

# meatup

FORUM

**For the latest in red meat R&D**

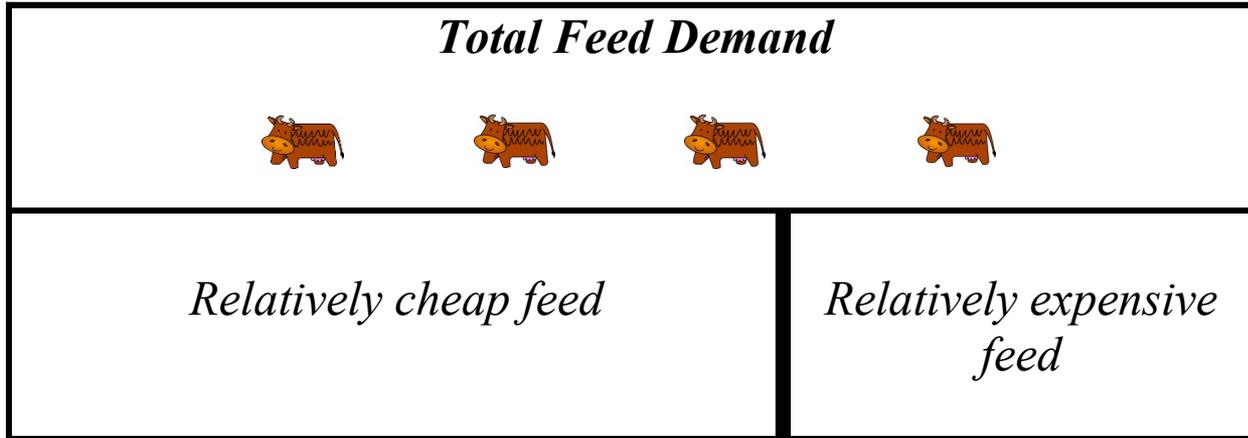
# The business and science of forage

Dan Parnell-Agsure Consulting with Tom Depiazzi – Depiazzi Agri Co

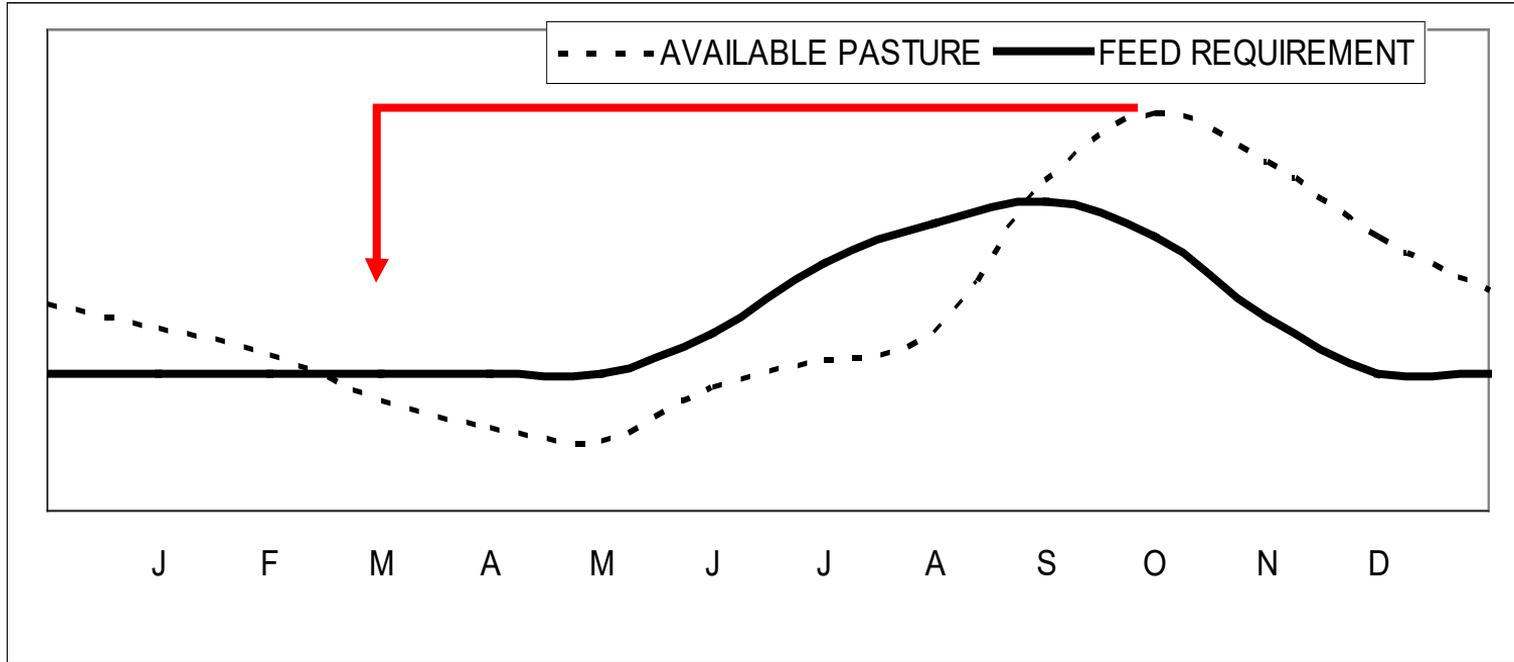
# Take home messages

- Does homegrown forage represent the best value feed option for you
- Choose the best forage option/s for you
- Get better at it
- It's complicated and nuanced but measure as best you can

