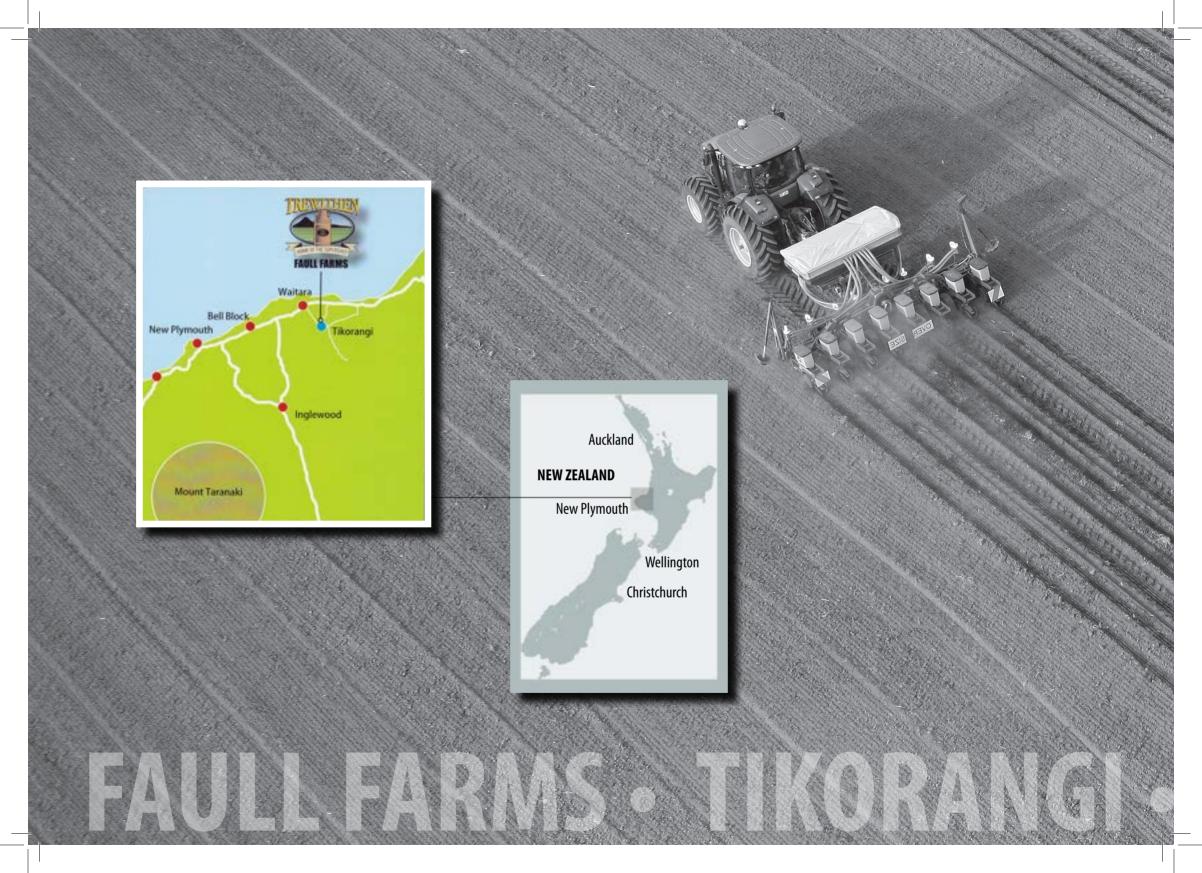
FAULL FARMS

The story of one family's dairying operation

Sustainability

- Environmentally sensitive
- Intergenerational

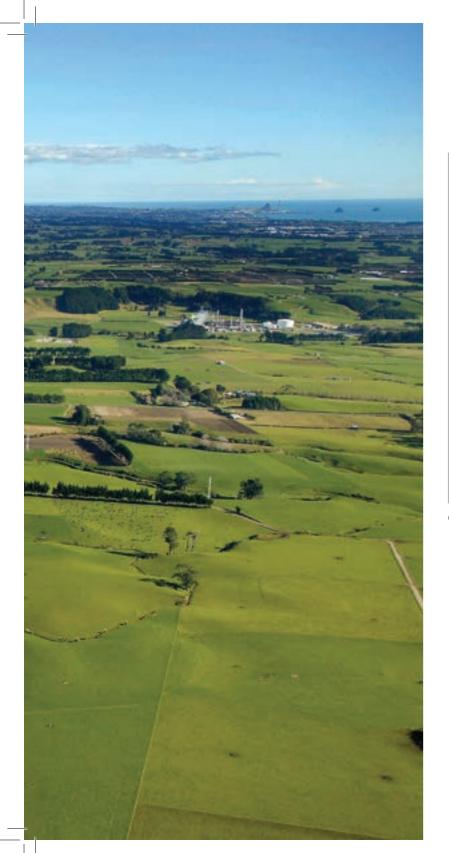


THE DREAM

The SuperShed was the result of three years of planning and research - and took 18 months to build. The Dream was to develop a 'state of the art operation' which would enable Faull Farms Limited to meet the demands of farm expansion and have a milking plant operation which would be an integral component in the development of an economically and environmentally sustainable dairy farming operation and business.

