



**Ballance**  
**Farm Environment Awards®**  
 Promoting Sustainable Profitable Farming

# 2012 BAY OF PLENTY

Jim and Barbara Hitchcock, and Rhys and Kim Meredith  
 'Castlerock Farm'

## SUPREME AWARD WINNERS

**ALSO WINNERS OF:  
 BALLANCE NUTRIENT MANAGEMENT AWARD  
 LIC DAIRY FARM AWARD**



Whilst Castlerock Farm's dairy effluent system already complied with council's requirements, such is Jim and Barbara Hitchcock's commitment to the environment and the sustainability of their venture, they invested a further \$150,000 upgrading this part of their business.

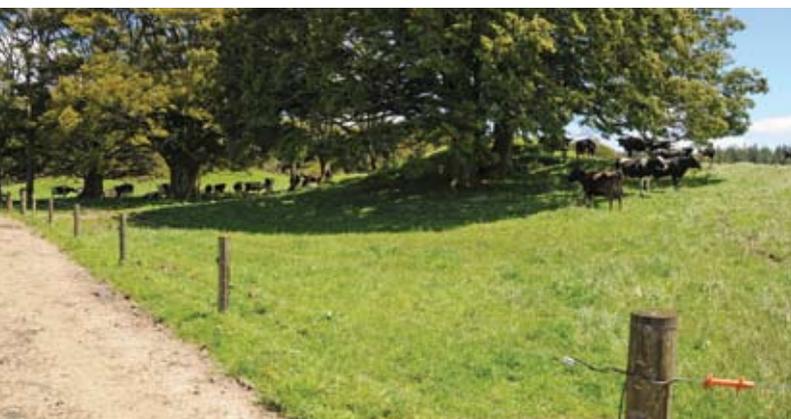
The decision came after a surprise inspection. "On that day we decided that we could improve our effluent system despite getting a clean bill of health," said Jim.

Castlerock is in a high rainfall area and the Rotorua Lakes catchment governed by the Bay of Plenty Regional Council's Rule 11 which restricts most means of increasing farm production.

However, those limitations do not overly concern the Hitchcocks nor their sharemilkers. "The farm is run on a low input system which is sustainable, can be easily managed while remaining profitable," said Jim.

"We use the Overseer computer programme to monitor nitrogen and phosphorus losses from the farm and a consultant has run a farm model to confirm our monitoring. This shows we are within the limits council has set and we're pleased with the results," said Jim.

"It's the traditional style of farming New Zealand is known for, pasture based with low inputs and while the Rule 11 restrictions might seem tough, they are probably the way everyone will have to farm in future," said Rhys who is in his fifth season as sharemilker.



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**Regional Partners**



Jim and Barbara Hitchcock, and Rhys and Kim Meredith  
'Castlerock Farm'

## SUPREME AWARD WINNERS (continued)



Barbara and Jim bought the original farm, at an altitude of around 570 metres in the Mamaku Ranges, in 1974 after it had been converted from a dry stock unit and have added to it since. The only supplements used are those grown on farm in the form of stack and pit silage.

The property has two winter stand-off pads for the 510 Friesian and Friesian cross milking cows, which like the underpass beneath Oturoa Rd which bisects the farm, drain into a newly installed effluent pond.

Jim and Barbara have given the regional council permission to locate an automatic weather station on the farm measuring rainfall, ground water loading and soil temperature. It provides information via the Internet which helps local farmers with effluent management decisions.

Rhys was 31 when he made a rather dramatic change of career. He had previously worked in Papua New Guinea on petroleum projects and then was Downer Engineering's plant manager in Auckland, a role which involved a good deal of international travel.

"In 2001 I got the idea to go dairy farming as I saw it as a way to eventual farm ownership and decided to start at the bottom," he said. From being a 'labour unit' in a milking shed to working on a 2700 cow property Rhys progressed to sharemilking and eventually the 50/50 arrangement he has today with Jim and Barbara.

The Hitchcocks and Merediths are in agreement over the importance of sustainability in their farming operations. They aim to use farming systems and practices which are environmentally friendly, animal friendly and profitable for all partners and staff.



