



Department of
Agriculture and Food



Dry Season Response

Agribusiness Update

July 2017

Supporting your success



Nutrition and feed budgeting

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Supporting your success



Energy requirements of lactating ewes

- Energy (MJ) requirement increases thro' lactation peaking at day 21
- Twinning ewes need up to 30% more than singles at peak lactation (~6MJ)
- Drops to 8.3 MJ/hd once weaned at condition score 3
- Confinement fed reduces energy required by 20%

To maintain a ewe in score 2 on low pasture

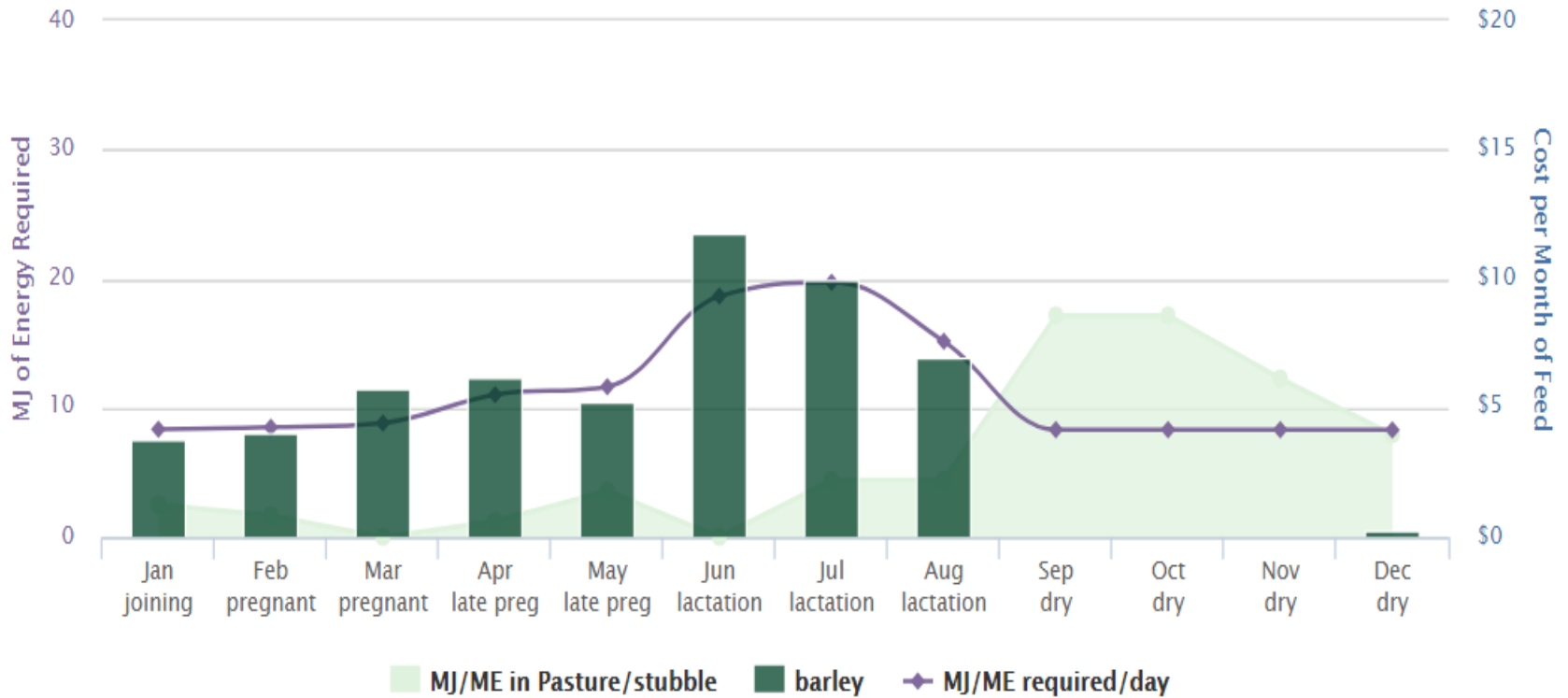
- 7MJ of energy a day = 700gms per head per day of a 10MJ feed (oats)
or 600gms of a 12 MJ feed (barley)
- 6MJ of energy if confinement fed = 500gms per head per day (barley)

What's she getting from the paddock?



