

How Now Gippy Cow



Your Levy at Work

FEBRUARY 2017

How Now Gippy Cow is a joint initiative of GippsDairy and Dairy Australia

ISSUE 217

Profitable Feeding - How Do You Decide?

In Gippsland, external feed sources make up 41- 44% of the cash costs of producing milk (Dairy Farm Monitor data 2014-2016) ; in physical terms, purchased feed accounts for 34 -41% of total feed consumed. No wonder the issue of feeding cows gets so much attention!

And Gippsland is the highest of all mainland Australian dairy areas in terms of the proportion of home grown feed consumed, so it's even more significant an issue in other regions.

If you get feeding wrong it's hard to make profit. So what are the fundamentals of how profitable farmers make feeding decisions, especially this year with such volatility?

By observing and analysing the real data for those dairy farmers that generate strong profits reasonably consistently, some common characteristics become obvious.

- These farmers have clearly identified the optimum stocking rate or "sweet spot" on their farm over a period of time for the risk profile they want. This is the cow number where cows can still be efficient and you don't have to buy in too much feed. You can ride the volatility.

At the start of this season the message was "If you are at your sweet spot don't change anything - but make sure there are no passengers." This "tweaking" involved less than 5% of cow numbers.

- They remember that most cows have 300 day lactations (or longer!) during which circumstances can change. Making a large impact decision early in the season can have a very significant impact for the rest of the year. For example, a decision not to feed or dramatically decrease feeding at the start of this season might now be regretted since supplementary feeding is 50% more profitable than it was at the start of the year, based solely on the price of milk and supplements.

With most farms supplying all year round now, these profitable farmers consider both the annual and monthly milk price to supplement price ratio. The following table offers two ways to do your own calculations for February. The current February ratio position (included as an example) is if you are paying \$220/T for concentrate (range \$180 - \$260/T) and receiving \$5.06/kg milk solids (37.7 cents per standard litre) over the next 3 months (range \$4.80-\$5.33/kg MS seems common).

Table 1. Milk Price vs Supplement Price February 2017

Method to calculate ratio	Example	Your Ratio Using Your Individual Figures
Cents/kg MS ÷ \$/T concentrate	506 ÷ 220 = 2.3 Above 1.5 is considered "good"	
Cents/ litre ÷ cents/kg concentrate	37.7 ÷ 22 = 1.7 Above 1.2 is considered "good"	

- Having checked the big settings (number of cows etc.) and done a bit of ratio/margin arithmetic, it's then all about the daily "body of evidence" for good farmers - making sure that the use of supplements is helping pasture management not hindering it! The body of evidence is not complicated; it is based on having a good set of eyeballs! Residuals, cow behaviour, and testing the vat - that's it!

So, nothing new in all the above, you say. There must be something else that these profitable farmers do that has an impact. They must use some fancy feeding regime, say an individual cow feeding system.

Individual cow feeding systems in dairies and feeding to production are aspects of "profitable feeding" that have crept into our production systems on many farms, without close scrutiny. Feeding cows should be and is simple. Whenever an aspect of feeding is introduced which increases cost and complexity it MUST be critically evaluated, particularly at \$5.00/kg MS. This is where the better farmers possibly stand out from the crowd. They question what they're told.

Some aspects of individual feeding to consider:

- The scientific world cannot agree on whether it works or not. Debates have been raging for years between researchers in various countries.
- If it does work in practice, then when it's introduced we should see either more milk for the same level of annual feeding from a herd, or less feed fed for the same production. This is not commonly observed - there does not seem to be a clear pattern of increased profit.
- Some of the technology that is giving us this precision in farming is actually not that accurate and can be 10-15% out when it indicates a cow's production. It's always important to compare the vat to what the total of the technology tells you.

The common sense approach blended with "old but good" science is that a cow's milk response to concentrate is significantly better in early lactation than late lactation. Therefore, in a split calving herd feeding to stage of lactation might be very sensible.

In addition, the approach of assessing condition in groups and feeding those groups better is sensible.

Then there's the carryovers (that are in high numbers because of fertility issues), that need to be fed well to successfully carry over, and others that aren't milking that well and can get less grain because they are gaining weight but generating a margin.

