

Dairy Industry responding to market signals to promote sustainable practices

Fert\$mart Web App Kempsey Dairy Discussion Group Trial

The group perspective

The **Kempsey Dairy Discussion Group**, located on the mid-north coast of NSW, were participants in the Fert\$mart App trial through their engaged Fert\$mart tick approved nutrient advisor, Matt Thompson of MNC Agronomy.

“As a Group we knew that the delivery of Fert\$mart made sense to us. Collectively we all agreed that our nutrient decisions needed better planning to improve the profitability of our nutrient use,” provides Mike Jeffrey, who owns a farm located immediately on the Macleay River where he milks a herd of 375 cows.

As a part of the holistic program conducted for the Group, three field days were held on various member farms.

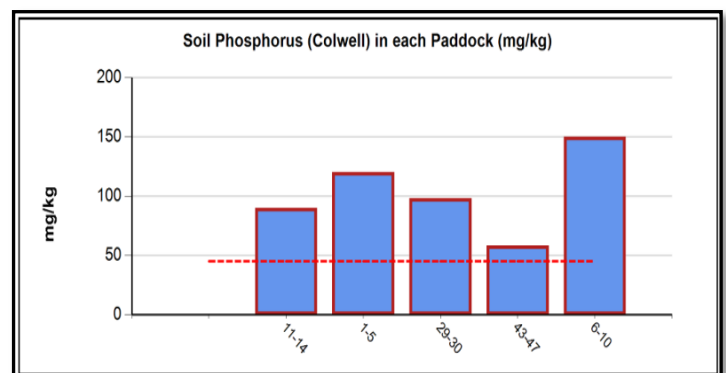
“Matt was able to use graphs and tables that he had generated on the App to communicate individual and group data relating to soil fertility levels against the Fert\$mart Soil Fertility Guidelines for NSW. He could also demonstrate recommendations based upon Farm Management Zones (FMZ) for each farm.”



Mike Jeffrey (right) with Norco Agronomist Michael Barbour & Norco Field Officer Maree Searle, both currently undertaking the process of becoming Fert\$mart tick approved and keen to use the Fert\$mart Web App

Kempsey Trial Key Points

- 15 Fert\$mart Plans prepared using the trial App.
- Approximately 636 hectares of dairying land (3,557 milking cows) covered by the newly prepared Fert\$mart Plans.
- The results of 108 soil tests automatically uploaded to the App via API capability from the NATA & ASPAC accredited soil testing laboratory of Nutrient Advantage.
- Nutrient Advantage Advice (NAA) used as the main decision support system.
- The results of 2 effluent tests automatically uploaded to the App via API capability from the NATA accredited EML (Chem) laboratory.



Fert\$mart Web App automatically graphs farm soil test results against the relevant dairy region industry fertility guidelines

The nutrient advisor perspective

Matt Thompson participated in the Fert\$mart Web App advisor training as part of the trial. He was a convert to the App concept immediately upon hearing about the trial innovation.

“An App which allows me to produce a Fert\$mart Plan more efficiently by bringing all the relevant data into a platform obviously has benefits for myself and for my dairy clients,” he says.

During the process of preparing the 15 Fert\$mart Plans, his feedback helped to steer amendments and upgrades to the system.

“Everything certainly wasn’t smooth sailing for me. There were times when I got frustrated with the technology. Whilst it was intuitive, some of the

functionality needed time to get to know, and given I had clients waiting, I couldn't take that time to stop and get to know the system fully, or set-up some of the efficiency elements such as a comprehensive personalised comments library."

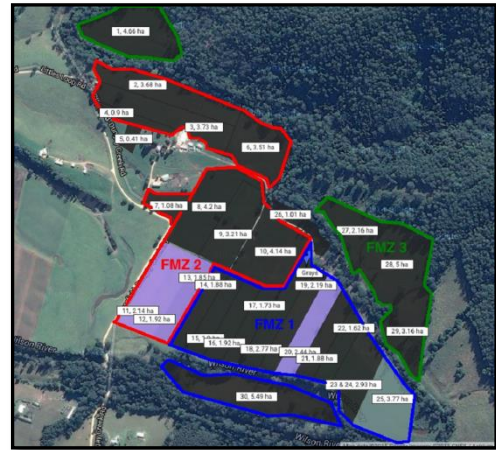
Matt believes the benefits and potential improvements of the App are:

Benefits

- Possibility of a central platform for advisor/ farmer interactions on nutrient planning & nutrient actuals.
- API capabilities with his two most used soil laboratories, APAL & Nutrient Advantage.
- Ability to use his preferred Decision Support System (DSS) rather than have this dictated by the App.
- Potential to generate reports that aggregate information on his clients within certain criteria.
- Generation of graphs against the relevant regional soil fertility guidelines.
- Integration of industry tools such as Farm Nutrient Balance, Effluent Calculator & DairySAT.
- Monitoring & updating the annual Plan should be easier.

Improvements

- Capability to use the App off-line.
- Inclusion of an interactive farm map.
- Capability to customise the template to suit individual client requirements.
- Increased filter and autofill options would improve time efficiencies.



Gray Property Farm Map displaying FMZ- produced externally by Matt Thompson & uploaded into the App. to generate the Fert\$mart Plan

The dairy farmer perspective

Mick and Paula Gray have been implementing a soil nutrient improvement program since 2011. Whilst they have never officially segregated their farm into Farm Management Zones (FMZ), they have soil tested and planned their nutrient use, both fertiliser and effluent, using the general concept.

"What a Fert\$mart Plan has done for us is bring all our information together and allow us to track our progress towards improved fertility," says Mick.

"By Matt using the App, we have the choice to input our actual applications pretty easily using our own access platform. We can choose from a product list, allocate the application to the relevant FMZ and give it a date, rate, method of application and other details. We can then run a report."

They see a longer term benefit being a cost reduction in having a Fert\$mart Plan prepared if the App platform can be used by them and their nutrient advisor.

Mick and Paula's privacy is also assured when using the App. They are able to select whether they "Opt-in" to participate in aggregated industry reporting.



Matt Thompson (MNC Agronomy) with Kempsey DDG members Mick & Paula Gray, Rollands Plains, NSW

1 (2015 - 2016) Fertiliser Program		
Timing	Rate	Product including nutrient analysis
Incorporated prior to the lucerne/chicory phase (every 3-4 years) as part of the whole farm pasture improvement program.		2500 Lime
Apply SOP as part of a Urea based blend every second graze.		60 Sulphate of Potash
Nitrogen increases the size of leaves and grazing interval (rotation length) determines the number of leaves. Within the optimum rate range, linking rate of nitrogen applied to the optimum grazing interval for the time of year will maximise response.		100 Urea
Managing Risk		
Key Actions To Reduce Risk : Extend effluent re-use area into fzm1 where soil k levels are much lower. Key Actions To Reduce Risk : Lime input will improve the overall efficiency of this pasture based enterprise. Not only will it improve nutrient utilisation, it will reduce the risk of environmental runoff, and will drastically improve the key driver for farm sustainability in this environment; pasture production and utilisation.		

The App Plan displays recommendations and risk considerations according to FMZ.

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