UNBEATABLE CROP?
Managing fodder beet’s benefits and risks

Public perception
What do Kiwis really think about dairying?

Tools and tech
Four questions to ask before investing
over the fence...

How many times do we hear that life is about achieving good balance, and the importance of work-life balance?

Balance – and attention to detail – is also relevant when we consider how farmers use pasture as the best feed for cows. It’s all about balance and doing the right thing by your cows and your business. It’s knowing when supplementary feed is required, how much of it your cows need, and then being confident that you’re choosing the best of many options available.

The popularity of fodder beet as a winter feed supplement that can be grown on-farm has increased in recent seasons. That’s not surprising, given beet is a high-yield and good-quality feed that also stores well.

We’re featuring fodder beet in this issue of Inside Dairy as it’s also a challenge to get right, from planting and growing through to transitioning cows onto the supplement and then shifting them off again.

Farmers are telling us they’re feeling more optimistic with the increase in the milk price forecast. There are also some positive signs about the public’s perception of dairy. Check out our latest survey findings on pages 16-17 of this issue.

As the busy season progresses, it’s as important as ever to ensure health and safety procedures are followed and that everyone on the farm team stays well. There’s sometimes a temptation to place a low priority on this, especially when it’s busy. However, one of our team recently drew my attention to another way of thinking about staying safe, fit and healthy – it’s about increasing profit.

Emphasising health and safety led to a five-fold increase in profit for Alcoa, an American aluminium company. With less illness and fewer accidents, Alcoa’s workers took fewer days off and the company’s productivity soared. That’s something we can learn from.

Enjoy this edition and, as always, please feel free to email me with any feedback – tim.mackle@ceo.dairynz.co.nz.

Tim Mackle
Chief executive
DairyNZ

Contents

FEATURES...

2 Treading carefully with a tricky crop
Two fodder beet veterans share their advice for a crop which offers huge benefits, but also presents many challenges and risks.

16 Public perception
There’s been plenty of chat about the growing urban and rural divide. But are we really going through a public confidence crisis?

19 Tools and technology
Thinking of investing in new tools and technologies for the farm? Ask yourself these key questions first.

Inside Dairy is the official magazine of DairyNZ Ltd. It is circulated among all New Zealand dairy farmers and industry organisations and professionals.

ISSN 1179-4909
DNZ03-185
IN THIS ISSUE...

1. Take five
2. Things okay down udder?
3. General Election roundup
4. Join the conversation
5. Help set our direction
6. Students learn the grassroots of farming
7. Fodder beet’s ‘stairway to heaven’
8. Is fodder beet here to stay?
9. Are all beets created equal?
10. Transitioning keeps cropping up
11. Beet vs maize silage: how to work out which is best
12. How to get the best beet yields
13. New tool to help farmers climb the ladder
14. Strategies for better financial benchmarking
15. Maximising forage crop returns
16. Just quickly
17. Regional update
18. Students learn the grassroots of farming
19. Take five
20. Things okay down udder?
21. General Election roundup
22. Join the conversation
23. Help set our direction

We appreciate your feedback
Email insidedairy@dairynz.co.nz or call us on 0800 4 DairyNZ (0800 4 324 7969). Alternatively, post to: Inside Dairy, Private Bag 3221, Hamilton 3240. For information on DairyNZ visit dairynz.co.nz.
TREADING CAREFULLY WITH A TRICKY CROP

Peter Davies (left) and contract milker Simon Davies inspect their 1.5ha fodder beet crop on a murky winter’s day in Ngakuru.
Fodder beet’s use has exploded in recent years as more New Zealand dairy farmers pick up on this crop that offers a high-metabolisable energy, high-yield option for supplementary feed. But it’s also a crop with challenges and complexities at planting and feeding and it pays to treat the beet with respect.

Peter Davies of Ngakuru near Rotorua believes fodder beet offers great potential for North Island dairy farmers seeking a supplement option. Yet the beet’s appeal wasn’t an instant one for Peter and he offers some valuable cautions around the crop’s establishment and feed allocation.

He first planted fodder beet seven seasons ago and admits he wasn’t overly impressed with that early attempt.

“We just managed to get 20 tonnes of dry matter per hectare (t DM/ha) which is a bit light. The problem was the crop was in its infancy and there wasn’t a lot of knowledge about it, or equipment suitable for planting it. However, I could see the potential for it; it just needed some work,” says Peter.

Fast-forward to three seasons ago and a drop in payout prompted Peter to review all his feed costs and revisit the beet.

“We’d also experienced a drought over 2012 and had been buying in maize silage at unsustainable prices so we were keen to consider an alternative feed source.”

“We’ve not lost cows, but you do have to be vigilant over transition and right through the period that you’re feeding beet.”

In the first three seasons, Peter opted to sow the beet on his 112ha milking platform, putting in 3.5ha each season. Key developments since his earlier efforts included the development of precision drills for higher and more effective sowing rates and improved herbicides for critical weed control.

Laying the groundwork

Peter cautions much of the cost comes upfront in the considerable ground preparation to achieve a fine seed bed. Also, close attention to weed control is necessary because of the crop’s slow establishment period, he says.

His preparation typically involves ploughing the top 10cm just to turn weed seed over and then a light power harrow to smooth the seed bed prior to drilling.

But investing the time and money from the outset will grow a crop capable of delivering yields of 25t DM/ha and more over time if it remains in the ground.

“This year’s crop was 22t DM/ha in March, 25t DM/ha in April, and was up at 32t DM/ha by July,” says Peter.

Vigilant at transition

Much has been publicised about the risks of feeding fodder beet to dairy cows, with cow illness and death being reported in mainstream media most winters. But Peter says he’s avoided any “horror story” outcomes to date, thanks largely to some careful transition feed management.

“We’ve not lost cows, but you do have to be vigilant over transition and right through the period that you’re feeding beet.”
“When transitioning, we’ll put them on a beet break for 20 minutes on day one, half an hour for day two. On day three we’ll shift the break out and leave them on for longer again.”

The risks of over-feeding beet include a milk fever-like condition where cows go down. Peter’s had a couple of cases of this, with cows responding to a standard milk fever remedy of glucalphos.

“When transitioning, we’ll put them on a beet break for 20 minutes on day one, half an hour for day two. On day three we’ll shift the break out and leave them on for longer again.”

After 10 days, about 90 percent of the herd will be fully engaged with the beet. He warns other farmers to observe the proportion of beet left behind after each feed and to avoid simply opening a new break each day, effectively increasing the total quantity offered.

“We tend to have a bit of a dilution effect too. The cows at the end of the season are getting silage and maybe some PKE (palm kernel extract) too, so they are only getting 3-4kg DM of beet each.”

**Milking the benefits**

Beet has enabled Peter to milk comfortably into May, something the farm struggled to achieve before. And this year he’s also sown them on the support block for winter grazing.

“We’d already transitioned the cows on the milking platform. Then at the support block we feed them on beet for three hours, then run them off again into a stand-off paddock with some silage. It’s worked well.”

Peter constantly emphasises to his staff the need to be vigilant grazing the beet, and all breaks are double fenced.

“Every day we check the power to make sure the fence is working.”

He determined the area to feed based on requiring a 100t DM/ha crop, based on a yield of 25t/ha or about 4ha.

