



Confinement Feeding National Webinar

July 2025



Acknowledgement to Country

MerinoLink acknowledges the First Nations people of Australia as the Traditional Custodians of the Lands and Waters on which we live, learn and work.

We pay our respects to elders past, present, and future of these nations and any First Nations people in this workshop today.



Merino
LINK

Funders and Partners:



Australian Government
**Department of Agriculture,
Fisheries and Forestry**



**Charles Sturt
University**

Gulbali Institute
Agriculture Water Environment



Green Blue Health
Supporting Green & Blue Farming



4 SEASON COMPANY PTY LTD
Premium Animal Nutrition



This project is supported by the Australian Government through funding from the Climate-Smart Agriculture program under the Natural Heritage Trust

Agenda

01

**Workshop
Introduction-
- Jim Meckiff**

02

**Principals of
Confined
Feeding
- Dr Susan
Robertson**

03

**Aims and
objectives of
new project
- Dr Susan
Robertson**

Meet our speakers



Dr Susan Robertson

Charles Sturt University



Mr Jim Meckiff

JM Livestock

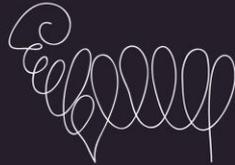
Project partner & production advisor

Jim Meckiff

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JM LIVESTOCK

SHEEP, WOOL & LAMB PRODUCTION SPECIALIST

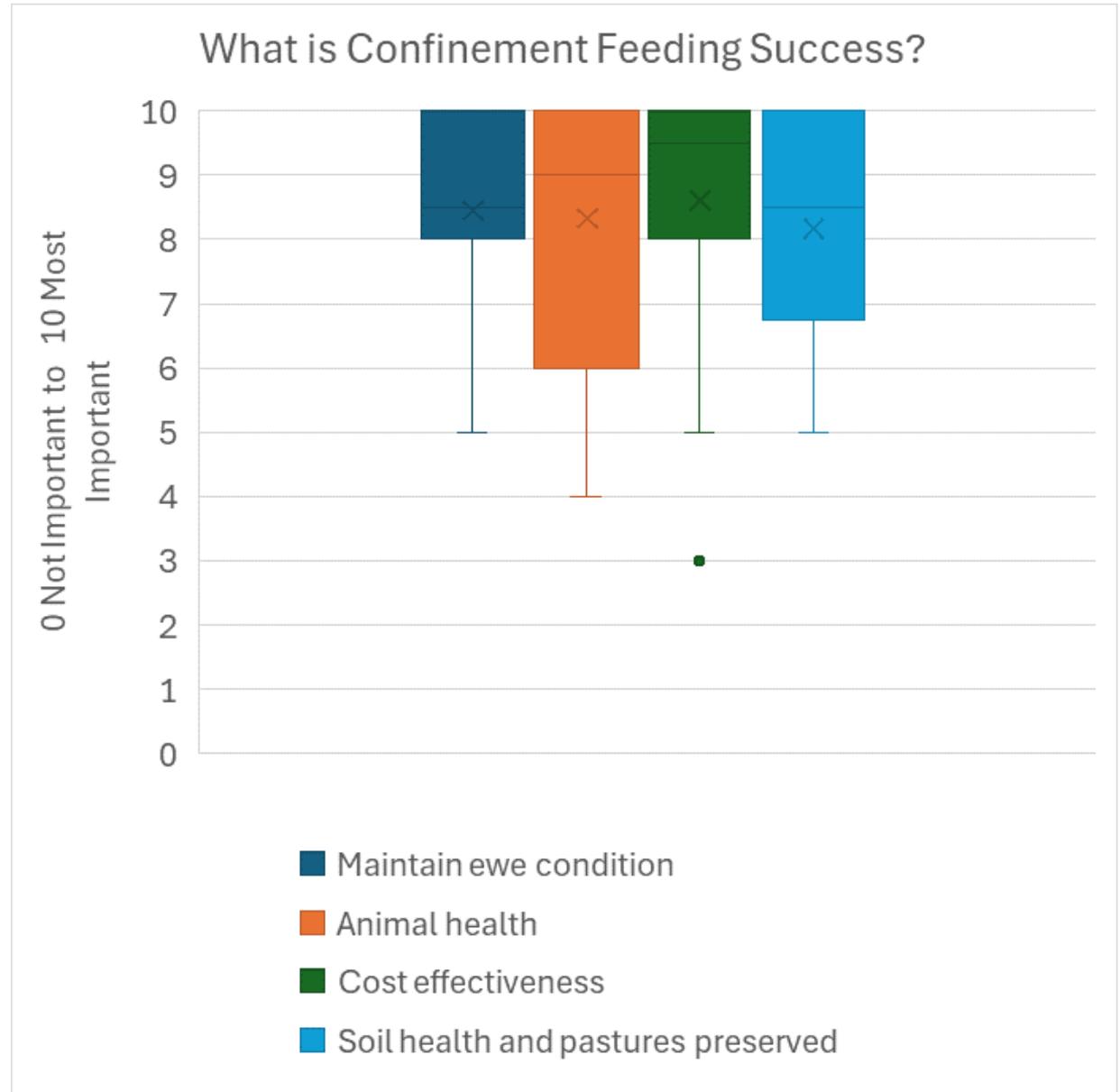
When & Why confinement feed....

