

meatup FORUM

For the latest in red meat R&D

Containment feeding: applications and learnings from north-west NSW

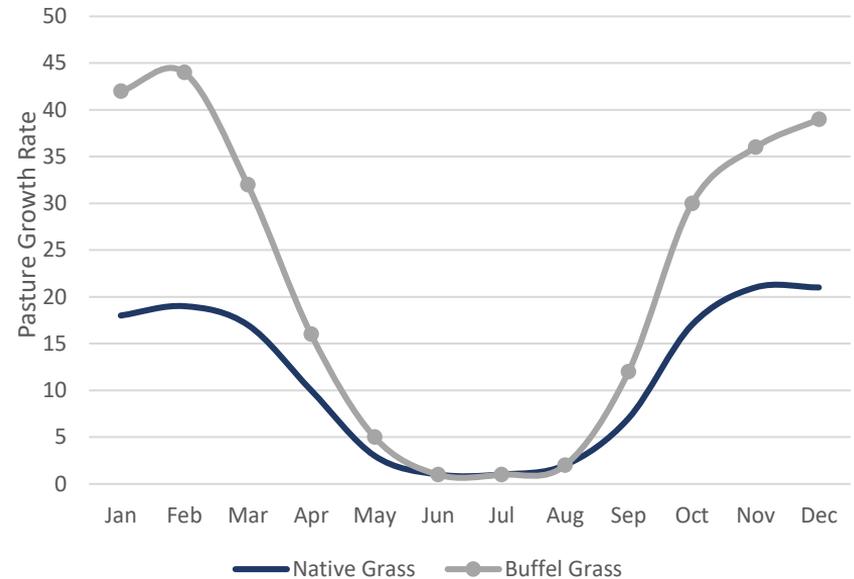
Dr Jillian Kelly

Animal Health & Nutrition Consulting

Why containment feed?

- Reduce grazing pressure (SR)
- Conserve topsoil, ground cover
- Reduce feed requirements
- Reduce labour inputs
- Production feed
- Early wean
- Join
- Maintain good welfare and health.

Annual Feed Budget - SW Qld



Feeding systems – self-feeders





Feeding systems – trail



Feeding systems – automated



Feeding systems – automated



Feeding systems – bunk



Establishment considerations

- Stocking density
- Mob size
- Feed trough space
- Water trough space, flow rate
- Shade
- Site selection (slope, drainage)
- Access to yards and feed storage
- Wet weather access
- Legislation.



Do your sums!

Drought Feed Calculator ?

Oaten hay % as-fed
 White Cotton Seed % as-fed
 Canola Meal % as-fed

The mix must add to 100%. Total: 100 ✓

Results

Energy (MJ/kg DM)	8.28
Crude Protein % DM	8.35
Cost cents per MJ	4.41
Cost \$/kg Crude Protein	4.37
Cost \$ per tonne 'as fed'	345.24



Department of
Primary Industries

Feed 1 Feed 2 Feed 3 Mix Livestock

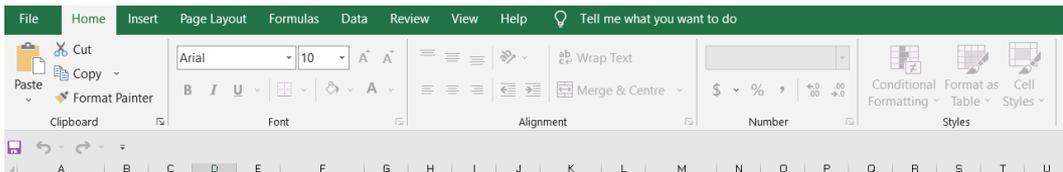
Drought Feed Calculator ?