For Peter, a key benefit of growing fodder is its flexibility – it can be fed from maturity in summer, right through winter.

Being fed in situ is cheaper than having to distribute feed on a feed pad. The beet’s bulb ensures minimal waste from a high-yielding crop. Its high energy content means it’s also capable of delivering good body condition score gains over winter compared to alternatives like kale.
VETERAN’S ADVICE FOR BEATING FODDER BLUES

Mark Slee of Hinds in Canterbury could be described as an old hand at fodder beet cropping, having planted his first 6ha crop 10 years ago. This winter, he’s grazing his cows through 95ha of beet.

Sharing Peter’s cautions around investing in a good planting programme, Mark also has some valuable observations about transitioning cows to fodder beet. In recent years, more farmers (himself included) have grazed autumn milkers on fodder beet before they move to higher intakes as wintered dry cows.

“But it’s an area people can get caught out on,” says Mark. “Taking a milking cow eating 15kg DM/day, of which beet may be 4kg DM, you need to cut them back to only 2kg DM/day of beet at drying off, given you are lowering their total DM intake by over a third. I would recommend keeping them on 2kg DM/day once dry and ramp it up over a period after that.”

Mark emphasises that it’s easy to think the cows are ‘transitioned’ to beet while milking, but the job is in fact only half done; you need to start reducing the cows’ fodder beet intake levels when drying off. Keeping them at milking levels exposes them to acidosis risk.

“Working on an average intake per head is also dangerous, he says. As much as 10 percent of the herd may not be interested in the beet, while other cows will be consuming well above average.

Fussy about feeding

When it comes to reducing acidosis risk and easing transitioning, Mark starts off not using supplement feeders for allocated straw or hay; instead he spreads it on the ground to allow all cows easy access.

“The feeders will only allow 20 to 30 cows access at any time, and dominant cows will claim it, meaning others don’t get that balance of feed they need.”

To balance fodder beet’s high carbohydrate content and corresponding low protein, fibre and phosphorus levels, Mark uses high-protein feeds like quality grass, grass silage or lucerne.

“That low protein level needs to be addressed when you’re feeding them to growing young stock, like rising one- or two-year-olds that demand protein for muscle and frame development,” says Mark.

“It’s also important to be patient with beet. Be prepared to take two to three weeks to get the cows transitioned to their complete diet and, once you have, you don’t want to change anything in terms of cow numbers or feed type.”

FARM FACTS

Mark Slee
LOCATION: Hinds, Canterbury
FARM SIZE: 3 herds on 705ha, plus 215ha support block
HERD SIZE: 2700
PRODUCTION: 1.2 million kg MS

Mark Slee checks the quality and size of a fodder beet bulb.

Mark’s cows tuck into a double break of fodder beet.
A riskier crop than most

Knowing a mass acidosis outbreak could occur if a break fence fails, Mark ensures his team double-fence the breaks, with the second fence right next to the first.

“That means if the cows do get out, they’ll tend to just graze the tops off the bulbs across the whole paddock, lowering the risk of acidosis. Otherwise, they’d hoe into the bulbs if it was a set break in front of them.”

Another risk is that cows with good body condition scores wintered on a beet diet will come back fatter than is healthy, increasing the risk of metabolic disorders.

“We’re considering planting less and being more selective in the future – maybe just feeding our rising one- and two-year-olds and lighter cows on it. The well-conditioned mixed-age cows have grazed on kale this winter instead.”

Overall, Mark acknowledges the appeal of fodder beet, with its high metabolisable energy, high yield and low waste. But he is quick to point out that it’s a riskier crop than most for wintering cows.

PETE’S TOP TIPS

1. Paddock selection (don’t pick your worst paddock) and ground preparation are key.
2. Don’t skimp on weed sprays even though they can be expensive.
3. Be vigilant for at least the first two weeks of transition and the rest will be easy.

MARK’S TOP TIPS

1. Monitor cow condition (BCS 5 cows may be better not wintered on fodder beet).
2. Don’t let cows get hungry – allow access to plenty of supplement during transition.
3. Fodder beet is low in protein, fibre and phosphorus, which all need to be addressed before grazing starts.

Mark’s dairy assistant, Alex Brook, uses a two-metre measuring stick to provide consistency with the feed breaks.
Fodder beet’s ‘stairway to heaven’

Fodder beet provides a high yield of good-quality feed with a long shelf life and flexibility of use. Planning, preparation, planting, growing and feeding – every phase needs your focus. Follow these steps on the stairway to a heavenly – or healthy – fodder beet system. Missed steps can lead to major issues.

Step 1: The sustainable cropping plan
Fodder beet can be more difficult and costly to grow than other forage crops. Select the right paddock early so you’ve got the optimum soil pH (6.0-6.3) and fertility levels before you sow the crop (ideally, 12-18 months ahead). Some chemical residues affect fodder beet establishment, so develop a crop rotation plan. When choosing paddocks, also think: soil type, location of waterways, critical source areas, main roads and shelter.

Step 2: The paddock set-up plan
Develop a feeding plan before planting so you can consider which variety to plant and how to minimise nutrient loss; take advantage of any shelter; and plant the crop for ease of feeding. Because cows eat fodder beet quickly and bulbs lie on the ground, grazing the crop results in an empty, sometimes muddy paddock quickly. If possible, site it away from public view, in case people think cows are not being treated properly.

Step 3: The paddock management plan
Achieve a fine seedbed and follow sowing guidelines for better crop establishment/yield. Weed and pest management is important so apply sprays correctly. Rip out those bolters and remove them before they drop seed. Consider whether sowing a ‘catch crop’ (e.g. oats) after grazing will utilise soil nutrients and reduce nitrate leaching.

Step 4: The transition plan
Fodder beet’s high sugar content causes nutritional upsets if introduced to your cows too quickly. Think about how you will feed the crop when allocation is initially low (e.g. how will you open up the paddock?); when to start feeding (lactating or non-lactating cows); whether the cows have eaten fodder beet before; and the choice of supplement to feed with it.

Step 5: The nutrition plan
The low crude protein content of fodder beet may provide environmental benefits, but it may not meet your cows’ nutritional needs. The ratio of crop to supplement (and the type of supplement) are key considerations for all classes of stock. Consider extra mineral supplementation (especially phosphorus) during feeding.

Step 6: The business/financial plan
Final yield and costs associated with feeding fodder beet will determine financial benefits. Net yield (crop yield minus pasture yield) is an important consideration when grown on the milking platform. Also, you won’t get the maximum yield if the crop is used to fill a late summer/autumn feed deficit.

Step 7: The human resource plan
Fodder beet adds another level of complexity into the farm system, so your staff should engage with and understand the planning and implementation process – and know about the risks involved too.

Find out more online
More information on growing fodder beet as a high-yield crop can be found in our farm management factsheet Farmfact 1-77: free to download at dairynz.co.nz/fodderbeet.
Is fodder beet here to stay?

Although fodder beet’s popularity has soared in New Zealand, many farmers and vets hold concerns about its long-term viability. DairyNZ senior scientist Dawn Dalley looks at where we’ve come from, where we’re heading and what we still don’t know.

Over the last 10 years the use and application of fodder beet as a winter feed crop for livestock has changed significantly in New Zealand. In 2007, there were less than 1000ha planted here, mostly in Canterbury and Southland. That’s now increased to approximately 75,000ha across farms throughout New Zealand.