Finally, there is the argument about the high producing cow requiring more concentrate. The counter argument is that by feeding her more you are simply reducing the efficiency of a highly efficient and profitable cow- the jury is out! All you can do is go back and look at what we physically observe and put the theory aside.

Feeling as if it's all getting complicated - and that's before we start talking about different feeds at different rates?

There is a danger that all that happens is that feeding just increases. What's strange is that at the end of the day when you visit a "flat rate" feeder with less complication, it's hard to pick the difference!

The following figures are from a 280 cow single calving (but spread over 5 months) herd with some carryovers in October:

Table 2. Feeding Regime of 280 Cow Herd

Flat feeding regime for all cows	6.7 kg of 60% wheat 40% barley mix 15 – 16 kg pasture No additional protein
Additive	28c/cow/day
Production (Av.)	35 litres at 3.6% Fat/3.3% protein 2.4 kg solids/cow

According to Herd Test data 50% of the cows in this herd were producing 39 L and 2.7 kg milk solids/cow. So it's possible to achieve high and profitable production with a flat feeding rate in a high quality herd.

If you do have "feed groups", because it all sounded justifiable, then a handy way of making sure you don't over-feed, is to work in reverse. Set a figure of say 6 kg to 300 cows per day = 1.8 tonne. Then allocate it to your groups but don't go over 1.8 tonne - that's a thing called cost control rather than assumed profit!

Be very cautious about the degree of complication you introduce into your feeding regime. Try to keep it simple unless there is a very good reason for complication.

A positive note to finish on... after all the effort dairy farmers have put in over the past ten volatile months a great comment to hear from a dryland Gippsland farmer was:

"... Half way through the season we have looked at the budgets and how production is tracking. Financially we are actually ahead of where we thought we would be, even though production is down 4000 kilograms (3.2% down, YTD). Reduced grain and fertiliser prices and feeding less supplement and doing it later has well and truly offset the drop in production..."

Prepared by John Mulvany O MJ Consulting omj@dcsi.net.au on behalf of GippsDairy.

Heat stress in dry period hurts business

By Dr. Steve Little
Capacity+ Ag Consulting

Dairy farmers across mainland Australia use shade and evaporative cooling to keep their milking herds cool over the hot months. However, dry cows have received relatively little attention when it comes to managing heat stress.

Should autumn and year-round calving farms that dry cows off over the hot months of the year, be doing more to ensure their dry cows stay cool?

Cows generate less metabolic heat when dry than when lactating, and have a higher upper critical temperature. So you would presume that dry cows are far less of a concern than the milking herd when it comes to heat stress.

However, research studies consistently show that if cows experience heat stress during late pregnancy (i.e. during their dry period), they produce less milk in the next lactation. (See Figure 1).



around calving (when their immune function is already naturally suppressed).

Calves born go on to be less healthy, fertile and productive in first lactation

Studies in many species of animals (including humans) show that the conditions that offspring are subjected to while still in the uterus affect their lifetime health and performance. When the foetal calf's body temperature is increased, as it is when its mother experiences heat stress during late pregnancy, it appears that this negatively affects the calf's metabolism and gene expression, pre-programming it for sub-optimal health and performance.

Calves born to cows heat stressed during the dry period have been shown to be less able to absorb maternal antibodies from the first colostrum consumed soon after birth, so have lower blood antibody levels than calves from cool dry cows. Their cell-mediated immune function may also be compromised. So they are more susceptible to infections that commonly occur pre-weaning and are more likely to die or be culled due to health problems or poor growth.

Researchers at the University of Florida have recently found that the effects on calves born to cows heat stressed during the dry period extend through their growth and development into adult cows. These calves go on to be less fertile as maiden heifers, taking more inseminations to get in-calf. They then go on to have reduced milk yield through their first lactation (4.5 litres per day up to 30 weeks of lactation in the University of Florida study).

So..... if many cows in a herd experience heat stress during their dry period, it may impact significantly on productivity and profits, not just for a few weeks, but for many years.

Autumn and year-round calving farms with a high heat stress risk level should therefore ensure that their early dry cows and transition cows have access to adequate shade and cool drinking water at all times.

