Dairy Production
Systems Ltd

Management Nutrition Research
Resea

Nick Tomsett Otautau

Peter Cook Oil Seed Products

Dear Nick & Peter

#### Points:

- 1. Pasture Cover 2200 kg DM/ha and Soil temperature 5.5 degrees
- 2. Heifers this year 10 so a lot less than last year,
- 3. Heifers last year 28% of the herd and still 602 kg MS.
- 4. The cows are looking excellent
  - a. BCS 4.9 very good
  - b. Rumen fill 4/5
  - c. Faecal score 3.5/5
- 5. Live weight for the herd on genetic maturity is 530 kg LWT.
- 6. SOA/Urea 10t 120 kg/ha as soon as you can get on.

#### Supplements on hand

	TI TICHTIC		
Grass Silage	Stack	94t DM	
July 9th	Stack	40t DM	
	30 x 240 kg		
Oct 10th	Stack	8t DM	
	22 x 240 kg		
2017	O		
May 9th		100 tDM	(May 20th)
Aug 1st		60t DM	( )
Dec 1st		35t DM Fed	over drought
Jan 1st			over drought
2018			3.11
July 31st		40t DM	
<i>y</i>			

#### Hay

25 x 240 kg	6t DM

2017-18 Wheat DDG PKE	\$402/t DOF \$407/t DOF \$216/t DOF	260t 212t 103t	+ 30t for the drought + 30t for the drought
2018-19 Wheat DDG PKE	\$447/t DOF \$450/t DOF Spot	170t 250t 45t 60t	Until Jan whole season Until Sep 1st From Feb 1st

PO Box 24-132 Hamilton 3253 New Zealand

**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 2017 171,025 kg MS 602 kg MS/cow 2220 kg MS/ha Stock Inventory Total cows to milk 260 R2 10 Calves 77 Ration Effective area 77 ha Herd Springers Aug Sep Number 97 60 Area per day Area per cow sqm 100sqm Pre graze mass 2800 Post graze mass 1700 Harvest 1100 Pasture intake kg DM/d 3.0 7.0 12.0 Wheat (DM 90%) 1.5 4.0 4.0 DMI 1.35 3.6 3.6 DDG (DM 90%) 1.5 4.0 4.0 DMI 1.35 3.6 3.6 PKE (DM 92%) 4.0 DMI 3.6 Grass Silage DMI 7.0 4.0-2.0 1.5 Total DMI 13.0 21.0 21.0 Salt 20g 40g CaS 100g 200g MgS MgO 20g 40g Lime Flour 100g Alltech Productivity Pack

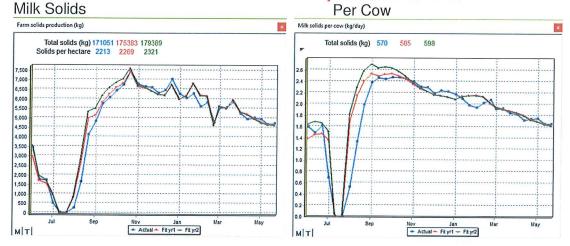
Alltech Productivity Pack
High 5
Yeasacc

Mycosorb Actigen

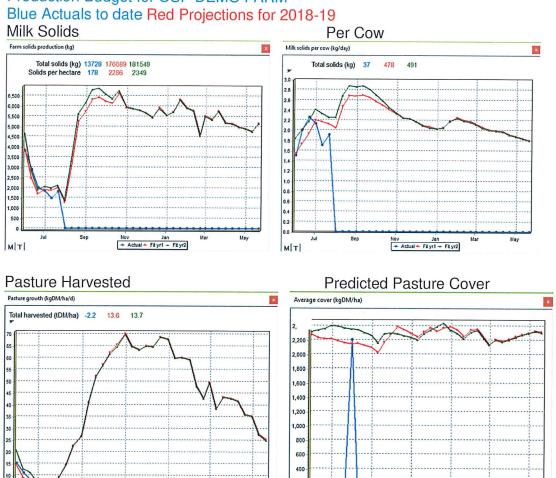
In line Prodairy MgC

10mls 35g

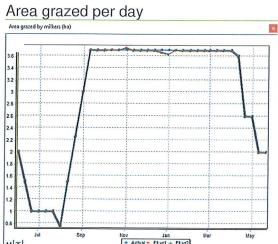
## Production Budget for OSP DEMO FARM Blue Actuals to date 2017-18 Red Revised Projections for 2017-18