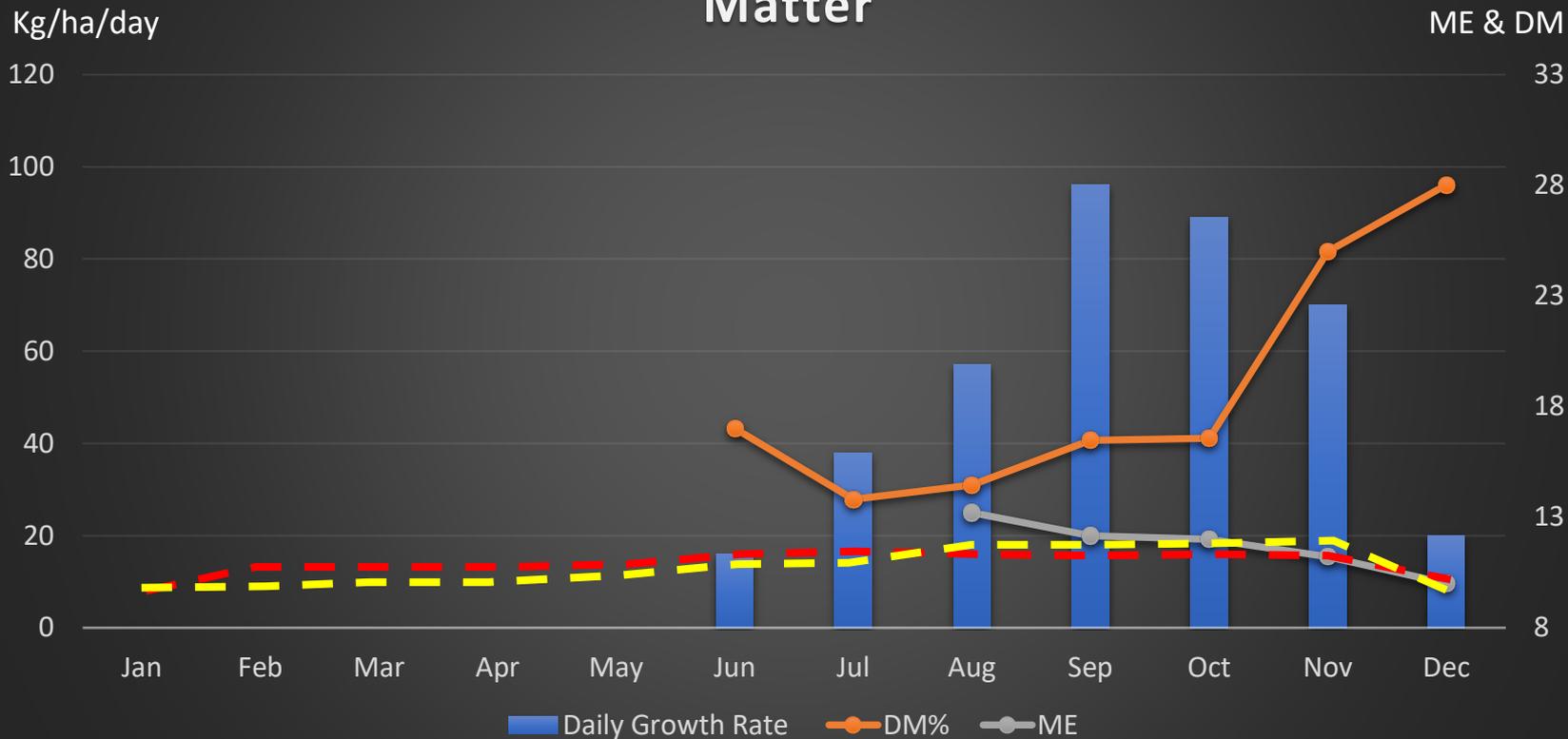
# The basics



# The basics



# Karridale 2020- Growth Rates, Energy and Dry Matter



# Do we make forage?

- Research has shown that up to 80% of the peak spring pasture can be 'lost' during summer and not ingested or turned into animal product.
- The rate of decline is influenced by weather.
- Both quality and quantity declines faster after rain. (DPIRD 2023)

Oct 16



Nov 12



Dec 10



Dec 21

# Where is the value?

- 3.8t/ha conserved at 10.5 MJ
- 3.8t/ha conserved at 9MJ
- 11MJ Beef pellet at \$450/t
- Lupins \$350/t

2.3c/MJ as silage

1.83c/MJ as hay

4.15c/MJ

2.63c/MJ



- Increase waste by 15% lose 0.8MJ and over capitalise
- 3.8t/ha conserved as hay **4.54c/MJ**

- FORAGE SUCCESS CHAIN

## STEP-BY-STEP PROCESS



Improvements in this chain can result in large differences and apply for both hay and silage

**Measure**

# Efficient Overheads



📷 20

⊕ Compare

♡ Save

2021 Fendt Rotana 180V  
XTRA Round Baler

**\$85,000\***  
Excl. Govt. Charges

24t/year in pellets in depreciation and finance (3yr HP)

# Cost Break-down- RB Silage Owner Operator

	100ha	300ha
Overheads	34%	15%
Operations	13%	17%
Labour	14%	18%