The SuperShed system is based on an all inclusive Dairymaster system involving herd management, animal health and welfare management, supplementary feeding systems, detailed data systems (for each animal) feed and production management and analysis, labour efficiency, resource management, product differentiation analysis and income/profit maximization in addition to sophisticated communication and managemnt systems which enables the owners to monitor from anywhere in the world and the share milkers to manage and monitor from anywhere on the farm or residence. Timely and accurate information is critical to good management and Dairymaster are able to monitor and undertake diagnostic reviews aand system corrections remotely from Stratford (NZ office) and from their global Head Office in Ireland.

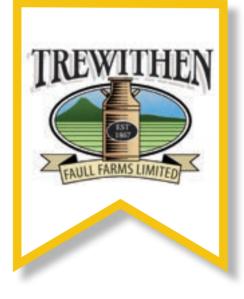






Gavin M. Faull

Faull Farms and Trewithen have been the historical base of the Faull family for more than five generations. Every member of the Faull Family - from the pioneer days of the 1840s to today - identifies very strongly with Faull Farms and Tikorangi, Taranaki, New Zealand.



OUR STORY

Our lives, our activities, our families all see Faull Farms and Tikorangi as our ancestral home and the farms continue to play an important bonding and family identification element in our lives.

Although we live in different parts of New Zealand, Australia and the world, some member of our family returns to the farm at least once a month. It continues to be an intergenerational investment and identification.

It is supervised on almost a daily basis, with management now led by Gavin, Gavin's wife Carol and their three sons Matthew, Oliver and Edward. Matters are still discussed with Gavin's four brothers, Allan, Richard, Bernard and Nigel.

This book -The Faull dairying history, details a key element of the Faull history in Taranaki and also the entrepreneurial approach the Faull Family has applied to survive the economic challenges of the New Zealand dairy Industry and yet to continue the inter-generational investment.

The book shows the impact of modern technology, modern management and innovative thinking. Faull Farms must still change continuously to meet the social, economic, environmental challenges of the global economy and to maintain a sustainable operation and business.

This publication preserves a slice of our history formally for our children, grandchildren and the future generations of the Faull whanau.

The Faull family's Māori connections can be traced back to the great 14th century navigator, Kupe, who sailed to Aotearoa from the Māori legendary Pacific island of origin, Hawaiki, in the 1300s. One of Gavin's great-great grandmothers was Hema (Ema or Emma) Toumairangi Te Kakati Stockman, most likely a descendant of Kupe through Rāhiri, a renowned explorer of the North Island, who founded Ema's hapū of Ngāti Rāhiri at Motunui near Tikorangi.

The wife of European whaler Edward William Stockman II, Ema was a key figure in regaining Ngāti Rāhiri land confiscated during the Taranaki Land Wars of the 1860s.

When her daughter – Blanche Eleanor Rolfe – married neighbour Lewis Nathaniel Faull (Gavin's great-grandfather) she brought with her a dowry of 6.5 hectares (16 acres) of that land and it became part of today's Faull farm

Past generations of the Faull family have been committed to dairy farming, which has been central to their upbringing and development.

Today's whanau owe a debt of gratitude and appreciation to the determination and commitment of our forebears. Modern education of the 60s and 70s saw the progeny of Wilfred Lewis and Phylis Thelma Faull expand into fields of education, medicine, commerce, religion and aged care management.

That resulted in no hands-on farming involvement of their children and therefore disruptive change was needed to the corporate and entrepreneurial management that Faull Farms operates under today. Yet still the history, the obligation and the commitment of the Faull family continues.

Read, enjoy, appreciate and understand the success, the challenges, the development, the foresight of Faull Farms and Trewithen of Tikorangi, Taranaki, New Zealand - the ancestral home of the Faull family.







Ko Taranaki taku maunga - Taranaki is our mountain

Ko Waitara taku awa - Waitara is our river

Te Atiawa taku lwi - Te Atiawa is our tribe

Ko Ngati Rahiri hapu – Ngati Rahiri is our hapu

Tena koutou, tena koutou, tena koutou katoa - Greetings one and all.

Faull Farms Limited • Tikorangi •
Taranaki • New Zealand
Here's a great reason why Taranaki is
acclaimed one of the world's great dairying regions -
Faull Farms, lushly pastured 400 hectares of Taranaki west coast farmland.
Read how fifth generation New Zealanders,
the Faull family, developed one of the finest
modern dairy units in New Zealand.
Faull Farm is a few kilometres inland from the Tasman Sea in North
Taranaki, a 15-minute drive from the dairy province's main centre,
New Plymouth.





