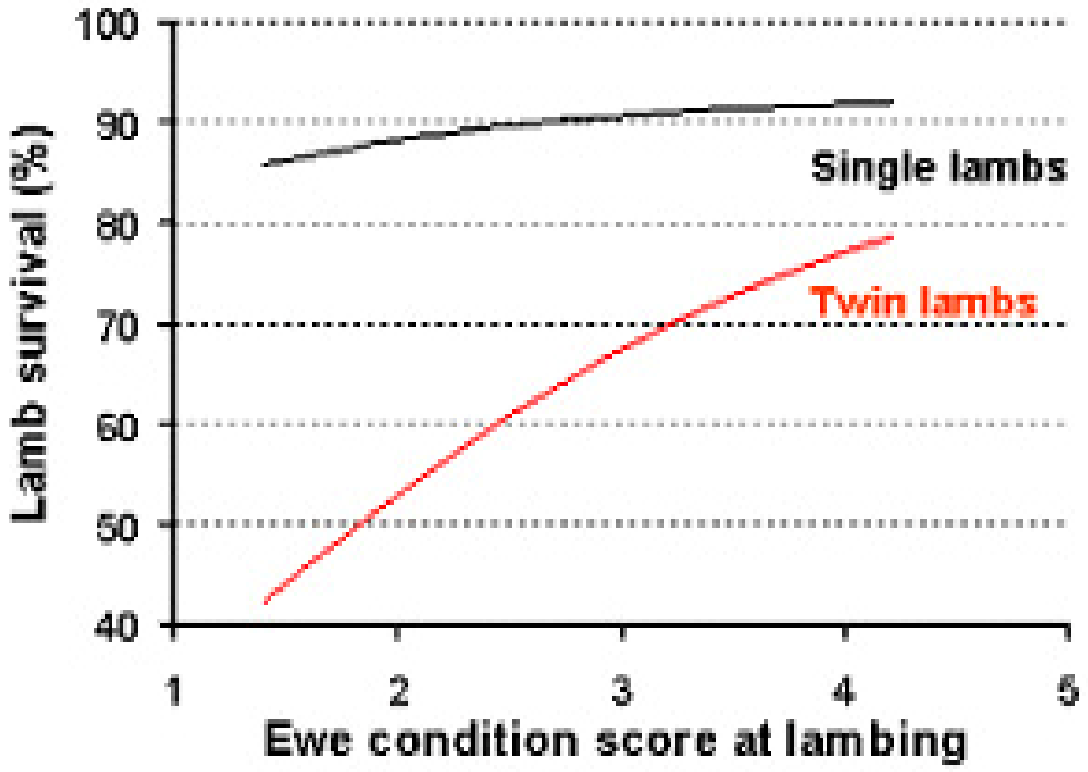
EWE CONDITION SCORE AT LAMBING AND LAMB SURVIVAL

(lifetime wool)



