

Feedpads during wet months – the flow-on benefits

Environmental management case study

Summary

- With the challenges of wet paddocks, soil pugging and pasture damage, Jancourt Farms installed a feedpad to reduce the amount of time cows were in the wet paddocks.
- Benefits of the feedpad have included:
 - Improved soil health and reduced soil pugging.
 - More efficient fertiliser usage.
 - Increased pasture utilisation.
 - Reduced fodder wastage.
 - Increased per cow production.
 - Increased carrying capacity of the farm.
- Jancourt Farms estimate the payback period of the total feedpad investment was less than three years.
- In the future, a small section of the farm will be drained with a view of further improving soil health and pasture performance.

“Look at what the actual problem is to see if you can address that, rather than solving it in part.”

Andrew Chivell - Jancourt, South-west Victoria

FARM SNAPSHOT – JANCOURT FARM

Andrew Chivell, Mark Paton, Brad Paton, Owen Chivell and Dick Webber – Jancourt, South-west Victoria

The owners of Cobden-based fertiliser business, Webber and Chivell, purchased Jancourt Farms in 2016. Share farmer Lincoln Dare milks 580 cross bred cows on the 248ha property. The farm consists of 215 ha milking area, plus 33 ha of non-milking area including some bushland. The main dairy farm is further supported by 95ha of out paddock for young/dry stock.

The annual production of the enterprise is approximate 296,000 kgMS (tons of dry matter per hectare per year) with approximately 85 per cent of the herd calving in autumn and the remainder in spring. They supply their milk to Frestine.

Farm system

- A dryland pasture-based system with a focus on home grown feed.
- Jancourt Farms aims to maximise the herd size and pasture growth rates. Average pasture growth rates are 9-10 t DM/ha/year with approximately 8.5 tDM/HA utilised.

- Cows are fed a supplement concentrate mix in the dairy of about 1.1 t/year/head and almost all fodder requirements are grown on the property.

Farm features

- Annual average rainfall in the area is 780–800mm.
- The property is in a relatively flat area with a loam soil type with a relatively low clay based (150–200mm below the surface).
- There is native bushland on the property, which is fenced off from livestock. The drain that runs through the property that leads to the nearby Scotts Creek.
- A large dam which fills from run off from the property, serves as the main water source for the farm.
- The farm experiences wet soils across much of the farm during the winter months due to the rainfall, location, topography and soil type of the farm.

Business purpose

Jancourt Farms has a strategy to focus on growing grass and producing milk. The operation aims to do this with careful planning and nutrient budgeting, which is carried out at the start of the year.

Fertiliser use is strategic and targeted to ensure efficient and effective applications. Soil testing supports this approach and is conducted every year – with each paddock tested every 3-4 years. A nutrient chart is then derived that supports the nutrient management plan. As part of their partnership with Webber and Chivell Fertilisers, Jancourt Farms utilises the property to run fertiliser, seed and crop trials.

The pasture renovation program is dependent on the performance of a paddock – it is not set on a rotational basis. With an aim to reduce soil disturbance (minimal tillage) the operation oversees approximately 70 per cent of the farm each year with a view of enhancing the pasture, while maintaining soil health.

“Allow for potential expansion, even if you don’t need it for yourself, someone else might.” " *Andrew Chivell*

Practice change

Issues identified

- 1 When the team first purchased Jancourt Farms, it focused on some basic improvements and repaired infrastructure, the water system and established a feed mill.
- 2 In winter months, the team experienced wet soils in many paddocks that resulted in pugging and water logging. This led to the following:
 - Inefficiency in fertiliser usage
 - Pasture wasted in paddocks – approximately 30 per cent.
 - Wasted fodder fed out – 40 per cent.
 - Cow tracks were wearing out quickly and costly to maintain.
 - Cow health was impacted, issues with sore feet.
 - Maximum herd size was 520.

Changes made

The team designed and installed a feedpad with a view of being able to feed the cows off the paddock during some of day during the wet months. Some key features include the following:

- 130 m x 23 m with room for 700 cows. This is wider than what was recommended to allow extra room for cows and machinery.
- Feed is placed in troughs prior to cows arriving on the pad.
- During wet months (and as required) the cows feed from the feed pad three times a day (before heading to the paddock):
 - After morning milking.
 - Prior to afternoon milking.
 - Following afternoon milking.
- The estimated total cost of design and construction of the feedpad was \$330,000 (including GST). This was paid by the farm owners.



Construction phase of the feedpad.

Benefits of the change

Jancourt Farms has estimated the following benefits of the feedpad, due to the reduced impact of soil pugging and damage from the herd during the wet months:

- Pasture utilisation now estimated to be 8 – 8.5t DM/ha (was previously estimated to be around 7tDM/ha).
- Reduced seed and re-sowing costs.
- Silage/fodder usage improved by approximately 30 per cent.
- Fertiliser efficiency has improved by approximately 30 per cent.
- Increased per cow production of 40–50kg MS per cow per year.
- Increase in size of milking herd to 580 cows.

Jancourt Farms have estimated their total share of these benefits to be approximately \$153,000 per year. The total benefit to the whole business of is \$300,000 per year.

The future

- A real focus on making a better return without taking on more land.
- While the feedpad has helped with some of the issues related to the effects of pugging and feed utilisation, it hasn't solved the problem of the wet soils. There is still the potential to improve pasture growth, fertiliser efficiency and cow potential.
- In 2023, 33 ha of drainage on the farm is being planned as a trial. If this works well, then more may be done across the farm.
- Jancourt Farms are continually looking at their largest expenses (fertiliser and pasture costs) and seek options to reduce costs and improve growth rates and utilisation.

Learnings

- Look for where the 'leaks' are in your business.
- Look at what the actual problem is to see if you can address that, rather than solving it in part.
- Always consider the overall set up of the farm. Look at the whole farm, not just on part in isolation. This will help you to plan for a solution that will work for your farm.
- Look at other farmers set up. But go with what suits your needs.
- Allow for potential expansion. Even if it's not in your time.
- Get a price from the people you want to work with. Who do you want to do the job. But get a price range. Don't waste your time getting loads of quotes.
- Be prepared for increases in costs/works.



Construction phase of the feedpad.

FOR FURTHER INFORMATION

Contact Dairy Australia Climate and Energy Lead Elissa McNamara at elissa.mcnamara@dairyaustralia.com.au

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Feedpad post-completion.

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