### JUDGE'S COMMENTS

- *Castlerock is an extremely well planned farming structure with Jim and Barbara's close support but not on a day to day involvement, thus allowing their excellent long time sharemilkers Rhys and Kim considerable control.*
- *The farm operates a low cost system with no purchased feed and milks 510 cows producing 360kg MS/cow with a very low Somatic Cell Count (SCC).*
- *Jim and Barbara have a good understanding of nutrient loss management on their lakes catchment area farm.*
- *Through hard work and taking opportunities, Jim and Barbara have a very successful and sustainable business.*

## Rangitaiki Station

### HILL LABORATORIES HARVEST AWARD BEEF + LAMB NZ LIVESTOCK AWARD

Rangitaiki Station on the Napier -Taupo highway is the first large scale farming operation to enter the Bay of Plenty Ballance Farm Environment Awards and as such has set a precedent organisers hope others will follow.



The Landcorp owned deer, sheep, beef, dairy grazing and forestry station is 9,694 ha, and it was farm business manager Ross Shepherd who spear-headed the decision to enter the awards. He did so with the support of Landcorp executive and Board, plus its Rangitaiki farm team of 20 permanent staff.

The aim was to demonstrate sustainable farming practices within a large farming enterprise, to benchmark the team and property against others and to improve awareness of sustainable issues.

“A large number of people are responsible for shaping the station and the practices that are in place today. These folk range from past and present Landcorp people (farm-based and off-farm), numerous industry specialists, regional council personnel and a host of others,” said Ross.

There are 23 dwellings on the station, and 23kms of public road. The station winters 19,090 deer made up of 8,300 commercial red hinds, 400 stud red hinds, 300 stud wapiti hinds, sire stags, replacement and ‘revenue’ yearlings.

There are 28,600 Romney sheep in winter, including 21,300 in-lamb ewes. Other livestock stock farmed includes 1,500 beef cattle (1,100 Angus breeding cows), 2000 cross-bred yearling dairy grazers and 1200 winter grazing dairy cows.

Rangitaiki has close relationships with Massey University, AgResearch and Lincoln University working several trials which will have industry wide benefits.

“The station is to be a North Island pilot farm working with AgResearch to determine drench resistance status in deer herds this year.

Rangitaiki Station’s altitude ranges from 700 to 880 metres above sea level.

“It is a tough environment to farm in due to our short growing season and high wintering costs.”

Rainfall is usually reliable but Rangitaiki has experienced summer droughts in the past. This year 835 hectares will be cropped for swedes, kale and fodder beet, all for winter feeding plus a combination of pasja/cordura ryegrass for summer lamb finishing. Each year 700 ha of pasture silage and 30 ha of lucerne silage is harvested.

As part of a pasture renewal programme, 515 hectares of new pasture is to be sown this year made up of permanent ryegrass and tall fescue based mixes.

Ross has strong views about farming sustainably. “From a land point of view we have a responsibility to leave it better than we found it. A healthy planet is vital for life to prosper now and in the future. The land will still exist in some form long after ourselves and future generations have departed.”



### JUDGE’S COMMENTS

- Pasture management is a feature of the Rangitaiki business – a full-time agronomist is employed to make sure optimum decisions are always taken.
- Crops are being used not only for their profitability but also as an on-going contributor to pasture rejuvenation and soil development e.g. potatoes for pasture rejuvenation and pasja/cordura ryegrass for lamb finishing and kale for deer.
- The condition score of all livestock was clearly evident and production levels/revenues clearly recorded. All on-farm information is valued and considered in the management of the business.

Mark Mayston  
'Bruntwood Farms Ltd'

## PGG WRIGHTSON LAND & LIFE AWARD ZESPRI® KIWIFRUIT ORCHARD AWARD

Buying a kiwifruit orchard and grafting a new variety just before the virulent disease Psa-V was found in New Zealand may not seem fortuitous but Mark Mayston said his family have no regrets about their purchase.



"If we can keep Psa-V out or learn to manage it, this orchard has a bright future," said Mark who manages the orchard owned by the family company Bruntwood Farms Ltd which includes Mark's parents Peter and Jenny Mayston and younger brother Robbie.

That confidence comes from the family's long history in the kiwifruit industry in which Peter and Jenny have been involved since the mid-1970s. They subdivided their farm at Plummers Point to fund development of their first kiwifruit orchard, built their own pack house and have expanded ever since. Their four sons were immersed in the kiwifruit industry through their childhood. Peter and Jenny were also founders of the Apata pack house and cool store, along with Brian Earp and Mike Muller.