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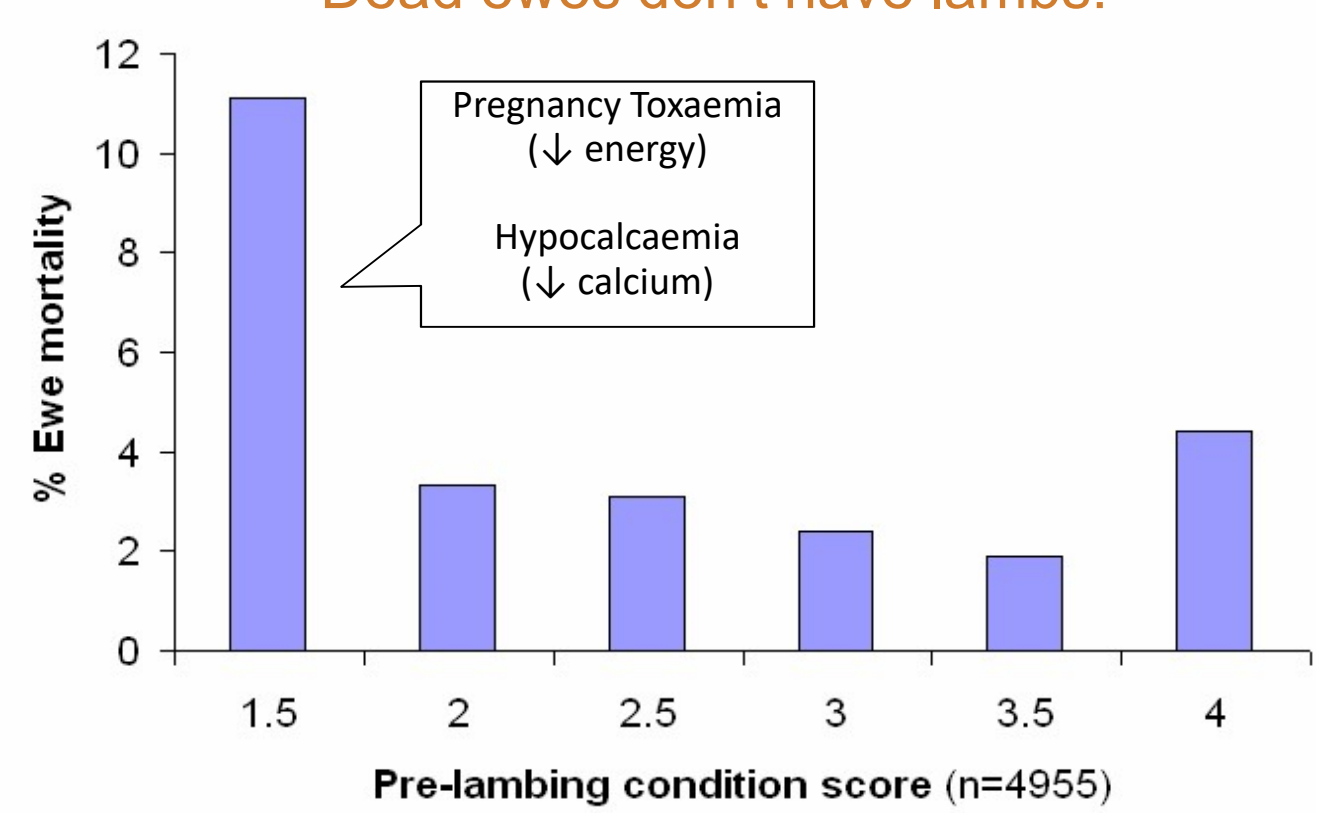
Dead ewes don't have lambs!



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TOOL: Condition Scoring

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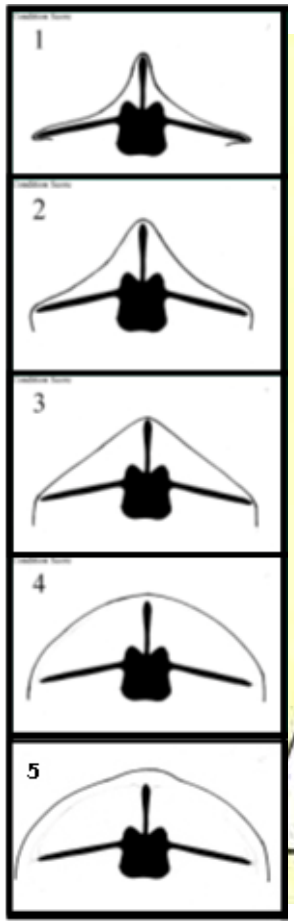

