Dairy Production

Systems Ltd

Management Nutrition Research

Production

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Research

Nick Tomsett Otautau

Peter Cook
Oil Seed Products

Dear Nick, Jordon & Peter

Points:

- 1. Pasture Cover 2200 kg DM/ha and Soil temperature 6.0 degrees
- 2. The cows are looking excellent
 - a. BCS 5.45 generally very good but 7% were 4.5 and below the rest
 - b. Rumen fill 5/5
 - c. Faecal score 3/5 some variation as the cows are adjusting to the meal feeders.
 - d. Some are showing evidence of low a protein diet from the poor silage quality
- 3. Live weight for the herd on genetic maturity is 530 kg LWT.
- 4. SOA 150 kg/ha on paddocks under 2000 and then following the cows until September 15th then
- 5. DAP 150 kg/ha Sulphurgain Pure
- 6. Cows are moving towards the ration above.

Supplements on hand

Grass Silag	e St	ack	94t DM	
July	9th St	ack	40t DM	
•	30	x 240 kg		
Oct 1	10th St	ack	8t DM	
	22	x 240 kg		
2017	•	J		
May	9th		100 tDM	(May 20th)
Aug			60t DM	,
J				
Wraps				
. May	9th 40	x 240 kg	8t DM	
,		9		

way 9th	40 X 240 Kg	OL DIVI
Aug 1st	30 x 240 kg	7.3t DM

Hay

40 x 10s 10t

2017-18

 Wheat
 \$402/t DOF
 263t

 DDG
 \$407/t DOF
 226t

 PKE
 \$216/t DOF
 103t

Production History

2015	152,086 kg MS	551 kg MS/cow	1950 kg MS/ha
2016	166,824 kg MS	607 kg MS/cow	2158 kg MS/ha
0047	475 000 1 100 1	-	-

2017 175,000 kg MS target

PO Box 24-132 Hamilton 3253 New Zealand

Stock Inventory

 Total cows
 296

 Calved
 17

 Springers
 143

 Dires off
 136

 R2
 83

 R1
 62

 Beefies
 5

Ration

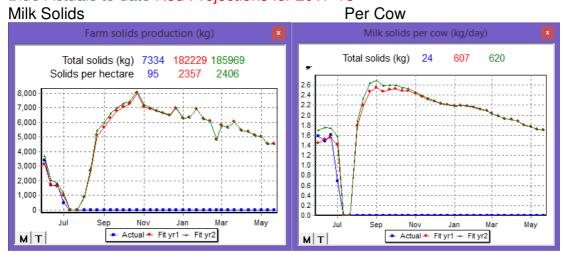
Effective area 77 ha
Grazing area 77 ha
Rotation 38 days
Pasture demand 36

PGR 35+ kg DM/ha/day

Herd Number Area per day	Springers 143	Colostrums 17	Milkers
Area per day Area per day Pre graze mass Post graze mass Harvest Pasture intake kg DM/d	25sqm 2700 1500 1200 10.5	120sqm 2700 1800 1100 12.0	120sqm 2700 1600 1100 14.0
Wheat (DM 90%) DMI	1.5 1.35	3.0 2.7	3.0 2.7
DDG (DM 90%) DMI	1.0 0.9	2.0 1.8	2.0 1.8
SBM (DM 90%) DMI	0.5 0.45	1.0 0.9	1.0 0.9
Grass Silage DMI	7.0	1.0	1.0
Wraps DMI			(1.0)
Hay DMI	1.0		(0.5)
Total DMI Salt MgO CaS Lime Flour	12.0 20g 20g 50g	21.0 40g 40g 100g	24.0 40g 40g 100g (150g)
In line			

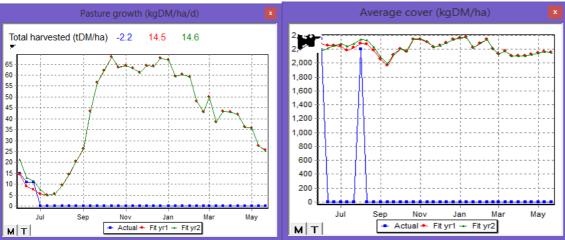
In line
DairyMin 5 5mls
Prodairy 10mls
MgC 35g

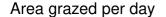
Production Budget for OSP DEMO FARM Blue Actuals to date Red Projections for 2017-18