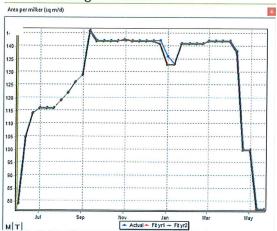
# Production Budget for OSP DEMO FARM



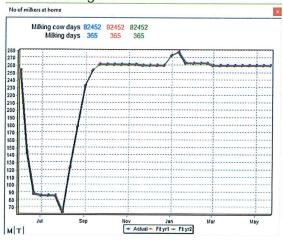
MIT



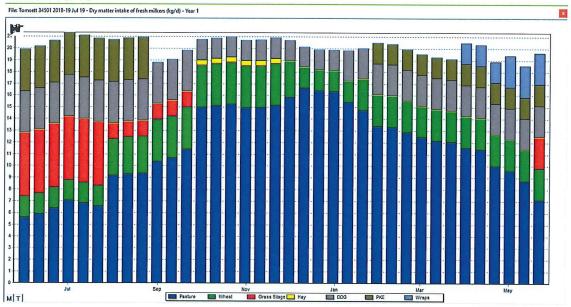
### Grazing residuals



### Cows Milking



### DMI 2018-19



#### Summary



6.94 Milk Income 1226108 Feed costs 464128 Inc less feed 761980 Variable costs 594464 Gross margin 631644 Wheat (t) 261 Grass Silage (t) 106 Whole Crop Silage 0 Hay (t) 9 DDG (t) 245 CDS (t) 0 PKE (t) 108 Kale (t) 0 Wraps (t) 40 SBM (t) 0 Feed 11 (t) 0

0

Feed 12 (t)

Current Position Cow Condition 2015	Average	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
Aug 1 <sup>st</sup> Oct 21 <sup>st</sup> <b>2016</b>	5.0 4.6		1%	19%	43%	32%	5%		
Mar 3 <sup>rd</sup> July 9 <sup>th</sup> Oct 10 <sup>th</sup>	4.7 5.28 4.76		1%	14%	7% 29%	39% 44%	44% 10%	9% 1%	
<b>2017</b> May 9 <sup>th</sup> Aug 1 <sup>st</sup> Dec 1 <sup>st</sup>	5.18 5.45 4.68			1% 16%	17% 7% 39%	38% 27% 37%	35% 34% 8%	6% 32%	3%
2018 July 31 <sup>st</sup> Dries Springers Milkers	4.92 4.95 4.86			3% 7%	28% 27% 30%	60% 48% 48%	12% 18% 16%	3%	
Rumen Fill	Average	1.0	2.0	3.0	4.0	5.0	1076		
Oct 21 <sup>st</sup> <b>2016</b> July 9 <sup>th</sup> Oct 10 <sup>th</sup> <b>2017</b> May 9 <sup>th</sup>	4.6 5.0 4.6 5.0			2%	36%	62%			
Aug 1 <sup>st</sup> Dec 1 <sup>st</sup> 2018  July 31 <sup>st</sup>	5.0 5.0 4.5								
Pasture Cover Jun 1st 2015 July 10th Aug 1st Oct 21st Dec 9th Mar 1st 2016 July 9th Oct 10th May 9th 2017 Aug 1st Dec 1st July 31st 2018	1710 kg DM/ha 1900 kg DM/ha 1900 kg DM/ha 2275 kg DM/ha 2300 kg DM/ha 2250 kg DM/ha 2250 kg DM/ha 2600 kg DM/ha 2200 kg DM/ha 2200 kg DM/ha 2200 kg DM/ha 2200 kg DM/ha 2200 kg DM/ha 2200 kg DM/ha			Soil te Soil te Soil te Soil te Soil te Soil te Soil te Soil te	emp 6 cemp 11 emp 16 emp 16 emp 16 emp 12 emp 10 emp 6 cemp 17	degrees degrees degrees degrees degrees degrees degrees degrees	6 es es es es es es		