It's that kind of knowledge, experience and determination among growers that the industry will need to ensure its successful future.

The orchard is one of several the family owns and was in a run down state when they bought it in 2010. The vines were growing on Bruno rootstock, which is a bonus given that variety appears more tolerant of Psa-V. The orchard was grafted 18 months ago to the new early gold variety G3, which in early January, had an impressive crop of fruit and vigorous replacement canes.

The entire block has been covered with artificial shelter to protect it from wind and hail. Even though the orchard is on the harbour edge, frost remains a threat.

"We have installed a 10inch Bore on the property for irrigation and frost protection. Alongside this system we run a Waterforce online monitoring system, which detects soil moisture, temperature, and rainfall."

Management on all the family orchards includes strict Psa-V hygiene protocols for people and vehicles entering or leaving. Pruning equipment is sterilised and on each orchard nurseries to grow budwood are established, avoiding the need to bring in plant material.

The family is acutely aware of the sensitivity to the harbour to run-off and sees the clearing and planting of 7 ha of steeper land as helping to reduce that risk. An area of wetland has also been cleared and is once again subject to tidal flushing now flood gates have been opened.

"To me sustainability means to be able to produce our crop with the least real effect on our environment and the people around us."



### JUDGE'S COMMENTS

- A feature has been the development of infrastructure to limit the constraints of wind, hail, frost and water.
- Mark's awareness of soils and nutrients, vine health and orchard management have resulted in spectacular growth of a new variety G3 from grafting in just 16 months.
- The staff are a key focus within the business – training and career path development are considered important. Staff retention is testimony to this. Mark's kiwifruit industry participation is extensive. It covers many aspects of the business, including growing, harvesting and marketing.

## Harry and Anne Frost 'Mamaku Blue'

### MASSEY UNIVERSITY DISCOVERY AWARD

The Frost family have always known the blueberries they grow are highly nutritious but now they have the scientific research to back their beliefs.



Studies carried out by Massey University Masters student Natasha Birt revealed that Mamaku Blue's juice had one of the highest levels of antioxidants when compared with juice made from berries from other sources. A further study on the health benefits of the berry is being continued by another PhD student.

Taking the decision to offer the scholarship, with the support of Technology New Zealand, to scientifically establish the health benefits of blueberries is yet another example of the Frost family's commitment to the products they produce and willingness to invest in the industry's future.

It's very much what Anne and Harry Frost, with son Phillip, have been doing since the business was established in the early 1980s. Mamaku Blue began when the first blueberry bushes were planted on their 40ha farm in the Mamaku Ranges above Rotorua.

Today 5.5ha of the land is in orchard with 0.75ha in gooseberries and 4.75ha in blueberries. Frost is a constant problem and the covered orchards have a series of fans to keep air moving thus reducing the potential for freezing but Harry said the move to biological management practices and inputs has also helped raise soil temperatures. "I was pretty sceptical at first but there's

been a significant increase in worm numbers, enhanced pollination and improved plant health. I reckon winter ground temperatures have risen by up to 3 degrees," he said.

This summer's extremely wet weather has adversely impacted the business. "We should have begun picking fruit from New Year's day and selling it at farmer's markets but the weather was too wet," said Phillip. Fruit was swelling and splitting.

Every weekend Anne and Phillip make the trip to Auckland to sell at two markets while Harry takes fruit to the Tauranga and Mount Farmers Market. A staff member attends the Rotorua market.

Mamaku Blue is more than an orchard. It is a tourist destination with a café, museum, winery and orchard tours. The natural 'cathedral' within the stand of native bush is popular as a wedding venue.

The family has been farming the land for 45 years and wants to continue conserving and enhancing nature's natural process by encouraging bio-diversity in the soil. The Frosts see themselves as guardians of the soil and the environment for future generations.



### JUDGE'S COMMENTS

- The introduction of mechanised harvesting, grading and sorting technologies imported from North America.
- Collaborative studies with Massey University to confirm the health benefits and qualities of Mamaku blueberries.
- The on-going development of new product lines plus diversification into other areas of activity within the property – examples are the hosting of weddings in the native bush cathedral, the café/shop and farm tours.
- Mamaku Blue is now a fully integrated business from growing the fruit to direct marketing.