Wrap & Plastic	20%	26%
Fertiliser	17%	23%
R & M	2%	1%
c/MJ	2.50	1.92
\$/t DM	\$206	\$158

# Optimise Quality



# Silage vs Hay

- Apple vs Orange
- The class of stock
- The other feed resources available
- Ability to make, store and feed efficiently
- Weed management
- Grazing management- better control of spring surplus
- Risk
- No seeds at feeding

# Weather considerations-Risk

2021

	Sept	Oct	Nov	Dec
1st		1.8	0	
2nd		9.6	5	0.2
3rd		8.6	4.4	0.6
4th		3	0.2	0
5th			5.2	3
6th			4	1.2
7th			0	0.2
8th			4.2	0.6
9th		25	5.6	0.6
10th		10.2		
11th		3.6		0
12th		0.8	19	5.6
13th			1.8	0
14th			0.8	0.6
15th				0
16th		0.8		0
17th		6		1
18th		1.4		0.2
19th		6.4	2.8	2.4
20th			10.8	0.2
21st			5.4	0
22nd			1.8	29.2
23rd		1.8		1
24th		1.6		0
25th			2.8	0
26th			6.8	0
27th		22		0
28th		12.4	4.8	0
29th		0.4	0.8	0
30th		1		1.8
31st				0

2022

	Sept	Oct	Nov	Dec
	2.8		0.2	2.2
	0.8		8.2	3
	0		0.6	0
	0		0	0
	6		3	0
	1		8	0
	1.4		2.4	0
	0.8			0
			1.6	0
			7.2	12.2
			4	4.4
	4.4		0.4	8.4
	6.6		0.2	0
	5.6		2.4	0
	0.2		0.2	0.4
	0		5.8	0
	0.8			0
	8.4			15.2
	3			2.8
	0.4		1.2	0
	3.6		1.4	0
	0.2		4.6	0
	5.8		34.2	0.6
	0.6		9.6	0
	0.6		2.8	0.4
				3
				0
				0
				0
			20.2	0
			7.4	0