THE TRANSITION

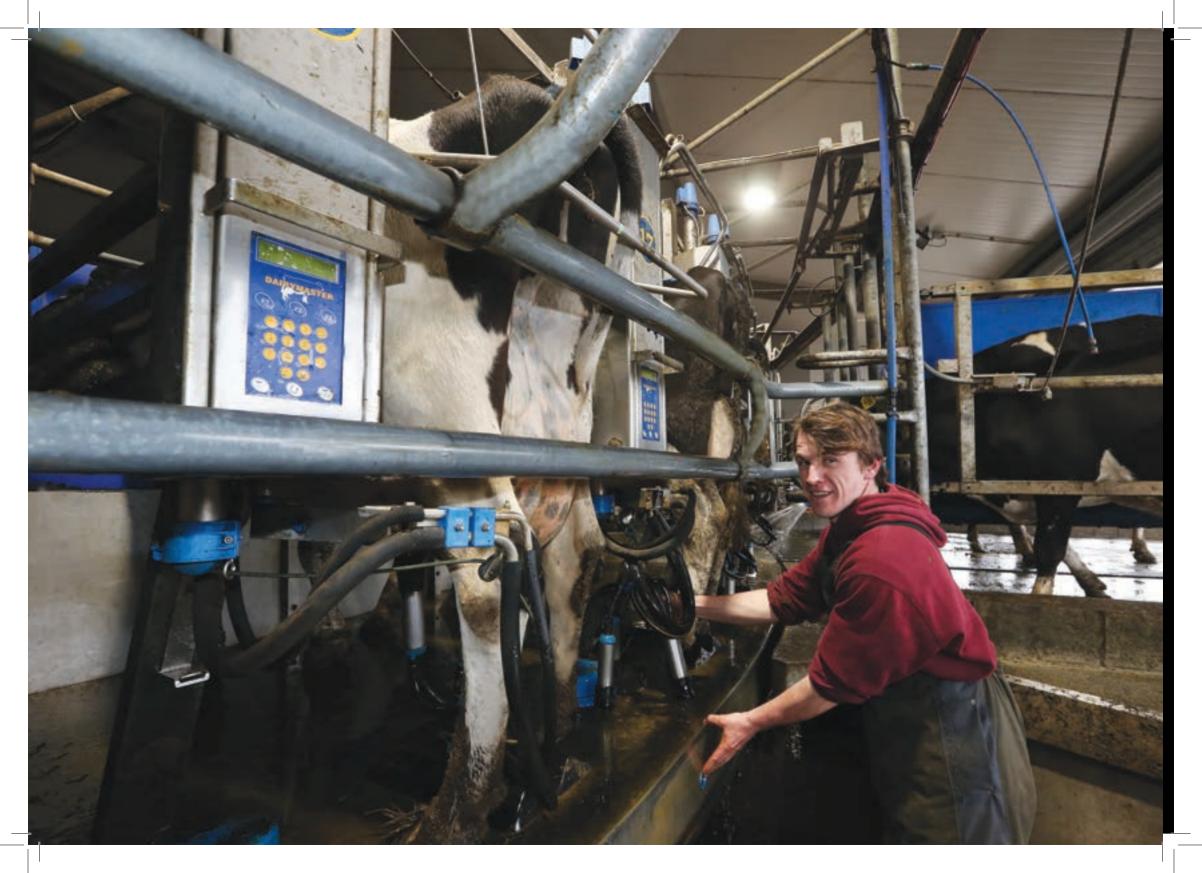


The Faull brothers, sons of Wilfred and Phyllis Faull, from left, Nigel, Bernard, Gavin, Sir Richard and Allan, the stewards of the farm for the last 50 years.



Right: Gavin and sons from left; Matthew, Oliver and Edward inspecting spring growth on the farm – a new beginning. - The farm stewards for the next generation.







The Faull Farms SuperShed is a 60-bail rotary operation from Dairymaster in Ireland.

The one-person operation design includes:

- a stainless steel construction for platform and surrounds
- two separate driving systems with variable drive units,
- safety gates with full rail and shed-wide safety provisions,
- twin 100mm stainless milk lines with jet-streams for dual supply (main milk production, and colostrums and animal rearing milk production);
- touch control milk diversion system; pulsation line with
- electronic pulsators and looped stainless wash-line with aquajets.

VISITORS

Many celebrities have visited Trewithen over the years, but none so well-known as His Royal Highness Prince Charles, heir to the British throne.

At owner Gavin Faull's invitation, he stopped in during a tour of New Zealand in November 2015. Here he takes delight in planting a kauri sapling on the farm, watched by a crowd of local Tikorangi school children.





The Archbishop of York, John Sentamu, tries his hand at milking and tree planting with the help of Archbishop Philip Richardson.



Archbishop Sentamu with Archdeacon Bernard Faull and right: pictured with his wife and farm workers.





Gavin with NZ Prime Minister, John Key, and right: New Plymouth Mayor, Peter Tennent, Gavin, Haliuna and Matthew with Financier Stephen Jennings.









John Key speaks at the supershed.



Three Taranaki members of Parliament, Shane Ardern, (left) the late John Armstrong (centre) and Jonathan Young with his wife Maura and mother Margaret Young.



Archbishop, Philip Richardson, celebrates a successful milking with assistant , New Plymouth Mayor, Peter Tennent (right).





Clockwise from top left; Carol Faull with PM Key, Agricultural Minister David Carter, Carol with her mother, Faith Managh, Carol and friends and boots and all – whose shoes belong to the PM?



Right: Gavin with the head of Taritahi Agricultural Training Centre, the late Donovan Wearing, David Carter and New Plymouth City Councillor, Richard Handley.

The late Rev Tiki Raumati dons an apron to learn the art of milking Supershed style.



Facts and figures

Owners: Faull Farms Limited

Directors: Gavin M Faull (Managing Director) Matthew D Faull Oliver R Faull (General Manager) Edward J L Faull

Operators: Trewithen Partnership (same shareholders as Faull Farms Limited) **Sharemilkers:** James & Melissa Barbour and Jason Groot **Farm Consultants:** Mark Dodd and Ranald Gordon.