Generally used in drought, autumn, late breaks & early winter to:

- preserve groundcover & pastures
- create a winter feed wedge
- target condition score management
- maintain numbers
- avoid selling low & buying high
- preserve breeding stock
- biosecurity - weeds & disease



FEEDBACK

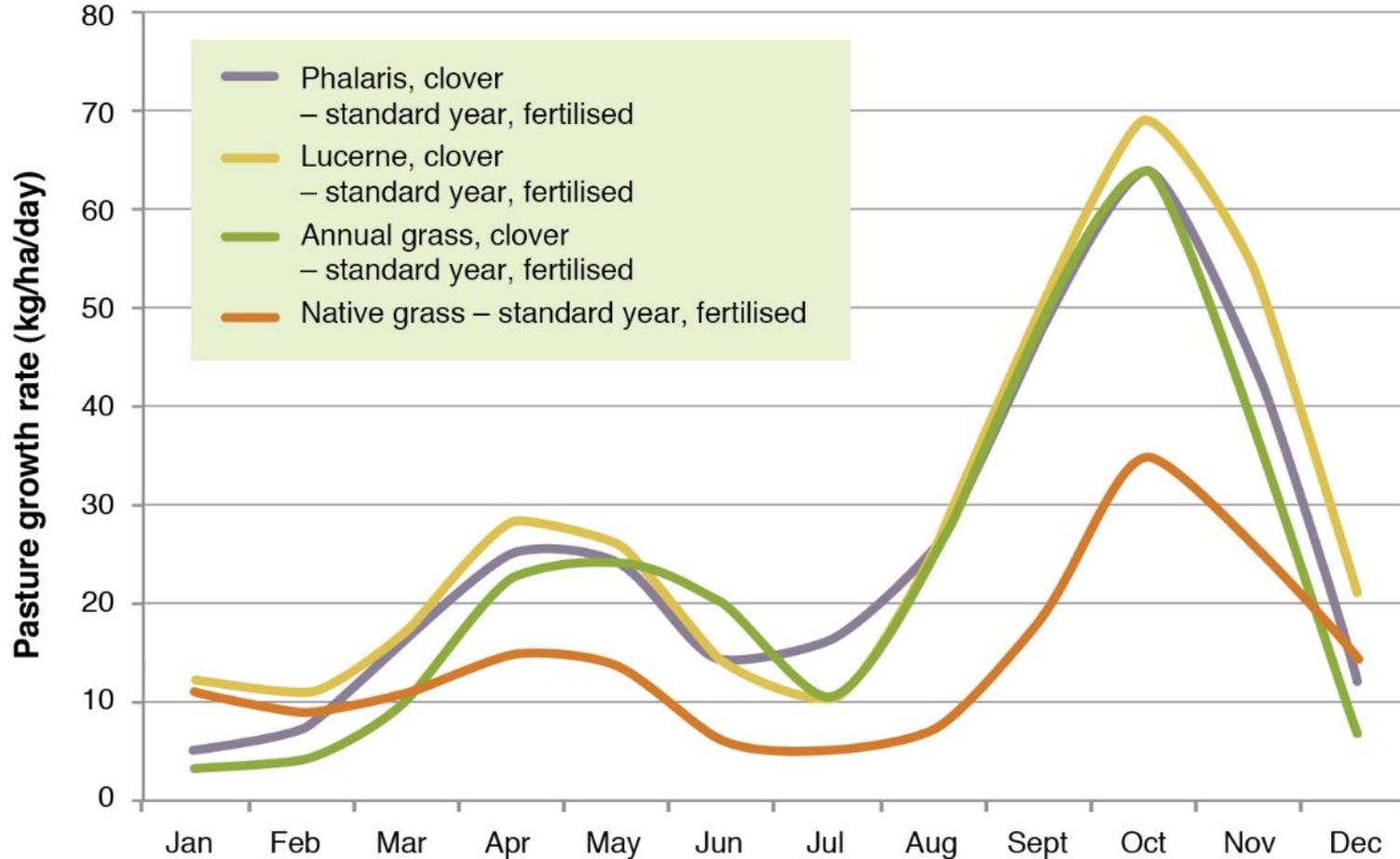


The feed gap can occur almost anytime....

- Drought / Flood / Fire
- Seasonal Autumn / Winter feed gap
- Late break
- Reliance on Grazing Crops >+SR
- Stocking Rates >>Carrying Capacity
- More stock for longer/ heavier sale weight
- Dual purpose Grazing Crops @crop lock up (August)



Pasture Growth Rates South West Slopes NSW



