



Ballance Farm Environment Awards

Promoting Sustainable Profitable Farming

2009 CANTERBURY WINNERS

NICK AND MICHELLE WARD
RHYS FARM

SUPREME AWARD 2009
BALLANCE NUTRIENT MANAGEMENT AWARD
HILL LABORATORIES HARVEST AWARD
GALLAGHER INNOVATION AWARD



Market-driven production and a focus on small scale specialist crops have been a hallmark of Nick and Michelle Ward's farming operation at Milford near Temuka.

Nick's family have been farming in the area for four generations. He returned to the family farm in 1987, and Nick and Michelle started farming on their own account in 2000. They now farm a 224ha irrigated intensive crop and lamb fattening property at Milford, plus 230ha of dryland at Geraldine. A key feature of their entry into the Ballance Farm awards was the preparation of a 20 page report clearly outlining their system as well as philosophies and goals. "We just felt it was pretty hard to tell the judges everything about ourselves in two hours," Nick says.

One aim is to be a small scale specialist producer rather than a large scale commodity producer, while at the same time recognising the need to achieve economies of scale. As well, they aim for sustainable agriculture with adequate profits. Production is market driven, and operating costs should be in the range of 60 to 65 per cent of gross income. They say they have achieved their aim of developing a reputation as good growers.

Cropping on the home farm this season has included a mix of grass seed, feed wheat, feed barley, brassica seeds, vegetable seeds, faba beans, onions, shallots, lucerne and pasture. On the lease block grass seed, feed wheat, feed barley, linseed, lucerne and pasture have been grown, while 6.5ha was leased to a potato grower. Such a wide range of crops must produce big management problems. How do they deal with that?

"Set goals for the week and make them happen," is Nick's immediate response. He says they try to keep the system for grasses and cereals as simple as possible, and for the other crops they now tend

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NICK AND MICHELLE WARD RHYS FARM

**SUPREME AWARD 2009, BALLANCE NUTRIENT MANAGEMENT AWARD,
HILL LABORATORIES HARVEST AWARD, GALLAGHER INNOVATION AWARD**

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to only grow those they know do well on the farm. "We've tried a few other things, but just know the ones that work well in this cooler, coastal South Canterbury environment," Nick says. "It's not easy, but as time goes on it comes with experience. Each one provides a unique challenge, but

the reward at the end makes the challenge worthwhile." He emphasises the

importance of the good backup

they get from companies

they grow for. "We take

that into consideration

when we grow them."

Most of the cropping

land is worked on

a six-year rotation

from grass to

grass. This could

be for example

ryegrass seed

–grazing/silage

– wheat –break

crop (brassica,

beans, plantain) -

wheat –barley. From

time to time they

have tried other crops,

some grown with a high

degree of success, others

less so. Plantain has been grown

successfully for a number of years,

but not this season because the market was oversupplied. Timothy grown for seed is in a similar situation. Forage fescue has been grown for a number of years, while process and garden peas are an excellent break crop, but the seed cost is high and there is no control over planting and harvesting dates. In 2002 the Wards bought a garlic business, relocating it from Blenheim to grow garlic

and shallots for seed and commercial purposes. "We purchased the garlic business as we wanted to create a niche in our business and further intensify our operation." However a fire in 2005 destroyed the drying shed where the good garlic seed was stored, and they were unable to obtain sufficient commercial garlic seed to continue. "If we were allowed to import seed tomorrow we'd be back into it," he says. "So we were forced to find another niche for our business. We've continued with shallots, but now also grow onions which are sold on the local market. Some of our onions are peeled using an imported air peeler and sold to wholesalers." Most of the time the Wards graze traded livestock, but from time to time they also take on dairy and sheep grazing. They intend to continue with this regime.

About 3000 fattening lambs a year are bought, plus some ewes to tidy up paddocks. About 40 to 50 beef cattle are fattened and 140 dairy heifers are grazed from January to June. "These provide good cashflow and are reasonably easy care. We only have small young mobs to avoid pugging," he says. To maintain optimum fertility soil tests are done on half of the property each year, and every paddock is treated on its own merits. As well, a range of crops are herbage tested each year.

