Westland Monitor Farm Project

Weekly Update as at week ending Wednesday 16 December 2020

CO Comment

There has been much discussion lately about changing milking frequency. Some farmers routinely choose to do this from Christmas onwards. The Kowhitirangi Monitor Farm sees good success by implementing 3-in2 all season.

There are advantages and disadvantages to milking frequency change and in 2019/20 an estimated 14% of herds were milked using 3-in-2, with around half using it from Christmas onwards, and half using it in late lactation.

When (during the season) to use 3-in-2 will be determined by what you are trying to achieve. Preliminary results from a farmlet experiment run as part of the DairyNZ-led Flexible Milking project give an indication of the likely effect on milk production. There were four herds, one being milked TAD for the full season, with the remaining three milking 3-in-2, either full season from Dec 1, or from March 1. Milking intervals were 10-14 hours for TAD and 12-18-18 hours for 3-in-2.

The preliminary analysis from this trial indicates that for a herd producing 460kgMS/cow on TAD, there is likely to be a 0.09kg MS/cow/day decrease for each day of 3-in-2 milking during the season. This equated to a 5% decrease in MS for the full season 3-in-2 herd. If your cows are producing less kg/MS/cow, the production loss will be less. These results suggest that milking 3-in-2 may be a viable strategy for many farms to help reduce the pressure on both the cows and staff.

But 3-in-2 is *not* a strategy to reduce feed intake, for more information on flexible milking visit the DairyNZ flexible milking page. I encourage you to plan your grazing well if you are considering changing milking frequency.

To limit milk production loss, and maintain BCS, cows should be fed to the same level as they would have been on TAD. The energy savings from dropping one in every four milking's may lead to an improved energy status and BCS profile of the herd.

Tips from farmers include managing feed as 48-hour blocks, splitting that feed into three, rather than four breaks; and work in with your paddock sizes, number of paddocks and target rotation lengths to find the most suitable system.

Another theme identified from farmer experience was not to over-complicate your grazing plan. Remember the shortest period between milking's is on the day's cows are milked twice. This short period happens during daylight hours which is when cows are actively grazing, therefore they should be able to consume similar amounts to the longer night-time periods.