Sheep Feed Calculator

Daily energy requirements and cost of feed / month



Annual feed budget for sheep at www.agric.wa.gov.au/feeding-nutrition/annual-feed-budget-sheep-enterprises



Energy requirements of a Merino weaner

Energy required MJ/head/day

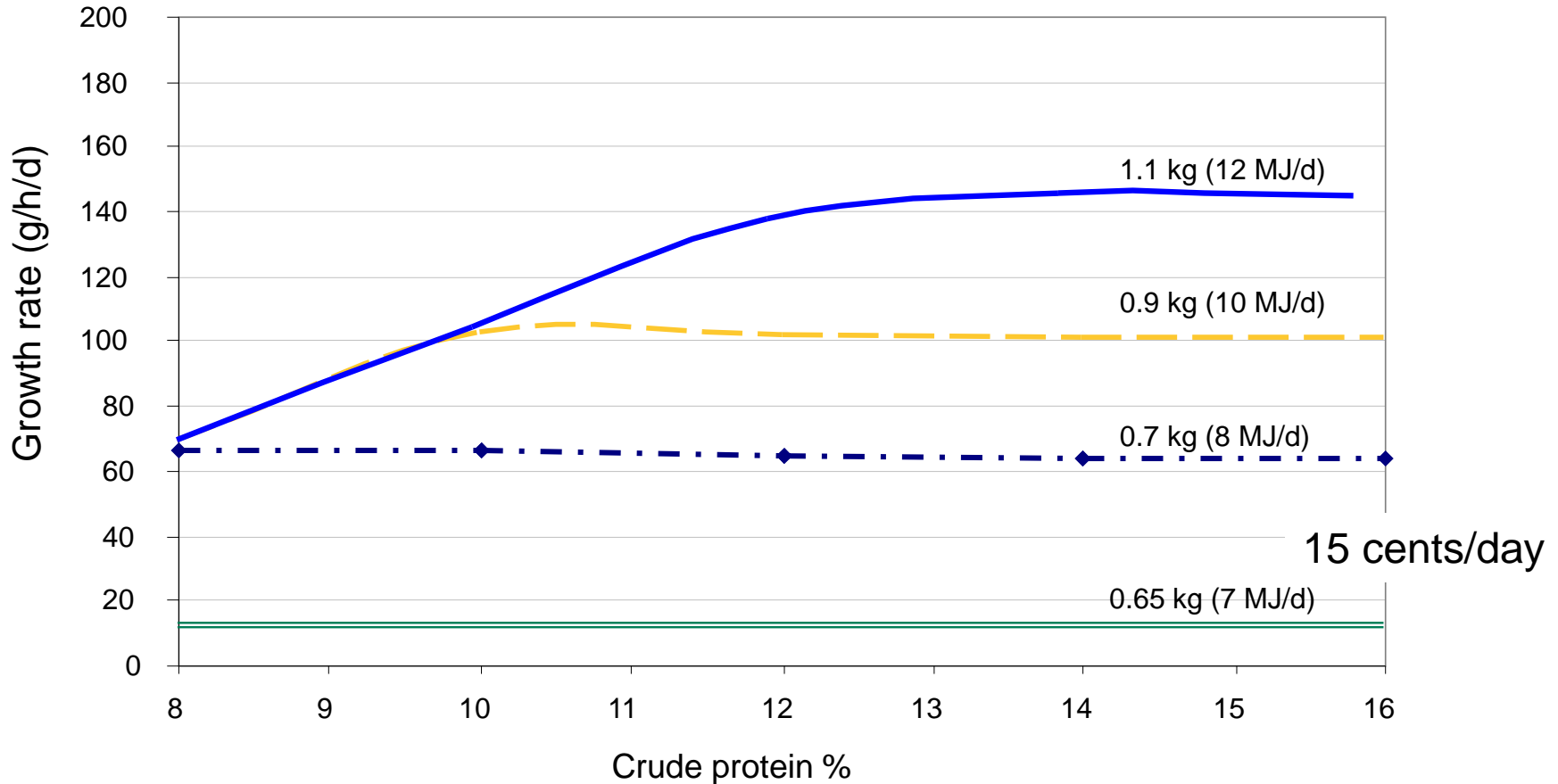
Liveweight (kg)	Maintain weight	Gain at 30g/day	Gain at 50g/day	Gain at 70g/day
15	3.9	5.5	6.2	7
20	4.8	6.7	7.5	8.3
25	5.6	7.8	8.8	9.5
30	6.3	8.8	9.7	10.5