The Wards are particularly careful about how they treat their soil. All crop residue is chopped and reincorporated into the soil, with the exception of some wheat stubble. Each crop has a maximum of two to three machine passes, including drilling, and about 30 per cent of the farm is subsoiled annually to reduce compaction. They avoid working wet soils. Spring crops are generally avoided and 90 per cent of crop establishment is in the autumn.

Irrigation is by three hard hose machines with 400m of hose, plus a newish Reinke lateral irrigator. Importantly all the irrigators are computer controlled, increasing water use efficiency. Water meters are used in 14 paddocks to assist in water budgeting.

JUDGES POINTS

- Above average crop yields from a wide variety of crops are well suited to the farms soil types and weather.
- All crops are grown on a six year rotation including grass for seed and grazing. Production is market driven and has good backup from the companies the farm grows for.
- As much crop residue as possible is returned to the soil to increase organic matter.
- Half of the farm is soil tested annually as well as a range of crops that are herbage tested.
- Irrigation is measured with water meters and probes and a computer program is used to help with water budgeting.
- A pneumatic onion peeler was purchased to add value to onion crops and help spread financial risk.
- Nick modified the wheel base of a tractor to fit the rows of mown grassed crops for faster drying and also modified a fertilizer box to place fertilizer for vegetable crops and reduce costs.
- Nick and Michelle work together and have a very high level of day to day planning.
- Nick and Michelle are achieving crop yields in the top 5% of arable producers through very good nutrient budgeting, irrigation monitoring and preservation of soil structure by a mix of direct drilling, straw incorporation, minimal burning and tillage and sub-soiling.



MICHAEL AND ANGELA CHAFFEY
MAROKI



ENVIRONMENT CANTERBURY WATER
EFFICIENCY AWARD

Michael and Angela Chaffey need to keep a close eye on water efficiency because irrigation accounts for 25 percent of their farm costs.

Since the 505ha property became fully irrigated they have specialised in winter grazing dairy cows with up to 4000 cows at a time in mobs of about 300. Before that the property ran sheep and deer, and had a small amount of cropping. The only livestock that belongs to the property now are 50 to 300 beef heifers, depending on the market. The farm, near Te Piritā on the north side of the Rakaia River, has been in the Chaffey family for over 40 years and is situated in the heart of new dairy country. "We've done some winter grazing for 15 years, but we've specialised in it since 2002," Michael says. "We try to find the right balance, but it does change from year to year depending on the market."

He says they are in an ideal position to be dairy graziers as they are surrounded by dairy farmers. "All the cows are walked here, and that has benefits for animal health." The system is relatively simple, and they use contractors for spraying and some cultivation. "It is a simple system, but realistically it's probably a two person farms. At times I'm flat out." The farm is irrigated by five rotorainers irrigators and one centre pivot, with water taken from wells up to 210 metres deep.

Electricity costs for pumping water from that depth are extremely high, so all measures are taken to make the irrigation system as efficient as possible. Soil probes are used to monitor soil moisture levels to ensure that no more water than necessary is applied. "What they've shown up is that I've probably been under watering rather than over watering because the cost of water here is horrendous."

He is enthusiastic about using the latest technology to maximise water efficiency, and has been studying overseas irrigation systems. "We're trying to make it as efficient as it can be, but I think there are still quite big gains to be made there." As a measure of the cost of irrigation, the power bill is around \$100,000 annually before any electricity is actually used. "The key for us is to keep monitoring and use the technology more than we have. There's a lot of

potential, especially under the pivot." For fertiliser they use one-third conventional fertiliser, one-third liquid fertiliser and one-third chicken litter. "This year we also did some trials with pig manure. The aim is to grow organic matter quickly."

A percentage of the farm is soil tested every year. "We'll keep doing that because we need a picture of what is happening. Soil health is everything; it's the key. Feed barley is grown over 10 to 20 per cent of the farm and sold to local farmers. Besides grass, other crops are kale and lucerne. Some land is leased for potatoes and onions, and one block of 160ha is leased for milking.

