

SMARTBEEF

Alan Peggs

Alan Peggs Rural Pty Ltd

SMARTBEEF Project

- ▶ Partially MLA fund project to *improve profitability of beef producers in the High Rainfall Zone - West and South Coast*
- ▶ *WA Livestock Research Council - Matt Camarri, Cundinup; Richard Metcalfe, Many Peaks, Alan Peggs, AAAC ~ recommend research and adoption priorities for WA ~ need to promote the time of calving results from MLA research project undertaken at Pinjarra with ALCOA in the early 2000's*
- ▶ Results - later calving - May/Jun cf Feb/Mar - by better matching feed demand with feed supply could:
 - significantly reduce the amount of hay fed to breeding cows;
 - increase stocking rate; and
 - lower the cost of production
 - increase profitability of beef production

SMARTBEEF Project

- ▶ Initially MLA **CALVING REWARDS Project** but after discussion project proponents expanded to focus on all aspects of beef production in the HRZ -> MLA **SMARTBEEF Project**
- ▶ **AIM** - raise profitability of beef production via change
- ▶ **APPROACH** - **FOCUS FARMS** x 5 with associated **FOCUS GROUPS** c.10 nearby beef producers
 - *Facilitated Learning Groups => Peer to Peer Learning*
 - Facilitated by experienced agricultural consultants - Phil Barrett-Lennard, Jeisane Accioly, Alan Peggs and Lucy Anderton
- *Examine what Focus Farms are doing*; why; at what cost; what benefit; field days/discussion/'throw around ideas'/up the supply chain - lot feeder/processor relationships
- *Evaluate* new ideas/innovations/changes - **myFARMSMART** - new whole farm computer program Lucy Anderton ~ physical and financial implications of **YOUR** ideas/innovations/changes

SMARTBEEF Project

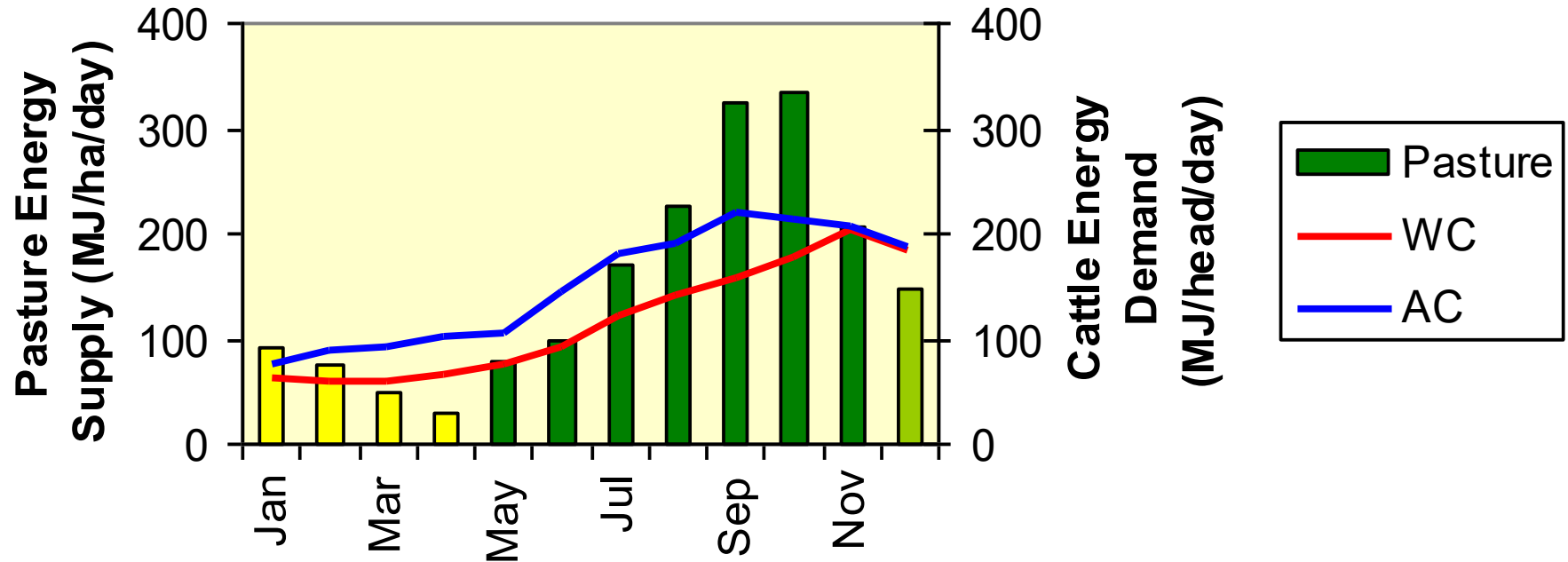
▶ **ULTIMATE AIM - More Profitable Beef Production**

