



**YOUR QUARTERLY FARMAX NEWSLETTER**  
SUMMER 2014

## TAKING STOCK

In this edition of *Advantage*, we look at the many uses of FARMAX as we hear from Ronaldo Vibart of AgResearch about the benefits of FARMAX for a scientific and research agenda.

Spring has swiftly turned into summer and all of a sudden the end of the year is upon us! FARMAX has had another huge year, filled with plenty of achievements, integrations and interactions with New Zealand's rural community. We look forward to many new projects and initiatives in 2015!

A big welcome to our new team member, Kate Cromie. Kate is joining us at a busy time of year, so her presence is definitely appreciated. No doubt you will be able to talk to Kate at the HelpDesk soon.

As usual, we will be sure to keep you posted on what is happening here at FARMAX. In the meantime, have a very safe and enjoyable holiday season.

*All the best*

From the FARMAX team



## GROWING UP-AND-COMING AG SECTOR STARS THROUGH TERTIARY SUPPORT

FARMAX's new Massey University scholarship is now open to applicants for 2015, as well as the Lincoln University scholarship which the company offered for the first time last year.

Like the Lincoln scholarship, the Massey scholarship is valued at \$5000 and aims to encourage post graduate research that will benefit agriculture in New Zealand.

All people eligible to perform postgraduate research at Massey University are able to apply, however, preference will be given to an applicant who is using FARMAX tools to conduct their research.

FARMAX general manager, Gavin McEwen, says the fact that FARMAX is based on decades of research motivated the company to do something to encourage the next generation of agricultural scientists and rural professionals to maintain a high quality and breadth of research for the sector.

The company also offers training courses at Lincoln and Massey each year for students, and has created special versions of its software for the tertiary institutions' computer systems, meaning ag students can get free extended trials of the

FARMAX software for their studies.

"There is a new generation of agricultural minds who have the potential to create and discover new tools that will help New Zealand farmers' everyday lives and improve the country's agricultural performance as well," said McEwen.

"We see the advancements being made in the sector all the time at FARMAX and we place immense value in the work that researchers do, so it is a natural fit for us to offer an incentive to make sure that continues.

"We are really looking forward to hearing the research proposals that these students come up with."

Applications close on 10 March 2015. To apply for the FARMAX Massey University scholarship, or to find out more, visit [www.massey.ac.nz](http://www.massey.ac.nz)

To apply for the FARMAX Lincoln University scholarship, or to find out more, visit [www.lincoln.ac.nz](http://www.lincoln.ac.nz)



**FARMAX**  
YOUR ADVANTAGE

# FARMAX CORPORATE CASE STUDY: AGRESEARCH

AgResearch is one of New Zealand's leading crown research institutes focused on supporting the country's pastoral sector through scientific research and development.

With the sector generating export revenues in excess of \$18.6 billion annually, AgResearch plays an important role in helping drive innovation through research and transfer of technology and knowledge, in partnership with key stakeholders.

AgResearch scientist Ronaldo Vibart is part of the organisation's 'Land and Environment' group and works in a team called 'Sustainable land use and global change.'

The scientists in his group work across a number of disciplines including soil and land use, nutrient management, water quality, greenhouse gas emissions and mitigation, climate changes and adaptation, and environmental footprinting.

Ronaldo describes how he uses FARMAX on a day-to-day basis as a research scientist.

"We analyse pastoral land use and land management in relation to environmental impacts and climate change," says Ronaldo, who describes himself as a farm systems analyst.

"We aim to improve dairy, beef, sheep and deer production systems by carrying out innovative research on soil and water management, pasture fertilisation and farm nutrient management. Our team is working on solutions to reduce negative impacts on the quality of soil, water, atmosphere and ecosystems. My role is to interpret these production systems, as best as possible, using models that simulate farm-scale operations throughout New Zealand."

Ronaldo uses two farm-scale simulation models to carry out this work - FARMAX and Overseer. Both software systems are the original brainchild of AgResearch scientists and now widely used by farmers and rural consultants across the country.

With a background in dairy pasture-based nutrition as well as agronomy, Ronaldo uses his expert knowledge to scale up the component research



Ronaldo Vibart, AgResearch scientist

to on-farm systems.

