

Seasons

SUMMER 2007



Hohepa Dairy Farm

Many readers of the first issue of Seasons told us they didn't know Meridian Energy was directly involved in farming.

In fact, Meridian Energy owns 22 farm properties along the south bank of the Waitaki River between Kurow and Glenavy – a total area of 3,433 hectares. While many of these properties are leased, Meridian Energy jointly farms four dairy holdings on a 50/50 sharemilking basis. In this issue we profile one of those properties – Hohepa Dairy Farm.

Hohepa Dairy Farm is a 300-hectare property with an effective area of 220 hectares. Total cow numbers are 680, with a stocking rate of 3.1 cows per hectare. Irrigation is provided from a shared scheme direct from the river, with 50% K line and 50% borderdyke irrigation. The farm is in its sixth year of production following conversion to dairy. Day-to-day management is in the hands of sharemilkers Richard and Jane Metcalfe, who are now in their third season at Hohepa.

Richard, from Yorkshire in the UK, and Jane, from Golden Bay, have achieved some very good increases in productivity during their tenure. Production per cow has risen from 371 kgMS (milk solids) per cow in the 2003/04 season to 403 in 2005/06. Production per hectare has risen from 1,166 kgMS per hectare to 1,240 in the same period, with total production rising from 245,000 kgMS to 273,000 kgMS. Hohepa is on track to reach per cow production of 428 kgMS this season.

Jeremy Savage of Macfarlane Rural Business acts as Meridian Energy's farm adviser. He says Hohepa's productivity gains over recent years are the result of prudent farm management by Richard and Jane. "Good pasture and grazing management is at the heart of the increase in productivity, with a strong focus on pasture quality," says Jeremy.

"The farm has a high soil water table and several creeks. All the creeks and riparian areas on the property have been fenced off and there's also been some wetlands development." Other improvements include the installation of a Varivac vacuum pump control system in the 40-bale herringbone dairy shed, which Jeremy says has resulted in energy savings and more efficient milking.

"The focus for the future is really on making incremental, ongoing improvements," says Jeremy. "In particular, focusing on profitability and making sure that any increases in production are profitable. For example, we run all the feed budgeting through a computer simulation model, UDDER, and benchmark it against a database of other farms in the Waitaki Valley, as well as Lincoln University data. Like any other dairy farm, we're looking to turn as much feed into milk as possible, so by comparing key performance indicators against other farms we can learn from what they're doing and continue to improve our profitability."

IN THIS ISSUE

- **Meet the team**
Introducing Tracey Gordon, Business Account Manager
- **Increasing productivity**
Eliminating stray voltage can lead to more milk and healthier cows
- **A new concept for irrigation**
How Meridian Energy is working with a local community to create an irrigation scheme with a difference
- **Wind farm sites**
How we select, develop and maintain sites
- **Taking a long-term view of electricity pricing**
Pricing options for farm businesses
- **Kids – your chance to win**
- **And more...**

MEET THE TEAM

TRACEY GORDON BUSINESS ACCOUNT MANAGER



As a Business Account Manager, Tracey Gordon helps Meridian Energy's farming customers throughout New Zealand with everything from enquiries about their bill to helping them save money by using energy more efficiently. Coming from a farming background in Southland, Tracey has a good understanding of the issues farmers face every day.

"Farmers are generally very well aware of how much electricity they use," says Tracey. "It's a big part of their costs, so from a farm management perspective they're very keen to find ways of reducing their electricity bill. There's a range of ways they can do that. For example, we can look at whether they're on the right metering to suit the way they use electricity, as well as the right pricing plan.

"We're also getting an increasing number of enquiries from farmers about energy efficiency in their business. We can make a range of suggestions about what they can do to increase their energy efficiency. We can also arrange for an energy audit. That involves someone coming out to their farm, looking at what they're doing and advising on changes they can make to operate more efficiently – and save money in the process."