Farm Size:

(a) Milking Platform - 320 Hectares(b) 5 runoffs with a total of 90 Hectares consisting of 18 on Otaraoa/ Inland North Rd, 45 on Snell Rd, 17 on Bertrand Rd and 10 on Inland North Road.

Cow numbers: 1,150

Animal Breed: Friesian and Friesian cross breeds.

Production: 580,000 kg MS 2019-2020 season

VAT capacity - 43,000 litres

Feed Systems: Grass and supplementary feeding systems using grass silage, maize silage, Palm Kernel and Avon Feed, In Shed computerised feeding systems and feed pad system.

THE SHAREMILKERS

James and Melissa Barbour are new to Taranaki, but certainly not to dairy farming. The sharemilker-farm manager couple who took over Faull Farms in 2017 are on their fifth sharemilking stint, and already in their early 30s, are experienced farmers.

They cut their sharemilking teeth on four previous farms in neighbouring Waikato, but none was as big or well-set up as Trewithen. They're relishing the chance to show what they can do with their 1150-cow Jersey-Friesian cross herd and advanced ideas on pasture growth.

Now in their fourth season (2020) at Tikorangi, the couple arrived with more than just hands-on farming experience. James grew up on dairy farms at Matamata and has a degree in agricultural science from Massey University, while Melissa is a chartered accountant.

"We'd never been to Taranaki before," says James, "and now we're grateful for the chance to run one of the province's largest and best-appointed operations on such high quality land."

That last bit is important, because focusing on high-yield pasture of mostly perennial rye/clover grass varieties supplemented with home-grown chicory (10 to 15ha), maize (43ha) and sugar beet, means they have been able to keep supplements like palm kernel expeller to what was already a reduced level.

"The grass is everything for us," says James. "We've helped the performance by reducing stock numbers a bit and introducing our herd of Jersey/Friesian crossbred cows, which are smaller than the previous Friesians and eat less, but give a higher milk fat yield."

They achieved 562,000kg milk solids in 2018 at a high average of 517kg per cow, and this season (2020) they hope to top 600,000, with 650,000 their long-term target. By comparison, the average output per North Island cow in the 2016-2017 season was a mere 362kg.







Gavin and Carol Faull with share milkers from left: Jason Groot and James Barbour (back) with family, Melissa Barbour holding baby Thomas, William, Benjamin and Joshua Barbour. When the Barbours took over they saw an immediate chance to put their already well-practised theories on growing grass to use, concentrating fertiliser on paddocks that need it and soil testing every two years to ensure the fertiliser is specific to the grass-growing requirements of each paddock. They have expanded the effluent spray system and installed a new and bigger pond, ensuring effluent returns to the land and removing any risk of polluting waterways and ensuring environment sustainability.

They are keen to demonstrate the new generation farmers' approach to the environment and have continued previous riparian fencing and planting, putting in 700 trees in 2018 and planning to add the same number in 2020.

They milk all year round, calving a third of the herd each autumn and the rest in spring, using four runoffs for young stock and to make silage. "Taranaki is warm enough to grow grass all year round, so continuous milking is fairly easily sustainable, which is good for a balanced cash flow," says Melissa.

Running the farm is something of a family affair, with James joined by Melissa's brother Jason Groot, while Jason's partner Catherine works with Melissa to help manage the twice-yearly calving times. There is also a staff of three.

Aside from attentive and supportive owners, James benefits from regular visits and observations by Tauranga farm adviser Mark Dodd. "We brought him south with us," he says. "He's a straight talker and not afraid to push us. He's been advising us for nearly four years now."

The couple is on a long-term contract with the Faull family, but hope to own their own farm eventually. "We feel lucky to be here. We treat the place as our own and we're keen to put our stamp on it."





FARM OPERATIONS

The objective of Faull Farms is to maximise return and income by utilising the flat fertile land to harvest a maximum amount of good quality pasture supported by low cost supplements.

Up till 1996, the Faull farm was a typical 64 hectare 200-cow dairy farm.

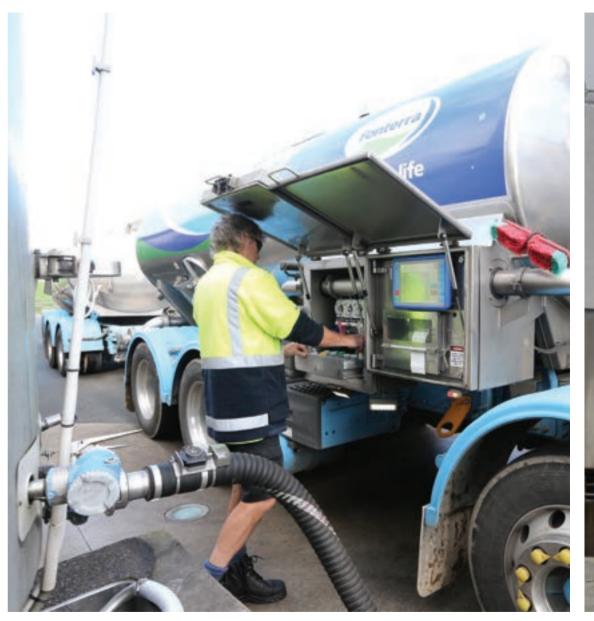
Since 1997, the farming operation has been in a rapid expansion mode and in 2019 milks more than 1150 cows with an all-year round system involving autumn calving (400 cows) and spring calving (750 cows) on 161ha, with three runoffs totalling 80ha, giving total land of 241 hectares.