Bruce and Judy Woods  
'Dreamfields Farm Ltd'

**WATERFORCE INTEGRATED MANAGEMENT AWARD**

Climate change may mean the days of New Zealand dairy cows grazing outside year round could be over.



That's the view of Edgecumbe dairy farmer Bruce Woods who with wife Judy, is already preparing for what he believes will be the management system of the very near future.

The couple want to build a 4000 square metre covered feed pad or wintering barn for the 460 jersey cow herd on the farm they call Dreamfields near Edgecumbe. Keeping animals inside is something of a controversial subject for many New Zealanders but Bruce said it makes sense.

"I'm sure, given the choice cows would rather be inside when it's wet and cold. This property gets very muddy in winter and it's not pleasant for cows to give birth, or their calves to be born in those conditions. The cows would still have the ability to go outside to graze," said Bruce who has seen indoor farming systems in action in Europe.

Bruce believes the climate is already changing with more significant weather events, particularly those involving rain, than in the past. Bruce and Judy want to prepare for the future welfare of their stock and the environment in which they farm, and part of achieving that aim is investing in the new wintering barn.

"It will give us full control over our cows during winter, compared with having them at a runoff, or away at grazing. Hopefully with this on/off grazing approach, we will be able to graze to higher residuals over winter," said Bruce.

The building will have effluent reticulated to a pond, but sawdust on the top of a drainage layer will absorb much of the waste. This will be cleaned out and spread over the paddocks that are due to be re-grassed.

Building the barn won't be the first time the couple have taken the lead in the district. Theirs was only the second farm in the North Island to install a centre pivot irrigation system about 11 years ago. "We use a centre pivot as we believe it is the most efficient use of water."

While the Dreamfields farm is virtually flat and often very wet in winter, it dries out in summer. Irrigation is carried out through the night and into the early morning to minimise evaporation and also take advantage of off- peak power rates. Bruce has used tetraploid ryegrass on the irrigated blocks where it has thrived and doesn't seem to get under stress.

Bruce and Judy believe they are custodians of the land for future generations and don't want to degrade any of the resources they have on, or off farm.



**JUDGE'S COMMENTS**

- There is a strong desire to reduce water usage across all aspects of the business e.g. not wetting the dairy yard during milking and the use of low volume nozzles in the dairy.
- Bruce has a clear understanding of soil types and therefore water holding capacities – this allows him to maximise efficiency under irrigation.
- The Woods are considering an opportunity to work with Fonterra on an irrigation system for part of their farm which will allow the incorporation of factory waste water alongside fresh water.

## BAY OF PLENTY REGIONAL COUNCIL ENVIRONMENTAL AWARDS

### Douglas and Catherine Bull, 'Lake Farm'



Forty years ago friends and family questioned why Douglas and Tess Bull had bought, as their first farm, a property which included a large area of apparently unproductive land.

Today, thanks to relentless focus and determination, Lake Farm is both an attractive and productive dairy unit which meets the aspirations of the Bay of Plenty Regional Council Environmental Awards, the focus of which is good sustainable and environmental practices.

Douglas and daughter Catherine, who now manages the 315 ha farm, demonstrate a clear understanding and appreciation of wise land use with intensification on highly productive land and retirement of marginal areas. Key focus areas have been weed control, pasture renewal, drainage, irrigation, land retirement and planting.

Areas of the property have been retired to enhance its ecological merit and this work has been completed to a very high standard. It has included the involvement of a Masters student to research native rushes and the extensive plantings of these, along with native trees.

The family also has a solid understanding of the wider impact of

wetland areas on both the physical and social environment. Not only are the wetlands home to native birds, but they are also of cultural significance and to this end local Maori are welcome to harvest watercress and eels from these areas.

Lake Farm's owners have further projects in mind as they strive for higher levels of productivity supported by environmental sustainability.

A challenge is the effective management of livestock, which includes 835 milking cows, 140 yearling heifers, 200 weaned heifers, 12 yearling hereford bulls and 18 mature hereford bulls within a diverse range of topography and the extremes between very wet winters and dry summers. To overcome the summer dry, four pivot irrigators have been installed to cover a total of 130 ha, with a further 100 ha of more hilly land to be irrigated which will include adding diluted effluent from the milking shed settling ponds using 'k-lines' and laterals.