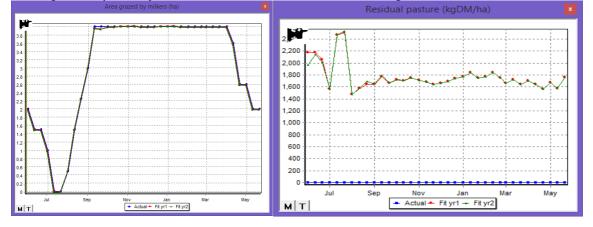
Pasture Harvested

Predicted Pasture Cover

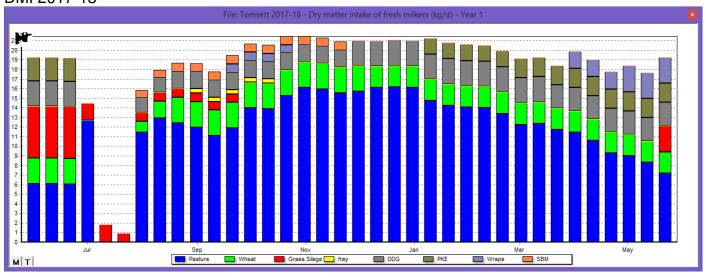




Grazing residuals



DMI 2017-18



Summary



Farm area (ha) No of cows Solids (kg) Dry matter cut (t) Nitrogen used	77.3 300 182229 30.6 19
\$/kg Solids	6.72
Milk Income	1224035
Feed costs	387798
Inc less feed	836237
Variable costs	509313
Gross margin	714721
Wheat (t)	232
Grass Silage (t)	92
Whole Crop Silage	0
Hay (t)	12
DDG (t)	224
CDS (t)	0
PKE (t)	95
Kale (t)	0
Wraps (t)	53
SBM (t)	30
Feed 11 (t)	0
Feed 12 (t)	0

Calving Cows

- 1) Cows onto springer ration from 21 days out from calving
- 2) Calves picked up twice a day at least and more if very cold or in the mud.
 - a) Tincture iodine spray both in paddock and again at the barn, up against the skin
 - b) Calf trailer keep the straw clean and use Vikon to disinfect
 - c) 3-4mls Betamox LA any calves with dirty navels (1ml/10 kg LWT)
 - d) Calves to get 3 litres of warm first milk colostrum ASAP and again 12 hours later
 - e) Dull dopey calves pick me up mix
 - i) Prolajecet B12 2000 1ml
 - ii) Ketofen/Caprieve 1ml
 - iii) Hideject ADE 1ml
- 3) Calves that are very cold warm up, Warm water in a wheel barrow works
- 4) Calved cows are drafted off twice a day and milked within 12 hours of calving
 - a) Quarters checked and milked out ASAP after calving
 - b) Teat spray before and after milking
 - i) Preferably a Chlorhexidne spray full strength and glycerine
 - c) B12 plain injection 10-20 mls
 - d) Heifers Oxytocin 4mls at first milking to ensure let down and a feeling of euphoria at their first milking calms them down. Allow 1-2 minutes to work before you touch her.
 - i) If in pain use Metacam as an -inflammatory
 - (1) Difficult calving
 - (2) Swollen udders
 - (3) Mastitis
 - e) Calving drench or bag any at risk cows with bag CBG 37% or Calcium bolus
 - i) Twins
 - ii) Older better conditioned higher producing cows
 - iii) Stressed cows
 - f) Freshly calved cows must get a good feed of milkers ration the day they calve the calcium intake on day 1 is critical.
- 5) Into the colostrum herd
- 6) Colostrums
 - a) Avoid effluent paddocks less palatable pasture
 - b) Milked OAD for 5-8 days
 - c) Check all quarters every daily
 - d) Teat spray before and after milking
 - e) To get PKE/Ration in a trailer (Lime Flour) in the paddock next to the water trough
 - f) Twins to stay there until calving is over
- 7) Fence away from the gate way but do not restrict intakes
 - a) Block Graze
 - b) Wrap silage ad lib in paddock works well
 - c) Graze to 1800-1900 residuals then move on
 - d) They can graze the same **non-effluent area** over and again or use the springers to graze behind.
- 8) MF/downer cows
 - a) Glucalphos i/v add Catosal 10-20ml into the bag
 - b) Calpro37.5% in vein or half in the vein rest under the skin
 - c) Calpor37.5% under skin if not already
 - d) Dextrose i/v 250-500mls if a milking cow and or groggy
 - e) Calving drench of Calcium bolus if able to swallow
 - f) Do not milk out for 24-48 hr then once a day for 4-5 day
 - g) Anti-inflammatory drugs if down for a time these big cows are hard to get up
- 9) Ketosis Cows downer
 - a) Glucalphos/max i/v add Catosal 10-12 ml
 - b) Calpor37.5% under skin if not already
 - c) Dextrose 40% ½ to 1 bag in the vein