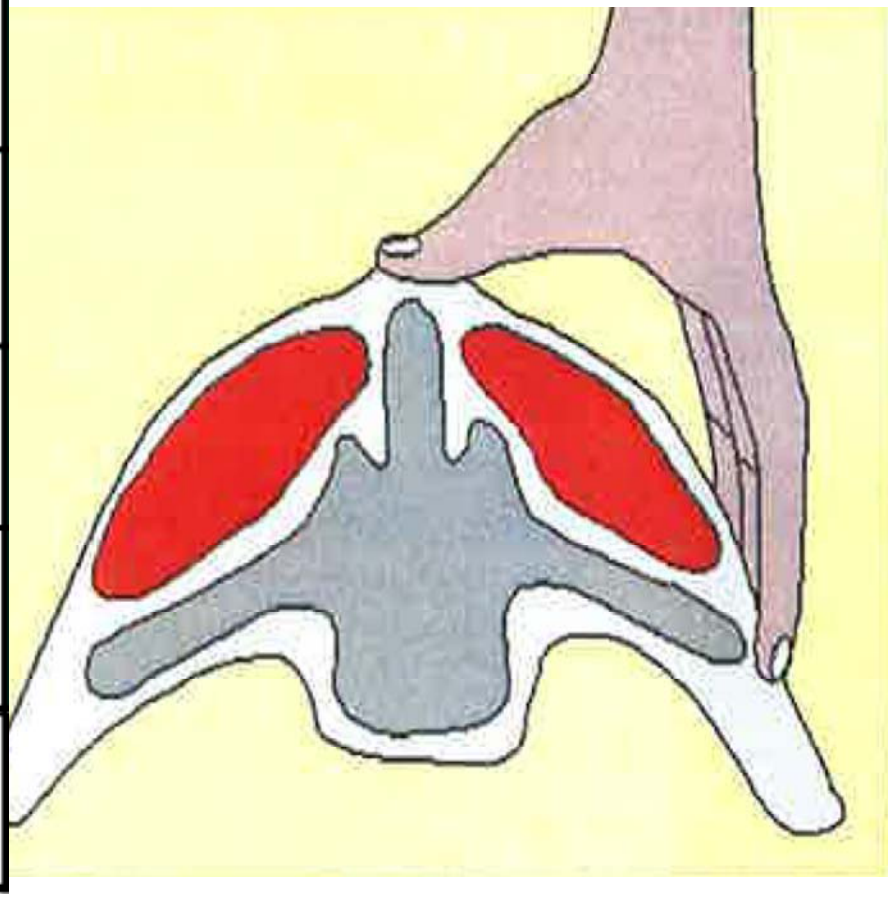

CONDITION SCORE

- Measure of fat <u>and</u> muscle
- **NOT** Fat Score - measures fat cover only over the long rib

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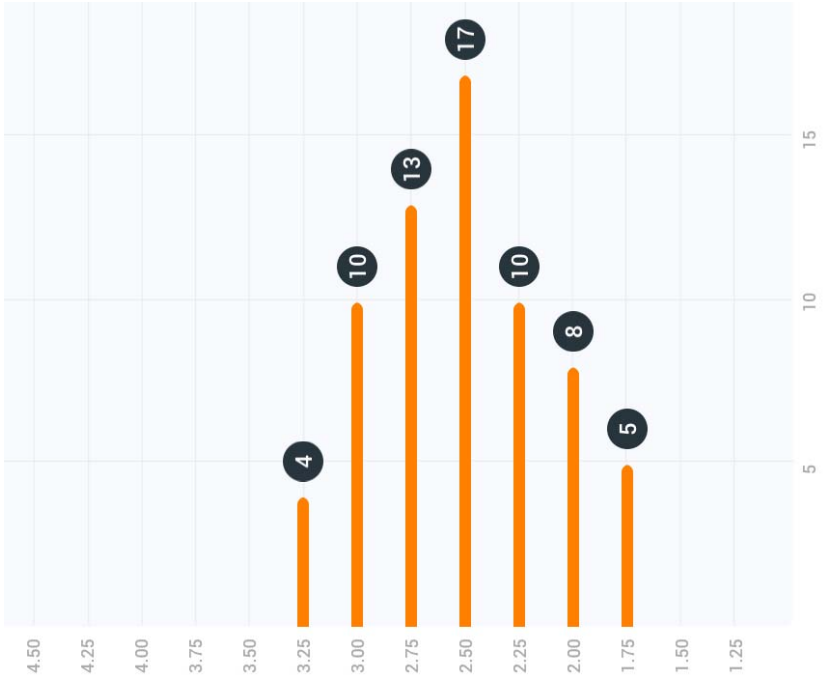
WHY CONDITION SCORE?