Tracey says it's the contact with farmers she enjoys most about her role. "I really like being able to get out to field days and shows, and talk face to face with customers. It's an opportunity to find out what they're interested in. It's also a chance to talk about some of the things Meridian Energy is involved in, whether it's products like Mahana Blue, fixed-term pricing options, wind power or our sponsorship of things like the New Zealand Dairy Industry Awards."

Tracey's message to farmers is simple – get in touch and find out how Meridian Energy can help your business. "Talk to us at the start of the season, so we can help you assess your options before peak use periods," she recommends. "We've got a whole range of options, tools and expertise we can call on to help you manage your electricity spend. After all, that's what we're here for!"

A New Concept for Irrigation

An irrigation scheme with a difference is being developed in the South Canterbury region. The Hunter Downs Irrigation Scheme offers farmers the opportunity to get irrigation at a known annual price – without the normal development risk or the need to raise equity for off-farm infrastructure.



The Hunter Downs scheme is a joint initiative between Meridian Energy and the South Canterbury Irrigation Trust. The Trust is convened by the mayors of the Timaru, Waimate and Mackenzie District Councils. The scheme proposes to irrigate 40,000 hectares out of a total area of 60,000 hectares, from the Waitaki River as far north as Otipua. Unlike co-operative irrigation schemes where members must commit capital for infrastructure development up front, Meridian Energy is proposing to build, own and operate the off-farm infrastructure and deliver water to farmers for an annual fee.

Meridian Energy's project manager, Brian Ellwood, says the proposal has benefits for both farmers and Meridian Energy, and if successful it could be replicated in other areas. "We see this as a natural business opportunity," he says. "We've developed considerable expertise in designing, building and operating water infrastructure through our experience in hydro developments. We think there's a real opportunity to use that expertise to benefit local communities, and achieve a reasonable return for Meridian Energy in the process."

Brian Ellwood says the main benefit for farmers

is certainty. "It gives farmers price certainty for irrigation. They know exactly what they will pay and they can factor that cost into their planning. It also takes away the risk of cost increases in the building of the infrastructure. Meridian Energy carries that risk, so it's another uncertainty farmers don't have to worry about. And because capital doesn't have to be committed for off-farm irrigation infrastructure, it's freed up for on-farm projects instead."

Demand for the scheme is being assessed, with a very strong registration of interest from farmers in the area to date. The next step involves resource consent. At the start of October, the South Canterbury Irrigation Trust and Meridian Energy jointly applied for resource consent to take and use water from the Waitaki River for the Hunter Downs Irrigation Scheme. If that is granted and demand is confirmed, the next steps will be to develop a detailed design, confirm the pricing structure for farmers so they can make a detailed assessment, and apply for the other resource consents required.

Farmers who want more information about the Hunter Downs Irrigation Scheme should visit the scheme's website, www.hunterdownsirrigation.co.nz.

North Otago Irrigation Company Shares Available

Meridian Energy is making available its shares in North Otago Irrigation Company Limited.

Meridian Energy underwrote the development of the scheme by purchasing 23% of the unsold stage 1 capacity (2320 hectares). The scheme, which aims to support the local community by providing a reliable water source to this drought-prone area, was commissioned in October 2006.

Now, Meridian Energy is making this capacity available to local farmers. Farmers who would like more information should contact Brian Ellwood on (03) 357 9744 or by email at brian.ellwood@meridianenergy.co.nz.

Increase Productivity – Eliminate Stray Voltage

Badly behaved, hard-to-manage cows can reduce milk returns for dairy farmers. The reason can be hard to diagnose, but cows who are 'skittish' in the milking shed may have reduced milk let-down, produce more effluent and often have higher somatic cell counts. Research by Meridian Energy on its own dairy farms shows rather than factors like coming into season, this behaviour may be caused by stray voltage around the shed.

Stray voltage is electricity escaping into the cowshed. In effect, the cows are getting 'zapped' – so it's no wonder they're skittish and difficult to handle. A number of factors may be causing stray voltage, including poor earthing, incorrectly installed equipment, the operation of electric fences, or spikes in electricity consumption. These can be relatively straightforward to fix. Our experience shows there are real benefits in eliminating stray voltage, including healthier

animals, increased production, more efficient milking – and, ultimately, improved profitability.