Initially, fodder beet was grown mostly for dairy cow wintering, an attractive alternative for farmers struggling with winter brassica crops. Currently leading the way in feeding fodder beet to their stock are Canterbury farms (79 percent) and Southland farms (58 percent). Lower North Island farms (19 percent) and West Coast/Nelson/Marlborough farms (27 percent) are the next highest users of fodder beet. However, fodder beet is being grown in all our major dairying regions now and it’s used widely across all classes of livestock.

It’s now become common for cows in Canterbury and Southland to have fodder beet in their diet for up to six months of the year and 40 percent of replacement animals are wintered on fodder beet. In these regions, increasing areas of fodder beet are now lifted and fed on feed pads or through the silage wagon on the paddock. Although more northern regions grow fodder beet as an alternative lactation supplement to palm kernel extract (PKE) and maize silage, in the south it has replaced grain and pasture silage during lactation; and swedes and kale during winter.

Research – then and now

With a long shelf life either in the ground or harvested, fodder beet is a flexible crop with lots of positive attributes – but it also carries several risk factors.

Early research by DairyNZ and Lincoln University focused on generating guidelines for transitioning cows onto fodder beet and understanding the nutritional variability of the crop. More recent research (also levy-funded by DairyNZ) has investigated the nutritional and metabolic changes associated with feeding beet and its contribution to reducing nitrate leaching and methane emissions. Agronomic research by Plant and Food Research Ltd, Foundation for Arable Research and others has focused on responses to a range of nutrients (nitrogen – N, phosphorus – P, potassium – K, sulphur – S) and irrigation. It’s also been identifying the range and extent of disease in fodder beet crops; and the mineral profile of the crop nationally.

More recently, we carried out a DairyNZ levy-funded survey of farmers and veterinarians about fodder beet feeding. Their greatest concern was the unknown impact of increasing fodder beet feeding on lifetime performance, as well as links between metabolic disease (including acidosis) and lactation performance, reproduction and milk quality. They also wanted a better understanding of the P requirements in systems feeding fodder beet; and reliable mineral supplementation methods for cows on crops during winter. Both groups thought there was a need to identify good management practices for transitioning cows off fodder beet (an area currently not well understood). Increasing use of fodder beet in dairy replacement diets was also a concern due to potential protein and mineral deficiencies at key periods in the animal’s growth cycle.
Adoption drivers

Here’s what our survey farmers and vets told us about the drivers:
1. Cost – fodder beet can be a cheaper alternative for either lactation supplementation or for wintering.
2. Yield – they can get higher yields, reduce the size of cropping areas and achieve more sustainable crop rotations.
3. Quality – from an energy perspective, they can obtain a high- and consistent-quality feed from fodder beet.
4. Body condition score (BCS) gain – it’s easier for them to achieve this with fodder beet than with other crops.

Most of the farmers interviewed (66 percent) said fodder beet is considered to be a permanent addition to their farm system. The rest said they were either undecided or not going to continue using it (11 percent).

Adoption issues

Here’s what the farmers told us about the issues:
1. Agronomic – some farmers said (depending on other variables) the cost of growing the crop didn’t always stack up as an alternative. Weed control challenges and within-paddock variability were also common factors to consider.
2. Metabolic – farmers and vets saw an increased incidence of metabolic disease and some farmers had difficulty with transitioning their stock onto and off the crop.
3. Environmental – many farmers noted an increased risk of soil compaction due to a high stocking density driven by high yields.
4. System-related – growing fodder beet increased the complexity of the farm system. Farmers said they needed to give more attention to detail throughout the preparation, growing and feeding cycles of the crop.

Where to from here

There was a genuine desire by the farmers and vets surveyed to get a better understanding of the longer term implications of fodder beet management and feeding practices so it remains a viable crop for future dairy systems. Many felt that some current practices are making it less likely that beet will achieve this goal. Overall, more research, education and practical advice is needed to achieve this outcome for the industry.

Find out more online

More information on growing fodder beet as a high-yield crop can be found in our farm management factsheet Farmfact 1-77: free to download at dairynz.co.nz/fodderbeet.

Key points

1. Fodder beet has many positive attributes – but its risk factors need further exploration/management, alongside a better understanding of feeding issues.
2. Potential benefits include flexibility, cost, yield, quality and BCS gains.
Are all fodder beets created equal?

Forming a fodder beet cropping plan isn’t just about paddock selection and crop management. It’s also crucial to choose the right type of fodder beet to suit your system. DairyNZ senior scientist Jane Kay breaks down the varieties.

When it comes to fodder beet varieties, two key differences are the bulbs’ dry matter (DM) percentage and the proportion that sits above the ground. Choosing the best variety for your system will depend on your cows’ feed requirements and your intended use, such as for grazing, lifting, or young stock.

To help you make that decision, here are descriptions of the three main fodder beet groupings.

**Very high DM percentage** (more than 20 percent)
These bulbs sit lower in the soil and are best suited to lifting. Examples include Agriseeds Blizzard and DLF Enermax. With a large portion of the bulb lying underground, these varieties are not recommended for strip grazing. Doing so would result in the cows harvesting less of the crop and ingesting more soil. With mechanical harvesting, leaf removal is more efficient in high-DM-percentage varieties and there is increased storage life after the bulb has been lifted.

**Medium to high DM percentage** (14-20 percent)
These moderate- to high-DM crops offer flexibility in the system as they can be strip grazed or mechanically lifted. Examples include Speciality Seeds Geronimo and PGG Wrightson Ribambelle. There is potential for these crops to yield more DM/ha than the low-DM-percentage crops. However, generally only 45 to 50 percent of the bulb sits out of the ground. So, when grazing these varieties, care needs to be taken to reduce the risk of soil ingestion. This can be achieved by offering long, narrow breaks rather than square breaks, or shifting the break several times daily so more of the daily allocation is consumed from in front of the break fence.

**Low DM percentage** (12-15 percent)
These bulbs are well suited to strip grazing as most of the bulb (about 60 percent) sits above the ground. Examples include SF Brigadier or DLF Feldher. Low-DM-percentage bulbs are also softer, which makes them easier to eat for young stock with new teeth, or older animals with fewer teeth.

So, when choosing a fodder beet variety, put careful thought into which one is right for your situation. Knowing the fodder beet variety, bulb DM percentage and proportion that lies out of the ground is essential.

Also, avoid changing varieties during the season, particularly during the transition stage. If you do introduce a new variety of fodder beet into the system, factor in any changes in DM percentage and bulb availability/hardness into your allocation and intake calculations.

---

**Key points**

1. Use a high-DM-percentage fodder beet variety if you’re lifting, as these can provide maximum yield/ha.
2. Use a low-DM-percentage variety for young stock, as these have softer bulbs that sit further out of the ground.
3. Pick a medium- to high-DM-percentage crop for flexibility (lifting and grazing).
Transitioning keeps cropping up

Now you’ve either finished or almost finished feeding fodder beet to your cows, have a think about how your cows transitioned onto the beet crop. What you could do differently next time? Below is the why, what and how of a transition plan for comparison.