But its not all about energy in growing animals

- Weaners need protein and energy
- If protein is limiting then growth rate is limited regardless of energy
- If energy is limiting then growth rate is limited regardless of protein



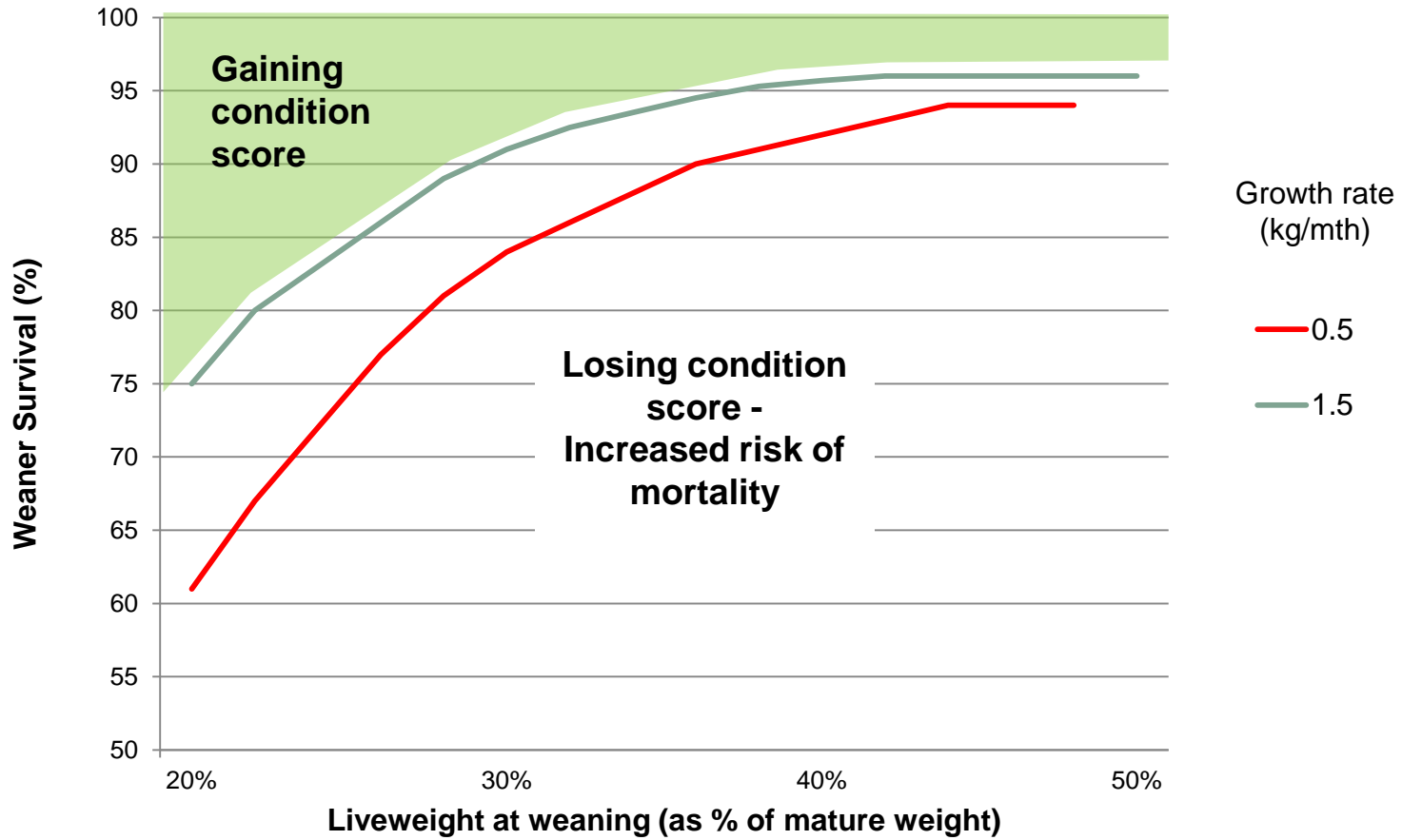
Growth rate of a 30kg Merino weaner with an 11 MJ/kg DM diet



Maintenance for a weaner means growing at >30gms per head per day (1kg per month)