"My dual background gives me scope to work across both the nutrition and agronomy aspects of a farm which can be quite handy when it comes to interpreting what it looks like on paper.

"We need to be able to decipher what's happening and run a few scenarios to look at production and environmental outcomes. FARMAX provides the farm setting - the financial and biophysical parameters

- and I then feed that into Overseer, which gives me the environmental outcomes."

He describes FARMAX as a "natural and

instinctive tool" to use if you're trying to capture some of the dynamics of farming and says he uses the system in three different ways.

## FUTURE PLANNING FOR EFFICIENT FARMING

Ronaldo and the team recently carried out a climate change project, looking at Southland, Hawke's Bay and Waikato sheep and beef farms, specifically.

"By coupling the information NIWA provided us with forecasted weather trends, we were able to develop pasture growth curves for individual years between 1980-1999 and 2030-2049, based on rainfall, radiation and other factors," tells Ronaldo.

"By having weighted average growth rates, we were able to see what the past pasture curve looked like for particular regions, and what the

future pasture growth rate might look like with environmental factors included, such as an atmosphere high in CO<sub>2</sub> - and then compare the two.

"I then used FARMAX to adapt a farm system hypothetically with the pasture growth curves in mind, so we were able to make a number of adjustments to adapt our farm to future growth rates and analyse the resulting financial impacts."

## "PUTTING A FARM ON PAPER"

Ronaldo says one of the most useful features of the FARMAX system in the environmental science field is its ability to capture a farm setting and "put it on paper."

"We were asked to develop farms that were highly profitable but low greenhouse gas emitters. Once we identified these farms, we interviewed the farmers, toured the farms and used FARMAX to capture their land resources, livestock and management policies.

"We then put that information into Overseer to see whether the farms were producing emissions as we thought they were, or not. It was a fascinating process; we ended up choosing four dairy and four sheep and beef farms from throughout the country as case studies."

## CAPTURING THE DYNAMICS OF THE LAND WITH ACTUAL SURFACE INFORMATION

"What I'm after with FARMAX is gauging whether farms are biologically feasible - the feasibility comes from matching what is demanded by livestock and what are we supplying in terms of feed

"...we were able to develop pasture growth curves for individual years between 1980-1999 and 2030-2049, based on rainfall, radiation and other factors"



energy – if it measures up or if we are going to have a shortage, or excessive growth by under-utilising our pasture,” says Ronaldo.

He tells of another study that tried to determine what the average farm looked like for particular regions.

“We integrated FARMAX information with geo spatial information where we were able to take the actual farm and put it into a grid of farms for the region and then apply some of the social interactions of these farmers.

“By doing that, we had a mass model which came in very handy to assess some of the regional nutrient losses and potential policies that could be applied to slow them down.”

Similarly, about four years ago, when the emissions trading scheme was a hot topic, Ronaldo carried out a simulation to investigate carbon balancing and the extent different forest blocks would counter-balance emissions from livestock.

“FARMAX is an important tool for us here at AgResearch, especially because we deal a lot with hypothetical and ‘what if’ situations, so it’s a great fit for our work.”

## RONALDO'S TOP FOUR FARMAX BENEFITS:

1. The model captures the biophysical essence of a pastoral farm or farm system.
2. It assesses farm viability by matching feed supply with feed demand; the available graphs are good at pointing this out.
3. You can create blocks that are different from other land blocks. Although these blocks of land cannot be managed independently, this is still a good feature of the software.
4. The financial data is updated regularly and provides a good comparison tool (across scenarios or farm practices tested).

## AG HUB INTEGRATION

FARMAX has teamed up with Ag Hub to provide customers with access to pasture cover measurements across both programmes.

Pasture cover measurements recorded by FARMAX Pro Dairy, FarmTools Dairy or Feed Wedge can now be automatically sent to Ag Hub to provide online reports of pasture covers and paddock performance.

Integrations between software companies are increasingly valuable and necessary for farmers and the wider agricultural industry.