- More accurate than Fat Score for managing ewes
- Simple and quick
- Can predict production of ewes/lambs
- Better feed allocation

AIM FOR:

CS 3 (singles) and 3.5 (twins) at LAMBING

CS 3 at JOINING



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MEETING THE NEEDS OF PREGNANT EWES

1. **Determine ewe's energy requirements**
2. Assess pasture for quality & quantity
3. Calculate surplus/deficit and feed appropriately

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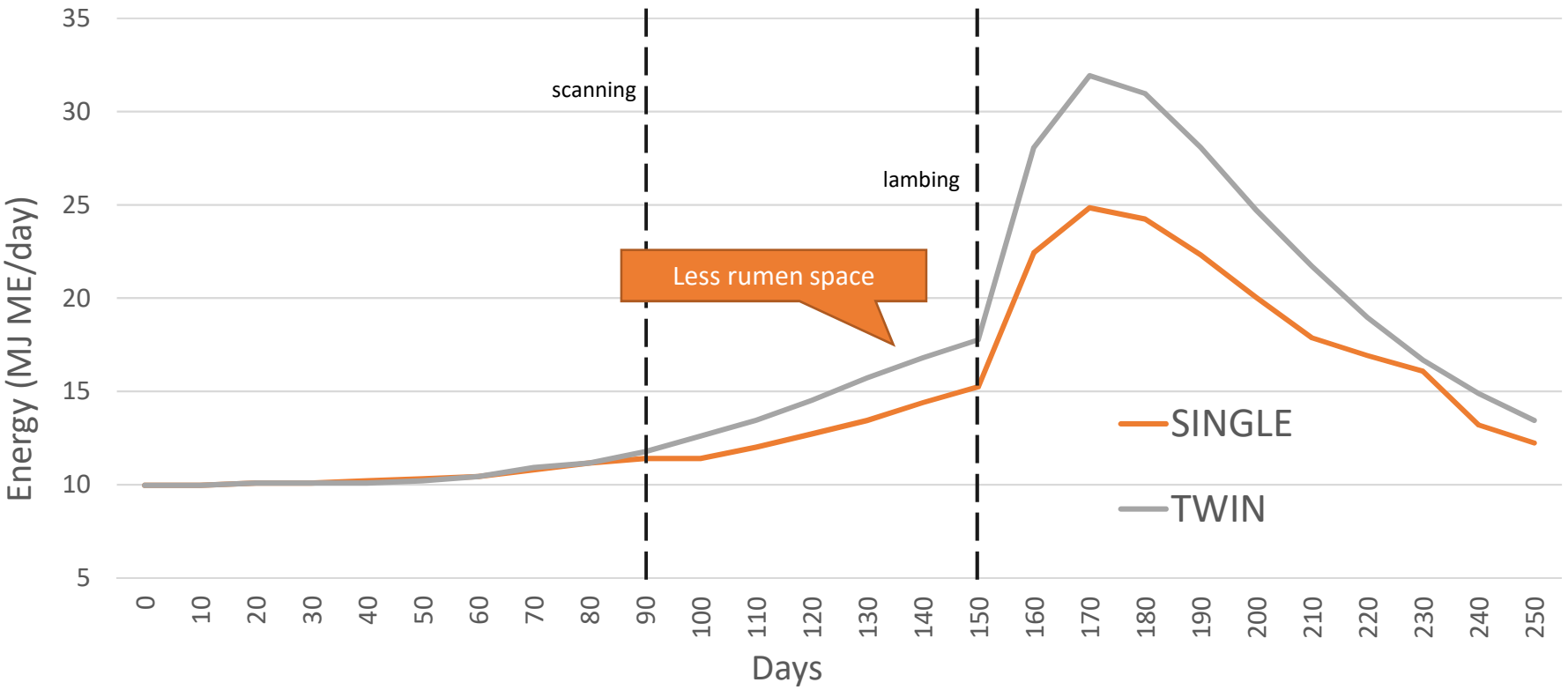
Energy Requirements for 60kg Ewe



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SCANNING

- Identify any joining problems
- Draft ewes post scanning – pregnancy and CS
- Better allocate feed
- (Better manage twins)