The targeted production is 600,000 kilogrammes of milk solids for a season. Along with the expansion of land area and cow numbers, considerable investment has been made into large modern facilities and fully upgraded supporting infrastructure, which is leading edge and to a high standard.

The farm is now recognised as one of the leading dairy farms in Australasia and is frequented by government dignitaries, international VIPs and a range of personnel and organisations that have an interest in the dairy industry.

The modern fully automated 60-bail rotary was complemented by the construction of a 600-cow feed pad and a controlled application effluent irrigation system that allows up to 1200 cows to be accommodated by the system.

The feed pad and feed bunker design mean the cows can feed efficiently all year, with maize silage grown on support areas close to the farm and palm kernel feed contracted and fed in the SuperShed at milking in amounts controlled by computer-based systems.



A Fonterra tanker loading milk from the two refrigerated tanks.



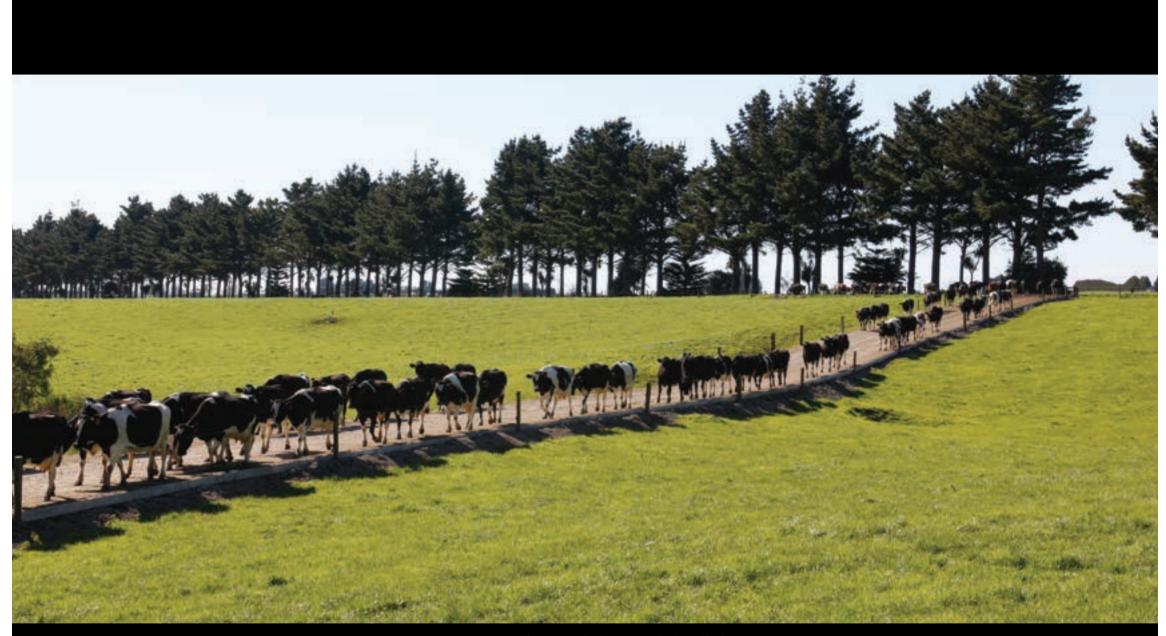






Left: Cutting a crop of chicory for supplement feed and above: silage making under a partly-covered Mt Taranaki.





The cows make their way to the SuperShed.







The milking operation monitored by computer.

The late-summer maize harvest in full swing destroying the home of one fleeing hare (inset).

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2 2 2 2 2 2 2 2 2 2









The farm in full production. Right: Gavin and former share milker, Tony Penwarden, share the satisfaction of a full milk tank.



ENVIRONMENT

Faull Farms is regarded as one of the best examples of responsible environmental care in Taranaki and New Zealand.

A modern electronically controlled effluent irrigation system operates on the farm with more than 50 percent of the land area serviced by the system.

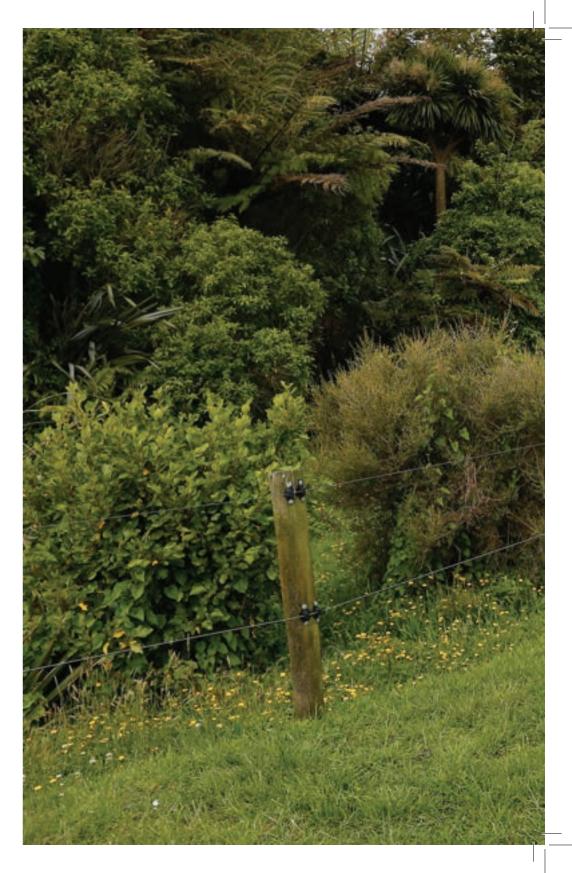
That ensures efficient distribution of processed wastes and is electronically controlled to minimise any land run-off or waterway contamination.