#### **Historical Dairy**

2015 June 1st 140 cows on crop July 25<sup>th</sup> Culled 2 cows Abortions July 31st 45 cows home Aug 1st 14 hfrs home Aug 10th 100 cows home Aua 10th Culled 3 cows Abortions Aug 15<sup>th</sup> SOA 12t applied Aug 20th 71 cows off (away until 27<sup>th</sup>) Aug 27th 50 lates off (away until Sep 7th) Sep 15<sup>th</sup> Urea 6t Oct 3rd R3 338 kg LWT Oct 10th Culled 2 cows Oct 21st Tail painted herd Oct 22<sup>nd</sup> PSM 280 cows BCS 4.6 Oct 25th Urea to follow the cows 80 kg/ha Silage harvested 7 ha Stack brought in 60t DM @ 30c/kg DM covered Nov 1st 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 10<sup>th</sup> Liners changed Feb 20th DAP 145 kg/ha whole farm (12t) Feb 23<sup>rd</sup> Scanned rechecks 16% MT Feb 20th Herd 493 kg LWT Mar 1st Herd 483 kg LWT (R3 403 kg LWT) Mar 10<sup>th</sup> 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 11<sup>th</sup> Milking 273 Nov 15<sup>th</sup> Silage bought 29c/kg DM 100t DM Nov 15<sup>th</sup> Silage added to stack Nov 17th SustaiN 5.1t Dec 1<sup>st</sup> 485 kg LWT Hfrs 445 kg Dec 16th SustaiN 6t 2017 Jan 9th **DAP 11.2t** Jan 15th Silage 5 ha wraps 50 Feb 5<sup>th</sup> 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 3<sup>rd</sup> SustaiN 5.25t Mo May 5<sup>th</sup> 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 5<sup>th</sup> 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 Aug SOA 12t Aug 20th Vacuum reduce to 43 from 46 DAP 6t Sep DAP 6t Oct Oct 15th New grass 7 ha Oct 22<sup>nd</sup> HT 2.33 kg MS Nov 8th Wraps made on 7 ha (28 wraps onto Crop at RO) SustaiN 8t SulphurgainPure 30 kg/ha Nov Dec 1<sup>st</sup> Calves 100 grazed off Meal mix changes to 2/2/2 Wheat/DDG/PKE Dec 1<sup>st</sup> LF 100 MgO 40 Salt 40 Dec 10th Grazing new grass Dec 15th Urea 60 kg/ha following Dec 18th Al ended 2018 Jan 15th Urea 60 kg/ha following Feb 15th Urea 60 kg/ha following Apr 15<sup>th</sup> Al synch cows 45 cows

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May 15 <sup>th</sup>	SOA 100 kg/ha 40 ha
Jun 1 <sup>st</sup>	PD Apr cows 28 pregnant
Jun 10 <sup>th</sup>	Culled 10 cows
Jun 10 <sup>th</sup>	Brought 10 Aut calving cows 20 Jan
Jun 10 <sup>th</sup>	DO 100 cows DCT/TS grazed off on pasture/wraps
Jun 18 <sup>th</sup>	DO 55 cows onto crop
Jun 20 <sup>th</sup>	Brought 30 Aut calving cows 20 Jan
July 5 <sup>th</sup>	DO 45 cows onto crop
July 6 <sup>th</sup>	Milked over 86 in July
	Teat Seal heifers
July 29 <sup>th</sup>	Culled 4 Ab cows
July 24 <sup>th</sup>	Cows home 50
July 26 <sup>th</sup>	Hfrs home 10
July 31st	Cow home 47
July 31st	Grazed off 30 Aut cows to Country Road until Dec 1st (Grazing off?)
Aug 1 <sup>st</sup>	PSC for 210 (10 hfrs) to milk 260 cows maximum.

Next visit October 2018.