- Multiple/Single – 90 days from rams in
- Wet/Dry – from 35 days after rams out
- Early/Late

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Quantity

- Feed on Offer (FOO)
- Kg DM/ha

FOO = 1500
(700 green, 800 dead)
- DOMD 50%
- CP 8.6%
- ME 6.9 MJ

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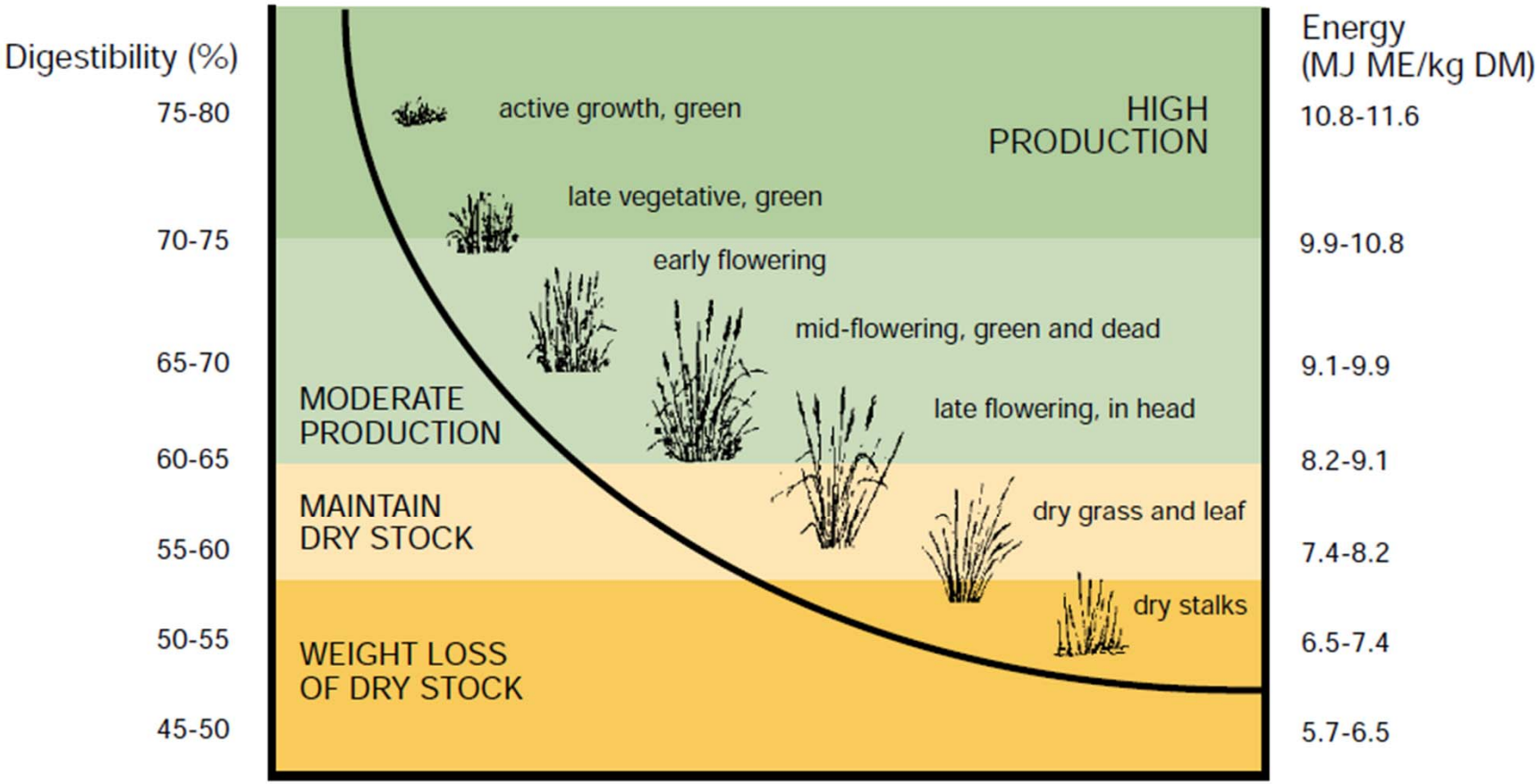
300–600 kg/ha

