



For the latest in red meat R&D

Time of Calving -Autumn v Winter

Alan Peggs

Alan Peggs Rural





Why do most beef producers in WA's South West calve in Autumn?



McLarty's Pinjarra 2020 May – Poll Shorthorn cows with F1 Akaushi (Red Wagyu) calves at foot





Because they end up with calves like this late Spring/early Summer!



McLarty's Pinjarra Nov 20 – F1 Akaushi x Poll Shorthorn calves Yellow Tags





BUT to end up with 'big' calves in late Spring/early Summer you need to feed hay until sufficient 'green' feed is available! Is this economic????



McLarty's Pinjarra May 20 – Poll Shorthorn cows with April drop F1 Akaushi x Poll Shorthorn calves at foot.





Most Sheep Producers in WA Lamb in Winter NOT Autumn! Why?







What happens when you put the bulls in 15 Sept and not 15 April?



Oakford Sept 20 – Akaushi bulls in with Ucarty Angus cows with Lawson Angus sired Winter calves at foot





Time of Calving – Autumn v Winter

- Client Oakford west of Byford 46 km S Perth 200 ha 750 mm rainfall
- Wheat Belt farmer crops/cattle/feed-lot ~ no sheep!!
- Winter calving pasture availability better meets nutritional needs of the cow
- Dry starts reduce cattle numbers
- Agist Winter calving cows at Oakford instructed to feed no hay manager incredulous!





Time of Calving – Autumn v Winter

- Oakford Farm good Case Study
- BUT Autumn v Winter Calving research by Dep. of Ag 2000's Alcoa Fairbridge/Wagerup
- Weaning Weight ~ First Year
- Autumn ~354 kg lw; ADG 1.09 kg/day
- Winter ~274 kg lw; ADG 1.16 kg/day
- Difference ~ 80 kg lw
- Subsequent Years Winter calving cows stocked at 20% higher stocking rate.
- Economics suggested not a lot of difference in final margin between Autumn calving and Winter calving at 20% higher stocking rate





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perty is thly, during ason, with razed easured n pasture towards the "I've moved from autumn to winter calving to calve down on green feed and re-join in late spring, also on green feed.

"I've also introduced larger mobs – 150 cows plus calves – and increased grazing pressure. With the 20% increase in stocking rate I have achieved, more calves are now born due to an increased number of breeders per hectare."

Bull selection has also been critical, with Michael selecting sires with the genetic ability to produce easier-calving heifers.

"Three main criteria need to be above average: scrotal size, body fat and calving ease," he said. benchmarking group of producers from south-east South Australia and draws on the expertise of a private advisor who provides an independent, farm advisory board service.



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Find out more about the programs and tools Michael uses at:

More Beef from Pastures: mla.com.au/mbfp

Profitable Grazing Systems: mla.com.au/pgs

MLA's healthy soils hub: mla.com.au/healthy-soils Cath Bell, 'Chelestan', Reedy Creek, South Australia



Area:

1,100ha of grazing land across two properties and a 230ha block of heritage bush

Enterprise:

Self-replacing, winter-calving Angus beef breeding herd producing feedlot-entry offspring

Livestock:

Calve 700 cows and heifers each year – total numbers on-property range from 1,400

Michael Cobiac, Reedy Creek, SE South Australia, 1100 ha, 900 Angus breeders, 600 mm rainfall





Is it more economic to calve in Autumn OR Winter?



Oakford 30 Jul 21 – Angus cows with Winter drop (15 Jun – 31 Jul) F1 Akaushi x Angus calves at foot.





Time of Calving – Autumn v Winter

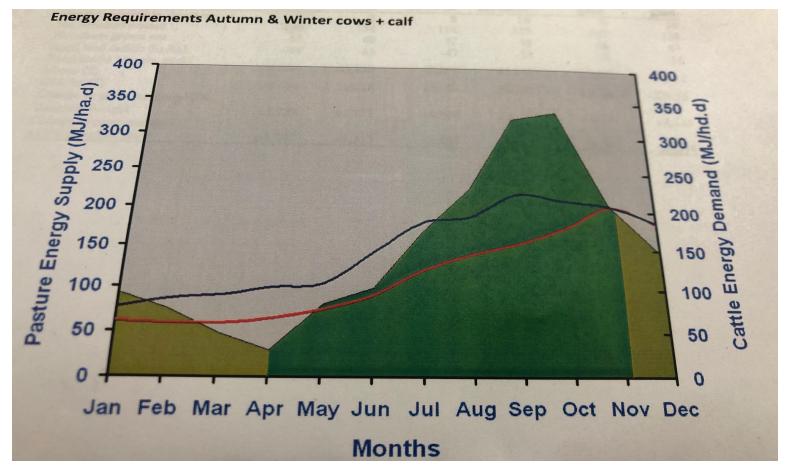
- Autumn advantage 60 days extra growing period
- Mate 15 July six weeks Start Calving –
 23 April
- Generally before the 'break' of the season

 limited feed
- Feed pasture hay allow 1000 kg hay/animal
- Stocking Rate ~14 dse/ha = 1 breeding cow/ha
- BUT need to allocate pasture area for hay production ~18% of total pasture area ~ assume only half stocking rate on 'hay' area
- 200 ha total