Source: EverGraze Regional Pasture Growth Rates

Feed Budget – FEED \$ Only

		0-90		90-150		Lactation	Total
Preg Status	TWIN	Feb	March	Apr	May	June	
Avg ME / DAY		8.6	9.1	11.1	15.4	24	
Supplement %		100%	100%	100%	100%	30%	
Days Feeding		28	31	30	31	30	
ME / Hd / Month		241	282	333	477	216	1549
Kg / h / m		20	23	27	39	18	128
Cost M/D		\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	
BARLEY \$ / T	\$350						
\$ / Hd / Month		\$6.94	\$8.13	\$9.59	\$13.75	\$6.22	\$44.63

Expensive:

Optimise timing, ME Requirements & Condition score





Charles Sturt
University

Gulbali Institute

Agriculture Water Environment

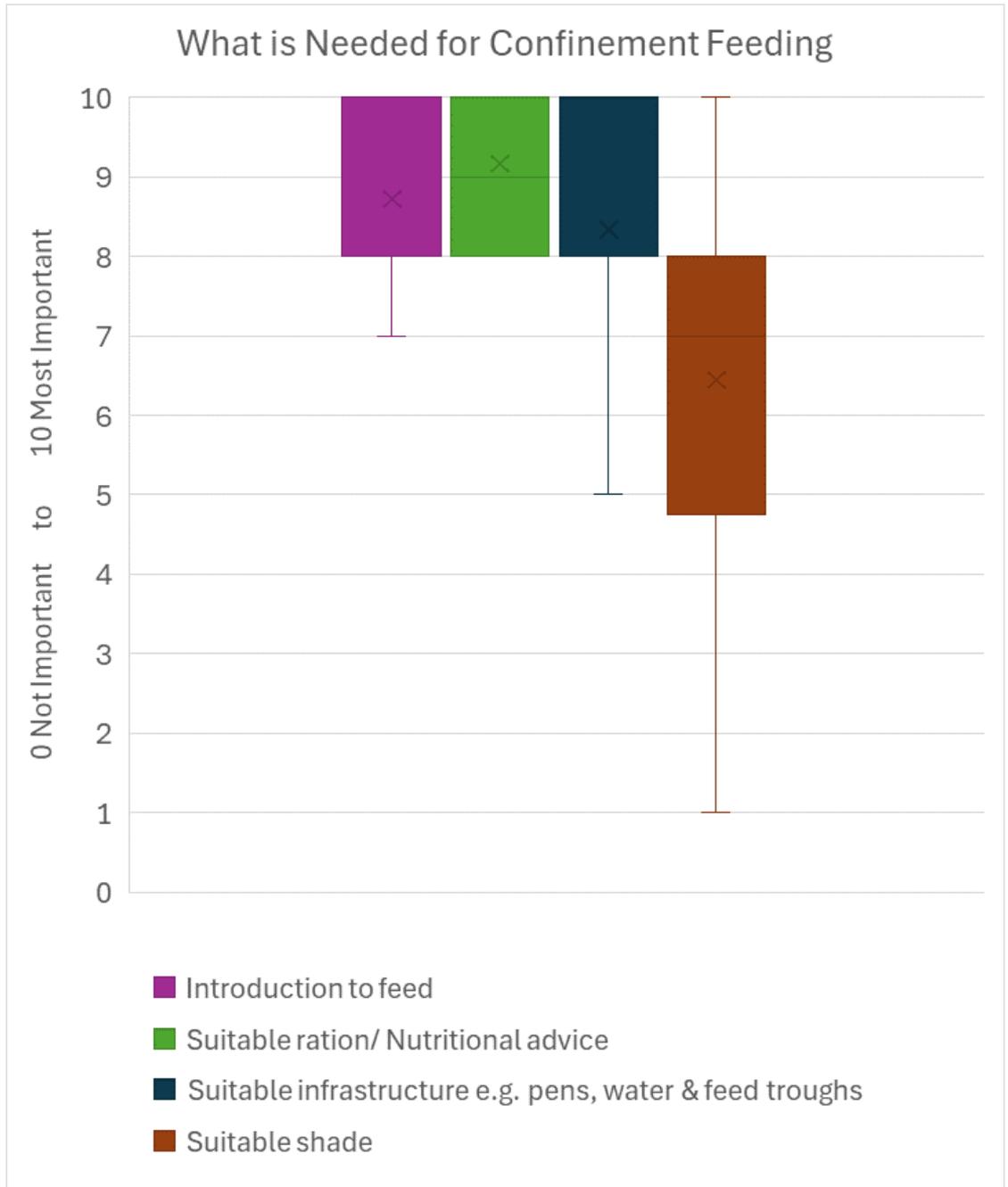
Climate Smart with confined feeding of ewes