As per the milking herd, the aim should be to protect dry cows from direct sunlight, particularly during the hottest part of the day. If existing natural shade from trees in paddocks on the home farm or support block used for dry cows is inadequate to provide 4 m² shade per cow at midday, then alternative paddocks should be sought. (Portable paddock shade structures or a permanent shade structure are also options).

In the longer term, the farm plan should be reviewed with the aim of establishing more tree belts along dry cow paddocks and springer paddocks.

Of course, the farm's calving system could also be adjusted to reduce the number of cows dried off over the hot months of the year.

For further information on keeping cows cool, visit www.coolcows.com.au

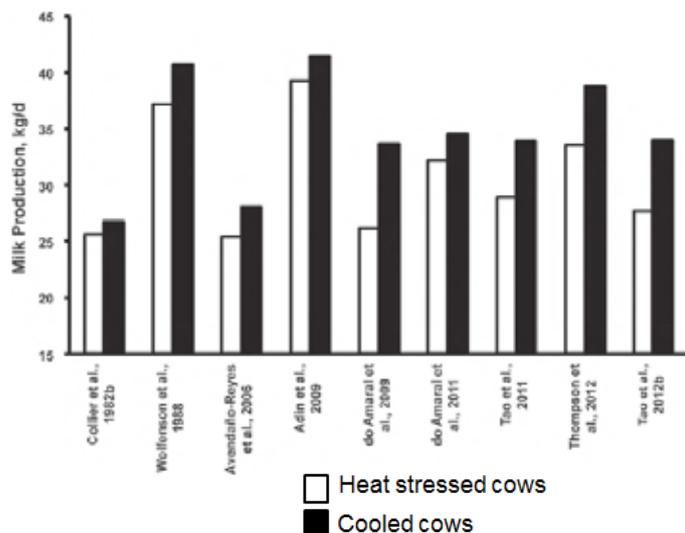


Figure 1. Nine research studies that examined the effect of heat stress and cooling during the entire dry period on milk production in the following lactation. (Source: Tao and Dahl, 2013)

Reduced milk yield in next lactation

So why does this carry-over effect on milk yield occur? Researchers believe it is due to impairment of blood flow through the dry cow's udder during the last two months of pregnancy, when the udder is growing and developing rapidly in preparation for the onset of the next lactation. (Cows that are heat stressed during the dry period are therefore handicapped at calving, possessing fewer functioning mammary cells with reduced secretory capacity).

Other metabolic / hormonal mechanisms may also contribute to the carry-over effect on milk production. For example, if cows are subjected to heat stress soon after drying-off it may affect normal involution of the udder. Further research is required.

Smaller, lighter calves born

Not only does heat stress during late pregnancy affect development of the cow's udder, it also affects development of her placenta, which the unborn calf is totally dependent on for its supply of oxygen and nutrients.

Cows that suffer heat stress during their dry period have smaller placentas, with reduced blood flow through the uterus and umbilical cord. As a result, calves of these cows (which were heat stressed while still in the uterus) tend to be born several days earlier and several kilograms lighter than calves of cows that kept cool during their dry period.

Greater risk of health problems around calving

When cows experience heat stress during late pregnancy it suppresses their immune system for many weeks. Studies have shown that the neutrophils (the white blood cells which are the first line of defence against pathogens) of heat stressed cows become less aggressive against bacteria. The level of circulating antibodies is lower than in cows that remain cool during late pregnancy e.g. cows that calve in spring. Cows that experience heat stress during late pregnancy may therefore be at greater risk of health problems such as mastitis and retained foetal membranes

Cultivating better pasture outcomes

Australian dairy farmers will soon be able to accurately assess the merits of cultivars.

The Forage Value Index has been developed by Dairy Australia, in partnership with Agriculture Victoria, Meat and Livestock Australia and the Australian Seed Federation to provide independent analysis of agronomic performance of the 60-plus cultivars of perennial ryegrass commercially available in Australia.

The FVI is an industry-endorsed economic index based on seasonal dry matter production and is aimed at providing farmers with another tool to help lift farm profitability.

Dairy Australia program manager - feedbase & animal nutrition, Richard Romano, said the FVI index could be a game-changer for Australian dairy farmers.

"The Forage Value Index gives you reliable, accurate and independent information to make decisions on which cultivars have the best potential for delivering economic value on your farm," he said.