Fodder beet is cow candy floss. They love it – and it helps build cow condition. However, it’s also sugar-rich, nutrient-deficient and fibre-deficient; and it can cause rumen acidosis (a sudden drop in rumen pH), which is fatal if left untreated.

Acidosis happens when your cows eat too much fodder beet too quickly. Introducing the crop gradually will give the microbes in the cow’s rumen time to transition to the new diet. Consider the three points below for a transition plan.

**Paddock set-up**

A long rectangular-shaped feeding area helps ensure your cows each get roughly the same amount of feed (at least one lineal metre/cow when transitioning). It also helps in setting up crop allocation and access. Plant beets in rows so grazing is parallel to the rows. It’ll also make it easier for you to estimate and allocate dry matter (DM) and to set up fences.

**Allocation and diet**

Work out a transition feeding plan that allocates a mixture of fodder beet and supplement (e.g. straw, hay, pasture silage or pasture) gradually increasing the kilograms (kg) of fodder beet DM by no more than 0.5kg DM/cow/day. See the example below – and also check out our winter feed allocation calculator at dairynz.co.nz/fodderbeet.

Recent research indicates the risk of not meeting cows’ nutritional requirements increases when fodder beet is more than 40 percent of dry matter intake (DMI) in lactating cows, and more than 70 percent of DMI in non-lactating cows.

**Animal management tips**

Most farmers find walking the herd is a useful way to identify poor-performing cows, so they can be removed from the crop. Look for ‘down cows’ or cows that are dehydrated, scouring, not doing well, bloating, not eating, have milk fever-like symptoms or those which are standing apart from the mob.

Use a break fence to manage the crop feed area. Shift cows twice daily if you can.

**Beet the competition**

Find out more online – and download our free crop allocation calculator at dairynz.co.nz/fodderbeet.

<table>
<thead>
<tr>
<th>Kg DM offered/cow/day</th>
<th>Fodder beet</th>
<th>Pasture silage or pasture</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>7</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>8</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>9</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>10</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>11</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>12</td>
<td>6.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Key points**

1. Set up your paddock so cows have equal access to the fodder beet.
2. Transitioning cows gradually helps prevent rumen acidosis, while adjusting feed mixes avoids nutrient and fibre deficiencies.
3. Regularly monitor the cows for signs of poor performance and/or acidosis.
Fodder beet vs maize silage: how to work out which is best

Don’t ‘fodder beet’ around the bush: use partial budgeting when making decisions on-farm. It's easier than you think.

Partial budgeting is a simple planning tool for farmers. It helps you estimate the financial gain or loss of changing some aspect of your business or making a ‘partial’ change to your farm system. It also helps you consider other non-financial factors such as time; skills and experience needed; and the risks and impacts on key parts of the farm system.

One farmer who’s been using a partial budgeting approach on-farm (formally and informally) for several years is Markus Woutersen. He runs his family’s 98ha (effective) farm near Cambridge, peak-milking around 275 cows (2016/17). The farm’s infrastructure includes a feedpad with a maize silage bunker next to it, plus a small palm kernel bunker, allowing him to feed stock efficiently with minimal wastage.

Markus has found that partial budgeting has really helped him to make decisions for his farm’s future needs – more recently, in comparing fodder beet with maize silage as a feed crop.

“It’s a good way to weigh up changes to the farm system and see more than just what the financial outcome of that would be,” he says.

There are five categories of assessment: increased income/revenue, decreased income/revenue, decreased expenses/costs, increased expenses/costs and other considerations. Using this tool has allowed Markus to gain valuable insight into the impact of his three-paddock fodder beet trial (total 3.8ha) assessing a range of variables, including impacts on the environment, his farm’s finances and its infrastructure. As always with Markus, environmental considerations, reducing the labour load and minimising stress on himself and his animals were important factors too.

In his trial, Markus wasn’t surprised to find that the annual yield per hectare for his fodder beet area was similar to maize silage he’d grown before (around 27-29 tonnes per year). However, when looking at cost per kilogram of dry matter, fodder beet costs more to establish and grow; maize silage is cheaper and easier on this farm because Markus has the

Cambridge farmer Markus Woutersen has been using a partial budgeting approach for several years.
option of using the feedpad and bunkers.

“Fodder beet is a great feed crop which has its place, but for me, my partial budget’s shown that it makes more sense to grow maize for the cows and just grow a small amount of fodder beet for the calves.”

He’s the first to say he’s no expert when it comes to using partial budgeting, but that’s okay. You don’t need to be an expert; you can make it as simple or complex as you like – and using it becomes second nature over time.

“This year I’ve looked at fodder beet versus maize silage – to see how we could save costs and make feeding the replacement calves easier.”

Looking beyond the finances of it, Markus was keen to reduce the farm’s reliance on palm kernel from an ethical/sustainability standpoint. He was also conscious of the fact that he wasn’t getting as much value out of having a feedpad by using fodder beet, as the feedpad wasn’t used as much.

“We also couldn’t get the grass seed in afterwards as quickly as we might have if we’d grown maize silage for harvesting. Some research I’ve seen shows that sowing seed before winter could equate to an extra yield of two tonnes of feed by October on that land area – so that’s a big cost/loss right there.”

One ‘big win’ for Markus related to animal health.

“When our calves are on fodder beet they are not at risk of getting facial eczema, so we didn’t have the increased expense of dosing zinc boluses. It saved me spending time and labour on managing facial eczema. There was also no decreased income from calves not reaching projected target weights as a result of prolonged zinc supplementation.”

Environmental considerations also revealed pros and cons.

“Having the fodder beet crop grazed in the paddocks where it grew removed the need to shift the calves and cows around pasture paddocks. So the grass paddocks didn’t get as damaged as they might have during the wet autumn and it cut back on the labour load.”

That was offset though by a high nutrient load (increasing leaching and runoff) caused by stock effluent collecting in the fodder beet paddocks. Although grassed paddocks were saved from the impact of heavy stock traffic volumes, the fodder beet paddocks were not, suffering compacted soil and damage to its profile. A feedpad/maize silage scenario would have allowed Markus to collect (higher quality) effluent and apply it more efficiently onto other paddocks. This would not only have been a good environmental solution, it would also have saved money in fertiliser costs and increasing productivity.

“Plus we could have sown grass four to six weeks earlier on those three paddocks,” says Markus.

His trial confirms that growing fodder beet as feed isn’t suitable for every farm, but using partial budgeting might be.

“It’s certainly something I’d use again if I’m looking to make changes with just a few variables – and they have to be the right ones on my farm for what I’m trying to find out. You can weigh them up financially and see what the effect is – it’s definitely a good tool in that regard. Even doing this in a small way really helps.”

Check out Markus’ dairying journey and key business practices at dairynz.co.nz/budget-case-studies and his Tiller Talk on pasture management at dairynz.co.nz/pasture-management.

Key points

1. Use partial budgeting before you change aspects of the farm system to help inform your decision.
2. You don’t need to be an ‘expert’: there are templates to help.
3. Identify which variables you should include for your farm and situation.
4. Consider the financial outcome of the change as well as the pros and cons of other considerations like infrastructure, time, stress, and staff wellbeing.

Get more information on DairyNZ’s budgeting tools online (including partial budgets and our handy partial budgeting template) at dairynz.co.nz/budgets.
How to get the best beet yields

A DairyNZ levy-funded trial examining cow performance on fodder beet and kale during winter in Southland has yielded some interesting extra insights. DairyNZ senior scientist Dawn Dalley looks at the findings.

