

Dairy Industry responding to market signals to promote sustainable practices

Fert\$mart Web App The advisor- client experience

The trusted relationship

Agronomist Matt Howell, of CRT Platinum Ag Services, conducts his business in the Meningie region of South Australia. His dairy clients are large scale irrigated and dryland enterprises with both total mixed ration (TMR) or partial mixed ration (PMR) systems. His agronomy skills are called upon by local farmers to advise in growing grain and fodder crops to maximise production efficiently and profitability.

“Efficient use of water and nutrients is really important to my clients as these are two of their biggest costs. Therefore, in preparing nutrient recommendations, extensive soil testing is needed to identify opportunities to maximise efficiencies. Soil fertility is greatly affected by the region’s variable soil types, crop variety, crop establishment techniques and irrigated water quality. We also need to consider any run-off risks due to proximity to the Coorong and Lakes system.”

Brad and Karin Fischer are third generation dairy farmers on Campbell House, located on the shores of Lake Albert, Meningie West. They currently milk 600 cows with plans to grow. Since taking-on the farm they have renovated and expanded the operation to include a feedpad and substantial loafing area. They are now at the point where they are building a compost barn to house the milkers and are feeding a full TMR.



Matt Howell (advisor) & Brad Fisher (dairy farmer) believe in a collaborative partnership when it comes to nutrient planning for the crops which supply the TMR system.

Key Points

- Fert\$mart Plan prepared for 1711 ha, 230 ha of which is irrigated through centre pivots.
- The results of 16 soil tests automatically uploaded to the App via API capability from the NATA & ASPAC accredited soil testing laboratory of ASPAC.
- The results of 1 effluent test automatically uploaded to the App via API capability from the NATA accredited EML (Chem) laboratory.
- Recommendations prepared for 7 separate Farm Management Zones (FMZ) across the Campbell House farm, SA.

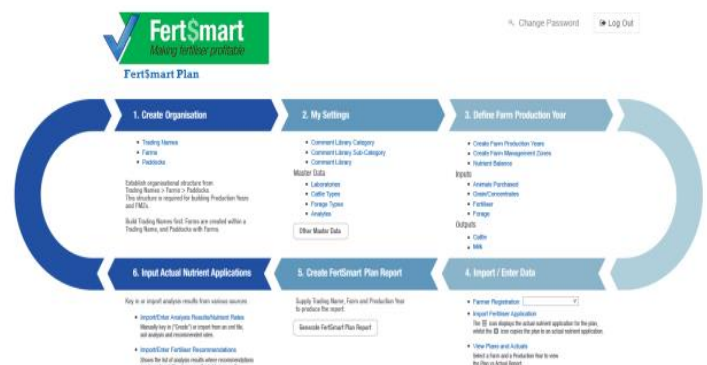
“We rely upon Matt to work closely with us to grow our business. The App Fert\$mart Plan puts our information together for us in a way that we can logically follow. Longer-term, using a common platform where both parties can input data separately will be beneficial as it will save time when it comes to planning each time.”

The nutrient advisor perspective

According to Matt, his take home message as an advisor participant of the Fert\$mart Web App trial is that the Fert\$mart planning cycle is logical and the App helps both the advisor and farmer address each step.

“The App guided me through the full cycle rather than head directly to the data analysis. It made me consider environmental factors that I have overlooked previously such as potassium and nitrogen rates to avoid impacts to surface and ground waters.”

Matt believes that the App produces a professional looking document within a fraction of the time.



Fert\$mart Web App Home Screen: leads the user through each step of the Fert\$mart Cycle so that the resultant Plan is to the standard required to display the Fert\$mart Tick Logo

“It would take me maybe 2-3 hours to do a full plan including analysis with the App, whereas conventionally it would take 5 hrs. It is particularly good at saving time in the data delivery and layout of the graphs,” provides Matt.

He adds, “It has short-cut the need to use multiple programs such as Microsoft Word and Excel plus it prevents double handing of data. As soon as I upload my soil test results in the xml. format from the lab, I can generate graphs which display results against the regional soil fertility guidelines.”

Matt believes the benefits and potential improvements of the App are:

Benefits

- The advisor and farmer can be guided through the Fert\$mart Planning Cycle- Situation analysis, limitations, issues, data analysis, nutrient planning, implementation and review.
- Farmers can enter their own data and allow the advisor to plan applications for the season ahead using a single platform.
- It makes consideration of the value of effluent nutrients easy by integrating the industry effluent and sludge calculator.
- Comparing soil fertility across seasons can be more closely monitored, particularly those FMZ which are harvested for pasture forages.
- Monitoring and analysing nutrient behaviour over a number of years will be an easier task and is therefore more likely to occur.

Improvements

- There are functionalities which could be upgraded such as greater auto-population of the recommendations summary table.
- Further APIs with NATA & ASPAC accredited laboratories.
- Flexibility in the Fert\$mart Plan template so that reports can be tailored.



Matt Howell was able to demonstrate to the Fisher's that effluent will be a resource when growing high value crops such as this Lucerne paddock at Campbell House.

The dairy farmer perspective

Campbell House has a mix of FMZ which can challenge the TMR system of the operation, according to Brad.

“We have heavy alluvial soils near the lake, gradually rising to sands back towards the Coorong and areas of strong limestone soils that make tillage and working somewhat difficult.

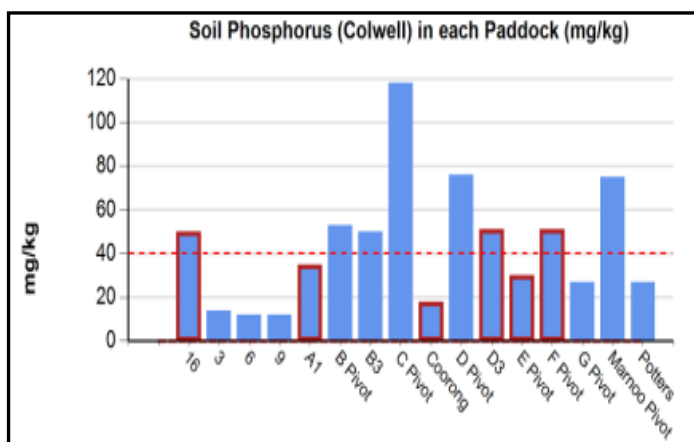
The App has allowed us to set-up our farm in the relevant FMZ to plan our nutrient use with consideration of these limitations and constraints. With Matt’s help we will keep better records of what we actually apply, as we do it, using the App. This will help us track if things are paying off for us.

I see the greatest immediate benefit has been the way the App helped establish the base line for future effluent applications through our pivots. Matt used the integrated effluent calculator and factored this into the relevant FMZ recommendations.”

Effluent will be a resource when growing high value crops such as Maize and Lucerne, significantly reducing the cost of production over time on Campbell House.

According to both advisor and farmer, managing the effluent will be a non- issue going forward, it will be resource that will be figured into the cropping and fodder production program as a cost saving and a way of cycling important nutrients back into the dairy.

Fert\$mart Web App can generate a graph which displays the nutrient levels of all paddocks tested & identifies those used to base recommendations for each FMZ.



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