Regards

Bryan McKay Dairy Production Systems Ltd

OSP DEMO	Affected A	At risk	2017-18	2016-17	2015-16	DPS Av. 1	lo. Herds	Target	Trigger
Herd Details						DI G AVI I	torrieras	1 Gilgon	Higger
Total Cows on Board June 1st Total Cows To Calve			300 300						
Mature Cow LWT			530	530				1	
Hfr LWT as % Adults -60 days	1		87%	83%	74%	87%	46	90%	80%
R1 Mating LWT % Adults			58%			60%	29		55%
Weaing LWT % Adults Survival of Last Seaon's Heifers			17%	17%		19%	40		15%
Calving analysis	-					56%	19	90%	75%
PSC Heifers		83	04-Aug-17	01-Aug-16	01-Aug-15				
Heifer Replacement Rate			27.7%	13.7%	4.8%	22%	64	20%	25%
Calving to mid point			12	16	8	10	37	10	18
Heifers Calved by 6 weeks Abortions/Wet-Dries in Heifers	310		85% 2.4%	75% 0.0%	78% 0.0%	89% 2.1%	36		75%
PSC Adults	-	217		01-Aug-16		2.176	52	1%	5%
BCS at Calving			5.45	5.40	5.00	5.13	49	5.00	4.50
Calving to mid point			18	20	31	17	37	18	25
Cows calved by 6 weeks Abortions/Wet-Dries in Cows	184		85%	75%	40%	79%	36	85%	70%
Inductions Total Cows	0		0.0% 0.0%	0.0% 0.0%	3.6% 0.0%	1.2% 0.0%	52 51	2% 5%	5% 10%
Health Problems						01070		070	1070
Calving Assists	10	300	3.3%	17.5%	6.9%	3.6%	48	2%	10%
Twins	10		3.3%	3.5%	0.0%	2.1%	47		
Retained Cleanings Calves Born Dead	10 5		3.3% 1.7%	4.2% 5.3%	2.1% 5.2%	2.5% 3.7%	48 37	2% 5%	5% 10%
Milk Fever	12		4.0%	5.3%	2.4%	4.5%	48	2%	5%
Metabolic Disorders	3		1.0%	0.4%	0.7%	0.3%	0	2%	5%
Other Diseases	2		0.7%	0.7%	0.0%	0.5%	49	2%	5%
Total Deaths Mating Analysis	6		2.0%	2.5%	1.0%	2.1%	56	2%	5%
PSM			24-Oct-17	23-Oct-16	21-Oct-15				
Cows to mate			288	273	276				
BCS at mating			4.75	4.76	4.60	4.49	51	4.50	4.00
Metricure Treated Aneostrus Treated			0.0%	0.4%	0.0%	4%	50	3%	10%
Before Mating Start	0		0%	0%	0%	6%	0		
In First Three Weeks	ő		0%	0%	0%	1%	o		
After Three Weeks	0		0%	0%	0%	3%	0		
Total Treated	0		0.0%	0.0%	0.0%	10%	62	10%	25%
Submission Rate Submission Rate 3 Weeks			79%	0 89%	55%	84%	35	90%	80%
Submission Rate 4 Weeks			85%	05/6	68%	90%	25	95%	85%
Bulls Run With Herd			01-Dec-17	12-Nov-16	07-Dec-15			0070	0070
Bulls Withdrawn		- 1	18-Dec-17	10-Jan-17	10-Jan-16				
Mating Period Weeks			7.9	11.4	11.6	10.6	61	12	15
Pregnancy Tested			10-Feb-18	23-Feb-17	30-Dec-15				
BCS at Lo Point			4.40	4.75	4.60	4.29	40	4.5	4
BCS at Dry Off			5.00	5.20	4.90	4.78	31	4.5	4
Herd In Calf Rate		288							
One Week Herd In Calf Rate Two Week Herd In Calf Rate					11% 26%	17% 32%	22 22	15% 31%	5% 21%
Three Week Herd In Calf Rate		- 1			39%	46%	26	46%	36%
Four Week Herd In Calf Rate		- 1			45%	53%	22	56%	46%
Five Week Herd In Calf Rate		- 1			53%	61%	22	66%	56%
Six Week Herd In Calf Rate Seven Week Herd In Calf Rate			73%	69%	59%	69% 73%	39 25	75%	65%
Eight Week Herd In Call Hate			82%		66% 76%	73% 76%	25	80% 84%	70% 74%
Nine Week Herd In Calf Rate		- 1			79%	79%	24	88%	78%
Ten Week Herd In Calf Rate		- 1			81%	81%	20	90%	80%
Eleven Week Herd In Calf Rate Fwelve Week Herd In Calf Rate		- 1		89%	82%	83%	17	92%	82%
Thirteen Week Herd In Calf Rate		- 1	- 1		84%	84%	16 0	94% 95%	84% 85%
Forteen Week Herd In Calf Rate		- 1	- 1				ő	3370	86%
Fifteen Week Herd In Calf Rate		- 1	1		1			96%	
Sixteen Week Herd In Calf Rate							0	96% 97%	87%
Cows Not In Calf Mastitis		000	10.10	44.00/	40.00	14.001	0	97% 98%	87% 88%
		288	18.1%	11.0%	16.0%	14.0%	0	97%	87%
Dry Cow Mastitis Incicdence	0	288 217	18.1% 0.0%			14.0%	0	97% 98% 10%	87% 88% 15%
Ory Cow Mastitis Incicdence Calving Mastitis Heifers Day 0-5	0	217 83	0.0% 0.0%	0.0% 33.3%	0.0% 21.4%		0	97% 98%	87% 88%
Calving Mastitis Heifers Day 0-5 Calving Mastitis Adults Day 0-5		217	0.0%	0.0%	0.0%	0.1%	0 0 45	97% 98% 10%	87% 88% 15% 2%