This winter 2017 project was carried out and showcased at the Southern Dairy Hub (SDH) in Invercargill. Due to challenging growing conditions, the final fodder beet yields at SDH were between 16 and 19 tonnes of dry matter per hectare (t DM/ha) rather than the 20-25t DM/ha budgeted. Corresponding kale yields were 14-18t DM/ha.

Our fodder beet experiences highlight the importance of planning, timing and attention to detail when growing crops. Below are our key agronomy recommendations.

Soil fertility

Aim for a soil pH of 6.2+. Ideally, soil-test and make pH adjustments 12-18 months before sowing. For our crops, we were only able to soil-test two months prior to sowing. (Average soil pH at SDH in September 2016 was 5.9, so 3t lime/ha was applied two weeks prior to sowing.)

Sowing date

Fodder beet is best sown in soil temperatures of 12°C and rising (usually between mid-October and mid-November in Southland). Earlier planting was not possible (farm possession was November 1) so beet was sown on November 22.

Cultivation

A fine, consolidated seed bed is required to achieve even seed placement and germination. Fodder beet is a deep-rooted plant that forages for nutrients. At SDH, 40mm of rain fell between ploughing and sowing, contributing to soil compaction and the formation of a ‘pan’ 150mm deep. Many of the plants, unable to penetrate the pan, formed secondary horizontal roots negatively affecting their bulb development.

Getting uniform crop establishment is crucial to ensuring herbicide sprays are applied at the correct time. Unfortunately, soil temperatures post-sowing at SDH in 2016/17 fluctuated significantly, contributing to multiple strikes and uneven establishment.

Drilling

Fodder beet prefers free-draining soils and struggles in waterlogged soils (made worse when there’s a soil pan already in place). High soil moisture (85 percent saturation) on the day of drilling and the 14 days after also affected establishment.

Growing period

The 2016/17 growing season in Southland featured hail and strong winds in January 2017. This, combined with an overall lack of warmth (growing degree days), reduced plant numbers and stunted growth. The average air temperature during the growing season was 11.4 percent lower than the nine-year average.

Find out more online

Check out the Southern Dairy Hub at southerndairyhub.co.nz.

Also, you can find more information on growing fodder beet as a high-yield crop in our farm management factsheet - Farmfact 1-77: available to download free at dairynz.co.nz/fodderbeet.

Key points

1. A crop’s total yield is determined by the most limiting factor.
2. Multiple factors contribute to fodder beet growth: soil pH, sowing date, establishment method, crop management, rainfall and temperature.
3. Timing and planning around crop establishment and management are crucial for a successful yield.
New tool to help farmers climb the ladder

As a farmer, how do you decide which operating structure best suits your career goals and desires? DairyNZ economist Angie Fisher introduces a new DairyNZ tool designed to make the decision-making process easier.

Wherever you find yourself in your dairy career – be it starting out as a new business owner or as a farm owner wanting to step back from day to day operations – determining the best operating structure to help you succeed with your future plans is an important step.

The pathway to farm ownership is no longer linear and farm ownership is not the ultimate goal for some people. Nowadays, there are many progression options and these are changing constantly as farmers modify operating structures to reach their goals.

Although the number of herd-owning sharemilking (HOSM) agreements has declined over the past 20 years, the number of sharemilking agreements as a percentage of farm businesses has remained constant at around 32 percent. HOSM agreements have been exchanged for variable order or contract milking arrangements and, in other cases, for equity partnerships or leasing agreements (cows and/or land).

All of this highlights the need to constantly adapt our thinking and investigate a range of operating structures to find one that suits our needs and aspirations.

To help you in this area, DairyNZ has created an online resource (visit dairynz.co.nz/business-pathways) comprising two ‘decision trees’ and a series of descriptions of the different operating structures. The decision trees can help you work out which structure best suits your circumstances and plans, based on your goals, equity position, appetite for risk and how much control or independence you want.

The operating structures have been grouped into four categories:

1. **Pre-herd owning** – management, contract milking, variable-order sharemilking and combinations of these.
2. **Herd owning** – 50:50 or variable-rate herd owning, or flexi-rate agreement.
3. **Leasing** – traditional leasing, or a variable lease rate based on milk price.
4. **Equity partnerships** – in a HOSM business, in a farm trading company, or in land ownership.

So, check out dairynz.co.nz/business-pathways to learn more about choosing the right operating structure. And if you’d like to speak with other farmers who have been through this process and are willing to share their experiences, go to dairynz.co.nz/dairyconnect.

### Key points

1. A key part of a successful partnership is getting the operating structure right.
2. Dairying offers a wide range of options for business ownership; be informed about those choices.
3. Pathways in the sector are no longer linear, so reaching your career goals might require some creativity.
Public perception: Is it all bad?

There’s been plenty of conversation about media beating up on dairy, the public’s negative stance and the growing urban and rural divide. But how bad is the situation? Is dairy really going through a public confidence crisis? DairyNZ chief executive Tim Mackle takes an honest look at the issue.

As a research-based organisation, DairyNZ opted to research this situation. We’ve been surveying the public for eight years and carried out another survey in April/May this year. We found the perception of dairy has improved to 59 percent, up three percent on the year before. At the perception peak in 2010, dairy received a rating of 72 percent, so it certainly has declined, but in my view things aren’t as bad as how many farmers are feeling.

Over the past few years, and certainly this election year, the public focus on animal welfare and the environment is driving opinion more than ever before. The public thinks we’re doing slightly better in the animal welfare space (which we are) but says dairy should be doing far more to protect the environment. Bear in mind that these results pre-dated the 2017 Water Accord three-year announcement in April.

Those surveyed said the media is getting more negative towards dairy – so they know there’s also a media beat-up going on at times.

This led us to asking, is the media actually that negative about dairy? You might be surprised by the results of independent media analytics we’ve conducted over the past three months to measure positivity, negativity and neutrality of all media that commented on dairy. The most recent analytics, in June, showed 94 percent of media coverage was positive/neutral.

What we want is balance in the media, which is why a positive/neutral rating is ideal. Even if a story says something negative, there is, generally, an element of balance that provides context. It may not feel that way to us but the data backs this statement up.

If you consider how we scan headlines, we’re all more interested in the things that directly impact us and we’re more likely to be captured by an attention-seeking headline. Often that headline may have a negative slant and may not always reflect the article’s content. It means those of us in the dairy sector are more sensitive to negative dairy media coverage – but members of the public are not, necessarily.

The message from DairyNZ is that we all need to keep our chins up, because the public view of us is actually better than how we’ve been feeling. But that’s not to say we don’t need to up the ante on this.

We all play a role in helping our communities understand how we farm, why we farm and what we’re doing to care for our animals and our land.

DairyNZ is proactively working on a public perception programme to drive positive commentary in the media and create opportunities for direct conversations with the public. And you can help too. If you have a story, please share it: actively engage with your local community, open your gates and talk to your friends. If we all do a little bit to tell our story, it will make a big difference to how the public views dairying.
How the public perceives the dairy sector is important, because we want supportive communities which appreciate what we do, and we want to attract passionate and skilled people to dairying. DairyNZ has been tracking public perception for the last seven years and we use the data to engage better with New Zealanders on the things they care about.