Extensive soil testing and soil management ensures there is no soil pollution or effluent saturation.

Extensive pasture renewal programmes, riparian and native planting along waterways, and careful placement of fencing and tracking systems ensure the sustainable management of the land and pastures.

Professional consultants specialising in land management sustainability are retained to ensure the latest and best practices are followed.

Prince Charles discussing riparian planting of a stream with Gavin and land consultant, Jeremy Thomson.









Professional landscape architects are retained to ensure appropriate planting and beautification programmes are followed. Faull Farms are an excellent example of sustainable land management ethics. Shelter belts for stock and to maintain water quality have been developed.

Stream banks have been planted to improve water quality by reducing nitrification of waterways and providing new wildlife habitats. More than five kilometres of riparian protection planting has been carried out under the supervision of the Taranaki Regional Council.

Historic puriri plantings have been preserved and native tree plantations are being established. Heat exchange systems are maintained to heat water with the heat from the milk production.







The old herringbone cowshed used for the last time before the operation moved to the new rotary SuperShed. Left: Former share milkers Loie and Tony Penwarden and Lynn Payne (centre) with the last cow milked under the old system.

THE SUPERSHED

Faull Farms SuperShed was the result of three years of planning and research, and took 18 months to build. The dream was to develop a state-of-the-art operation enabling Faull Farms to meet the demands of farm expansion.

It would have a modern milking plant operation as the integral component in the development of an economically and environmentally sustainable dairy farm.

Timely and accurate information is critical to good management and Dairymaster are able to monitor and undertake diagnostic reviews and system corrections remotely from Stratford (NZ office) and from their global head office in Ireland.

The development would have remained a dream without the support of New Plymouth's KODESIGN (innovative ideas and exceptionally high building standards); Dairymaster in Ireland and NZ (advanced technology and advice); and Interlact (advisers who in their support included visits to Ireland to view concept and design).

The SuperShed's successful development also owes much to those local companies and individuals who supplied and applied their advanced technical expertise in complicated wiring and configurations, security and communication.

The following photos show the development phases of the SuperShed.





























With the shed completed and the outdoor feed pad concrete laid, the first cow (above) takes a tentative step towards being milked on the new rotary platform.