- ▶ Raise productivity
- ▶ Lower cost of production
- ▶ Increase profitability

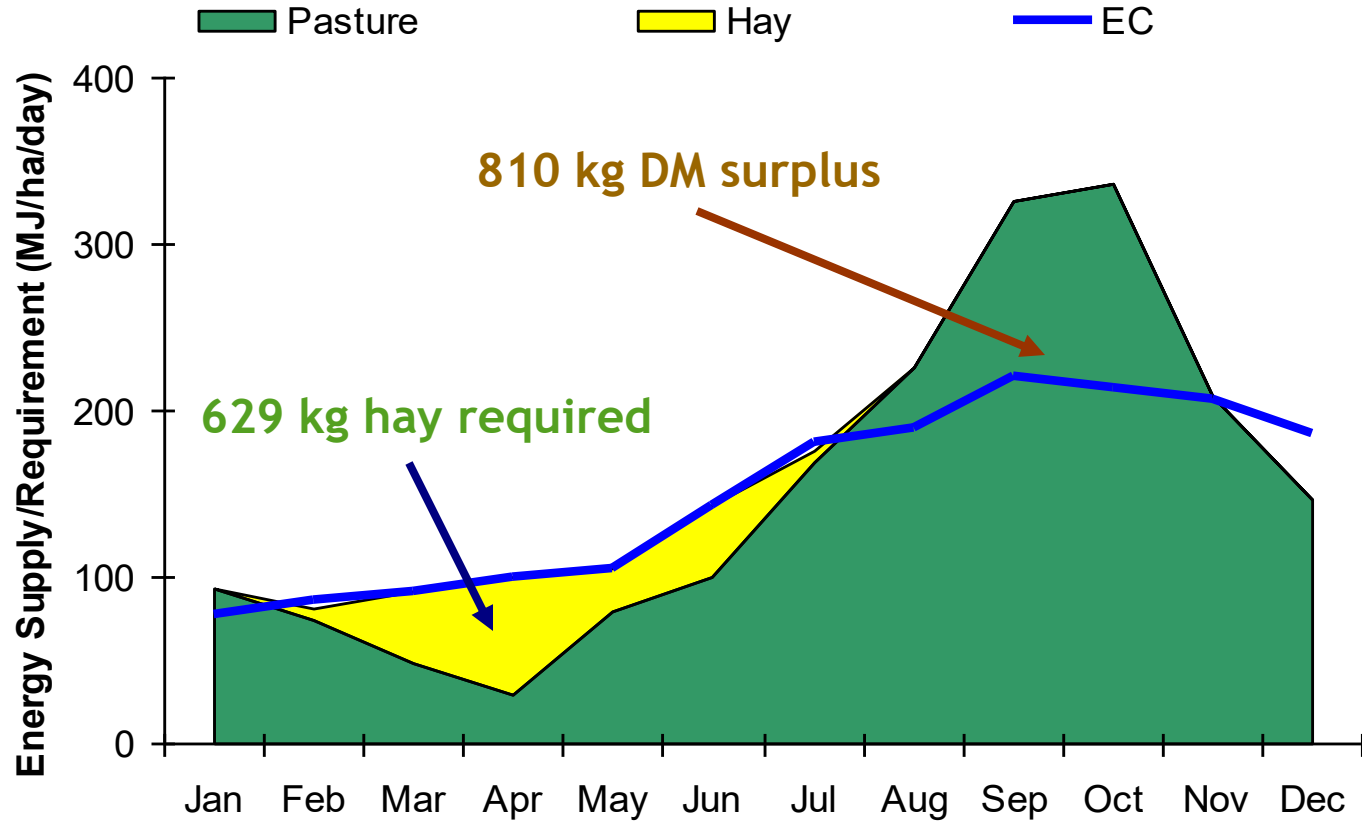
▶ **Example**

1. Change time of calving
2. Change fodder source - hay to silage
3. Take Advantage of Opportunities
 - 'free' brewers grains
 - 'surplus' silage and
 - Feedlot agistment - grow out 300 kg weaners to feedlot entry weight 340-380 kg/lw

Energy Supply and Demand: Autumn Calvers (AC) & Winter Calvers (WC) (1 cow-calf/ha)



Energy Supply and Requirement:



FARM - Kalgan

Kalgan 300 ha pasture; Stocking Rate 1.0 Breeder/Ha

PARAMETER	Units	FEBRUARY	MARCH	APRIL	MAY	JUNE
Income	\$	292K	297K	301K	307K	307K
Costs	\$	309K	305K	296K	282K	290K
Margin	\$	-17	-8	+5K	+25K	+17K
Number Animals Sold	hd	228	232	235	241	241
Live Weight Sold	kg lw	88K	89K	90K	92K	92K
Income (Str Wnrs \$3.80)	\$/kg sold	3.33	3.33	3.33	3.33	3.33
Expenses	\$/kg sold	3.52	3.41	3.27	3.06	3.15
Margin	\$/kg sold	-0.20	-0.09	+0.06	+0.27	+0.18

FARM - KALGAN

► Kalgan 300 ha pasture; Stocking Rate 1.0 Breeder/Ha

PARAMETER	Units	FEBRUARY	MARCH	APRIL	MAY	JUNE
Start Calving		1 Feb	1 Mar	1 Apr	1 May	1 Jun
End Calving		4 Apr	2 May	2 Jun	10 Jun	13 Jul
Calving Span	weeks	9	9	9	6	6
Cows	hd	251	256	259	265	265
Hay Fed Adults	t	250	174	96	28	0
Silage Fed Weaners	t	53	64	82	63	90
Area Fodder Crop	ha	48	39	32	17	19
Weaning Rate	%	90	90	90	90	90
Weaning Date		15 Dec	30 Dec	15 Jan	30 Jan	8 Feb
Growth Rate	kg lw/day	1.00	1.03	1.06	1.09	1.12