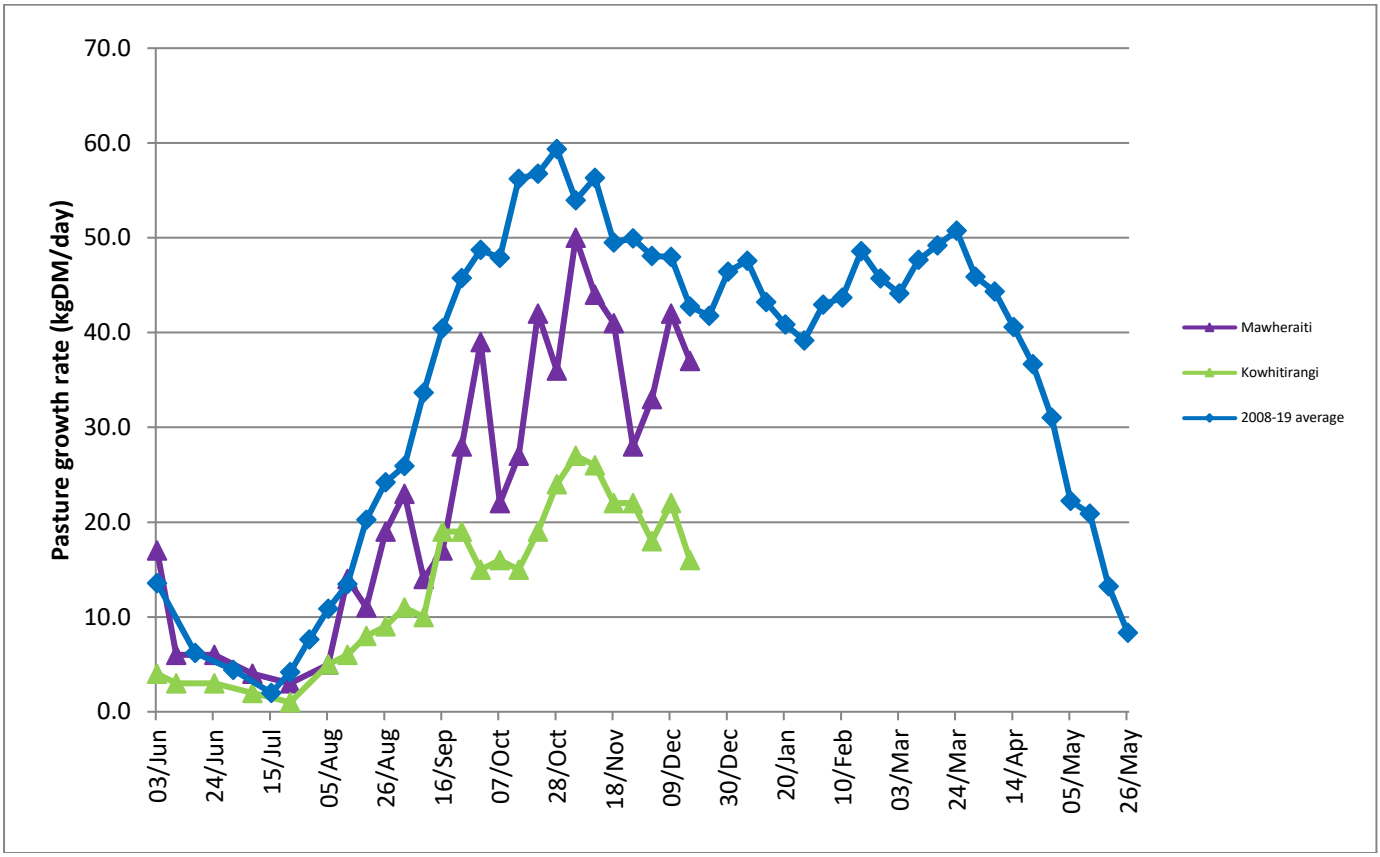
If you do wish to utilise 3-in-2 to extend round length and decrease demand, then you will need to supplementary feed to do that. The economics of various feeds can be limited by factors such as price and milksolids response. The DairyNZ Supplement Price Calculator can help you decide whether to input supplement and what those inputs should be.