It's a view shared by Victorian Department of Agriculture research scientist Matt Deighton, who believes that farmers can have confidence that the Forage Value index will deliver on its promise.

"When data is aggregated across all the trials within the Forage Value Index, we can have a great level of confidence that the relevant ranking of rye grasses is accurate and can be applicable to farms throughout southern Australia," he said.

Dairy farmer Stuart Griffin sees pasture improvement as a key factor in the profitability of his family farm in Westbury in central Gippsland.

"Pasture innovation is really important to us as we are predominately a pasture based system," he said.

"It is the most important feed input in our farming business, so we need to make sure we are selecting the cultivars that are most suited to our system because it is such a key driver of profitability for us."

Stuart has always put time and effort into selecting the best ryegrass species for his farm, but the prospect of adding scientific data to his selection process could be as important as improved cow genetics for long term farm profitability.

"The FVI does make it easier for us to make decisions because rather than just looking at what is happening over the fence at the



neighbours we know that there is some pretty rigorous testing and trial data behind the ratings that the cultivars get," he said.

"Just like we select our cows, we are looking to select better pastures and the FVI allows us to do that. It does show us which pastures have improved performance and we can then utilise that information to select better cultivars from our system."

Aubrey Pellett puts a lot of thought into his pasture program – so he's happy that the dairy industry is doing the same.

A former Kiwi who now farms at Hill End in West Gippsland, Aubrey has looked towards his homeland for guidance on cultivars, with the New Zealand dairy industry having successfully used a Forage Value Index for some years.

Now with Dairy Australia developing our own Forage Value Index, Aubrey can see huge benefits for farmers who use the tool to select their ryegrass species.

"Ryegrass is the foundation of my farming business so I want to make sure when I put in a new ryegrass in the ground, I'm hoping it's going to be there for more than five years, so I want to get the best ryegrass that I can," he said.

"The Forage Value Index will give me the confidence that this is the best ryegrass that I can sow for my conditions."

For more information go to www.dairyaustralia.com.au and search for FVI.

Wheat harvest good news for dairy

The world is flush with wheat, with 124 days of world wheat stocks available and a stocks-to-use ratio of 34%, which is keeping prices low.

In Australia, our stocks are also increasing due to a record wheat crop, lower demand, a lack of exports and a carry-over of 4.2 million tonnes on Australian east coast wheat. Subsequently, our domestic basis has fallen. The forecast is for wheat carry-out stocks to increase by almost 2 million tonnes in 2017. Barley stocks will also increase by over 1 million tonnes to 1.36 million tonnes on the east coast of Australia in 2017.

There is over 1 billion tonnes of corn grown in the world annually, making it the largest grain commodity. Corn is important to wheat prices, because if corn tightens, wheat is substituted for feed, which tightens the wheat balance sheet. Corn is also used to make ethanol, which can be impacted by oil prices.

Price forecast:

Wheat is trading into the West Gippsland region for \$238 per metric tonne (PMT) and Feed Barley at \$200 PMT.

To forecast prices this year, we need to look at Chicago wheat futures, domestic basis and our exchange rate.

The Castlegate James "view" is:

- Domestic basis will be low—between \$0-\$10 PMT.
- Chicago wheat should trade between 400 cents per bushel (c/bu) and 420 c/bu
- AUD / USD exchange rate rate of 72 cents

Based on these variables, ASW wheat "should" trade into Warragul between \$216—\$237 (currently around \$238 PMT). So there may be further downside to the wheat market, but that would be limited to \$20 PMT.

However, if basis remains around the same level and wheat futures do not fall, then we forecast we are already at the low end of the market.

Corn will be the driver of wheat prices. The world Corn S&D is tighter than wheat. A production issue, or a change in demand, driven by an oil price increase will firm corn prices and this will drive up wheat prices.



A strong wheat harvest is likely to keep prices at or below current levels.

A corn rally to 390 c/bu - only a 30 cents rally – would push wheat prices up to 450 c/bu and keeping basis at 20 c/bu, could push wheat to \$252 at Warragul. Hence it might not take much to firm the market by \$15 PMT, and it could be oil prices that move it.

Canola Meal is \$355 in to the West Gippsland region. Demand is expected to increase in February and March. Prices from April will be determined by the autumn break and imported Soy Bean Meal values.