Calving Mastitis Heifers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+	0 5	217 83 217	0.0% 0.0% 2.3%	0.0% 33.3% 5.3%	0.0% 21.4% 5.4%	0.1% 3.7% 3.0%	0 0 45 61 47	97% 98% 10% 1% 4% 4%	87% 88% 15% 2% 8% 8%
Calving Mastitis Heifers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June	0 5 0	217 83 217	0.0% 0.0% 2.3%	0.0% 33.3% 5.3% 0.0%	0.0% 21.4% 5.4% 0.0%	0.1% 3.7% 3.0% 0.3%	0 0 45 61 47 52	97% 98% 10% 1% 4% 4%	87% 88% 15% 2% 8% 8%
Calving Mastitis Heifers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July	0 5	217 83 217	0.0% 0.0% 2.3%	0.0% 33.3% 5.3%	0.0% 21.4% 5.4% 0.0% 0.0%	0.1% 3.7% 3.0% 0.3% 0.8%	0 0 45 61 47 52 50	97% 98% 10% 1% 4% 4% 1%	87% 88% 15% 2% 8% 8% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September	0 5 0 0 30 0	217 83 217 300 300 300 300	0.0% 0.0% 2.3% 0.0% 0.0% 10.0%	0.0% 33.3% 5.3% 0.0% 0.0% 0.0%	0.0% 21,4% 5.4% 0.0% 0.0% 0.0%	0.1% 3.7% 3.0% 0.3%	0 0 45 61 47 52	97% 98% 10% 1% 4% 4%	87% 88% 15% 2% 8% 8%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ lune luly August September October	0 5 0 0 30 0 5	217 83 217 300 300 300 300 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 33.3% 5.3% 0.0% 0.0% 0.0% 0.7% 1.8%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 3.2% 2.3%	0 0 45 61 47 52 50 49 49	97% 98% 10% 1% 4% 4% 1% 1% 1% 1%	87% 88% 15% 2% 8% 8% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September October Vovember	0 5 0 0 30 0 5 2	217 83 217 300 300 300 300 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 1.8% 1.1%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 3.2% 2.3% 1.6%	0 0 45 61 47 52 50 49 49 45 43	97% 98% 10% 1% 4% 4% 1% 1% 1% 1%	87% 88% 15% 2% 8% 8% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Joctober November Joccomber	0 5 0 0 30 0 5 2	217 83 217 300 300 300 300 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 33.3% 5.3% 0.0% 0.0% 0.0% 1.8% 1.1%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 0.7% 2.5% 2.1% 1.4%	0.1% 3.7% 3.0% 0.8% 2.5% 3.2% 2.3% 1.6% 1.4%	0 0 45 61 47 52 50 49 49 45 43 40	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1%	87% 88% 15% 2% 8% 8% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September October Vovember	0 5 0 0 30 0 5 2	217 83 217 300 300 300 300 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 1.8% 1.1%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 3.2% 2.3% 1.6%	0 0 45 61 47 52 50 49 49 45 43	97% 98% 10% 1% 4% 4% 1% 1% 1% 1%	87% 88% 15% 2% 8% 8% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Colober Jovember Joecember January February Jarx Jarx	0 5 0 30 0 5 2 0 0	217 83 217 300 300 300 300 288 288 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 1.8% 0.4% 0.4% 0.4% 0.0%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 2.1% 1.4% 0.4% 0.4% 0.7%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 3.2% 2.3% 1.6% 1.4% 1.5% 1.5%	0 0 45 61 47 52 50 49 45 43 40 40 36 31	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Joctober Jovember Joecember January February Jar	0 5 0 30 0 5 2 0 0	217 83 217 300 300 300 300 288 288 288 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 0.7% 1.8% 0.4% 0.4% 0.4% 0.0% 0.0%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 0.7% 2.1% 1.4% 0.4% 4.0% 0.7% 0.4%	0.1% 3.7% 3.0% 0.8% 2.5% 3.2% 2.3% 1.6% 1.4% 1.5% 1.5% 1.2%	0 0 45 61 47 52 50 49 49 45 43 40 40 36 31 26	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June June July August September October Joveember Jecember January February AarX April Aday	0 5 0 30 0 5 2 0 0 0	217 83 217 300 300 300 300 288 288 288 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0% 