1200–1500 kg/ha

QUALITY


Digestibility (%)
75-80
70-75
65-70
60-65
55-60
50-55
45-50
active growth, green
late vegetative, green
early flowering
mid-flowering, green and dead
late flowering, in head
dry grass and leaf
dry stalks
HIGH PRODUCTION
MODERATE PRODUCTION
MAINTAIN DRY STOCK
WEIGHT LOSS OF DRY STOCK
Energy (MJ ME/kg DM)
10.8-11.6
9.9-10.8
9.1-9.9
8.2-9.1
7.4-8.2
6.5-7.4
5.7-6.5

What's in the feed?

Cannon ball – Wilcannia May 2020

DOMD	55%
CP	20%
ME	7.8 MJ

Blue bush – Wilcannia May 2020

DOMD	43%
CP	14%
ME	5.6 MJ

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Pastoral Plants

	Saltbush	Blackbush	Bluebush	Spear Grass (Dry)
Protein (% DM)	11 - 20	15	14 - 23	4 – 5
Energy (MJ/kg DM)	7 - 11	5.5	6 - 10	6.5
Digestibility (DOMD %DM)	45 - 55	42	56	45
Other	High salt High Ca:P, N, S			

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MEETING THE NEEDS OF PREGNANT EWES

1. Determine ewe's energy requirements
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3. **Calculate surplus/deficit and manage appropriately**

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You can't
make a silk
purse from
a sow's ear
FEEDTEST!

SUPPLEMENTARY FEED

Feed Source	DM %	ME (MJ/ kg DM)	As fed ME /kg	$/ Tonne	$/ MJ	CP %
Cereal Hay	87	8.5	**7.4**	$180	$0.03	**6**
Lucerne Hay	87	9.0	**7.8**	$350	$0.05	**21**
Pellet	90	11.0	**10**	$470	$0.05	**16**
Barley	90	12.3	**11**	$240	$0.02	**11**
Lupins	90	12.5	**11**	$400	$0.04	**32**

How much can they eat?

Higher fibre feed = Lower daily intake

A ewe can eat (roughly, % bodyweight):

- 3.5% bwt – grain
- 2 to 2.4% bwt – hay
- 1.8% bwt – straw

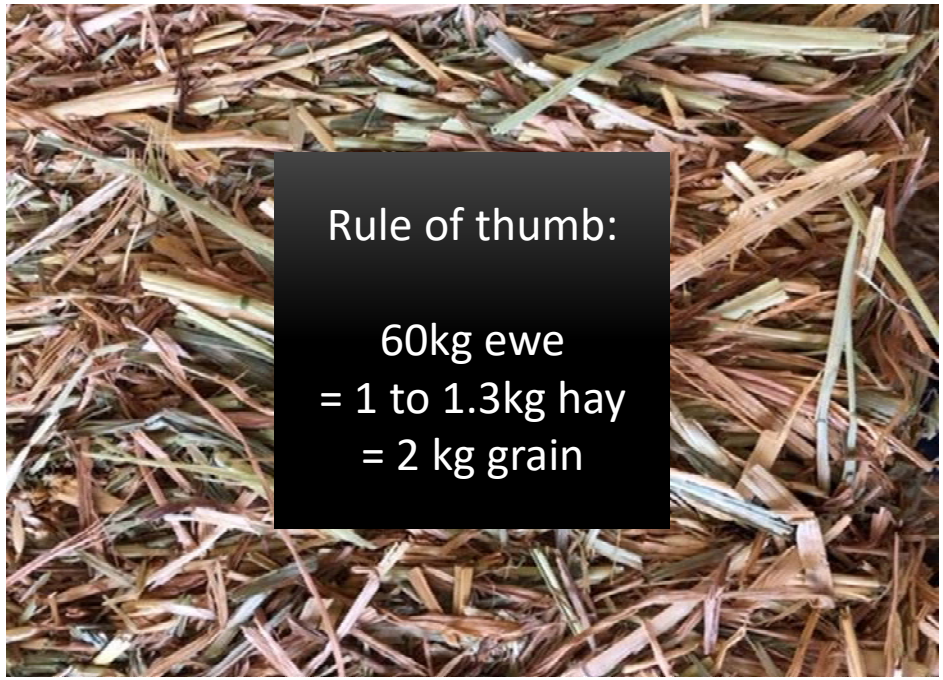

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Table 5. Change in Condition Score due to ME Surplus or Deficit