Michael says that with farming intensification extra effort is needed to protect the environment. "If you bugger up the environment, you're going to bugger up yourself in the end." He believes that farming systems now are a lot better environmentally than they were in the past.

Angela does all the accounting and helps out on the farm where she can. They have two children and Michael's parents live on the farm. Michael enjoys learning from other farmers. They host tour groups of farmers from South America, which "are always good value", and he enjoyed having the Ballance judges looking over the farm.



JUDGES POINTS

- *A passion for water management is evident. All water use is recorded with the use of moisture probes to ensure no more water than necessary is applied. The farms own weather station and the latest technology carefully monitors water requirements.*
- *Enthusiastic about the latest technology to maximize water efficiency and studies overseas irrigation systems.*
- *Dedicated to water use in Canterbury, Michael is a member of the Selwyn-Rakaia Cluster Group Network working with ECan on guiding strategies to manage groundwater in a fully allocated zone.*



COLIN AND HILARY GUILD QUARTZ HILL STATION



SILVER FERN FARMS LIVESTOCK FARM AWARD

By integrating livestock, machinery and labour Colin and Hilary Guild have developed a well managed pastoral farming operation which maximises the strengths and weaknesses of three properties.

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The Guild's own Quartz Hill, a 2800ha high country property at the head of the Selwyn River, as well as two Canterbury Plains blocks of 237ha and 120ha, 15km away near Windwhistle. Colin says that although the country is difficult to farm it has a lot of potential. A measure of what can be achieved is the diverse range of products coming off the land which include lamb, wool, beef, venison, velvet, and crops.

Quartz Hill was subdivided from the family-owned High Peak Station 22 years ago when Colin and his brother James decided to go their own ways. The Windwhistle properties were added in 2001. Quartz Hill is difficult country, rising to almost 1000m. It is cold in the winter and that is exacerbated by heavy clay soils. It is exposed to strong nor'west winds, and seasonal flooding.

The Guilds run a 4500 Perendale ewe flock and try to finish all their lambs. Some of the ewes are mated to a Suffolk terminal sire for lamb production, and the remainder to a Perendale ram to breed replacements.

The true lambing percentage is 120 to 130 per cent, which is very good for such difficult country, and the Guilds have a good reputation for their Perendales.

Ewe numbers have been much higher, but in recent years have reduced in response to low lamb prices, and in an

attempt to get better performance from lower numbers. Angus cattle have replaced Herefords on Quartz Hill, which now runs about 450 Angus and Angus cross breeding cows. Some are mated to Charolais bulls, which Colin says are "an excellent cross especially from a first-cross Angus-Hereford dam". Calves are wintered at Windwhistle and sold in the autumn at 18 months and close to 500kg liveweight. "We could never do that at Quartz Hill, it's too summer dry, but down there with better summer rain, and with improved grasses and better fencing we can."

The deer operation produces both venison and velvet. The property produces about one tonne of velvet annually. Of 650 hinds about half are mated to Wapiti stags as terminal sires with the aim of selling 60 to 70kg weaners. They are sold together with some of the straight red deer weaners at an annual sale held in conjunction with Colin's brother James. For the first time this year wheat and barley have been grown because insufficient money was being made out of sheep. On Quartz Hill red tussock has been used in riparian strips to control water run off, in association with a large number of stock water dams that have been created. As well Colin has installed three gravity-fed reticulated water supplies.

A big area of gorse and broom has been ring fenced and that will be allowed to revert to native bush. Outside of that woody weeds on the hill country are controlled vigorously. Because the area is windy, extensive shelter belts have been established. On Quartz Hill 27km has been double fenced for shelter belts, with another 19km on the two down country properties.

Over grazing is avoided. "It's summer dry here so we always try to leave a bit of top on our pastures," Colin says. Colin and Hilary are both heavily involved in community activities, and they have a staff of four on the farm. "We've got very good staff and they are a vital part of the operation," he says.