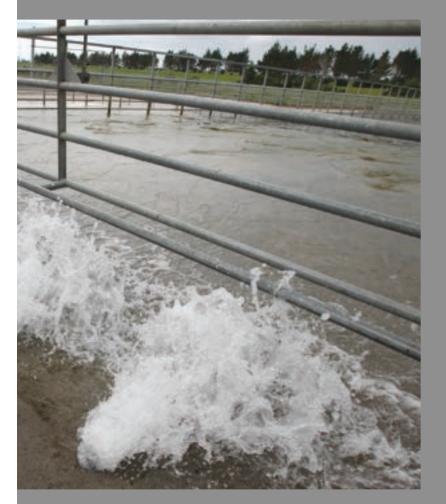




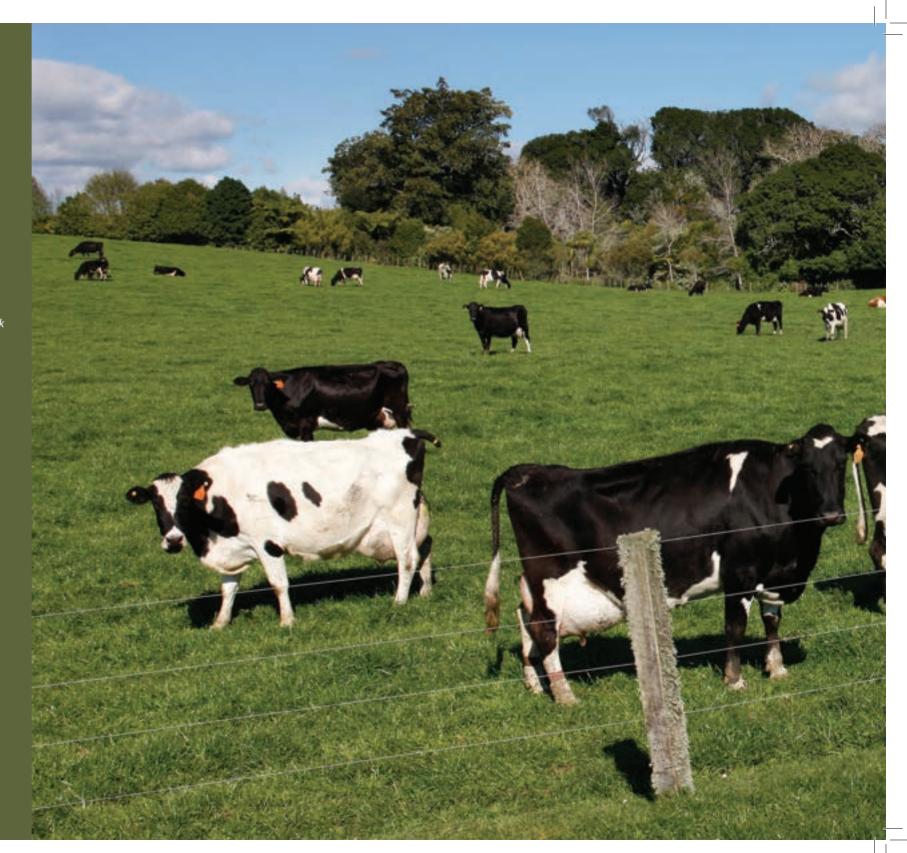




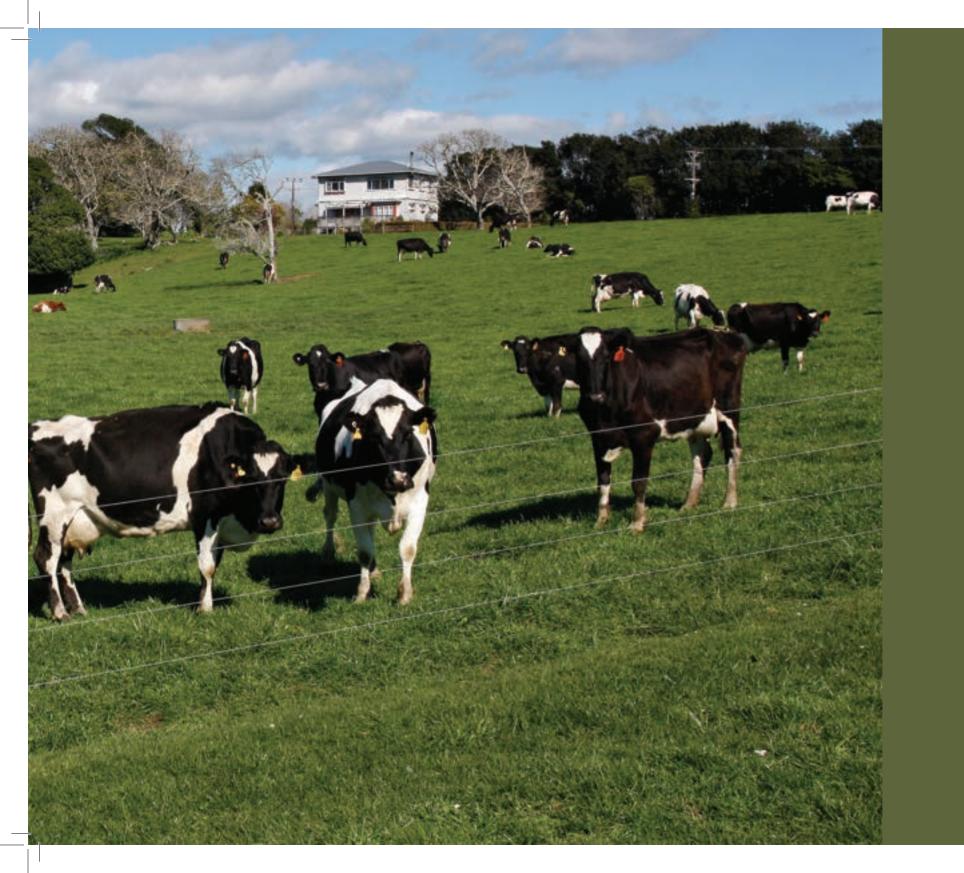








Cows back in the home paddock after milking.



THE OPENING



The official opening of the SuperShed in 2010 was attended by local dignitaries, Faull family members and friends. Mayor Peter Tennent addresses the gathering, members of the family and VIPs cut the ribbon, Mayor Tennent unveils a plaque to commemorate the day and local MP Harry Duynhoven responds.

























Kapa Haka group from the local Manukorihi Marae helps celebrate the opening of the SuperShed.

UNVEILING OF THE MAUA STONE





The unveiling and dedication of the sacred stone carving, Maua, attended by kuia Whero "Poppy" Bailey and Faull family and friends.





MAUA

WAIHO I TE POTO KAUA I TE TOIROA -Let us keep close together, not far apart.

This kohatu/toka (rock) is called "Masa" representing the ideal state of togetherness and the will to strengthen our communities. The rock was iscapited by Rangilapuohs (Peiri) Balley of Te Asiawa- Ngati Rahirt, the son of Te UpokoMutu and Whero-o-Te Rangi (Poppy) Balley.

Carved from Taranaki andesite at Te Kopenga Symposium on the New Physiosth foreshore in 2009-2010, it portrays the upoko kanohi (face) that is unique to North Taranaki and Te Atiawa Iwi.

Rangi Bulley: "Betarning bome after spending four years in Australia and two years in Wellington, J observed the many and varied relationships built on in Taranaki – cross-cultural, neurriages, basiness partnerships and oducational achievementa.

"The toka's small month-large eyes depict the proverty 'Say little, but observe much.

"The peak at the top of the toka represents Te Maunga Taranaki.

"The spiritual implication and significance of the carved, upoko (head) on the toka is prominent yet subtly expressed.

"The symmetrical kowhaivhai païtern on the back is the potae (head covering/scarf) representing the gathering, storing and attainment of knowledge.