Increasing Condition Score ME Surplus (above maintenance)					Decreasing Condition Score ME Deficit (below maintenance)				
ME surplus	CS gain per month	Gain g/day			ME Deficit	CS loss per month	Loss g/day		
		50kg	60kg	70kg			50kg	60kg	70kg
6.0	0.4	91	124	131	-3.00	0.4	92	107	133
6.5	0.4	99	134	142	-3.25	0.4	100	116	143
7.0	0.4	107	145	153	-3.50	0.4	108	125	154
7.5	0.4	114	155	164	-3.75	0.4	115	134	165
8.0	0.5	122	165	175	-4.00	0.5	123	142	176
8.5	0.5	129	176	186	-4.25	0.5	130	151	187
9.0	0.5	137	186	197	-4.50	0.5	138	160	198

It takes twice as much energy to gain weight than lose it

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IT TAKES TWICE AS MUCH ENERGY TO GAIN WEIGHT THAN LOSE IT

Need = 10MJ/day, less pasture intake = 5MJ/day =Balance = -5MJ/day

60kg Dry Ewe, CS3	Maintain Condition	Lose Condition
FEB/MAR		
ME Supplement (Grain mix = barley + buffer)	5.5 MJ (0.5kg/h/d)	0 MJ
Energy Balance	Maintain	**Lose 0.6 CS /**mnth
Condition Score end Mar	3.0	1.8
APR		
April feed (max gain 0.6 CS/month)	5.5 MJ (0.5kg/h/d)	**15.5 MJ (1.4kg/h/d)**
Condition Score end Apr	3.0	**2.4**
TOTAL FEED		
Ration cost = ($350/t)	18c/day for 89 days	50c/day for 30 days
Total cost 3 months	$16.00	$15.50

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WATER

- Quality
  - Salinity
  - Contaminants
  - Free of toxins (eg. blue- green algae)
- Clean troughs every couple of days

  - more often for younger stock
- Minimum flow rate of 21 litres/minute

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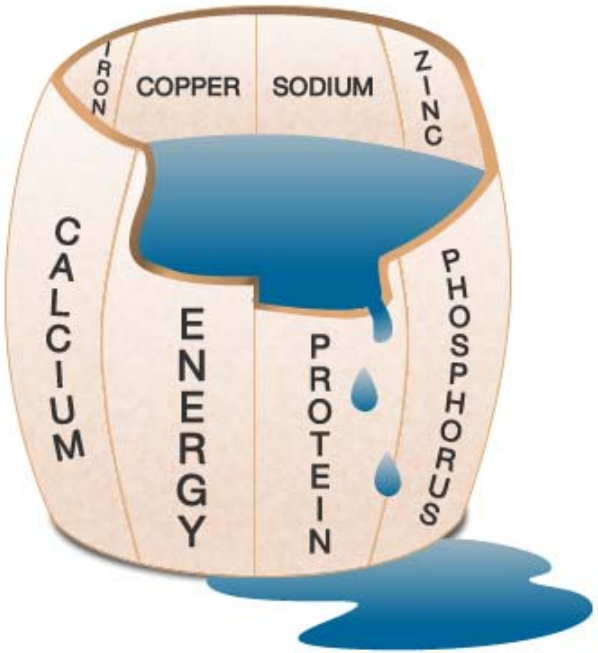
MINERAL SUPPLEMENTS