Farm Summary

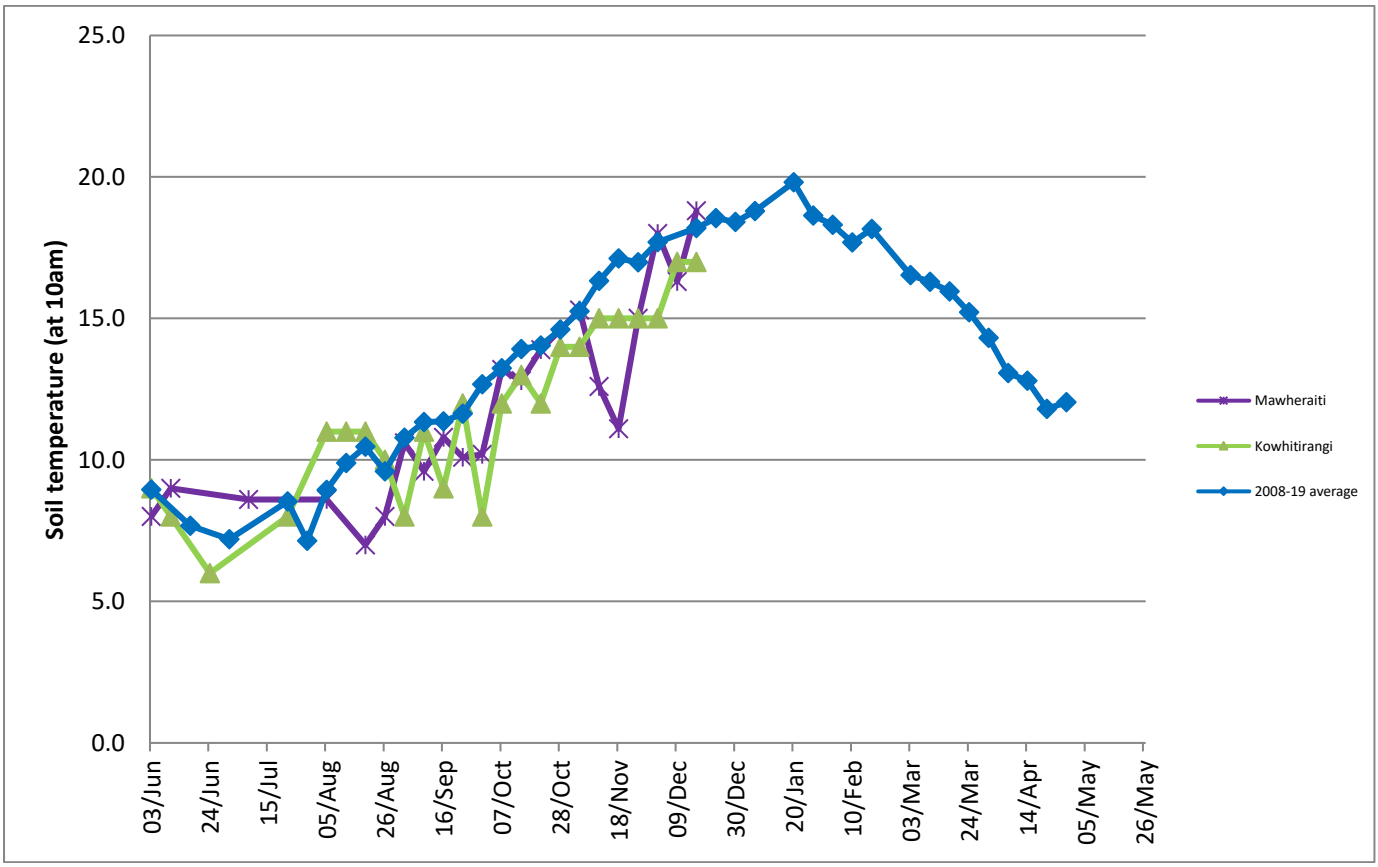
	Mawheraiti	Kowhitirangi
Average cover (kg DM/ha)	2149	1911
APC (9 December)	*2119*	*1947*
Rotation length (days)	25	20
Stocking rate	2.3	2.5
Percentage in milk	100%	100%
Milksolids kg/cow	1.88	1.78
Milksolids kg/ha	4.4	3.8
MS/cow (season to date)	217	204
MS/ha (season to date)	509	440
N (kg/ha) year to date	125	130
Current N application rate kg N/ha	22	-
	30 Nov	2 Dec
DM%	16.3	15.4
Pasture ME	11.9	12.0
Pasture NDF	44.5	42.0
Pasture CP	19.3	26.7
Target Intake (kg DM/cow/d)	18	18
Supplement (kg/cow/day)	1.1	2.5
Soil temperature (°C)	18.8	17
Growth Rate (kg DM/day)	37	16
Rainfall	32	23
Conditions for farmwalk	Fine	Hot and sunny