Weaning Weight	kg lw	322	317	308	311	295
Target Sale Wt	kg lw	340	340	340	340	340

Time of Calving Discussion

- ▶ Stocking Rate
- ▶ Weaning Time => Weaning Weight
- ▶ Cow Recovery from Lactation => Backfat = *Haystack on their Back*
- ▶ May/June calving cows wean earlier maintain backfat accumulated over Spring
- ▶ Target Market - feeder steer/heifers for feedlot ~ 340 kg lw min
- ▶ Different results different markets? Weaner/Trade Steer
- ▶ Probably not - still have to feed early - Feb/Mar/Apr calving cows
- ▶ Come to the next field day to find out!!

Grazing at start
son: Opening
in late April or May,
el holds animals
small paddocks
until there is
0kg dry matter a
/ha) across the
paddocks – usually

Grazing targets:
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"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

Michael Cobiac and
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

Economics of Time of Calving - Reality

- ▶ Client Oakford - west of Byford - 46 km S Perth - 150 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

Winter Calves F1 Akaushi x Angus Jan 22 Byford



Winter Calving and Pregnancy Rates - Ucarty Angus Cows Kargotich's Oakford

	2020	2021	2022
Cows PTIC	142	132	120
Cows PTNIC	8	8	10
Cows PTIC	95%	94%	92%
Bull Breed	Angus	Akaushi	Angus
Bulls In	20 August	20 August	10 August
Bull Out	30 September	30 September	15 October
Mating Period	42 days	42 days	66 days