1.7%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 0.7% 1.8% 1.1% 0.4% 0.4% 0.0% 0.0% 0.0% 0.0% 0.0% 0.4% 0.0%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 1.4% 0.7% 0.4% 0.7% 0.4%	0.1% 3.7% 3.0% 0.8% 0.8% 2.5% 3.2% 2.3% 1.6% 1.5% 1.5% 1.1% 0.7%	0 0 45 61 47 52 50 49 45 43 40 36 31 26 26 15	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Joctober Jovember Joecember January February Jar	0 5 0 30 0 5 2 0 0	217 83 217 300 300 300 300 288 288 288 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0%	0.0% 38.3% 5.3% 0.0% 0.0% 0.0% 0.7% 1.8% 0.4% 0.4% 0.4% 0.0% 0.0%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 0.7% 2.1% 1.4% 0.4% 4.0% 0.7% 0.4%	0.1% 3.7% 3.0% 0.8% 2.5% 3.2% 2.3% 1.6% 1.4% 1.5% 1.5% 1.2%	0 0 45 61 47 52 50 49 49 45 43 40 40 36 31 26	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1%	87% 88% 15% 2% 8% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June June June June June June June June	0 5 0 30 0 5 2 0 0 0 0 0 42	217 83 217 300 300 300 300 288 288 288 288 288 288 288 288	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0% 1.7% 0.7% 14.0%	0,0% 0,3% 5,3% 0,0% 0,0% 0,0% 1,9% 1,1% 0,4% 0,0% 0,0% 0,0% 13,7% 111000	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 1.4% 0.4% 0.4% 12.1%	0.1% 3.7% 3.0% 0.8% 2.5% 3.2% 1.6% 1.5% 1.5% 1.2% 1.1% 0.7% 14.9%	0 0 0 45 61 47 52 50 49 45 43 40 40 36 31 26 63 58	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1% 10% 100000 5	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Detober Sovember December January February MarX April Aday Annual Masitits Incidence Leame Cow Interventions June June June June June June June June	0 5 0 30 0 5 2 0 0 0 0 0 42	217 83 217 300 300 300 300 288 288 288 288 288 288 288 288 300	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 1.7% 0.7%3	0,0% 88,3% 5,3% 0,0% 0,0% 0,0% 0,0% 1,4% 0,4% 0,0% 0,0% 13,7% 111000	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 0.7% 2.11% 1.4% 0.4% 0.4% 12.1% 12.100 0.0%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 2.3% 1.6% 1.5% 1.5% 1.1% 0.7% 0.7% 1.49% 1.49%	0 0 45 61 47 52 50 49 45 43 40 36 31 126 53 58	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 2%	87% 88% 15% 8% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 4% 4% 850000 4%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Colober November Jecember January February MarX April Aday Annual Mastitis Incidence Average BMSCC Lame Cow Interventions June July	0 5 0 30 0 5 2 0 0 0 0 0 0 42	217 83 217 300 300 300 288 288 288 288 288 288 288 288 300	0.0% 0.0% 2.3% 0.0% 0.0% 1.0% 0.7% 1.7% 0.7% 14.0% 158000	0,0% 98,393 5,3% 0,0% 0,0% 0,0% 0,7% 1,8% 1,1% 0,4% 0,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 4.0% 0.4% 0.4% 0.4% 12.7000 0.0%	0.1% 3.7% 3.0% 0.8% 0.8% 2.5% 3.2% 3.2% 1.6% 1.4% 1.5% 1.5% 1.1% 0.7% 14.9% 14.9%	0 0 45 61 47 52 50 49 49 49 40 36 31 11 26 15 63 35 8	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 2% 2%%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 4% 4%
Calving Mastitis Helifers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June June June June June June June June	0 5 0 30 0 5 2 0 0 0 0 0 42	217 83 217 300 300 300 288 288 288 288 288 288 288 300	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0% 1.7% 0.7% 14.0% 158000	0,0% 83,332 5,3% 0,0% 0,0% 0,0% 1,9% 1,1% 0,4% 0,4% 0,0% 1,1% 1,1% 0,0% 0,0% 1,1% 1,1% 0,0% 0,0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 1.4% 0.4% 1.2.1% 12.1% 12.1% 12.1%	0.1% 3.7% 3.0% 0.8% 2.5% 3.2% 1.6% 1.5% 1.5% 1.1% 0.7% 14.9% 174617	0 0 45 61 47 52 50 49 45 43 40 40 36 31 26 63 58	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1% 1% 2% 2% 2%	