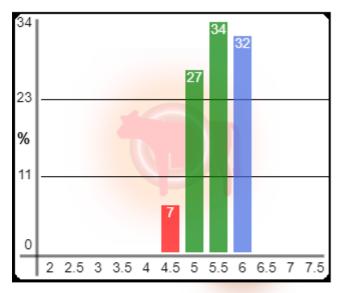
- d) Ketol 500 mls daily for 3 days
- e) B12 20mls
- f) Do not milk for 1-2 days
- 10) Inflammation over calving.
 - a) All cows go through an inflammatory period over calving it should last only 48-72 hours. Those cows that are in trouble it lasts 2-3 weeks and this affects the cows for the whole season with a higher risk of problems later (empty, death, culling, disease)
 - b) So any cows with
 - i) Acute Mastitis swollen
 - ii) A difficult calving more than just a simple pull and live calf.
 - iii) Swollen udders in heifers
 - iv) Acute Metritis
 - c) To get Metacam/Capreive as well as dealing with the issue at hand

SAD cow recovery Program

Observe cows very closely over the initial post calving period (3 weeks) any cows looking off colour or Sick And Depressed (SAD) should go onto the recovery program. This means dull, sunken or puffy eyes, hollow gut, droopy ears, rough dry coat, and rapid weight loss. If acute can be grumpy or nervous in disposition. If very acute sudden death results. Any cow with her gut narrower than her udder goes onto once a day milking to reduce energy demands on the cow. If severe then do not milk her at all simply check for mastitis. Once the gut is back to being wider than the udder i.e. she is eating well then she can be milked twice a day again. Cows can be like this for up to 2 weeks if she is very severe, they will perform better over the season if given a chance to recover properly.

- Treat concurrent conditions check for the 3 Ms: Mastitis Milk Fever Metritis
- 2. MPG to be given 500 mls daily for 3 days until eating well
- 3. B12 plain 20mls can be given safely every week
- 4. Place back in the colostrum mob if not already there
- 5. Milk once a day until eating well

Current Position									
Cow Condition	Average	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
2015									
Aug 1 st	5.0								
Oct 21 st	4.6		1%	19%	43%	32%	5%		
2016									
Mar 3 rd	4.7								
July 9 th	5.28				7%	39%	44%	9%	
Oct 10 th	4.76		1%	14%	29%	44%	10%	1%	
2017									
May 9 th	5.18			1%	17%	38%	35%	6%	3%
Aug 1 st	5.45				7%	27%	34%	32%	



Tonsett_Nick_DPS - Springers

Tally	41	Avg Score	
		Score	

Rumen Fill	Average	1.0	2.0	3.0	4.0	5.0
Oct 21 st	4.6			2%	36%	62%
2016						
July 9 th	5.0					
Oct 10 th	4.6					
2017						
May 9 th	5.0					
Aug 1 st	5.0					

Pasture Cover

Jun 1 st 2015	1710 kg DM/ha	Soil temp 8 degrees
July 10 th	1900 kg DM/ha	Soil temp 6 degrees
Aug 1st	1900 kg DM/ha	Soil temp 6.5 degrees
Oct 21st	2275 kg DM/ha	Soil temp 11 degrees
Dec 9 th	2300 kg DM/ha	Soil temp
Mar 1 st 2016	2250 kg DM/ha	Soil temp 16 degrees
July 9 th	2250 kg DM/ha	Soil temp 4 degrees
Oct 10 th	2600 kg DM/ha	Soil temp 12 degrees
May 9 th 2017	2200 kg DM/ha	Soil temp 10 degrees
Aug 1 st	2200 kg DM/ha	Soil temp 6 degrees