Growth rate and bodyweight effect weaner survival





Maintenance Pellets at \$250/t

Energy (MJ/kg) as fed:	8 MJ/kg
Energy (MJ/t DM):	7,820 MJ/t DM
Protein % as fed:	6%
Energy (\$/MJ DM):	0.03 \$/MJ DM

Barley at \$250/t + 10% hay

Energy (MJ/kg) as fed:	10 MJ/kg
Energy (MJ/t DM):	10,450 MJ/t DM
Protein % as fed:	10%
Energy (\$/MJ DM):	0.02 \$/MJ DM

www.agric.wa.gov.au/feeding-nutrition/feed-cost-calculator

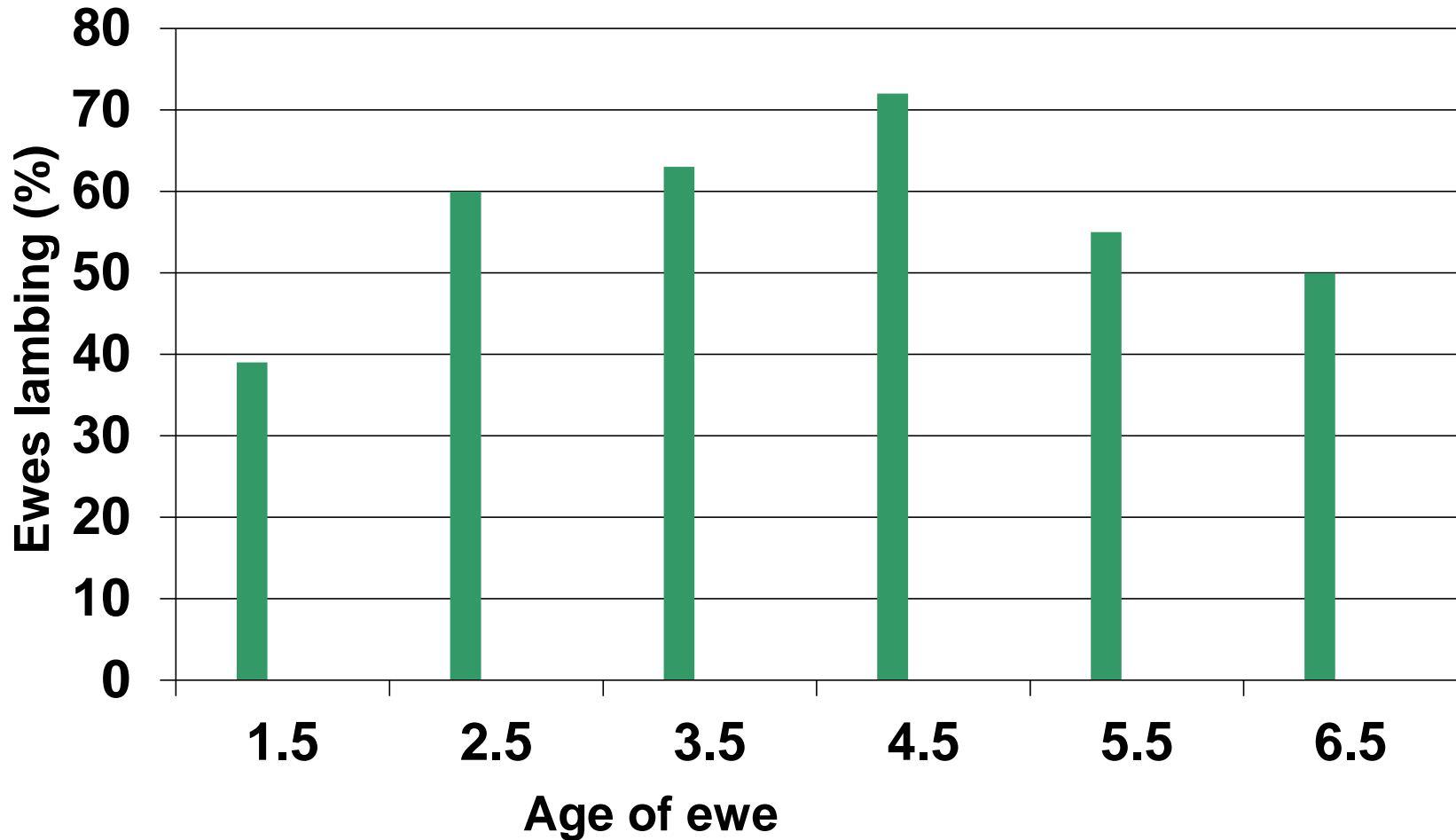


- **Age**
- **Reproductive performance**
- **Production**

Identify the most valuable ewes!