While much of the area irrigated by the pivot system is virtually flat, the irrigators are also able to travel over rolling contours too. Douglas is designing a plan to extend the irrigation reach as far across the farm as possible.

Douglas and Catherine love the land and actively participate within farming and local community affairs, as did Tess, Doug's late wife who passed away 5 years ago.

### Whakaue Farming Limited, 'Tihiotonga'



Sustainability has special meaning for those charged with managing a 700 ha sheep and beef farm on the outskirts of Rotorua. That's because Tihiotonga will never be sold.

Tihiotonga is administered by Whakaue Farming Limited, a wholly owned subsidiary of Ngati-Whakaue Tribal Lands Inc. which is committed to maintaining and constantly improving its properties both environmentally and productively.

Trevor Smythe, general manager of Whakaue Farming Limited said around 10,000 shareholders currently have an interest in the three farms (including Tihiotonga) administered by the company and they take pride in the economic and environmental sustainability of their lands.

Taking such a long term view of farming brings a focus to management practices which is not solely profit driven, he said. At Tihiotonga, this focus has included the extensive fencing of all waterways, planting with native trees and shrubs plus the fencing of existing native bush.

The farm is managed by Rod and Nikki Monson with the help of shepherd Dean Devery. At July 1, 2011 the farm was running 751 two-tooth Romney ewes, 2451 mixed age Romney ewes and 1048 Romney ewe hoggets. A flock of 100 Stud Suffolk ewes

are used to supply sires for hogget mating. The majority of the company's 120 breeding rams are held at Tihiotonga. Cattle included 487 autumn born 15 month old heifers.

The property is within the Lake Rotorua catchment and close to the city itself making environmental considerations for farming practices even more important. But that aside, Whakaue Farming Limited, its parent body Ngati-Whakaue Tribal Lands Inc. and those who manage the land, share a commitment to care for the wider environment as well as ensuring the farm is economic.

"No farm is an island and everything which happens on the land can have wide reaching impacts on the environment around it," said Trevor. In the case of Tihiotonga, that could include affecting the water quality of Lake Rotorua which is why the farm operates under the restrictions of Bay of Plenty Regional Council's Rule 11.

All three farms administered by Whakaue Farming Limited have up to date nutrient management plans and were among the first in the Lake Rotorua catchment to be benchmarked under Rule 11.

For those who administer Tihiotonga, sustainability means that 'future generations will be able to derive income from this farm forever. To achieve this each generation must leave the farm in a better state, productively and environmentally'.

## THE AWARDS

The Ballance Farm Environment Awards are designed to encourage farmers to support and adopt sustainable farming practices. The awards are now held in Northland, Waikato, Bay of Plenty, East Coast, Manawatu/Whanganui, Wellington, Canterbury, Southland and Otago. This is the tenth year in the Bay of Plenty Region.

## THE AIM

The aim of the Ballance Farm Environment Awards is to recognise farmers who pursue good environmental practices. When farmers enter the awards, a team of assessors visit the farm and discuss the entire farming operation. The awards are designed to be a positive experience for everyone, an exchange of information and ideas, plus a chance for farmers to also get information and advice from the various assessing representatives.

## THANK YOU

The Ballance Farm Environment Awards and the Farm Environment Award Trust (BOP Region) committees would like to thank Elaine Fisher and the Bay of Plenty Times for their help in preparing the content for the winner's booklet.

Thank you to our entrants who entered the awards this year.

A big thank you to all people who volunteered their time and expertise with the assessment process.

Thank you to all regional and national sponsors. Your sponsorship of the awards is appreciated and we are grateful for your on-going support.

And finally, thank you to Margaret Wright for being the 2012 Bay of Plenty Judging Coordinator.

## UPCOMING EVENT - FIELD DAY TO BE HELD AT THE SUPREME WINNERS PROPERTY

The field day will be held at the 2012 Supreme Winners property.

**Name:** Jim and Barbara Hitchcock, and Rhys and Kim Meredith

**When:** Tuesday 27th March 2012

**Time:** 9.45am to 3.00pm (with lunch provided)

**Where:** 1089 Oturoa Road, Hamurana, Rotorua 3072

**FOR MORE INFORMATION, VISIT:** [www.bfea.org.nz](http://www.bfea.org.nz)

● The Bay of Plenty Ballance Farm Environment Awards process is managed by the Farm Environment Award Trust (BOP Region).

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