# Silage vs Hay

**Table 1.1**

*Growth of steers (initially 277 kg) on hay and silage produced from an annual ryegrass/subclover pasture in WA, and given various levels of concentrate.*

	Hay (5.6 t DM/ha)			Silage (5 t DM/ha)		
Concentrate in diet (% liveweight) <sup>1</sup>	0.5	1.0	1.5	0.5	1.0	1.5
<b>DM intake (kg/day)</b>						
Forage	4.36	3.86	2.82	4.99	4.26	3.58
Concentrate	1.39	2.90	4.47	1.45	2.94	4.39
Total	5.75	6.76	7.29	6.44	7.20	7.97
<b>Liveweight gain<sup>2</sup></b>						
kg/day	0.33	0.63	0.88	0.81	1.09	1.20
kg/t feed	57	93	121	126	151	151

*Source: Adapted from Jacobs and Zorilla-Rios (1994).*

<sup>1</sup> Concentrate comprised 67% barley, 30% lupins and 3% minerals

<sup>2</sup> Liveweight gain from the mixed diets.

# Quality & Waste

**Impact of improvements in quality or reduced losses for 100tDM on the additional value of beef produced (See note below)**

Loss range	Quality range MJ/kgDM			
	9.00	9.33	9.67	10.00
25.00%	\$0	\$4,324	\$8,648	\$12,972
20.00%	\$1,597	\$6,209	\$10,822	\$15,434
15.00%	\$3,194	\$8,095	\$12,995	\$17,896
10.00%	\$4,792	\$9,980	\$15,169	\$20,358

# Optimise Quality Silage

Sugar + Air = CO<sub>2</sub> + Water + Heat

# Making basics

- Cut good pasture early
- Cutting height
- Wilt as fast as possible to the target DM – (Cut, rake and bale ASAP) TD
- Chop length (Dryer, stemmy = shorter)
- Compact well
- Seal properly
- Transport and store well
- Feed Efficiently (waste)



# DEPIAZZI AGRICO

Tom Depiazzi  
Dardanup

# Tom Depiazzi – Depiazzi Agricultural Co

- Tom & Tracy
- Robert & Karen
- Dad (Peter) trouble shooter
  
- Beef and Contract Business



# Tom Depiazzi – Depiazzi Agricultural Co

## The Farm

- Boyup Brook 600ha (est. 550ha Grazable) 40ha Oats/Rye/Clover/Hay
  - 380 Angus Breeders – 9-13 Bulls
- Dardanup- 200ha including 30ha of irrigation (Wellington Water)
  - Young stock and 1<sup>st</sup> calvers (then moved to Boyup Brook)

# Herd Summary

- Calving date end of April
- Weaning late Nov early Dec
- All yard weaned on to silage (works really well)
- Heifers go irrigation no silage - sold from 350kg upwards
- Steers dry feed (pretty decent tucker) post cut silage paddocks

# Silage to \$\$

- Yearling steers are focus for silage achieving weights of 600kg on just silage alone
- Average 1.2-1.5kg LW/Day (Range 0.75-2kgLW/day)
- CW 277.86 average over 60.
- No dark cutters
- 8-10mm fat.



# Contracting Business

- Revenue generally 50:50 depending on cattle price
- Hay, Silage, Seeding Spreading, Spraying, Cultivating
- Contract mowing, tedding, raking, baling and wrapping

# The kit



# The kit



# The kit



# Contracting

- Main regular dairy farm client base- well prepared for and always first to start late September. High priority
- Need to know areas in advance
- Work in grazing rotation with dairy guys
- Some have some kit ie tedder to share workload at times ie baling
- Prefer a little dryer for wrap silage
- Early in season (late Sept) cut and then bale on the third day later in season target 24 hours in the bale

# Tools and resources

- Top Fodder Courses
- Grazing Matcher Courses
- Successful Silage Manual
- Five Easy Steps

# Q&A - Poll Everywhere