Meridian Energy has produced a booklet for customers, based on our experience and industry research, which explains how to identify and remedy the cause of stray voltage. If you'd like a copy, simply call our Business Services Team on 0800 496 777 between 7.30am and 7.30pm, Monday to Friday, excluding public holidays.



Wind Farms – How we Select and Maintain Sites



Wind farms are the subject of a lot of interest at field day events. Many farmers have asked us how we identify suitable sites and what happens when a wind farm is built, so here is a brief overview.

SELECTING A SITE

New Zealand is an island, so there is no shortage of windy places – but relatively few of them are suitable for wind farms. There are a number of criteria that must be met, including:

- good wind potential – obviously there needs to be a lot of wind, but it also needs to be constant rather than gusty. Elevated plateaus or ridgelines are best
- relatively easy access
- proximity to high-voltage transmission lines
- the ability to achieve resource consent.

For sites with good potential, we enter into an agreement with landowners for more detailed investigation, including erecting towers to collect windspeed data. This is an extensive process and may take considerable time to complete.

Many sites that appear on the surface to have good potential fail to meet one or more key criteria on closer investigation. However, Meridian Energy remains committed to developing wind power as a viable and sustainable energy source, and we are always interested in hearing from farmers who would like to discuss potential wind farming sites on their property.

SITE DEVELOPMENT

Once a wind farm has been developed, a considerable amount of time and effort goes into maintaining the equipment and infrastructure required. For example, roads are developed and gates, fences, bridges and culverts erected as required. These all need to be maintained, so the roads are checked each month and maintenance is carried out as required. This is usually done during working hours, and always in consultation with the farmer. Farmers report that their farm roads are maintained in much better condition than before.

Regular maintenance of the turbines and substation is also required for the safe and efficient operation of the wind farm. This is also usually carried out during working hours. Typically, two operators are required for every 20 turbines on the site, so a 50 turbine wind farm would require five maintenance staff on site at any one time. Once again, all maintenance is scheduled and carried out in consultation with farmers.

Supporting New Zealand Dairy Farmers

Meridian Energy is proud to be a sponsor of the newly created New Zealand Dairy Industry Awards.



The new Awards bring together three previous competitions (the Federated Farmers Sharemilker of the Year, the Fonterra Westpac Dairy Excellence Awards and the Dairy Farmers of New Zealand

Dairy Trainee of the Year), under a single umbrella.

"We're delighted to be involved with the awards," says Meridian Energy Chief Executive Keith Turner. "We're very much a part of the New Zealand dairy industry – we supply Fonterra with milk from our own dairy farms, and we supply the electricity that keeps many dairy farms and Fonterra factories running. This is a wonderful opportunity for us to show our support for an industry that makes a huge contribution to New Zealand.

"We're also committed to sustainability, so we're particularly pleased to be sponsoring the farm environment award as part of our overall involvement."

The new competition will be run in stages this year throughout 12 different regions in New Zealand. For more information, including a calendar of events, visit the Awards website at www.dairyindustryawards.co.nz.

Market Update

Prices on the electricity spot market eased from June 2006 onwards as the inflow season to the hydro lakes approached, and the market factored in decreased risks.

Hydro lake storage levels began to increase around the end of September. By mid-November storage had reached average levels, and by December levels were above average. Spot prices continued to fall as a result.

Looking ahead, farmers with exposure to spot market pricing can expect to see lower prices in the short term, due to the current above average storage levels. The expected average forward price per Megawatt Hour for the first quarter

of this year is around \$41. In the medium to longer term, forward prices are at normal levels as the market has assumed a return to average storage conditions. North Island farmers with spot pricing exposure should be aware that the commissioning of the Huntly e3p (Energy Efficiency Enhancement Project) may see some increase to North Island prices during Quarter 1, due to its impact on reserves.