Live weight (kg)
 Feed Option **Mix** ◇
 Feeding Period (Days)
 Number of Animals (hd)

Results

Daily feed amount 'as fed' (kg/hd/day)	8.18
Cost/hd/day (\$)	2.83
Cost/hd for period (\$)	84.76
Total feed amount for period 'as fed' (tonnes)	Oaten hay (0.17) White Cotton Seed (0.07) Canola Meal (0.00)
Total ration cost for period (\$)	85

Feed 1 Feed 2 Feed 3 Mix Livestock



SHEEP/LAMB Feedlot Calculator




Version 4.1

Written by G.Duddy, S. Semple and D. Stanley

For further information
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phone 0427 007490

BASIC Click to start

A basic cost of production calculator with no nutrition information

ADVANCED Click to start

An advanced cost of production calculator with nutrition information

View Instructions (ADVANCED)

Recommended prior to using program for first time

Use the **VIEW** option to adjust each page (normally from 70 to 120%) to fit your monitor.

For other information **CLICK** on button

Feedlotting Lambs Primefacts

The CRC for Sheep Industry Innovation

NSW DPI

Practical Wisdom Sheets

Primefacts

The Sheep/Lamb Feedlot Calculator can be used to accurately predict profitability for feedlotting. In addition it can be used for calculating outcomes when using drought lots or for the live sheep trade where intakes may be restricted. Experienced users of this calculator can also use it for supplementary feeding predictions as pastures can be entered in the other feeds section.

Welcome

SHEEP/LAMB FEEDLOT CALCULATOR Data Entry and Summary Information

ENTERPRISE		MEMO	
Sheep Breed or Cross		Memo	
Number to be Fed	800		
Av Starting Liveweight (kg)	38		
Starting Liveweight Value (\$/kg lwt)			
Starting Skin Value (\$/skin)			
OR Purchase Price or Value on farm (\$/hd)	93.65	\$ 93.65	Lamb Cost
Av Target Sale Liveweight (kg lwt)	50		
Carcase Sale Price (\$/kg HSCW)	5.80		
Skin Sale Price (\$/skin)	7.00		Sale Price
Carcase Dressing % (%)	47		
OR Sale Price/head (\$/hd)	133.40	\$ 133.40	
Target Daily Growth Rate (g/h/d)	290		Actual Growth Rate
OR Days on feed (days)		280	g/day
Daily Level of feeding (DM) (% of lwt)	3.5		

STEPS FOR ADVANCED CALCULATOR -

USE tabs below to move between sheets -

USE instruction buttons for information as required

1. Enter in Enterprise details
2. Go to Input sheet and enter in Costs
3. Go to Ration Sheet, enter in Ration details
4. Go to Feed Values and enter in prices, quality details
5. Return to summary page and check results

Fine tune results by making adjustment(s) to entries as required

Data Form provides a blank set of sheets that can be used to enter and collect information prior to doing a computer run

PRODUCTION SUMMARY		DM	AS FED
Daily Intake	kg/h/day DM	1.54	1.71
Feed Conversion	kg feed/kg LWT	5.5	6.1
Total feed	kg/lamb	69	77
Liveweight Change	kg	12.0	
Days on feed	days	43	

PROFIT SUMMARY	
TOTAL INCOME	(\$) 104812
Total Costs	(\$) 110897
Net Profit - Total	(\$) -6085
Income per head	(\$/head) 131.02
Costs per head	(\$/head) 138.62
Net Profit - Per Sheep	-7.61

COST SUMMARY (\$/SHEEP)	
Purchase	95.65
Selling	12.49
Running	2.05
Labour	2.14
Feed	26.29
Fixed	0.00
TOTAL	138.62

RATION SUMMARY	
Ration cost	As Fed 328
	\$/tonne DM 365
Metabolisable Energy (ME)	MJ/kg DM 12.7
Crude Protein (CP)	% DM 16.1
Average Dry Matter (DM)	% DM 90
C:a:P ratio (estimate)	2.9 to 1

CARCASE SUMMARY	
Average HSCW (All)	HSCW 23.2
Total HCSW	kg sold 19356
Average HCSW (\$/kg)	5.71
<small>(HCSW = Hot Standard Carcase Weight)</small>	