Aubrey Pellett is looking forward to improving pasture performance with the Forage Value Index.

By Dominic Hogan
Castlegate James

contact us

This newsletter is published by GippsDairy & Dairy Australia

Copyright and disclaimer: Copyright (c). This publication may be of assistance to you but GippsDairy and Dairy Australia and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error.

www.gippsdairy.com.au - Phone: 03 5624 3900



Young stock care pays dividends

At this time of the year, as pasture quantity and quality declines, it is important to keep a close eye on your young stock. Heifers that are not growing at the rate required to reach their target weights at mating and first calving may require good quality supplements. Improving your heifer management is a relatively simple management strategy that may provide a multitude of benefits including:

- A big payback in milk production
- Fertility benefits
- Easier calvings
- Improved animal welfare
- Increased longevity
- The option to rear fewer replacements
- Reduction in the herd's carbon footprint

Dairy Australia's Heifers on Target program is destined to improve outcomes for dairy farmers in raising young stock into healthy productive cows. Heifers present a significant investment on dairy farms.

At the point of calving, it is estimated that a heifer has cost the dairy farm owner between \$1300 and \$1500. Therefore for every 100 heifers raised on a farm, it has cost the business \$130,000 to \$150,000.

To receive a return on this significant investment, heifers must get in calf quickly, calve without difficulty, produce well and get back in calf easily.

Some key points that came out of a Heifers on Target pilot program in the Macalister Irrigation District included:

- The struggling point seems to occur 10-12 weeks after weaning up until six months and even 12 months. This is an important time to consider investment in high quality supplementary feeding.
- Regular weighing with cattle scales is certainly useful to monitor growth, but not the only way. A 44-gallon drum or a mark on a fence post can be used as a sight gauge for height to assess how well the heifers are growing
- Over time and lots of practice you can train yourself to be more accurate in weight estimation by sight; but it's worthwhile to calibrate your eye with strategic weighing (every 3 to 6 months) and increase observation times.



Effort put into rearing young stock is time and money well spent.

- Weighing and/or regular observation without taking corrective action (if required) is a waste of effort.
 - Challenges are greater with mixed herds; separation into different sized groups and/or breeds works best if relevant follow up preferential treatment occurs.
 - Consider a minimum weight for a calf to warrant being reared (particularly if you use contract rearing); selling it early may be a cheaper option than pouring concentrate feed into it unnecessarily.
 - Consistency is the key. When you play catch up it's already too late. Applying the four-point "85% Heifer Rule" to your herd will help you assess how well you are growing your heifers;
- 1) your heifers should achieve a six-week in-calf rate of greater than 85%
 - 2) production of heifers vs. mature cows should be greater than 85 %
 - 3) the ratio of second to first calvers should be greater than 85 %
 - 4) heifers should be at least 85% of mature body weight at calving (which will vary with production level).

For more information on the Heifers on Target program, including the online booklet and calculators go to www.dairyaustralia.com.au and types heifers into the search area.

Building remarkable (dairy) workplaces

People are just as crucial to a dairy business as cows or grass, but farmers don't always put the time and effort into staff that they do for other parts of their farm operation.

GippsDairy and Dairy Australia are offering farmers the chance to improve their management of employees through a 'masterclass' on recruitment and retention problems within businesses.

The workshops, which will be held at Warragul, Leongatha and Maffra, will be led by Mandy Johnson, a best-selling author, engaging speaker and business adviser who will share with dairy farmers the best techniques to help business recruitment and solve employment issues.

Mandy completely changed her approach to managing staff with great success and now shares this experience - and the free tools she developed - with many businesses and industries across Australia.

Dairy farmers who have previously participated in workshops with Mandy suggested that Dairy Australia should offer the same sessions to the dairy community. All her workshops have been rated outstanding by your peers, so this is one event not to be missed!

For more information visit Mandy's website www.mandyjohnson.co

The workforce masterclass will have an emphasis on innovative techniques to solve recruitment and retention problems within businesses, increase business profitability and assist in achieving goals in the current challenging environment.