Protecting a New Zealand Icon

Every summer the blooms of pohutukawa and rata trees announce the arrival of the Christmas season in New Zealand. But these iconic species are increasingly coming under threat from the impact of possums and people. As the new major sponsor of Project Crimson, Meridian Energy is helping to ensure they continue to survive and flourish.

Project Crimson is a charitable conservation trust established to protect New Zealand's pohutukawa and rata – particularly the mainland pohutukawa and the tree rata, which are the species under the greatest threat. As well as raising awareness of issues around tree protection and conservation generally, Project Crimson partners with major replenishment projects and supports local pohutukawa and rata planting initiatives.

The project's focus is on protecting local, native varieties rather than imported plants. Plantings of new trees are sourced from local stock and planted within the natural range of each species.

Sponsorship Manager Yvonne Way says the sponsorship is a natural one for Meridian Energy.

"We have a very strong focus on conservation and sustainability," says Yvonne. "The Southern Rata flower is strongly featured in our advertising, so it's a particularly appropriate initiative. We're very proud to be involved with the effort to preserve these trees which are very special to so many New Zealanders."

For more information on Project Crimson visit www.projectcrimson.org.nz or call 0800 POHUTUKAWA (0800 764 888).



Focus on Energy Efficiency – Royal New Zealand Show, Christchurch

New Zealanders are becoming increasingly interested in using electricity more efficiently, if our experience at the Royal New Zealand Show in Christchurch in November is anything to go by.

Corporate Telephone Account Manager Mel Taylor, based in Christchurch, was one of the Meridian Energy staff on our stand at the show. She says both city and country folk were very keen to talk about ways to save money and reduce the impact on the environment. "Solar water heating was a very popular feature of our stand," says Mel. "We had a representative from a solar hot water panel company on site and people could get detailed information about what was involved and what the benefits were. One lucky local visitor, Hamish Tindall, also won our competition for solar hot water panels for his home – and of course there's no shortage of sunshine in Christchurch!"

Wind power was another major area of interest. "Many people were interested to find out more about what Meridian Energy is doing in terms of new wind generation developments, and we had some very positive feedback," says Mel.

Farmers visiting the stand were also able to find out more about the experience Meridian Energy has had with reducing farm electricity costs, including products like Mahana Blue and Varivac and our own Irrigation Manager system.

We look forward to seeing you at our stand at the upcoming Central Districts Field Days at Manfeild Park, Feilding on 15-17 March, and the South Island Agricultural Field Day at Lincoln University on 28-30 March.

Kids – Win a Great Prize for Your Family!

Swanndri clothing is a real Kiwi legend. The original Swanndri bush shirt was developed in 1913 by Taranaki tailor William Broome. Broome used a secret waterproofing technique to protect against the elements, and called the shirt a Swanndri because of the way the water ran off your back. Ninety-three years later Swanndri is still keeping Kiwis warm and dry with a unique combination of pure New Zealand wool, a rich heritage and the latest in design and technology.

To celebrate our sponsorship of Project Crimson,

send us a drawing of a pohutukawa or rata in bloom and you could win \$500 worth of Swanndri gear for the whole family – an Ashurst jersey for Dad, a Lismore top for Mum, two Brixton bush shirts for the kids and two pairs of gumboot socks. Don't forget to include your name, age and contact details with your drawing and send to:

Meridian Energy Swanndri Competition
Meridian Energy
PO Box 10 840
Wellington.

Prize draw conditions: One prize of one Ashurst jersey, one Lismore top, two Brixton bush shirts and two pairs of gumboot socks will be given away. Competition is open to children 13 and under submitting an entry. Entries close on Friday 16 March 2007. One entry per person. Entries will be judged Friday 30 March 2007. Prizes are not transferable and cannot be exchanged for cash. Judge's decision is final and no correspondence will be entered into. Children of employees and contractors of Meridian Energy's agencies are ineligible to enter. The prize winner will be notified by phone or in writing, during the five working days following the judging. Artwork will not be returned and Meridian Energy reserves the right to publish the artwork.