“Having to enter data twice into different systems means farmers are at their desks longer than needed. In this day and age, with the technologies we have available to us, FARMAX believes there is no longer any excuse to make farmers spend unnecessary time working in software applications – we’ve been working together to do something about it,” said FARMAX general manager, Gavin McEwen.

Customers interested in using the new link can contact the FARMAX Helpdesk (0800 FARMAX) or the Ag Hub HelpDesk (0800 MY AGHUB) for setup support.



## IN BRIEF

### HOLIDAY CLOSURE

FARMAX will be closing for a short period over the holiday season. The HelpDesk will close at 12noon on Wednesday 24 December 2014 and reopen at 7.30am on Monday 5 January 2015. If you have any FARMAX emergencies over this period, you can call Julia Hoddinott on 021 432 341. Please be sure to send your December files in before 24 December if you would like them to be loaded before the end of the year.

### INFORMATION PACK

FARMAX has a brand new information suite, consisting of product brochures, customer case studies and information sheets. These are particularly helpful for consultants to give to new and potential FARMAX clients. These materials can be downloaded free from our website or you can fill out a form to have the materials posted to you. Check out the FARMAX info packs at [www.farmax.co.nz](http://www.farmax.co.nz) under the training and advice section.

### TRAINING COURSES

FARMAX training courses have finished for 2014. In total, we held almost 50 courses in 12 locations throughout the country. Next year, there will be even more courses, including several new ones that our training manager, Julia Hoddinott, has been trialling this year. The 2015 courses are scheduled to begin in March next year, starting with the Hawkes Bay.

### CONNECT WITH US

 [facebook.com/FarmaxLtd](https://www.facebook.com/FarmaxLtd)

 [@FarmaxNZ](https://twitter.com/FarmaxNZ)

[www.farmax.co.nz](http://www.farmax.co.nz)



## DID YOU KNOW?

Around 40 million ha of the world's land is used for organic agriculture. While this may sound like a lot, it is only about three per cent of the world's total agricultural area. Demand for organic food and drink has been growing steadily over the last decade, totalling \$63 billion in sales in 2011. Unlike the rest of the food sector, the organic market has continued to grow – even throughout the global economic recession. (Source: Food and Agriculture Organisation of the United Nations)

## CLOUD RELEASE

Over the past few months we have been re-developing the FARMAX infrastructure to store files in the cloud. This is an exciting development as it modernises and simplifies the FARMAX programmes and gives our users more access and control of their farm files. The first release of the cloud software will occur in January next year. More information about the release and how it will benefit you will be available soon.



## AUSTRALASIAN DAIRY SCIENCE SYMPOSIUM

FARMAX was excited to be a sponsor at the 2014 Australasian Dairy Science Symposium, which was held in Hamilton last month.

This was a great opportunity to network with science, research and industry representatives and to catch up with FARMAX customers. It was great to see the interest in FARMAX as a valuable asset to dairy farming businesses.

## 2015 FARMAX CONSULTANT CONFERENCE

A reminder that our next FARMAX Consultant Conference will be held in Wellington on 7-8 May 2015. We are excited to announce the location of the conference is Mac's Function Centre, which is on Wellington's waterfront.

Conference attendees are able to receive a special accommodation rate from Copthorne Oriental Bay Hotel, so make sure you save the date and get in quick!



## FARMAX TIP

### ALTERING DATABASES

Did you know the FARMAX user has the ability to change **ALL** the databases in their own FARMAX files? This can be done at the whole file level, then selecting the database you would like to edit.

FARMAX updates a number of databases, such as milk pricing, on a monthly basis. A number of farm consultants also maintain their own databases and you can do the same. This can be important when updates in pricing occur mid-month in order to reflect changes without FARMAX updates.



## HAVE YOU MET... KATE?



A big welcome to Kate Cromie! Kate is the newest member of the FARMAX team, joining us in November. Her role is junior technical specialist, which involves covering the HelpDesk and assisting customers with technical questions.

She is very much looking forward to being a part of FARMAX training sessions and meeting some of our customers. Kate is originally from Canterbury and made the big move up to the Waikato after completing her Bachelor of Software and Information Technology, majoring in Agribusiness, at Lincoln University.

Kate loves netball and the outdoors, and is enjoying exploring her new home.