87% 88% 15% 8% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 4% 4% 4% 4%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September October Jovember December Jovember Jove	0 5 0 30 0 5 2 0 0 0 0 0 0 42	217 83 217 300 300 300 288 288 288 288 288 288 288 288 300	0.0% 0.0% 2.3% 0.0% 0.0% 1.0% 0.7% 1.7% 0.7% 14.0% 158000	0,0% 98,393 5,3% 0,0% 0,0% 0,0% 0,7% 1,8% 1,1% 0,4% 0,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 4.0% 0.4% 0.4% 0.4% 12.7000 0.0%	0.1% 3.7% 3.0% 0.3% 0.8% 2.5% 2.5% 1.6% 1.5% 1.5% 1.1% 0.7% 1.19% 1.29% 1.19% 1.49% 1.49% 1.49% 1.49% 1.49% 1.59% 1.49% 1.59% 1.49% 1.59% 1.49%	0 0 45 61 47 52 50 49 45 43 40 36 31 126 53 58	97% 98% 10% 1% 4% 4% 4% 1% 1% 1% 1% 1% 1% 1% 2% 2% 2% 2%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 2% 4% 4650000 4% 4% 4%
Calving Mastitis Helifers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June June July August September October Jovember Jecember Jeanuary February JarX AarX April Jay Annual Mastitis Incidence Average BMSCC  Lame Cow Interventions June July Junyust Jeptember Joctober Joctober Joctober Joctober Joctober Joctober Joctober Jovember Joctober Jovember Joctober Jovember	0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217 83 217 300 300 300 300 288 288 288 288 288 288 300 300 300 300 300 300 300 300 300	0.0% 0.0% 2.3% 0.0% 0.0% 10.0% 0.0% 1.7% 0.7% 158000	0,0% 83,332 5,3% 0,0% 0,0% 0,0% 1,1% 0,4% 0,4% 1,1% 0,4% 1,1% 0,0% 1,1% 1,1% 1,1% 1,1% 1,1% 1,1	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 1.4% 0.4% 1.27000 0.0% 1.1% 1.8% 1.8% 1.8% 1.4%	0.1% 3.7% 3.0%  0.8% 2.5% 3.2% 2.3% 1.6% 1.5% 1.5% 1.7% 1.1% 0.7% 14.9% 174617  0.2% 0.8% 1.9% 2.4% 1.6% 1.4%	0 0 45 61 47 52 50 49 45 43 33 40 40 36 63 31 26 53 58	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 1% 1% 2% 2% 2%	87% 88% 15% 8% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 4% 4% 4% 4%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Calving Mastitis Incidence Day 5+ Une Unly Laugust September December December Anary February MarX Lary Lary Lary Lary Lary Lary Lary Lary	0 5 0 30 0 5 2 0 0 0 0 42	217 83 217 300 300 300 288 288 288 288 288 300 300 300 300 300 300 300 300 300 3	0.0% 0.0% 0.0% 0.0% 0.0% 10.0% 0.7% 0.7% 0.7% 0.7% 0.0% 0.0% 0.0%	0,0% 88,398 5,3% 0,0% 0,0% 0,0% 1,8% 1,1% 0,4% 0,4% 1,1% 0,0% 1,11000 0,0% 1,11000 0,0% 0,0%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 2.1% 0.7% 0.4% 0.4% 0.4% 0.4% 0.4% 12.1% 127000 0.0% 1.1% 1.8% 1.4% 0.0% 1.14% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.	0.1% 3.7% 3.0%  0.3% 0.8% 2.5% 2.3% 1.6% 1.4% 1.5% 1.1% 0.7% 1.19% 1.74617  0.2% 0.8% 1.9% 1.9% 1.9% 1.9%	0 0 45 61 47 52 50 49 45 43 40 36 31 26 53 58 50 50 50 49 49 49 49 49 49 49 49 49 49 49 49 49	97% 98% 10% 1% 4% 4% 4% 1% 1% 1% 1% 1% 1% 2% 2% 2% 2% 2% 2% 2% 2%	87% 88% 15% 15% 29% 29% 29% 29% 29% 29% 29% 29% 29% 49% 49% 49% 49% 49% 49% 49% 49% 49% 4
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Detober November Jecember January February Jerry	0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217 83 217 300 300 300 288 288 288 288 288 288 300 300 300 300 300 300 300 300 300 3	0.0% 0.0% 2.3% 0.0% 0.0% 1.0% 0.0% 1.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0	0,0% 98,3% 5,3% 0,0% 0,0% 0,0% 0,0% 1,1% 0,4% 0,4% 0,0% 13,7% 111000 0,0% 0,0% 0,0% 13,7% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 0.4% 0.4% 0.4% 127000 0.0% 1.1% 1.1% 1.8% 1.8% 1.4% 0.0% 1.1% 1.8% 1.8% 0.0% 1.1%	0.1% 3.7% 3.0%  0.8% 0.8% 2.5% 3.2% 3.2% 1.6% 1.4% 0.7% 1.9% 2.4.6% 1.9% 2.4% 1.9% 2.4% 1.9% 2.4% 1.9% 2.4% 1.1%	0 0 0 45 61 47 52 50 49 49 49 45 43 40 36 31 11 26 15 63 35 50 50 50 40 40 40 40 40 40 40 40 40 40 40 40 40	97% 98% 10% 1% 4% 4% 4% 1% 1% 1% 1% 1% 1% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%	87% 89% 15% 15% 29% 29% 29% 29% 29% 29% 29% 29% 29% 29