Historical Dairy

2015

June 1st 140 cows on crop

July 25th Culled 2 cows Abortions

July 31st 45 cows home Aug 1st 14 hfrs home Aug 10th 100 cows home

Aug 10th Culled 3 cows Abortions

Aug 15th SOA 12t applied

Aug 20th 71 cows off (away until 27th)
Aug 27th 50 lates off (away until Sep 7th)

Sep 15th Urea 6t

Oct 3rd R3 338 kg LWT Oct 10th Culled 2 cows Oct 21st Tail painted herd

Oct 22nd PSM 280 cows BCS 4.6

Oct 25th Urea to follow the cows 80 kg/ha

Nov 1st Silage harvested 7 ha Stack brought in 60t DM @ 30c/kg DM covered

Nov 4th Super10 400 kg/ha whole farm 23t

Nov 9th Culled 4 cows Dec 4th Grazed new grass

Dec 5th Urea following the cows 55 @ kg/ha 72 ha

Dec 7th Bulls into the herd Dec 20th Culled 3 cows

Dec 20th Wraps taken 50 x 12s off 8 ha

Dec 30th Scanned herd

2016

Jan 10th Bulls out

Jan 15th Urea following the cows 80 @ kg/ha 72 ha

Jan 10th PKE 11t

Jan 31st PKE ended

Feb 1st DO 2 cows

Feb 10th Liners changed

Feb 20th DAP 145 kg/ha whole farm (12t) Feb 23rd Scanned rechecks 16% MT

Feb 20th Herd 493 kg LWT

Mar 1st Herd 483 kg LWT (R3 403 kg LWT)

Mar 10th Lime 400 kg/ha whole farm

May 10th Herd 510 kg LWT

Apr 9th Urea 90 kg/ha following cows

Apr 15th Wraps made 600/ha 20 bales from 8 ha

May 12th Urea ended 10t applied

May 12th Culled 45 cows May 27th Culled 13 cows May 31st Culled 8 cows

May 31st Returned 11 lease cows

June 1st Milking 196 Dries 0 Hfrs 39 June 1st Hfrs 39 grazing off farm next door

June 5th Scanned herd 6 MTs

June 8th DO 80 cows DCT/TS (Dryclox DC)
June 9th Dries onto the crop with wraps

June 24th DO herd DCT/TS 28 did not dry off well

June 24th Brought 50 R3 June 1st cows to come home Aug 1st

June 24th Grazed off 50 cows LC Aug 1st R3s to come home (40)

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Aug 15th SOA 150 kg/ha following cows 12t

Aug 15th LC home (35) Aug 24th LC home (15) Sep 17th First round ended Sep 20th Calf milk 100 litres

Sep 20th DAP 150 kg/ha Sulphurgain30 20 kg/ha 13.1t

Sep 22nd Pre-graze mowing started
Oct 9th Baleage cut 7 ha 50
Oct 10th LWT average 470 kg

Oct 25th Culled 5 cows Oct 27th SustaiN 6t 70 kg/ha

Nov 10th New cup/liner Milkrite air admission in of the shoulder of the liner

Nov 11th Milking 273

Nov 15th Silage bought 29c/kg DM 100t DM

Nov 15th Silage added to stack

Nov 17th SustaiN 5.1t

Dec 1st 485 kg LWT Hfrs 445 kg

Dec 16th SustaiN 6t

2017

Jan 9th DAP 11.2t

Jan 15th Silage 5 ha wraps 50 Feb 5th Lime 1t/ha whole farm

Feb 17th SustaiN 6.1t Mar 9th SustaiN 6t

Mar 15th Silage 5 ha wraps 45 Mar 20th Pre-graze mowing ended

Apr 3rd SustaiN 5.25t Mo

May 5th Urea 4t

May 9th LWT 530 kg Hfrs 500 kg

May 25th Test the herd with CellSense to find HISCC for Cepravin DC

June 10th DO 100 cows DCT/TS CloxAmp500 Teat Seal HISCC Cepravin DC/TS

June 12th Sent dry cows to Manapori

June 28th TS heifers

July 5th DO off 114 remaining cows DCT/TS July 25th Cows home 100 from Manapori

July 24th 83 heifers home 20 have gone to neighbour's crop

Aug 1st 17 cows calved

Next visit October 2017.

Regards

Bryan McKay

Dairy Production Systems Ltd