JUDGES POINTS

- *Very good integration of sheep, cattle and deer help preserve the unique environment.*
- *All stock are able to be fattened year round with the purchase of a down land property.*
- *Animal welfare is well catered for through very good shelter and plans are in place to minimize the effect of adverse weather.*
- *Stock health, quality and production were a feature of the property.*



JOHN HARRINGTON
TE MANIA LIVESTOCK



NEW ZEALAND FARM ENVIRONMENT AWARDS TRUST HABITAT AWARD

Te Mania Livestock is a running a big efficient, performance-oriented stud cattle farming operation while at the same time making significant gains in enhancing the natural environment.

Situated on the narrow coastal flats from Claverley to Conway Flat in North Canterbury, the well known, 80-year-old Te Mania Angus cattle stud has been owned by the Wilding family since 1932. Frank Wilding, who took over in 1952, now spends much of his time restoring native vegetation on the property, while Tim Wilding who took charge in 1982 has moved to off-farm business interests leaving the day-to-day management with John Harrington. "I'm treated like part of the extended family," John says. "There's obviously a lot of history with the stud. Management is now working hard to keep it at the leading edge of Angus genetics in New Zealand. It's a challenge I enjoy." The 1700ha of coastal land is half owned by a family trust and half leased. This season it's carrying 850 mixed age stud Angus cows and heifers, while 1200 stud Perendale and Texel ewes are run in a 50-50 partnership with neighbour Tim Anderson.

About 260ha are under irrigation, using a mixture of centre pivot, k-line, and hard hose irrigators. Water comes from the Conway River. "We are focused on what our clients want. That is performance-oriented traits which can add value to a client's business." John says that running a large number of cattle puts a lot of environmental and population pressure on the animals and sorts out any deficiencies.

Frank started performance recording in the 1960s and that has continued to the point that Te Mania cattle genetics are highly sought after. He was also instrumental in starting Te Mania Australia in 1972, and although that is now a separate business the two Te Manias co-operate on genetic improvement. "Performance is one of the key things. Frank instigated it back in the '60s and we're trying to carry that on now in a sustainable way and improve it," John says. "Part of the strength of this operation is that we have a good team of people to make sure things are going in the right direction."

Included in the team is North Canterbury Angus breeder Lindsay Haugh who is involved with genetic selection. They try to source the best Angus genetics from around the world. The award judges said that Te Mania was an excellent example of a careful integration of farming with native areas to reduce effects on the environment.

They concluded that the land had been well farmed for the last 80 years with a strong emphasis on producing bulls that shift well and produce the best returns for clients. The farm is situated in a prime spot. The narrow coastal flats are backed by the Hundalee Hills and are dissected by a series of bush filled gullies feeding down to the sea. To the north the majestic Kaikoura ranges rise out of the sea.

It is a truly spectacular location, and the owners and management team aim to keep it that way. Enhancing the environment and farming sustainably is a big part of the overall farming operation. "We don't overuse nitrogen. With the waterways on the property we are very conscious of the need to minimise run off."

Fencing off and covenanting bush areas has been a critical way of buffering the waterways from the farming operation. So far 330ha have been fenced off to exclude bush and river margins, and 80ha of this are protected by QEII covenants. More of that will be covenanted and regeneration is being extended into new areas each year with seedlings grown by Frank.



JUDGES POINTS

- 330ha of Te Mania has been fenced off to protect native bush and streams.
- Over 80 ha is covered by a QEII Trust Covenant with another larger covenant pending.
- This property has had three generations protecting and planting native vegetation.
- The well known Angus stud breeds high performance cattle.
- Te Mania is an excellent example of enhancing the environment while farming sustainably.



JOHN AND ROBYN FAULKNER THE TERRACE

LIC DAIRY FARM AWARD



A low stocking rate and respect for all aspects of the farming system are key aspects of John and Robyn Faulkner's dairy farming operation in North Canterbury.

"Our whole farming system's run on respect," he says, "and it's respect for everything - for the cows, the farm, the people, and the environment.

"It's all a really tightly interwoven thing because you can't have respect for one thing without respect for the others. That's our whole philosophy." John and his wife Robyn have been on the 162ha Culverden farm since 2001. He has spent most of his life in dairy farming, like his father and grandfather, on the family farm at Kereone near Morrinsville.