Dr Susan Robertson (CSU)

Mr Jim Meckiff (JM Livestock)

Dr Christine Storer (CSU)

Feedback

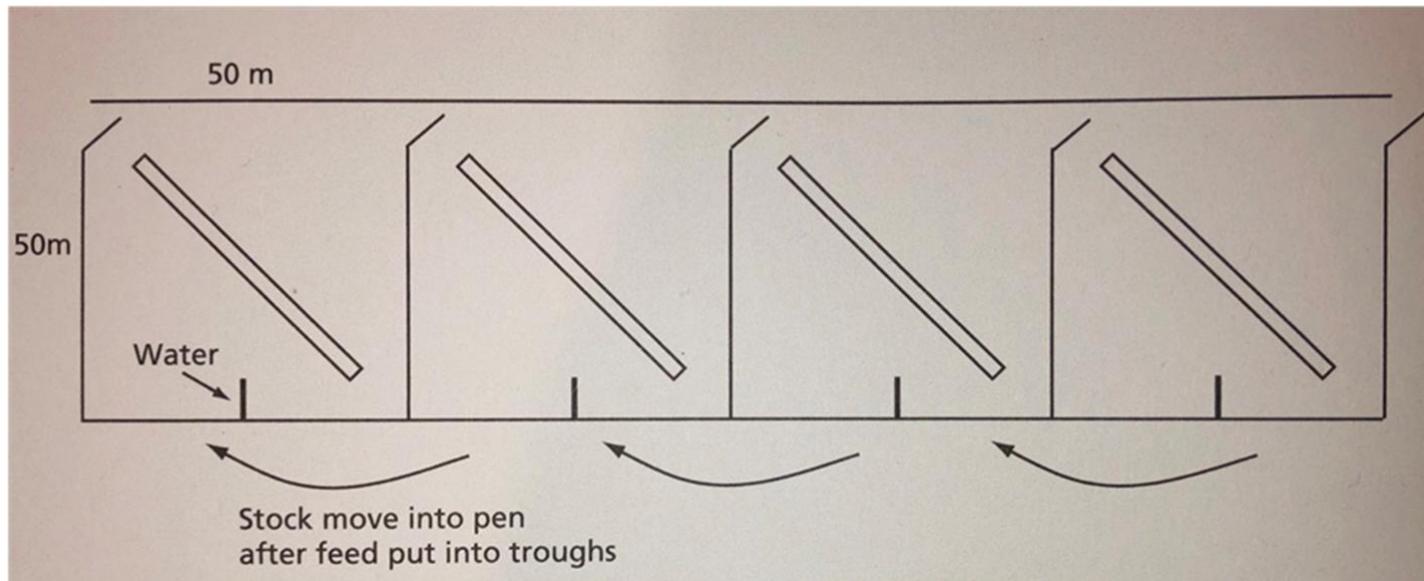


Best evidenced practices - Facilities

- **Lots of designs work, can be low cost**
- Clean water (10 L/sheep/day)
- Minimum space: adult 1.3 m²
 heavy wether 1.5 m²
 ewe + lambs 1.8 m²
- Feed troughs? (cleanliness, disease, feed wastage)
 - Trail length to allow all to feed at once (5-15 cm/sheep?)
 - Insufficient trail/trough length = shy feeders
- **Shade** for hot weather (> 25°C) (≥ 32°C = heat stress)

- Use Existing infrastructure OR Purpose-built