Public

Favourability towards dairy
Total favourability is the sum of the 'somewhat positive' and 'very positive' ratings.

59% Total favourability towards dairying in May 2017

Media

How the media reported on NZ’s dairy sector in July

Environment and Animal Welfare

What does the public think?

Nov 15  May 16  May 17

Most NZ dairy farmers are doing all they can to look after the welfare of their cows

55%  52%  62%

Most NZ dairy farmers are doing all they can to maintain a good balance between economic success and environmental responsibility

41%  44%  48%

Most NZ dairy farmers are committed to protecting the environment and water quality

38%  40%  45%

*This graph shows the percentage of people surveyed who agree and strongly agree with these statements.
Students learn the grassroots of farming

Last term, DairyNZ’s education programme delivered 200 science kits to teachers who signed up for the newest learning module called ‘How does your grass grow?’ The science kits were accompanied by a teacher guide and fact sheet, providing teachers with everything necessary to roll out the module.

Children aged 8-10 investigated the factors farmers must balance when planning their grass growth. Each of the 200 classrooms conducted an experiment investigating the impact of an independent variable (soil, temperature, water or sunlight) on a dependent one (speed of growth, amount of growth or height). The module was about learning that changing one thing has an impact on the outcome of a simple experiment.

Waiuku’s Aka Aka School principal Michaelene Nu’u says her class enjoyed the hands-on nature of the study and it gave children an insight to the different roles of a farmer.

“We talked about why it might be important to consider weather and soil conditions for growing grass and the students identified the need for farmers to produce feed for their animals. The children could explain that farmers would need to grow as much quality grass as possible to keep the cows producing milk,” says Michaelene.

“From carrying out the experiment, they learnt that the conditions seeds are planted in affect the outcome as to how much grass is produced and how quickly it grows.

“We learnt that it’s not just about the soil, but also the amount of warmth, light and moisture that affects the rate of growth and quality of grass produced. It was really interesting for the kids to compare rates of growth depending on the conditions.”

What is DairyNZ’s education programme?

DairyNZ’s education programme in schools is delivered in partnership with an organisation called School Kit. Together, we develop and deliver learning resources that explore different curriculum subjects through a dairying lens. Our aim is to improve children’s understanding of dairy farming and spark their interest in dairying as an exciting career option.
To find out more visit dairynz.co.nz/education.
Choosing the right tools and technology, such as activity or mastitis sensors, is an increasingly important part of managing your dairy business. Farms will lean heavily on smart tools to automate some tasks, better manage natural resources, assess profitability, meet compliance requirements, improve the welfare of farmers and animals, and to connect farmers to customers.

Here are four key questions you should ask before deciding how you might use technology and tools to improve an aspect of your operation.

1. What are your goals in this area?

What does success look like for you? Is it more profit, fewer errors, peace of mind, supporting new staff, or more free time? The improvements might be measurable, such as your six-week in-calf rate. Or they could be less tangible, like less stress, less dependence on skilled operators or being home 30 minutes earlier in the evening. Remember, just thinking ‘return on investment’ might mean you miss out lifestyle-related factors.

2. What is your current performance?

What’s really causing the ‘issue’? For example, with reproduction, how much is heat detection contributing to the fertility gap and how well is heat detection performed on your farm already? For improved pasture utilisation, think about all the factors that lead to good grazing performance: measurement, accurate allocation, assessing grazing residuals and continual refinement. DairyNZ tools include the InCalf Fertility Focus Report and SmartSamm.

There are few ‘silver bullet’ technologies out there. Remember, finding the cows on heat or with mastitis is only one step towards improved performance.

3. What are the alternative options?

Technology can often be promoted as the cure, but is there another (cheaper/more effective) remedy? First, consider changes to current practices, focusing on improving the skills within your farm team or seeking the input of advisors.

For example, can you raise awareness among your team of the causes and signs of lameness through DairyNZ’s Healthy Hoof programme, to give them a reason for changing their practice?

4. Will technology help you meet your goals?

When comparing options, start with performance – does it work like it says on the box? For many dairy technologies, it can be hard to tell without a comprehensive trial. So, find a farmer who’s using it already and ask them some tough questions, such as how easy it is to learn and use, what are the other skills required (computer skills, data entry), how do staff interact with it and what evidence do they have to support their perception of its performance?

Check out DairyNZ’s website for information on dairy farming tools, tactics and technology – plus a wide range of online tools and planning templates which you can download free. Specifically, go to dairynz.co.nz/amd to learn about mastitis technology; and dairynz.co.nz/ahd for more on heat detection technology.
Benchmarking, or comparing your performance, is a practice that differentiates average performers from top performers – whether you’re racing boats or running a dairy farm business. It’s easy to draw the wrong conclusions from benchmarking though, and this can cause you to make the wrong changes to your business. Here are four ways to ensure you make the right changes.

Ask for help interpreting your report

Have you received a benchmarking report from an accountant or consultant, or DairyBase, that’s now gathering dust in your office drawer? If you’re not sure what to make of the report, get in touch with the sender and ask them to explain it and summarise the key points. Otherwise, it’s been a waste of your time and effort collecting the data in the first place.

For support from a consultant, visit dairynz.co.nz/nzipim.
For DairyBase support, visit dairynz.co.nz/contact-dairybase.

Compare with care

Your best benchmark is a neighbouring farm of the same size and with the same infrastructure, soils and farm system. Of course, it’ll be a top-performing farm too. Sounds unrealistic, right? There’s no way to make benchmarking 100 percent perfect, but the DairyBase system is a great help. It collects data from hundreds of farms, which allows you to compare your farm with others similar to yours. At $100 per financial report, it’s excellent value.

Another way to compare your farm is to ask farmers in your area if they’re prepared to sit around the kitchen table and discuss their benchmarking reports. You’ll find the numbers really come to life in these situations. As a group, you may decide to leave out debt levels and personal drawings if this data is considered too personal. If you want help setting these meetings up, simply ask your consultant or DairyNZ consulting officer to facilitate the process.

Big picture first – then the details

There’s a temptation to go through benchmarking reports line by line, called the ‘ruler’ approach. The result is that you jump straight into the detail, such as comparing administration costs, shed expenses and young stock grazing, before you’re clear on the big picture.

Does your business have potential to improve profitability? If so, by how much? Is there potential to reduce costs and maintain milk production, or increase milk while maintaining costs? Skip the line-by-line detail initially until you’ve answered these big-picture questions. Then move to the detail because this helps answer the questions of ‘how do we make changes?’ and ‘in which specific areas?’

Bring it to life

Once you’re clear on the big picture and the finer details of what you need to change, it’s time to bring things to life by using a cashflow budget and feed budget. These will help put your changes into action. However, you’ll need to monitor your budgets carefully, as that’s the only way to achieve your new targets. This final step will ensure your benchmarking mission was worthwhile.

Key points

1. Nearly all top-performing farm businesses benchmark their performance.
2. Get support to interpret your benchmark reports such as DairyBase – lots of people want to help.
3. It’s important to understand the benchmark group or individual farm to which you’re comparing your farm.
MAXIMISING FORAGE CROP RETURNS

DairyNZ’s Maitland Manning explains why you should really know your onions (or turnips and fodder beet!) if you want to get the best financial return per hectare from your forage crops.