Now John's 30-year-old son Tamlin has come from Auckland to try his hand at dairy farming. "We're looking at succession scenarios, and that's why my son is here to see if he wishes to take up dairy farming. If it doesn't work we'll look at other options." John and Robyn have reached a stage of life where they are gradually easing themselves out of full involvement in the farm, to pursue other interests.

While Robyn is very involved with massage, dog grooming and crafts, John has become very interested in adventure cycling events. In 2007 at age 51 he competed in and won the 7200km Paris to Dakar cycle race. "I did ok in that", he says with a high degree of understatement. "I like adventure cycling- type events and want to continue with them."

He is also a member of victim support for North Canterbury and involved in Enterprise North Canterbury. He has been doing a masters degree in agribusiness and plans to finish that off. The irrigated farm, which is divided into 26 paddocks, winters 500 cows and milks between 460 and 475. Production is around 220,000kg of milksolids a year working out at about 480kg per cow and 1500kg per hectare.

Irrigation from the Amuri Irrigation Scheme is by rotorainers on a 13-day rotation. It has not been possible to install centre pivot irrigators on the property because of power pylons. John has a passion for management and performance of the herd which has been in the family for 60 years. His aims include reducing stock numbers and making feed supplements on-farm to help reduce costs and improve farm profits. When

they bought the current farm eight years ago, it had been sharemilked for the previous 22 years. Improvements since then have included getting rid of a serious thistle problem, regrassing the majority of the pastures, increasing production, and creating an attractive staff housing environment as well as building an outstanding homestead which is tastefully integrated into the farm environment.

Well maintained shelter plantings create a pleasant environment for working in and for livestock. "We don't have a high stocking rate. I really like my cows, and like seeing everything well done and be well maintained. It's a balance so that you're not putting too much pressure on anything, but you do have to meet your financial goals as well". John Gueveres from Uruguay is in his second year as farm manger.

"He's a top notch person, one of those people that's held in high regard with very good ethics and morality." Two other farm workers are also from Uruguay plus Johns son Tamlin. John says the systems they run are staff friendly. "That in turns flows through to the environmental management and how we run the effluent system. If there is a good working environment then I expect things to be done to a high standard." The judges commented that John and Robyn have improved the pastures and production at The Terrace, turning it into a sustainable farming enterprise through their passion for the dairy stock, their management and their attention to pasture management.

Their strong philosophy and expectation of respect, high standards for the farm and staff, and their social and community involvement was to be commended, the judges said.



JUDGES POINTS

- Attention to animal health and feeding management has resulted in above average per cow and per ha production.
- A high level of soil monitoring and nutrient budgeting resulted in very good pasture production.
- A great awareness for staff conditions including working hours and accommodation



BEN TODHUNTER AND DONNA FIELD CLEARDALE



PGG WRIGHTSON LAND AND LIFE AWARD

Ben Todhunter and Donna Field run a successful pastoral operation on the spectacular country between the steep northern slopes of Mount Hutt and the Rakaia River.

Cleardale is a 1250ha freehold farm on the south side of the Rakaia, upstream from the gorge. Before Ben and Donna took over in 2006 it was part of a larger family farming company that also ran Lake Heron Station. Some livestock is still bought from Lake Heron, but it is now a completely separate operation. Ben's parents still live and help out on the farm. Ben and Donna run an Angus cattle stud, as well as Halfbred, Merino and English Leicester sheep studs.

Of the 4500 ewes run on Cleardale, 3200 Halfbreds are mated with a Poll Dorset or Southdown terminal sires for lamb production, while 1300 Merino ewes are reared for fine wool production, as well as for mating with English Leicester rams to produce halfbred replacement ewes. Two hundred and fifty breeding cows are carried, plus about 140 heifer calves are wintered over. Two hundred and thirty Angus steer calves are fattened for the Five Star Feedlot near Ashburton. In addition they are wintering 60 bulls for breeding and selling.

A new enterprise on the farm, unusual for the high country, is 40ha cropping milling wheat and feed barley. "We find it's quite useful for the rotation and for controlling weeds, and we seem to get reasonable yields," he says.