- Close to feed sources and reliable water supply and handling facilities
- Consider access, aspect, shading, drainage
- Away from houses, main roads, waterways

Example design: with skip pen



What do I build?





Photo: John Broster (CSU)

Rations

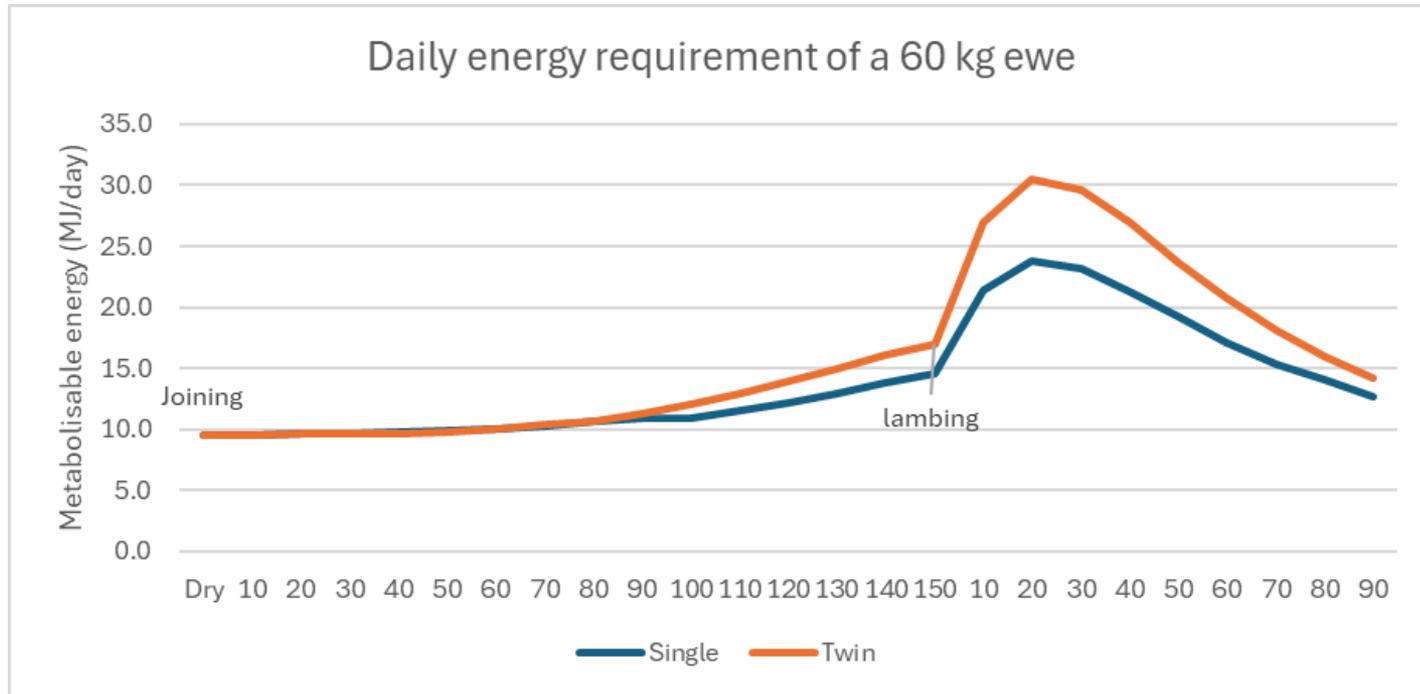
- **Feedtest**
- Feed on 'as fed' basis (allow for water content)
- **Least cost which meets sheep requirement**
 - Cents/MJ **energy** (dry matter basis)
 - Protein, fibre, vitamins and minerals
 - Within intake limits: 120/neutral detergent fibre %
Eg $120/60 = 2\%$ of liveweight
- Pregnancy scan allows feeding to requirement