Cropping on the milking platform can be an expensive exercise, especially if it’s not done well.

DairyNZ recommends maximising net yield to minimise cost. Net yield is the difference between crop yield, minus what the same area of pasture could have yielded instead during the same growing period.

Why, what and how

**Why**
- increase homegrown feed?
- fill a feed gap (summer or winter)?
- shift a surplus (from spring to summer)?
- renew pasture?
- alter diet, i.e. to get higher metabolisable energy (ME) and higher protein levels from summer feeds?

**What**
- select the poorest-performing pastures
- increase crop yield by preparing the seed bed (i.e. its soil structure, pH and fertility) and suppressing weeds and pests.

**How**
- review paddock growth rates (especially in spring)
- where possible, select the paddocks that will give the best return and fit your farm system (accounting for location, drainage, and pasture renewal)
- explore some options by following the three steps below, to assess different crops against poor and good paddock growth rates.

**Step 1: Calculate the pasture yield**

A. Calculate the pasture yield (t DM/ha) that would have been grown if the paddock was not in crop.

B. Estimate the net yield of the crops you are considering growing on that paddock. For example:
- a turnip crop planted in October and put back in pasture in March could equate to a five-month ‘lost pasture’ of 10.4-7.3t DM/ha (lower-performing paddock).
- in contrast, a paddock planted in fodder beet might be out of pasture for 12 months, missing a yield of say, 16.3t DM/ha of pasture produced during that time instead.

**Step 2: Calculate net yield**

Using the two examples above, subtract the paddock’s likely ‘lost pasture’ production from its estimated crop yield.

Net yield = crop yield (t DM) - lost pasture (t DM)

**Turnips:** a turnip crop yielding 11.5t DM/ha would have a net yield of 11.5-10.4t DM/ha or 11.5-7.3t DM/ha.

**Fodder beet:** a fodder beet crop yielding 20t DM/ha in 12 months could achieve a net yield of 3.7-16.3t DM/ha.

**Step 3: Calculate the maximum financial return**

Calculate the option that maximises the financial return per hectare from your crop and paddock selection. Calculate by following this formula: $/ha ÷ net yield (kg DM) = c/kg DM.

For more information and calculation tables, go to dairy.co.nz/crops.

---

$ RETURNS — TURNIPS AND FODDER BEET

<table>
<thead>
<tr>
<th>Crops</th>
<th>Net Yield (t DM/ha)</th>
<th>Cost to Grow per Hectare</th>
<th>Net Yield Cost to Grow per Hectare based on Net Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turnips</strong></td>
<td>4.2t</td>
<td>$1500</td>
<td>$0.36/kg/DM</td>
</tr>
<tr>
<td><strong>Fodder beet</strong></td>
<td>8.0t</td>
<td>$2500</td>
<td>$0.32/kg/DM</td>
</tr>
<tr>
<td><strong>Fodder beet</strong></td>
<td>3.7t</td>
<td>$2500</td>
<td>$0.66/kg/DM</td>
</tr>
</tbody>
</table>
Farmers share results

DairyNZ’s budget case study farmers have provided a review of their 2016/17 season. The 20 dairy farmers first opened up their businesses for others to learn from in 2015 by sharing their forecast budgets and results of different decisions. Some of the farmers had a challenging season with unprecedented wet weather, while others have introduced new systems. For the updates visit dairynz.co.nz/budget-case-studies.

Biosecurity – protecting our future

Have you got a view on how our dairy sector should manage future biosecurity threats? On behalf of New Zealand dairy farmers, DairyNZ has an opportunity to sign the Government Industry Agreement (GIA) for biosecurity readiness and response. This will ensure your views are represented and you have a say in protecting our industry from harmful pests and diseases. We’ll be providing more information and seeking your views over the next few months. In the meantime, visit dairynz.co.nz/gia for more information.

Kiwi kids thanking farmers

Have you seen the website ourfarmvisit.co.nz?

Children taking part in DairyNZ’s education programme use this website to share what they’ve learned in class through photos, videos and pictures.

The website also features photos from classrooms experiencing their visit to a dairy farm, plus an array of ‘thank you’ letters to the generous farmers who host them.

This example on the left is a lovely picture drawn by Mikayla from Waikanae School showing some of the many things she saw after her visit to a dairy farm.
Heat goes on mating management

Want to get cows in calf quicker and put more milk in the vat? Taranaki dairy farmers can warm up their mating skills by attending a free DairyNZ workshop in September.

This month, DairyNZ is running four events in Taranaki aimed at helping local farmers prepare for mating. The workshops will cover the six-week in-calf rate and how to improve it; how to spot signs of heat using heat detection aids; and tips on bull health and management. Farmers will also review last season’s mating results and look at ways to improve them.

DairyNZ consulting officer Michelle Taylor says the workshops will benefit farmers of all experience levels and she encourages farmers to bring their staff.

“Whether you’re an experienced farmer looking to refresh your mating management knowledge or you want to equip your staff with the required skills, the events are a good chance for the whole farm team to develop in this area,” says Michelle.

“These workshops also provide a good practical grounding and warm-up for the busy mating period. They’ll get everyone in the right mindset to focus on important mating-related targets.”

Even focusing on improving heat detection skills will make a big difference on-farm, says Michelle.

“Making improvements in this area will help you get cows in calf quicker, generating more profits with more milk in the vat.”

Heat detection – quick tips

Effective heat detection starts with careful planning, good observation and the smart use of detection aids. The ability to distinguish and interpret cow behaviour and other signs is critical – so is good record-keeping and training.

Here are four steps to follow:

**STEP 1**

Review heat detection skills on-farm. Does everyone involved know exactly what to look for when detecting cows on heat? It’s important that staff responsible for heat detection know what to look for and how to record information.

**STEP 2**

Give one or two experienced people the responsibility for observation. Others may be involved, but they should report their observations to the individuals responsible, or on a form.

**STEP 3**

Work out which aids to use. Remember, farmers with the best heat detection results use a combination of observation and heat detection aids. Be prepared to test several combinations to find the most suitable.

**STEP 4**

Finally, schedule times each day to check cows and record the results. This information is critical to spot trends early.

---

**EVENT DETAILS:**

**Opunake:** 13 September, 10.30-1pm  
Lynskey Farm, Waitino Road, SN: 42238

**Tikorangi:** 14 September, 10.30-1pm  
Rowe Farm, Otaraoa Road, SN: 43438

**Stratford:** 19 September, 10.30-1pm  
Stratford Demonstration Farm, East Road, SN: 40696

**Hawera:** 20 September, 10.30-1pm Kavanagh Farm, Nowell Road, SN: 40393

Mating management events will also be held in other parts of the country during September. For an event near you, visit dairynz.co.nz/events.
**September events**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TARANAKI</td>
<td>Mangorei Discussion Group – impact of pasture damage and options for those areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TARANAKI</td>
<td>The heat is on! Review last season’s mating, identify signs of heat, and much more at this mating management workshop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANTERBURY/NORTH OTAGO</td>
<td>Conference call for farmers using automatic milking systems to share experiences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOP OF SI/WESTLAND</td>
<td>Murchison/Maruia farm systems group – come along to hear from DairyNZ nutrition scientist Jane Kay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOUTH WAIKATO</td>
<td>Cow skills heat detection workshop – focus on how to improve heat detection on your farm.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NORTHLAND**

DairyNZ consulting officer Mark Forsyth has established a Northland once-a-day (OAD) milking group which now has over 180 farmers registered. A recent OAD event Mark ran for this group drew about 70 people, with a variety of guest speakers adding value and insights. To find out more about the group and how you can get involved, contact Mark on 021 242 5719, or check out [dairynz.co.nz/oad](http://dairynz.co.nz/oad) for information on once-a-day milking.

