RED MEAT UPDATES

TASMANIA

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The real cost of dryland forage crops

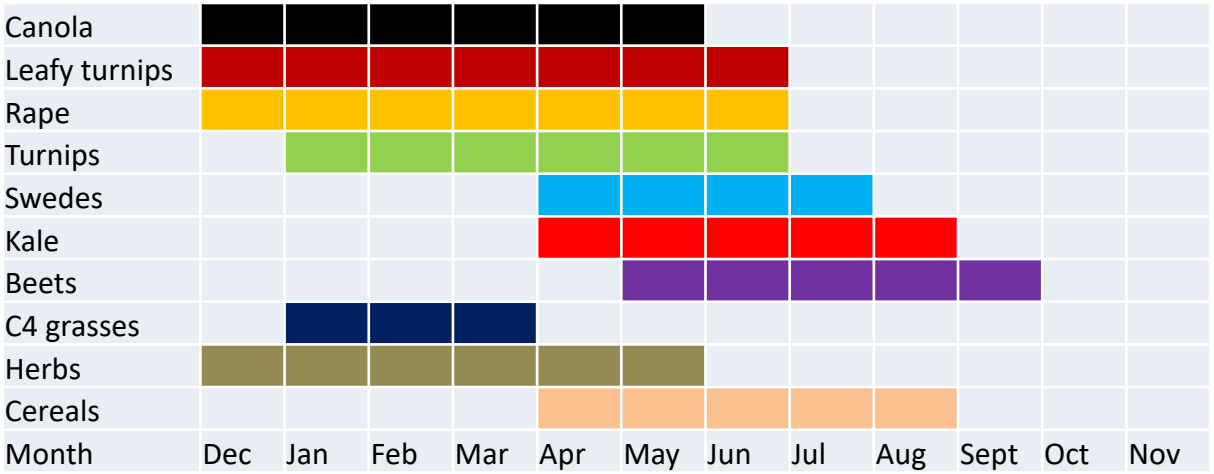
Jason Lynch

Macquarie Franklin

What and why?

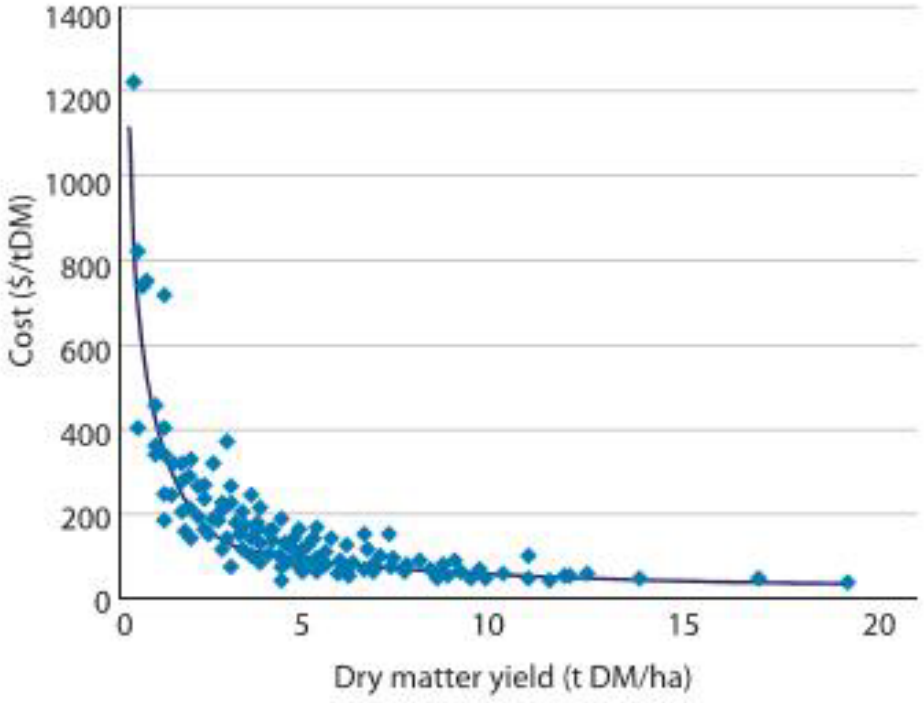
- Various forage crop options are available:
  - brassicas (canola, kale, leafy turnips, fodder radish, rape, stubble/bulb turnips)
  - C4 grasses (sorghum, millet)
  - other (herbs, cereals, beets)

- Forage crop feed availability;



Forage crop yield and crop cost

- The relationship between forage crop yield (kg DM) and crop cost ($/kg DM)



Source: Jacobs *et al* (2001), Project 3030, Dairy Australia)

How much? – cost of production

Crop	Turnip ($ha)		Leafy turnip ($/ha)	
	Good crop	Poor crop	Good crop	Poor crop
Yield (kg DM/ha)	8000	4000	6000	3000
Paddock spray-off (chemical + application)	70			
Ground preparation	100			
Seed	40	40	60	60
Drill (airseed + cultivator)	150			
Fertiliser – starter	140			
– topdressing	70			
Pest control	150			
Total	720		740	
Cost ($ kg/DM)	**0.09**	**0.18**	**0.12**	**0.25**
Cost as fed @ 80% utilisation ($ kg/DM)	**0.11**	**0.23**	**0.15**	**0.31**

How much ? – partial budget

Production system	Turnip crop			
Pre-crop pasture quality	Good	Poor	Good	Poor
Crop yield (kg DM/ha)	8000		5000	
Lost pasture yield (kg DM/ha, seven months)	4000	1000	4000	1000
Extra yield (kg DM/ha)	4000	7000	1000	3000
Crop costs ($/ha)	720		720	
Pasture costs saved ($/ha)	100	50	100	50
New pasture cost ($/ha)	400			
Cost for extra crop yield ($/kg DM)	**0.25**	**0.15**	**1.05**	**0.25**
Cost for extra crop yield as fed @ 80% utilisation ($ kg/DM)	**0.32**	**0.20**	**1.15**	**0.32**

Comparative feed costs

Feed	As fed cost ($/kg DM*)
Turnip crop (8 t DM/ha, @ 80% feed efficiency)	0.12
Rape crop (6 t DM/ha, @ 80% feed efficiency)	0.15
Urea grown pasture ($550/t, 100 kg/ha, @ 10:1 response)	0.15
Grain ($350/t, 13 MJ, @ 95% feed efficiency)	0.40
Hay ($60/400 kg bale, 9 MJ, 80% DM @ 80% feed efficiency)	0.40
Silage ($70/600 kg bale, 10 MJ, 45% DM @ 80% feed efficiency)	0.45

*Compared on an ME basis.




Top three take home messages

1. Plan ahead — resources, financials and feed budgeting

2. Get sound agronomic advice and stick to the crop production timelines (land preparation, sowing etc…)

3. Achieve the best possible crop yield

Tools, resources and training

- Useful forage and fodder crop information:
  - http://dpipwe.tas.gov.au/Documents/Species-for-Profit-Book_Web.pdf

- A tool to help guide your forage brassica crop planner and comparing feed cost:
  - http://www.macquariefranklin.com.au/wp-content/uploads/2016/01/Grazing-Management-Tools_V1.1

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jlynch@macfrank.com.au