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June June June June July August September October Jovermber Jecember Jecember Jenuary February JarX AarX April Jay Annual Mastitis Incidence Average BMSCC  Jame Cow Interventions June July Juny Juny Juny Juny Juny Juny Juny Jun	0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217 83 217 300 300 300 288 288 288 288 288 300 300 300 300 300 300 300 300 300 3	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0,0% 88,392 5,3% 0,0% 0,0% 0,0% 1,1% 0,4% 0,4% 0,4% 111000 0,0% 0,0% 1,0,4% 0,7% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 1.4% 0.4% 1.27000 0.0% 1.1% 1.8% 1.8% 1.8% 1.8% 1.8% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0	0.1% 3.7% 3.0%  0.3% 0.8% 2.5% 3.2% 2.3% 1.6% 1.4% 0.7% 14.9% 1.74617  0.2% 0.9% 1.4% 0.9% 1.4% 0.9% 1.1%	0 0 0 45 61 47 52 50 49 45 43 34 40 40 36 31 26 53 58 50 50 49 49 49 49 49 40 40 40 40 40 50 50 50 50 50 50 50 50 50 50 50 50 50	97% 98% 10% 1% 4% 4% 1% 1% 1% 1% 1% 1% 1% 20% 20% 20% 20% 20% 20% 20% 20% 20% 20	87% 88% 155% 2% 8% 2% 2% 2% 2% 2% 2% 2% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4%
Calving Mastitis Helfers Day 0-5 Calving Mastitis Adults Day 0-5 Monthly Mastitis Incidence Day 5+ June July August September Detober November Jecember January February Jerry	0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217 83 217 300 300 300 288 288 288 288 288 288 300 300 300 300 300 300 300 300 300 3	0.0% 0.0% 2.3% 0.0% 0.0% 1.0% 0.0% 1.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0	0,0% 98,3% 5,3% 0,0% 0,0% 0,0% 0,0% 1,1% 0,4% 0,4% 0,0% 13,7% 111000 0,0% 0,0% 0,0% 13,7% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.5% 0.7% 2.1% 0.4% 0.4% 0.4% 127000 0.0% 1.1% 1.1% 1.8% 1.8% 1.4% 0.0% 1.1% 1.8% 1.8% 0.0% 1.1%	0.1% 3.7% 3.0%  0.8% 0.8% 2.5% 3.2% 3.2% 1.6% 1.4% 0.7% 1.9% 2.4.6% 1.9% 2.4% 1.9% 2.4% 1.9% 2.4% 1.9% 2.4% 1.1%	0 0 0 45 61 47 52 50 49 49 49 45 43 40 36 31 11 26 15 63 35 50 50 50 40 40 40 40 40 40 40 40 40 40 40 40 40	97% 98% 10% 1% 4% 4% 4% 1% 1% 1% 1% 1% 1% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%	87% 88% 15% 2% 8% 2% 2% 2% 2% 2% 2% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4%
calving Mastitis Helfers Day 0-5 calving Mastitis Adults Day 0-5 calving Mastitis Incidence Day 5+ une uly uugust september becomber december anuary february darX unnual Mastitis Incidence uverage BMSCC ame Cow Interventions une uly uugust eptember becomber december anuary eberbuary dary annual Mastitis Incidence uverage BMSCC ane Cow Interventions une uly uugust eptember becomber december elecember anuary eberuary larX	0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	217 83 217 300 300 288 288 288 288 288 300 300 300 300 300 300 288 288 288 288 288 288 288 288 288 2	0.0% 0.0% 0.0% 0.0% 0.0% 10.0% 1.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0.7% 0	0,0% 88,398 5,3% 0,0% 0,0% 0,0% 1,8% 1,1% 0,4% 0,4% 1,1% 0,0% 1,1,1% 1,1,1% 0,0% 1,1,1% 1,1,1% 1,1,1% 1,1%	0.0% 21.4% 5.4% 0.0% 0.0% 0.0% 2.6% 2.1% 0.4% 0.4% 0.4% 0.4% 0.4% 0.4% 0.4% 0.4	0.1% 3.7% 3.0%  0.3% 0.8% 2.5% 2.3% 1.6% 1.4% 1.5% 1.1% 0.2% 0.3% 14.9% 1.176 0.2% 0.9% 1.9% 1.1% 1.1% 1.1%	0 0 45 61 47 52 50 49 45 43 40 36 31 26 53 58 50 50 50 44 44 44 44 44 44 41 38	97% 98% 10% 1% 4% 4% 4% 1% 1% 1% 1% 1% 1% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%	87% 88% 155% 2% 8% 2% 2% 2% 2% 2% 2% 2% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4%