**NORTH WAIKATO**

Upcoming North Waikato events will look at Fonterra’s new fat test to ensure farmers are not feeding excessive levels of palm kernel expeller (PKE). These events will be for farmers to share what they’ve learned, look at how that influences the test results, and discuss options for ensuring they can still feed cows well without failing the test threshold. Find out when the events are happening at [dairynz.co.nz/events](http://dairynz.co.nz/events).

**SOUTH WAIKATO**

DairyNZ’s South Waikato consulting officers will be hosting three heat detection and cow skills workshops around the region later this month. The focus will be on two critical elements for a high-performing farm: heat detection and understanding cow behaviour.

This is a great opportunity to ensure your whole farm team is aligned in the way you manage your herd over the mating period. Events will be delivered in collaboration with local vets and breeding company representatives. Visit [dairynz.co.nz/events](http://dairynz.co.nz/events) for dates and locations.

**BAY OF PLENTY**

Winter and spring conditions have been tough for Bay of Plenty farmers, which means you may not be set up for top reproduction performance. But let’s control the controllables to ensure cows have the best chance possible to get in calf early.

Our September repro events will help you learn what you and your team can do – in the areas of team work, heat detection, cow health and bull power – to influence repro outcomes over the next couple of months.

Whether you’re an experienced farmer looking to refresh your skills, or wanting to equip your staff with the required skills, join your local consulting officer team and industry experts at this useful workshop. Visit [dairynz.co.nz/events](http://dairynz.co.nz/events) for more details.
LOWER NORTH ISLAND

Discover DairyNZ’s top seasonal tips and tools in our Spring Survival Guide – designed to help farmers get through the physically and mentally challenging time of calving.

This easy-to-read guide covers the key activities currently underway on Lower North Island dairy farms. Content is divided into three sections: putting people first, pasture and supplement management and getting the most from your cows and calves.

Order or download your Spring Survival Guide at dairynz.co.nz/publications/seasonal.

TOP OF THE SOUTH/WEST COAST

Consulting officers Mark Shadwick and Angela Leslie will be out and about during calving. If you have a spare five minutes to catch up or would like some resources dropped off, give them a call (contact details on the right) to arrange a visit.

Also, do you have any burning questions about feeding cows in spring? We’ve collated common questions and answered them in the Feeding cows in spring booklet. Here are some example questions from the booklet:

- If I offer multiple breaks each day, will this increase pasture intake?
- Why is production increased when cows eat more clover?
- Does once-a-day milking in spring reduce feed demand?

Find all the answers by downloading your free booklet at dairynz.co.nz/publications/feed.

CANTERBURY/NORTH OTAGO

A new round of Farm Systems Groups will be starting up in Canterbury from mid-September, following on from the last of these back in May. If you’re interested in attending, please contact your local DairyNZ consulting officer to ensure you’re receiving the email updates.

Also, if you’ve never tried Dairy Connect, now might be a good time to consider this network if you’re seeking information about a specific dairying topic or would like to receive advice from one of our support farmers. Sign up now at dairynz.co.nz/dairyconnect.

SOUTHLAND/SOUTH OTAGO

New immigration policy changes are likely to affect many dairy farmers in the Southland region, but what do the changes mean for you? The new regulations for migrants on work visas were announced by Government in late July. Dairy assistants and herd managers are now eligible for a maximum of a one-year visa. They can renew this visa yearly for up to three years, before facing a mandatory stand-down period in which the migrant must leave New Zealand for 12 months. DairyNZ will be updating its immigration pages as more information becomes available, so keep an eye on the latest news at dairynz.co.nz/immigration.

DAIRYNZ CONSULTING OFFICERS

Northland

Regional Leader  Chris Neil  027 499 9021
Far North  Chris Neil  027 499 9021
Lower Northland  Mark Forsyth  021 242 5719
Whangarei West  Chris Neil  027 499 9021

North Waikato

Regional Leader  Phil Irvine  027 483 9820
South Auckland  Jamie Hautain  027 486 4344
Hamilton North  Jannae Morgan  021 245 8055
Matamata/Karearea  Frank Portegys  027 807 9685
 Morrinsville/Paeroa  Euan Lock  027 293 4401
Hauraki Plains/Coromandel  Annabelle Smart  021 242 2127

South Waikato

Regional Leader  Wade Bell  027 285 9273
Te Awamutu  Stephen Canton  027 475 0918
Otorohanga  Michael Booth  027 513 7201
South Waikato  Kirsty Dickins  027 483 2205

Bay of Plenty

Regional Leader  Sharon Morrell  0274 922 907
Western Bay of Plenty  Wilma Foster  021 246 2147
Central Bay of Plenty  Kevin McKinley  027 288 8238
Central Plateau  Collin Grafton-Allen  021 225 8345
Eastern Bay of Plenty  Ross Bishop  027 563 1785

Taranaki

Acting Regional Leader  Simon Sankey  021 228 3446
South Taranaki  Simon Sankey  021 228 3446
Central Taranaki  Sarah Payne  027 704 5562
Coastal Taranaki  Michelle Taylor  021 276 5832
North Taranaki  Lauren McElroy  027 593 4122

Lower North Island

Regional Leader  James Muwungunirwa  027 499 9020
Horowhenua/Wanganui/South Taranaki/Southern and Coastal Manawatu  Scott Cameron  027 702 3760
Waipapa/Taranui  Tim Ferguson  021 244 3428
Hawke’s Bay  Gray Beagley  021 286 4346
Central/Northern Manawatu/Rangitikei  Jo Back  021 222 9023

Top of South Island/Westland

Regional Leader  Wade Bell  027 285 9273
Nelson/Marlborough  Mark Shadwick  021 287 7057
West Coast  Angela Leslie  021 277 2894

Canterbury/North Otago

Regional Leader  Virginia Serra  021 932 515
North Canterbury  Teagan Lourie  021 246 2775
Central Canterbury  Natalia Benquet  021 287 7059
Mid Canterbury  Stuart Moonhouse  027 513 7200
South Canterbury  Virginia Serra  021 932 515
North Otago  Trevor Gee  021 227 6476

Southland/South Otago

Regional Leader  Richard Kyle  021 246 3166
South Otago  Mark Olsen-Vetland  021 615 051
Central/North Western Southland  Nicole E Hammond  021 240 8529
West Otago/North Eastern Southland  Liam Carey  027 474 3258
Eastern Southland  Nathan Nelson  021 225 6931
Western Southland  Teresa Anderson  027 702 2219

Dairy Survival Guide
LOOKING FOR A DAIRY EVENT IN YOUR REGION?

DAIRYEVENTS.CO.NZ

IS THE GO-TO PLACE FOR DAIRY INDUSTRY EVENTS.