The comprehensive workshop will cover:

- What's changing in the labour market
- Self-reflection, looking at your achievements and disappointments in the people area
- Attracting and hiring great recruits
- Performance Management
- Getting the best from your people

The sessions will be held at:

Warragul on Tuesday, 14 March from 10.45am to 2pm at the Warragul Country Club (Conference Centre) at 41 Sutton St; Maffra at Maffra Community Sports Club, Johnson St Maffra, on Tuesday, 14 March 2017 from 6.30pm – 9pm; Leongatha on Wednesday, 15 March 2017 from 10.30am to 2pm at the Leongatha RSL, cnr Smith St and Michael Place.

The workshops are free and a meal will be provided.

Places are limited, so get in early to secure your spot by sending an RSVP by Thursday, 9 March.

To register for the workshop of your choice, please contact Leah Maslen at GippsDairy by email at leah@gippsdairy.com.au or phone 0448 681 373.

Graeme Nicoll joins DA Board

GippsDairy Chair, Graeme Nicoll, has been appointed to the Dairy Australia Board after being nominated by the Board Selection Committee.

Graeme fills the casual vacancy position which has arisen out of the resignation of former Board member Lisa Dwyer at last year's AGM.

Milking 300 cows with wife Gillian at Fish Creek, Graeme has

been a GippsDairy Board member since 2012, serving 16 months as Chair and two years as Deputy Chair.

In taking up the casual directorship, Mr Nicoll has stepped down as GippsDairy Chair.

Details about the new GippsDairy Chair and Deputy Chair will be in next month's How Now Gippy Cow.

Focus on summer feeding

With summer feeding a hot topic in the Gippsland dairy industry, How Now Gippy Cow asked GippsDairy's three Focus Farmers about their plans for keeping their cows healthy and productive during the dry months.

Graeme Cope - Fish Creek

What is your summer feeding strategy (and how did you come up with that strategy)?

We grow 30ha of summer crops of millet and rape and started feeding that off in mid-January. It was ready to graze just as we ran out of grass in the paddocks. After we graze we will put on the second-pond effluent and we always get a second grazing by doing that. We had mixed success with the crops this year. We were a bit later planting because we were busy doing silage. We made a lot of silage and we feed as much of that possible.

How much home grown feed are you giving each cow?

We feed approximately 18 tonnes a day to 650 cows. I just feed them virtually what they will eat. If they leave too much in the paddock that means they are getting too much and we cut them back. If they clean it up, we offer them more. We work on the challenge feeding system where we challenge them to eat as much as we will offer.

How much grain per cow?

We've increased the grain to 6.5kg of wheat, 1.3 kg of canola and a mineral pellet which is 125 grams per day. Sweet brewers grain is also added into the silage when we feed it. It's 40% dry matter whereas normal brewers grain is 20 per cent.

How is the quality of this year's silage affecting your feed strategy?

The quality is not as good as normal because of the wet October, but it is what it is. We had it tested which showed it had high lactic acid. As we have got into the stack further it is getting drier. Because we're adding the brewers they are getting a bit more that way. With a bit of luck we will get a thunderstorm or two which will give us a bit of green pick. We just need a bit of luck.

Brenton Ziero - Jindivick

What is your summer feeding strategy (and how did you come up with that strategy)?

I've got 20ha of crop in, with 16ha of pasja rape and millet and about five of chicory. We have a lot of cows calving in February, and it helps keep an even flow of milk right through summer. The crops have been really good, with four and half to five tonnes for each crop on average.

How much home grown feed are you giving each cow?

There are on about 5 kilos of crop and that's it. No silage. I don't need to put silage in yet. With the crops, it is enough for them. The grass is still growing faster than the cows can eat it. This time last year we had a little bit of crop and were feeding a hell of a lot of silage.

How much grain (and what type) per cow?

They are on 4kg of wheat and canola along with some additives. Usually they get 6.5kg but, with the way milk price is, I'm trying to get them to eat more grass. Their health and milk production doesn't seem to be worse off for it, so I'll keep trying to get them to eat more grass for sure.

How is the quality of this year's silage affecting your feed strategy?

Probably 90 per cent is all good. First cut wasn't the best I've done, but second cut was pretty good. The quality won't change anything. Fresh cows will probably get silage when they start calving.



Paul Mumford - Won Wron

What is your summer feeding strategy (and how did you come up with that strategy)?