Blocks

Loose Licks

BEACHPORT LIQUID MINERALS
livestock supplements

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TOOL: Mob Size

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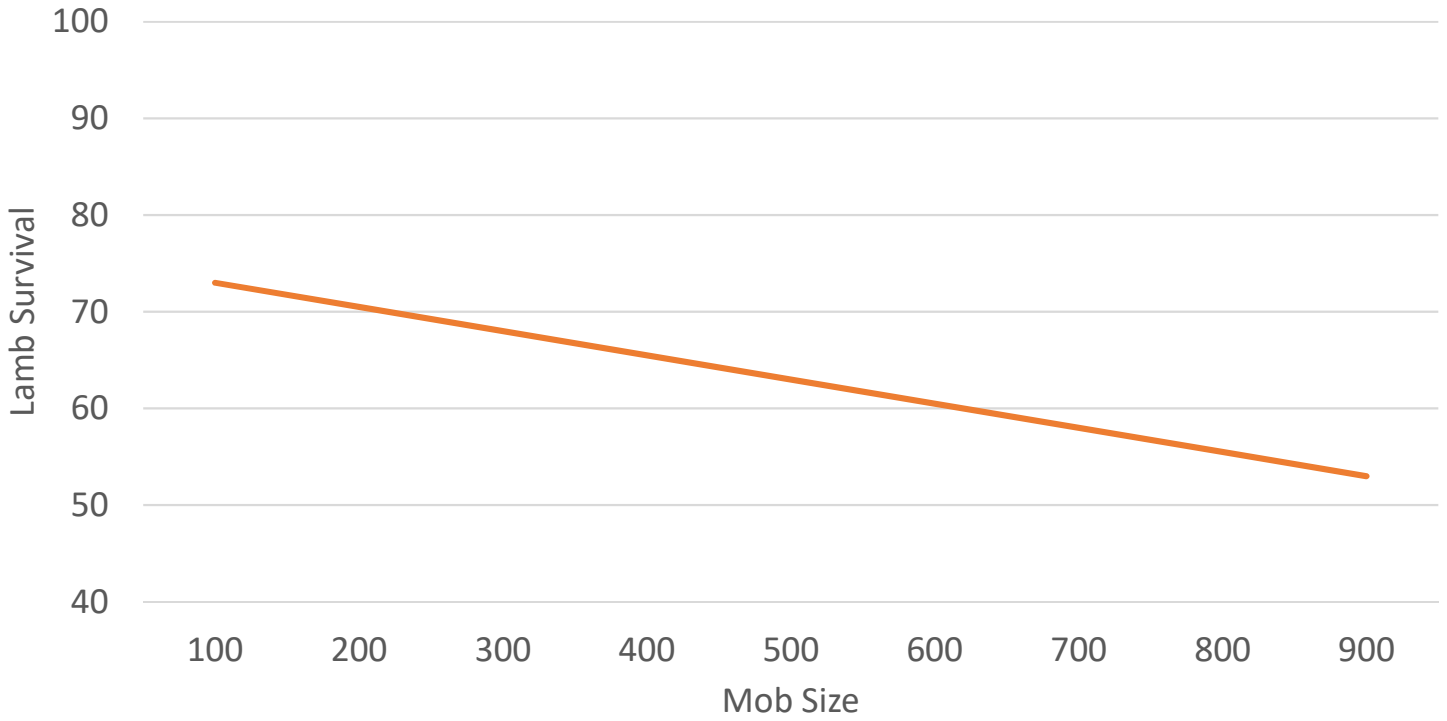
Mob size and Merino twin lamb survival at low stocking rates



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MOB SIZE & LAMB SURVIVAL

- 2 to 2.5% reduction in survival for every 100 ewe increase in mob size
- Twin mob size 40-50% of the optimum for singles
- Keep mobs as small as possible

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Take home messages

- Monitor and manage condition score
- Meet the needs of ewes (playing catch up doesn't work)
- Identify fodder/pasture quality and quantity
- Focus on multiples to ↑ survival %
- Restrict Mob Size

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Tools and resources

- Bred Well Fed Well
- Making More from Sheep – especially Modules 10, 11, 12
- MLA Project Number ON-00347, Improving lamb survival by optimising lambing density, Publication date: 5th February 2019
- Lifetime Wool program and Lifetime Ewe Management producers course

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