- 36 ha to hay
- Carrying capacity 164 ha x 14 dse + 36 ha x 7 dse = 2548 dse
- 155 breeders
- 27 replacement heifers
- 6 bulls
- 2546 dse
- **90% calving** = 140 calves
- Weaning Weight ~Heifer calves 310 kg
- Steer Calves 330 kg











Autumn v Winter Calving

- Winter disadvantage 60 days less growing period
- Mate 15 September six weeks Start Calving 24 June
- Generally the season has broken in early May buy late June reasonable pasture ~ c.1500 kg DM
- No hay required so NO need to allocate pasture to hay production
- Stocking Rate ~14 dse/ha = 1 breeding cow/ha
- 200 ha total
- Carrying capacity –200 ha x 14 dse = 2800 dse
- 170 breeders
- 30 replacement heifers
- 7 bulls
- 2800 dse
- **90% calving** = 154 calves ~ extra 14 calves
- Weaning Weight ~ Heifer calves 250 kg

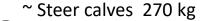


~ Steer calves 270 kg



Autumn v Winter Calving + 20% Higher SR

- Winter + 20% disadvantage 60 days less growing period
- Mate 15 September six weeks Start calving 24 June
- Generally the season has broken in early May buy late June reasonable pasture ~ c.1500 kg DM
- No hay required so NO need to allocate pasture to hay production
- Stocking Rate ~20% higher than Autumn 12.7 dse/ha = 15.3 dse/ha
- 200 ha total
- Carrying capacity –200 ha x 15.3 dse = **3038 dse**
- 185 breeders
- 32 replacement heifers
- 7 bulls
- 3048 dse
- 90% calving = 166 calves ~ extra 26 calves c.f Autumn
- Weaning Weight ~ Heifer calves 250 kg





Autumn v Winter v Winter + 20% SR

Output Assumptions ~ Autumn Calvers

Cattle Class	Cattle Sale Weight	Cattle Prices	Cattle Prices
	kg lw	\$/kg lw	\$/hd
Cows	550	3.00	1650
Heifers	470	4.00	1880
Heifer Weaners	310	4.25	1318
Steers	510	4.50	2295
Steer Weaners	330	4.75	1568
Bulls	800	3.00	2400





Autumn v Winter v Winter + 20% SR

Output Assumptions ~ Winter Calvers

Cattle Class	Cattle Sale Weights	Cattle Prices	Cattle Price
	kg lw	\$/kg lw	\$/hd
Cows	550	3.00	1650
Heifers	410	4.00	1640
Heifer Weaners	250	4.25	1063
Steers	450	4.50	2025
Steer Weaners	270	4.75	1283
Bulls	800	3.00	2400





Autumn v Winter v Winter + 20% SR

- Input Assumptions
- All Calving Periods
- Fertilizer pasture 200 kg/ha Dairy 29N:16P:25K:19S
- Autumn hay 100 kg/ha Fodder Max 30N:0P :15K:8 S
- Hay requirements 188 adults x 1000 kg/hd/yr = 188 t
- Hay all contract Total Cost \$30K/188 t = \$160/t
- Senior Farm Hand \$55K + Plus (Case Study other activities on farm Wedding Receptions!!)





Economics of Calving Time Autumn v Winter v Winter +20% SR

Parameter	Autumn	Winter	Winter + 20%
Cows	155	170	185
Calves	140	154	166
Live Weight Sold	50073	47301	51474
LW Sold/ha	250	237	257
Income	\$209K	\$194K	\$211K
Costs	\$164K	\$133K	\$135K
Margin	\$45K	\$60K	\$77K
Income \$/ha	\$1043	\$971	\$1057
Costs \$/ha	\$820	\$666	\$\$670
Margin \$/ha	\$223	\$305	\$387
Income/kg lw	\$4.17	\$4.11	\$4.11
Costs/kg lw	\$3.28	\$2.82	\$2.60
Margin/kg lw	\$0.89	\$1.29	\$1.50

Pastoral Region ~ Boolathana Station in a good season 380 mm rainfall YTD



Boolathana Station Jul 21~F1 Akaushi x Droughtmaster and Droughtmaster yearling steers and heifers