LOOK FOR COMMENT BOX -helpful hints

Help - Getting Started Feedlotting Lambs Primefacts

PRINT REPORTS

Summary

Inputs

Rations

Feed Values

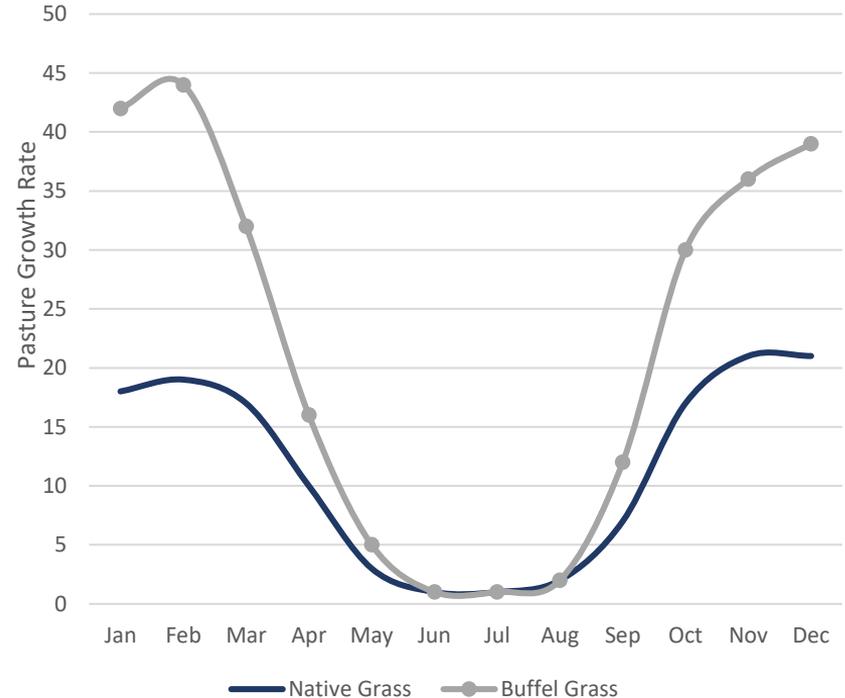
Profit/Loss

DataForm

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Challenges

- Cost of establishment and feeding
- Quantity of feed required
- Disease risks
- Environmental impacts
- Labour requirement.



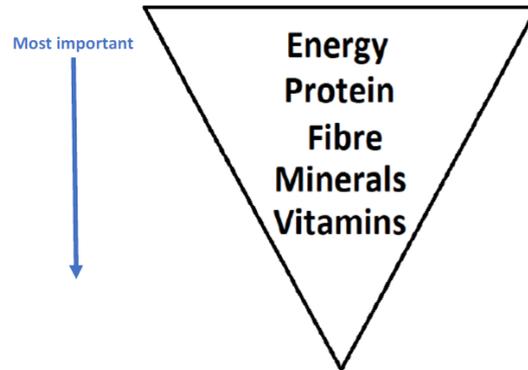
Livestock management

- Vaccinate before feeding
- Imprint at foot
- Draft on bodyweight
- Remove shy feeders
- Redraft every month
- Take care with induction
- Clean troughs daily
- Check poo and stock health daily.



Livestock nutrition

- Example diet might be cereal grain + pulse + hay + vit/min
- NSW DPI Drought Feeding Calculator is great
- Sheep – process to match particle sizes
- Cattle – processing grains (cereal/pulse) important for utilisation
- Rumen buffers
- Get some advice to get it right.



Animal health issues

“The Big 5”

- Acidosis
- Shy feeders
- Hypocalcaemia
- Water belly
- Vitamin A deficiency



Take home messages

- Confinement feeding is a temporary, proactive management strategy to maintain livestock production and reduce grazing pressure.
- Confinement feeding areas can be low cost and versatile.
- Careful planning, attention to detail with regards to livestock management and nutrition is vital for success.

Tools and resources

- Managing and Preparing for Drought Handbook

dpi.nsw.gov.au/_data/assets/pdf_file/0006/582531/Managing-drought.pdf

- Dry Times Smoko

[Dry times smoko – YouTube](#)

- Drought and Supplementary Feeding Calculator

[Drought and Supplementary Feed Calculator \(nsw.gov.au\)](#)

- A Guide to Confinement Feeding in NSW

lls.nsw.gov.au/_data/assets/pdf_file/0005/1431059/LLS_confinement-feeding-booklet-web.pdf