Byford Autumn - Feb/Mar - Calving Cows and Calves late September 23

- ▶ Feb/Mar Poll Shorthorn Cows
- ▶ Weaners ~ 320 kg
- ▶ Mated to Angus
- ▶ PTIC 90%
- ▶ Late Start 24 ~ 29 May
- ▶ Stocking Rate Reduced - 120 cows on 150 ha c.f. 150 cows = 20% lower
- ▶ More than 1000 kg hay fed in Autumn 24 ~ very substantial cost!
- ▶ Decided to put bulls in a month later in 24 ~ calve Mar/Apr in 25



Economics of Time of Calving

► Later Calving = Lower Cost of Production = More Profit = Lower Risk

► Lower Cost

- Easier to get breeders in calf because cycling in August/September - rising plane of nutrition ~ *matching nutritional demand with pasture supply*
- Less fodder required for cows prior and during early lactation
- Smaller area of hay crop required = more pasture for breeders = more weaners
- Larger area of silage crop required BUT more economic to feed \$3.80/kg weaners
- May/June calving - do not have to feed silage to replacement heifers ~ can grow out on pasture and be at mating weight - c.340 kg - by mid August/September

➤ Lower Risk - *More Resilient Production System*

Break of the Season assumed 1 May - only a short time before 'green' pasture available

Growing Out Weaners on High Quality Silage

- ▶ **Focus Farm Pasture Silage 2023**
- ▶ *Haylage* ~DM 64.0%
- ▶ Crude Protein ~13.3%
- ▶ Energy ~9.6 MJ/kg DM
- ▶ Digestibility ~62.5%
- ▶ **Weaners gained 0.95 kg lw/day!**
- ▶ **Focus Farm Pasture Silage 2024**
- ▶ *Silage* ~ DM 39.1%
- ▶ Crude Protein ~16.0%
- ▶ Energy ~ 10.8 MJ/kg DM
- ▶ Digestibility ~67.3%
- ▶ **Weaners gained 1.3 kg lw/day**
- ▶ **High quality silage gives you flexibility/options!**
- ▶ ~ learn how to make high quality silage with **Western Beef Association's Silage Program**



Agist Weaners - grow out to feedlot entry weight

Opportunity

Angus weaners 308 kg lw 9 Mar 25

► Brewers Grains - 'free'

- CP 26.1%; ME 9.2 MJ/kg DM; DM 19.6%; Dig 56.9%

► Pasture Silage - \$262/t DM as fed (10% loss)

CP 10.3%; ME 9.9 MJ/kg DM; DM 54.3%; Dig 64.9%

► 20% Brewers Grain + 80% Pasture Silage =

- **CP 13.5%; ME 9.8 MJ/kg DM**

► Intake 7.5 kg/d = 73.5 MJ/day = **0.92 kg lw/d**

► Silage 6.0 kg DM/day = \$1.57/hd/day

► Feed Out = \$0.20/hd/d

► **Cost of Gain = \$1.77/hd/d = \$1.92/kg**

► **Agistment = \$3.60/kg**

► **Margin = \$1.88/kg**

Start Weight ~ 308 kg lw

End Weight ~ 358 kg lw

Gain ~ 50 kg lw x \$1.88/kg = \$94/hd x 57 = \$5K



SMARTBEEF Project - Cost

► Increase Profitability ~ 300 Cow Breeding Herd South Coast

1. Change Time of Calving - Feb/Mar 9 wks to May/Jun 6 wks = + \$42K

2. High Quality Silage Weaners - Other Markets \$3.30/kg steers; Feedlot \$3.80/kg steers

119 steers 340 kg lw + 50c/kg lw = \$170/steer x 119 steers = + \$20K

3. Opportunity - Agistment \$94/steer x 57 steers = + \$5k

Potential Increase in Profitability = \$67K

SMARTBEEF Project Cost

Year 1 - \$5K - \$3K returned = Net Cost \$2K

Year 2 ~ \$5K - \$3K returned = Net Cost \$2K

➤ NOT a BAD RETURN on INVESTMENT!!

➤ Check Out the MLA **SMARTBEEF** website and/or the Foyer to sign up to the **SMARTBEEF Project NOW!**