	Minimum crude protein (%)	Minimum fibre (%)	Maximum intake (% of liveweight)
Not or early pregnant	7	10 (straw)	2-3
Last 6 weeks pregnant	12	20 (hay)	2-3
Lactating	12	20 (hay)	4-5.5

Compare cost of feed in cents/megajoule of energy, dry matter basis

	Cost \$/tonne 'as fed'	150	250	350	450	550	350
	kg dry matter (90%)	900	900	900	900	900	400 (40% DM)
	Cost c/kg dry matter	16.7	28.7	38.9	50.0	61.1	87.5
		<i>Cents/MJ in Dry Matter</i>					
Grain	12 MJ ME/kg DM	1.4	2.3	3.2	4.2	5.1	7.3
Good hay	9 MJ ME/kg DM	1.9	3.1	4.3	5.6	6.8	9.7
Straw	5 MJ ME/kg DM	3.3	5.6	7.8	10.0	12.2	17.5

Energy requirements



6 week joining: last month pregnancy Maintenance x 1.7
 1st month lactation Maintenance x 2.5
 2 & 3 month lactation Maintenance x 1.8 (Bell et al. 2004)

Preg scan useful to feed groups (fetal age, twins, sell dry), reduce feed costs

Preventing health issues

- Typical ration: high cereal grain + straw/hay
- **Risks:** **Acidosis, calcium deficiency, pregnancy toxaemia**
- Calcium and sodium deficient
 - Add 1% salt and 1-1.5% ag lime to grain, or as loose lick
- Magnesium for late preg, lactating ewes
 - Add 1-1.5% causmag
- Vitamin A, E: >3-12 months no green pasture/hay (injection ?)

Preventing health issues

- Separate low condition ewes

Minimise shy feeders

- Monitor and remove shy feeders
- Expose to feeds pre-weaning
- Straw rather than hay (except for late preg/lactating)

	0.5-1 kg hay/week	0.7-2 kg straw/week
Ewes losing > 7 kg	18-25%	0-8%
Source: Morbey & Ashton (1990)		