Now that their four children are getting older Donna is getting more involved with the farm. "She's an equal shareholder with me in the farming company. She does a lot of the staff side of things, helps with the mustering, and organises a lot of the conservation plantings and weed and pest control." Ben says that historically the property has had good shelter belts. It is subject to the full force of the nor'westers coming down the river which cause wind erosion and weed spread. Since the Todhunters bought the land in the 1940s there has been an extensive programme of shelter belt planting on the developed flats and terraces. More recently riparian strips have been created along streams flowing down to the Rakaia River. These are being planted in corridors of natives. They have a clear focus on grazing management to maintain the quality of pasture and to get optimum use out of it. They grow a lot of winter

forage brassicas and use cattle to control feed quality. "We are disciplined with our feed budgeting to try and optimise pasture cover, and make it as palatable as possible. During winter we rotate large mobs of sheep behind electric fences."

The main problem weeds are gorse and broom spreading on to the property out of the Rakaia River. Ben says they have been well contained by past generations. Donna is chair of the local Landcare Group which has recently surveyed emerging weeds in the Rakaia is working to eradicate them.

Donna is also in charge of fundraising for the Methven Primary School. Ben has been involved in farming politics, and has been chairman of the High Country Committee of Federated Farmers. Until recently he was chairman of the High Country Accord.

He has a strong belief that private individuals can look after conservation values as well as the Crown. He is a member of the Molesworth Steering Committee and has been involved with a Sustainable Farming Fund project looking at how to best manage biodiversity and farming on high country properties. The judges said Cleardale is well managed by a couple dedicated to developing its potential, and with a clear focus on maintaining a sensible balance between economics and the environment.



JUDGES POINTS

- Long term involvement with the High Country Accord and successful promotion of the principles of sustainable land management to Government officials.
- Ben is part of the oversight committee for Molesworth Station.
- Donna is the chairperson for the Whitcombe Landcare Trust which oversees a weed and pest management program in the Rakaia River.
- Through direct drilling they minimize the threat of soil erosion.
- Very good shelter catering for the needs of the sheep and cattle.

FINALISTS - WHY?

NICK AND MICHELLE WARD

Achieving high yields through innovation, planning and care for their soil.

COLIN AND HILARY GUILD

A well thought through balance between high quality stock and the environment in which they farm.

MIKE AND ANGELA CHAFFEY

Successfully running a large but simple dairy support system with minimal labour.

JOHN AND ROBYN FAULKNER

Strong farming philosophy and expectation of two-way respect and high standards for people, stock and machinery.

JOHN HARRINGTON TE MANIA LIVESTOCK

Careful integration of stud cattle farming and the protection of streams and native bush.

BEN TODHUNTER AND DONNA FIELD

Showing leadership at a local and national level for the benefit of farming and the environment.

BFEA 2009 – ABOUT THE AWARDS

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, Manawatu/Whanganui, Wellington, Canterbury, Southland and Otago.

This is their seventh year in the Canterbury region.

THE AIM

The aim of the Ballance Farm Environment Award is to encourage and support farmers to 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, and a chance for farmers to get information and advice from the various assessing representatives.

CONTACT US

The Canterbury awards process is managed by the Ballance Farm Environment Award Management Committee. Environment Canterbury is the award operator for the Canterbury region. For more information about the awards or if you would like to be included on the mailing list, please phone the Regional Coordinator on 353 9711.

Environment Canterbury staff can also offer advice and information on sustainable land management, riparian fencing, farm conversion and environmental management. Phone 365 3828.

UPCOMING DATES – FIELD DAY

SUPREME WINNER: NICK AND MICHELLE WARD, RHYS FARM, TEMUKA AND GERALDINE

There will be a field day to showcase the Supreme Award winning farm in Spring 2009. Keep an eye on the Ballance Farm Environment Awards website for more information: www.ecan.govt.nz/bfea

NEED MORE INFORMATION... www.bfea.org.nz

● For more information please contact the Ballance Farm Environment Awards in the Canterbury region contact the Canterbury Coordinator, phone 03 353 9711 or go to www.ecan.govt.nz/bfea.html or bfea.org.nz

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