Summer feeding strategy is to incorporate summer crops into the cow diet. A total of 12ha of brassicas were planted for their protein source and an additional 20ha of millet was planted for bulk roughage. Home grown grass silage will also be utilized in the cows' diet to balance out feed requirements on a daily basis. Supplement feeding of barley will also be increased to assist daily requirements of cows.

This strategy came together from a number of difference sources. Over time we have had a good understanding of what the cows require to milk for a dry land farm in South East Gippsland. The incorporation of this and the Focus Farm (FF) direction from the facilitator and group has also added value to areas required for brassica crops and millet. This regime also had to fit into the goals of the FF, one of which is Kikuyu management.

How much home grown feed are you giving each cow?

Generally speaking, history has shown that this farm uses an average of 0.9t DM/cow/per year. This is the goal point for our silage production each year but is dictated by the season's weather patterns. This season has seen great spring and early summer rains assisting grass production and a decrease of silage intake/use for the herd. This may change further into the year, however, it's likely a lower silage requirement for this season. An expected cow requirement (at a guess) would be 0.5t DM/Cow/pa

Brassica crops may average 5tDM/ha.... therefore between 0.1 and 0.2tDM/cow/pa will be consumed while millet will be 6tDM/ha at between 0.3 and 0.4tDM/cow/pa.

How much grain (and what type) per cow?

This year due to the volatility of milk price and feeding cows to milk price, a reduction and change of grains has happened. A change from whole wheat to whole barley, crushed on farm, happened this season. Over time from the spring ration to their summer ration, we have increased their kg fed to 5kg/cow plus an additional 1kg of additive pellet containing trace elements and minerals. Due to the price differential of wheat and barley, we are considering moving back to wheat

How is the quality of this year's silage affecting your feed strategy?

Generally speaking, fodder conservation was difficult this year due to the wet conditions. This will probably be seen in the quality of silages and hay made. At this stage with summer rains assisting summer crops and small grass coverage, the quality of silage hasn't effected milk production.

Reminders

MARCH

Hay and Silage Stocks

- Check your levels of hay and silage and do your sums on potential hay and silage use for the balance of the year. Allow for milking cows, dry cows and young stock.
- It's often a challenge to feed the best feed you can and make use of the feed you have on hand. Balancing the diet with all the right feeds is great but using the feeds you have on hand and getting the diet balance in the zone might come with lower cash costs and still achieve target production.
- Baled silage is a great example of a feed with a use by date and when not fed for whatever reason it can turn out to be costly wasted feed.

Fertiliser

- March is a good time to apply fertiliser to pasture in preparation for the autumn break.
- Superphosphate and Muriate of Potash do not require rain to release into a soil, rainfall after an application increases the risk of nutrient loss.
- Dairy effluent is a good alternative to traditional fertiliser on areas of the farm. When applying dairy effluent be careful not to have any runoff or to overload soils with Nitrogen and Potassium. This will also empty effluent ponds to maximise capacity for the wetter months of the year.

Pasture Renovation and Oversowing

- All soils that are sown should be soil tested to determine any limiting factors for plant growth and develop a plan to improve or maintain the soils and pastures on the farm.
- When planting pasture always check for pest activity and control if required. This year red legged earth mites and lucerne flea have been abundant in areas of Gippsland.
- March is an ideal time for checking your paddocks for pasture density and making some decisions on what areas of the farm if any need renovation or oversowing.
 - If pastures have root mats consider working the paddocks up and allowing some time for the root mat to rot before sowing the new pasture or plan a summer crop in this paddock for next year.
 - If pastures are just thin and have no root mat oversowing is a good option.

Pastures/forages

Ryegrass leaf appearance rate	10 to 20 days per leaf (depending on soil moisture and temperature).
Area of farm to graze today	1/30th to 1/60th of the grazing area.
Average daily pasture growth rate	6 to 15kg DM/ha depending on soil moisture and temperature in dry land areas and 30KgDM/ha to as high as 50KgDM/ha in irrigated areas in ideal conditions.
Recommended pre-grazing decisions	Balance quantity and quality of pasture depending on the dominant species.
Recommended post grazing decision	Paddocks should be clean from any high residual ready for the autumn break, if so pasture is likely to respond well when it rains.
Estimated daily evaporation	6 to 8mm per day if hot and dry.