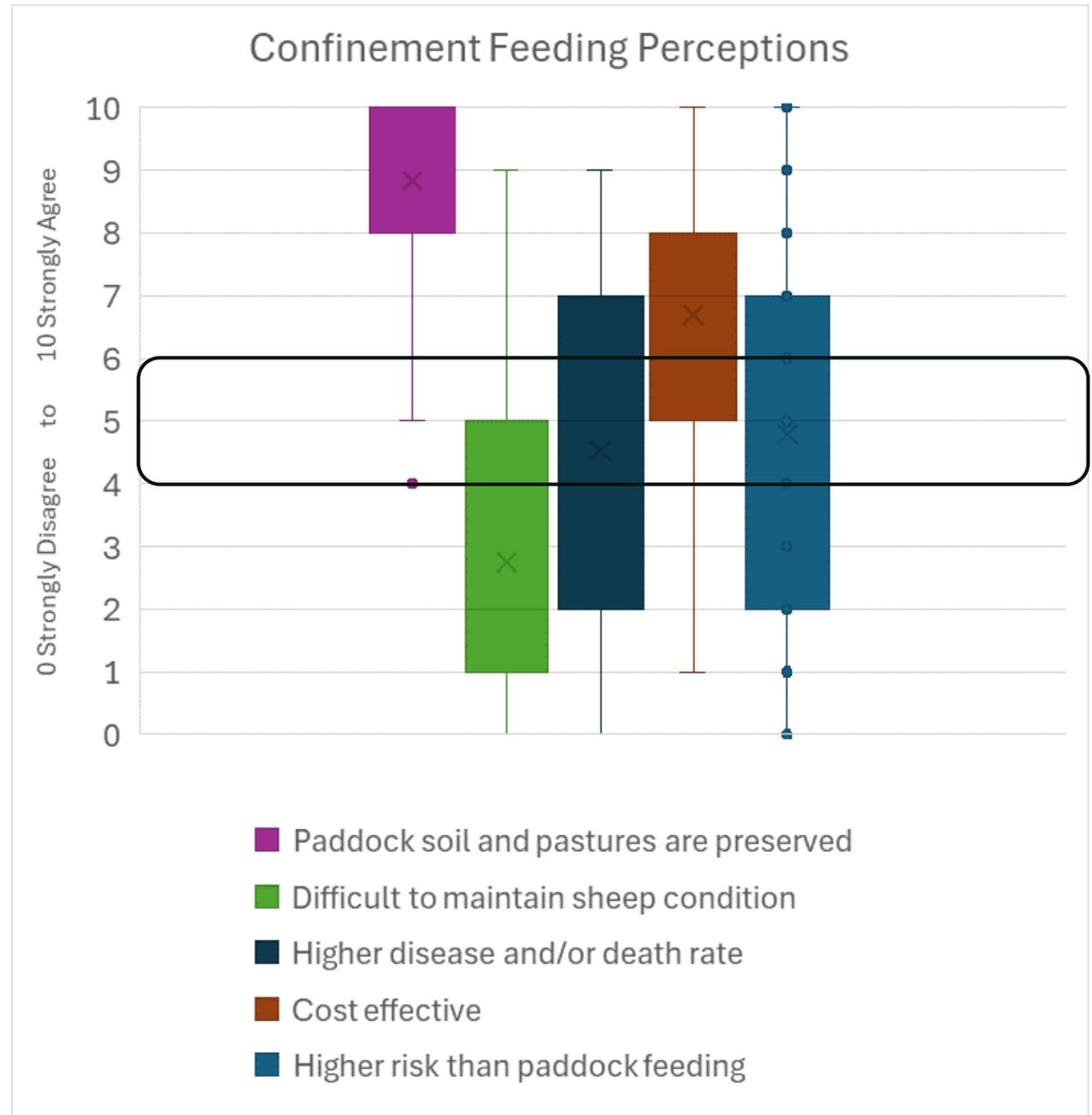
Preventing health issues



- \geq condition score 2 – target 3 to maintain production
- **Vaccinate** for clostridials prior to entry and exit
- **Drench** if needed prior to entry
- **Introduce grain slowly** (2-3 weeks), including rams
 - If changing batch or type of grain
 - Particularly with late pregnant ewes
- **Feeding every 2-3 days** rather than daily < shy feeders
 - Late pregnant/lactating - feed daily
- Avoid releasing without sufficient feed

- **MONITOR**
- Sick sheep = consult a vet

What information is needed?



Resources

- Managing breeding ewes in containment areas. A guide for producers. <https://www.mla.com.au/globalassets/mla-corporate/extensions-training-and-tools/documents/managing-breeding-ewes-in-containment-areas.pdf>
- Drought feeding and management of sheep. A guide for farmers and land managers. <https://www.feedinglivestock.vic.gov.au/wp-content/uploads/2019/03/Sheep-drought-feeding-guide.pdf>
- A guide to confinement feeding sheep and cattle in NSW (Local Land Services). https://www.lls.nsw.gov.au/_data/assets/pdf_file/0005/1431059/LLS_confinement-feeding-booklet-web.pdf
- <https://www.feedinglivestock.vic.gov.au/sheep-resources/useful-tables-sheep/>
- NSW DPI Drought and supplementary feed calculator

Developing practices for profitable, sustainable sheep production in a variable climate

Aims:

Develop & provide information on more **profitable, sustainable, evidence-based** on-farm strategies to:

- Improve the use of confined feeding to protect soil/pasture
- Improve grazing production and resilience to varying climate

Why?

- Need to adapt to hotter, drier, variable climate to remain profitable/sustainable

Questions?



Follow Up Discussion Survey



Post Workshop Survey