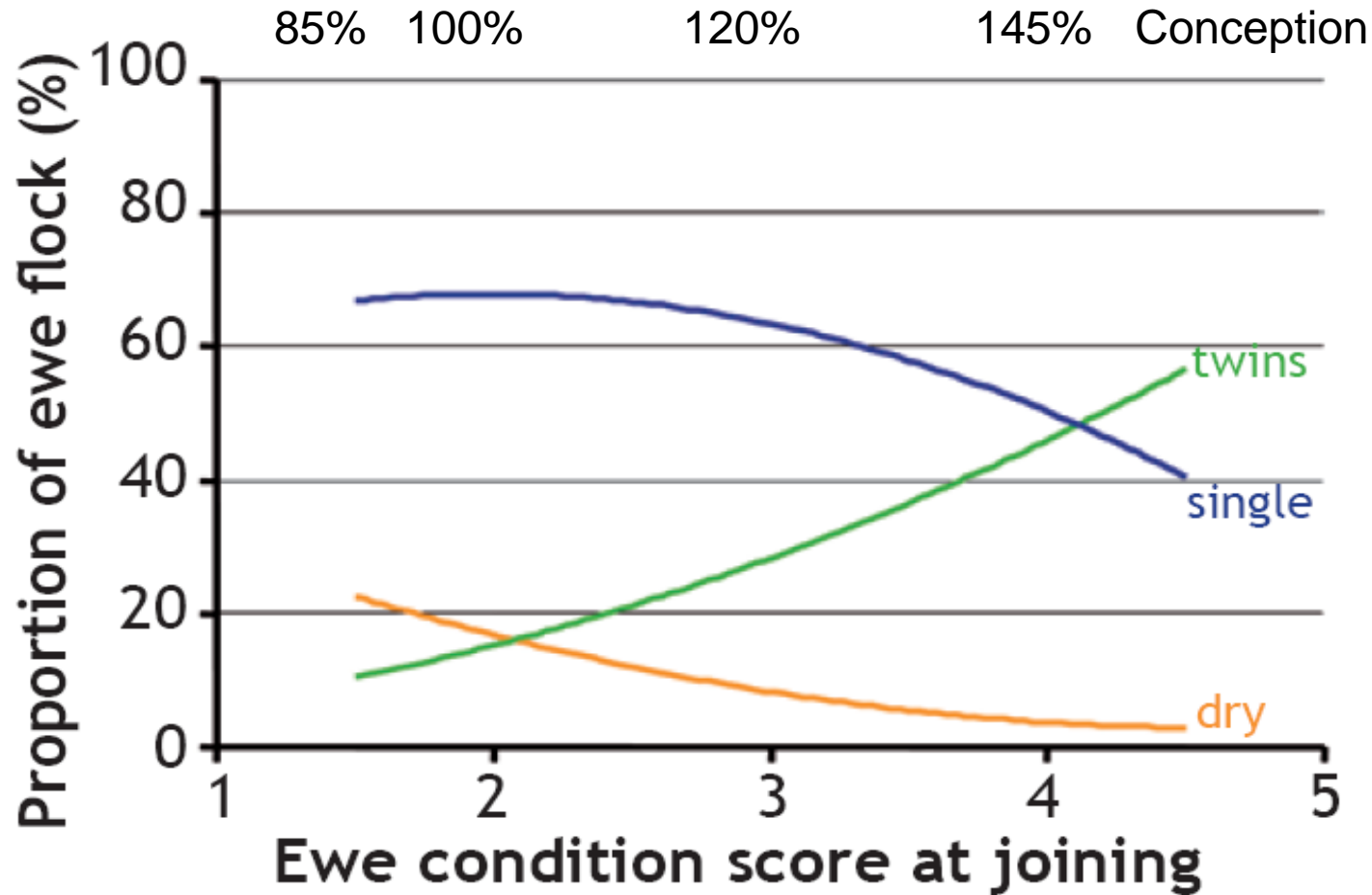
Age of ewes affects reproduction



But there are variable responses between genotypes

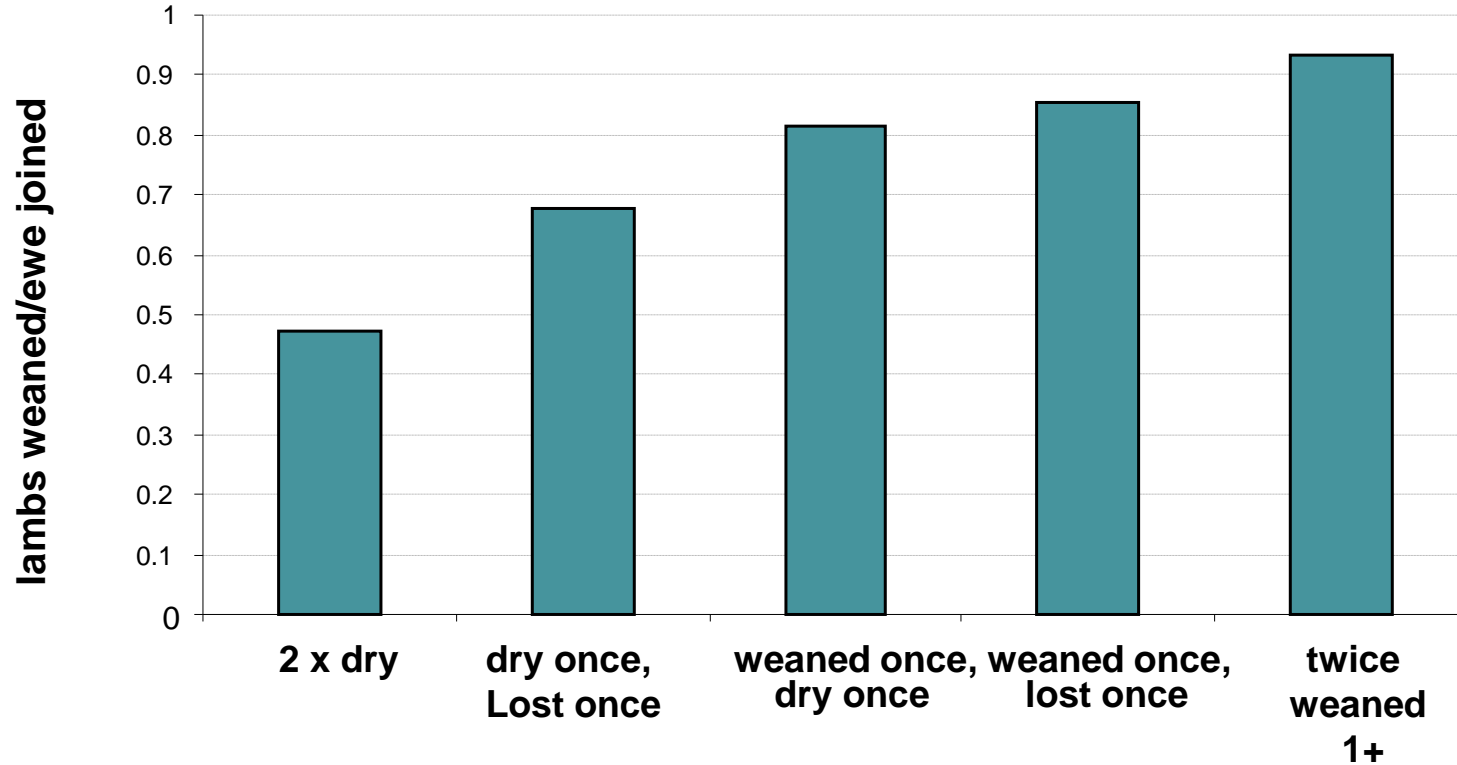


Condition and reproduction



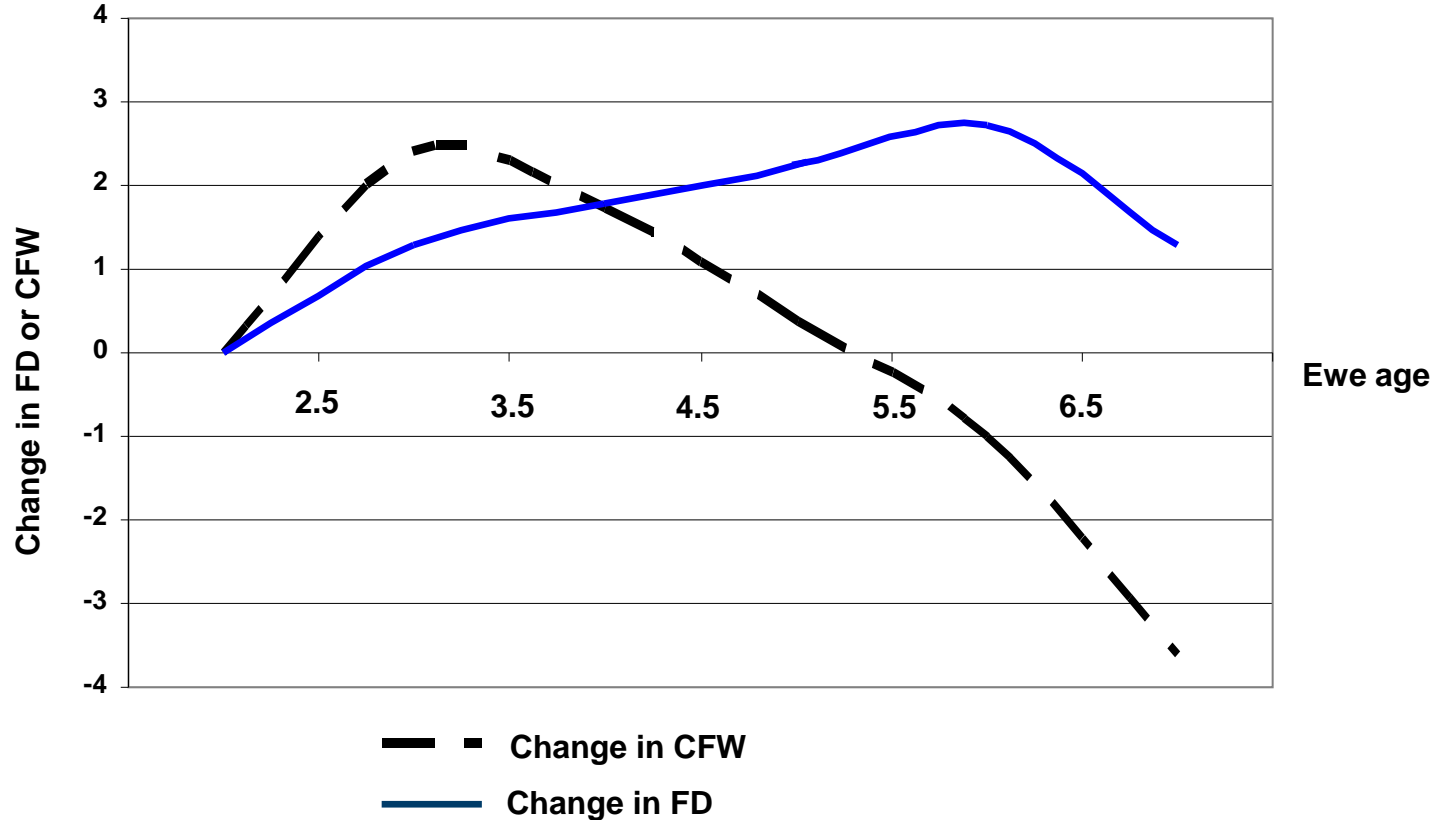


To cull on reproduction





Age of ewes affects wool production



(Newton-Turner, 1961)



- **Wean early to maximise ewe 'recovery' to get higher ewe condition at next joining**
- **Feed to meet the needs of individuals, NOT whole flocks**
 - variation in condition score between ewes
 - 'twinners' will be up to 0.5 CS lighter at weaning
 - repeatability of twinning \approx 15%
- **Monitor condition score well in advance of joining**

Ewes will be in different condition at weaning

Wet and dry to choose performers this season

Draft into 2 groups – skinnys (CS <2.5) and fats (CS > 2.5)



Resources

- **Feed budgeting tables and calculators**
- **Feed Cost calculator**
- **Condition scoring – video and charts**
- **Dry seasons info pages on agric.wa.gov.au**

Managing a poor spring – workshops for producers (check the Sheep's Back website for dates)

**Lifetime Ewe Management Professional Development
training day – 28 July at Katanning**

Recommend producers do a LTEM course.