- Consider the type and variety of seed to put in the ground. Where ryegrass is concerned its good to try to simplify the process using 3 categories for seed types:
 - Perennial – Permanent pasture (sow once you have dealt with any soil issues in the paddock such as drainage or root mat issues).
 - Short Rotation – 2 to 3 year varieties that tend to establish with more vigour than perennials, after being well sown and can last 2 to 3 years when conditions and management allow. Great plants for developing paddocks that may need to be sprayed out in the future whilst increasing productivity in the short term.
 - Annual – 1 year varieties (May to November) that are very vigorous after sowing, strong winter performers but will not produce once they have gone to seed in spring. Great for a low performing paddock that will be summer cropped the following year.

Stock

- Be on the lookout for the effects of mycotoxins such as facial eczema (looks similar to photosensitisation), affecting exposed areas of pale skin. If facial eczema is suspected contact a veterinary practitioner for advice on prevention or treatment. Information is available on the Dairy Australia website <http://www.dairyaustralia.com.au/Animal-management/Animal-health/Facial-Eczema-Monitoring.aspx>
- Plan your transition diet for autumn calving cows. The aims are to prevent milk fever,

ensure the cow's energy requirements are met, and introduce grain to the diet if a high level of grain is being fed in the milking herd. A properly-formulated lead feed ration or the use of anionic salts in the water troughs should be considered. Even a low level of milk fever in the herd has many flow-on effects including calf losses during calving, downer cows and cow health issues in early lactation. Learn more at www.dairyaustralia.com.au in the feeding and nutrition section.

Young Stock

- Poorly fed young stock will impact your business when they calve down and become milking cows with low in calve rates, higher mortality rates and generally are likely to produce less milk.
- Some good targets for young stock are 70% in calf after 3 weeks after of joining with heifers due to calve 2 weeks before the cows in the herd. To join young stock this early they have to be well fed and have reached the target joining weights you can see in the Heifers on Target manual on the dairy Australia web site <http://www.dairyaustralia.com.au/Animal-management/Fertility/Heifer-management.aspx>.
- Monitor the replacement heifers' growth. They will require high quality supplementary feeds as available pasture is reduced. They need feeds containing a minimum of 10 MJ/kg DM and 13% crude protein to grow adequately. When feeding them consider silage, hay and grain as options.

Coming Up

See the GippsDairy events calendar for more information
www.gippsdairy.com.au/eventscalendar.aspx

Employment Basics

Is an introduction to employing people correctly in the dairy industry.

These workshop will demonstrate how to apply key learnings to individual dairy farm businesses to ensure that the workforce is managed successfully and reducing risk to the business by being compliant. Places are limited to be quick.

The workshops will be held on:

Date: Tue 21 February 2017
 Time: 10.00am – 2.30pm
 Venue: DEDJTR Office
 1 Stratford Road, Maffra
 RSVP: info@gippsdairy.com.au

Date: Wed 22 February 2017
 Time: 10.00am – 2.30pm
 Venue: RSL Board Room

Smith St & Michael Pl,
 Leongatha
 RSVP: info@gippsdairy.com.au

Date: Thu 23 February 2017
 Time: 10.00am – 2.30pm
 Venue: Baw Baw Skills Centre
 Wills Street, Warragul
 RSVP: info@gippsdairy.com.au

Once-a-day milking

Workshop to be held in Orbost.
 Date: Thursday 23 March
 Time: 11am-2pm (lunch included)
 Venue: David Macalister's farm 296 Princes Highway Orbost
 RSVP: By 20th March to Louise Sundermann 0428 573 909 or louise@gippsdairy.com.au

Stepping Up Stepping Back

Aims to help farmers consider the options available to them

as they transition into or out of the dairy industry. The interactive 1-day workshop will be presented by John Mulvany.

Date: Tuesday 28 February
 Time: 9.45am-3pm (lunch included)
 Venue: Century Inn, 5 Airfield Road Traralgon
 RSVP: By Wednesday 22 February to [GippsDairy 5624 3900](mailto:GippsDairy56243900@ippsdairy.com.au) or info@gippsdairy.com.au