NB: pasture quality data are for 1 sample collected from each farm

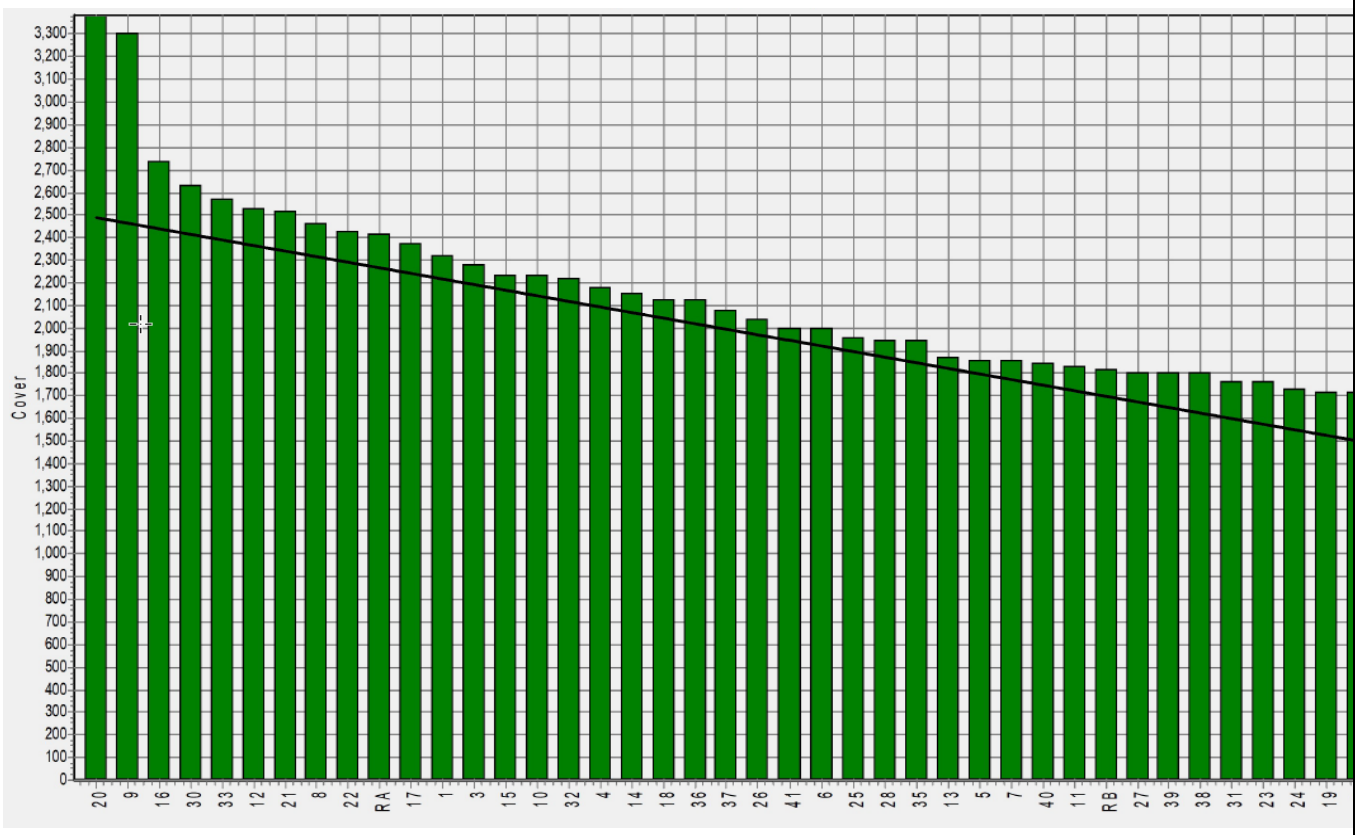
Weekly Pasture Growth Rates



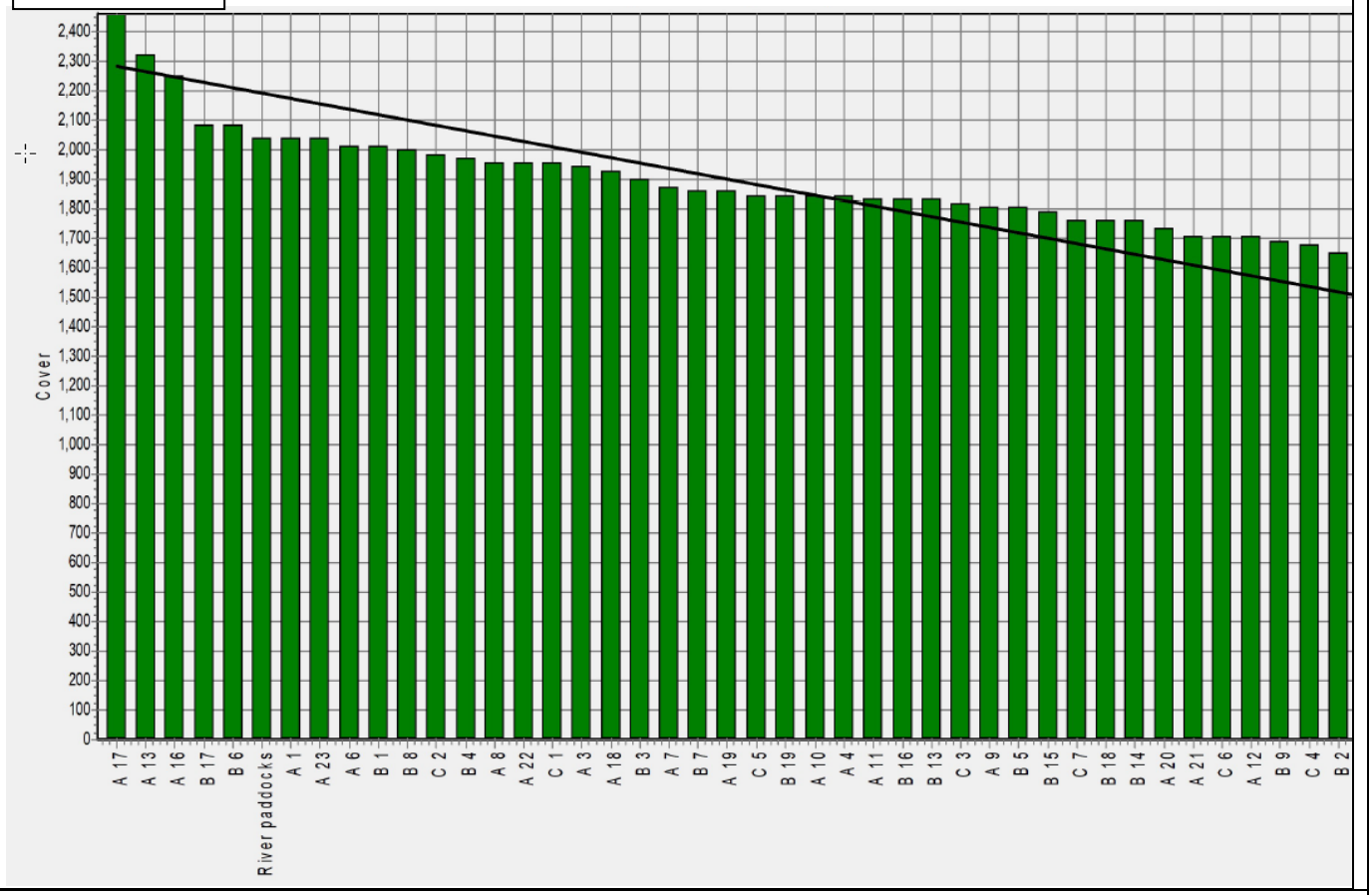
Weekly Soil Temperature



Mawheraiti



Kowhitirangi



Mawheraiti

Description	Date	RPM	% DM	% Prot	% Lipid	% ADF	% NDF	Sol Sugar	OMD %	MJME/kg
Paddock 29	8/6/20	16.8	12.8	26.1	3.7	18.7	41.5	14.7	86.7	12.7
Paddock 6	6/7/20	13.6	14.8	24.2	3.7	19.3	37.1	17.5	86.3	12.6
Paddock 23	3/8/20	12.8	12.4	31.7	4.2	23.2	43.4	5.5	82.5	12.0
Paddock 5	31/8/20	14.0	15.0	29.6	3.2	22.4	44.9	9.4	82.7	12.1
Paddock 8	5/10/20	16.6	14.9	24.7	3.6	24.9	47.0	8.8	78.5	11.5
Paddock River A	2/11/20	14.0	13.6	24.6	3.6	26.3	51.1	6.0	78.1	11.4
Paddock 17	30/11/20	14.4	16.3	19.3	2.9	26.0	44.5	13.8	81.2	11.9

Kowhitirangi

Description	Date	RPM	% DM	% Prot	% Lipid	% ADF	% NDF	Sol Sugar	OMD %	MJME /kg
Paddock 17b	10/6/20	10.8	13.6	28.3	3.8	17.4	33.6	14.0	88.3	12.9
Paddock 13b	7/7/20	8.0	11.8	29.4	4.1	21.7	44.6	10.0	84.6	12.3
Paddock 3c	5/8/20	10.2	11.7	30.9	4.3	23.5	45.9	7.1	81.3	11.9
Paddock 4a	2/9/20	11.8	17.3	25.8	4.2	21.5	42.3	12.0	>85	>12.7
Paddock 1	14/10/20	9.7	12.9	31.7	4.0	23.9	49.0	6.8	83.2	12.1
Paddock 19b	4/11/20	11.8	10.9	27.6	3.6	27.4	54.0	3.9	78.3	11.4
Paddock 11a	2/12/20	11.4	15.4	26.7	3.3	24.2	42.0	7.9	82.2	12.0

* Test analytes which have occurred as outliers on the NIRS calibration are indicated by * and should be treated as an approximation only.