"The kereru, a sacred bird of the ngahere (forest), is a carisous crusture, but also a sentired and a sign of changing citcurnstances. Its presence signifies kotabi (as one) - the togetherness of us all."

Range Builey and his parents are close family friends of the Fault family, who share the same Te Atiawa-Ngati Rahiri heritage.

The kolustra/toka was acquired by Fault Farms to signify the togetherness of the Fault family and the Tikonangi community, even though family members and whanau live in many parts of New Zeuland and the world.

This sculpture is on the dairy farm at Trewithen – Fuell Farms, Tikorangi, Taranaki where it is prominently located outside. The SuperShed, it is an important symbol of Faull Farms and the Faulf family and is so located that everyons, should they with, can touch the sculpture as part of a feeling of connection to the land and the Faull Family Whakapapa.

The rock sculpture has been erected by the Fauli Berthers (Allart Maxwell Fauli, Richard Lewin Maxwell Fauli, Gavin Maxwell Fauli, Bernard Maxwell Fauli and Nigel Henry Maxwell Fauli) in memory and acknowledgement of their Tipuna (anceotism) and in particular of their parents Wilfred Lewin and Phylia Thelma Fauli.

The sixit scalarian web likesed by Archdronom Tikituturange Riaumati, Where or Te Rangi Boliey and Archdeocon Bernard M Fault on 20rd May 2014.

LA ALEXANDER TRUST

In 2011 Faull Farms were looking to expand their land.

Across Ngatimaru Road is the 70.3 hectare L.A. Alexander Trust property.

Faull Farms took over the lease of this valuable land, added access via an underpass and joined the two properties .

On his death, L.A. Alexander, left his farm, including the Winthorpe Stud, to the New Plymouth Boys High School Board to be used as an educational resource generating funds to further the objectives of students in agriculture. Trustees are appointed from The Boys High, New Plymouth Girls High School, Spotswood College and the Taranaki Polytechnic, WITT.

Gavin with Trustees of the LA Alexander Trust, Lynn Bublitz and Bruce Bayley.























Faull Farms took over the neighbouring Alexander Trust property to expand the farming operation. This included having to construct an underpass to enable access to the SuperShed, cutting down old pine plantings and developing races to the lush pastures.

AWARDS

ce

Enviro

Sustainable Profitable

Faull Farms winning Taranaki's first supreme title at the Ballance Environmental awards 2014. Gavin and Oliver Faull, and their sharemilkers, Tony and Loie Penwarden, accepting the awards. The Faull Farms Ltd/Trewithen Partnership collected the Ballance Agri-Nutrients Soil Management Award, the LIC Dairy Farm Award, the Massey University Innovation Award and the PGG Wrightson Land and Life Award.



Ballance

FAULL FAMILY WEDDING





The St Luke's Anglican Church in Tikorangi near Faull Farms was the scene of the wedding of Gavin and Carol's son Matthew to Haliuna in 2008. The family have had a long association with this church and donated to the stained glass window when the church was restored. Gavin's brother, Archdeacon Bernard Faull conducted the marriage ceremony supported by the late Archdeacon Tiki Raumati.





Wedding guests gather at the SuperShed before the wedding breakfast.



TIKORANGI CEMETERY





2^{MD} LEIUT M. R. FAULL 22 & Nov. 1941, ACED 26 YEARS. L.SCT. A. K. DAVIDSON 23 & SEPT. 1944, AGED 26 YEARS. SAPPER A. A. JURY 26 & May 1941, ACED 37 YEARS. IN CLASS S.B. H. J. HONEYFIELD 5 & JAN. 1943, ACED 17 YEARS. SCT. PILOT R. J. NEWMAN 12 & JAN. 1943, ACED 2 YEARS. "ALL KILLED IN ACTION."

I HOKE AND COUNTS

IN THE CHEAT WAR

WORLD WAR I

1935 - 1945.





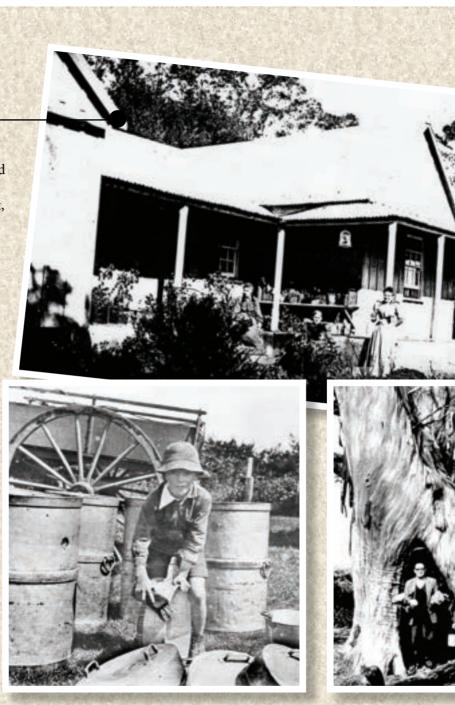
The Tikorangi Cemetery is the resting place of many of the Faull descendants. Sir Richard Faull is seen inspecting his forebear's graves.

FAULL HISTORY

The Faulls come from Cornish mining roots, the first to arrive here being Elizabeth Faull (below left). She and copper miner husband Richard Faull and their five children migrated from England on the very first Taranaki settler ship, the William Bryan, in 1841. Henry Faull (below right) was her youngest, brought ashore in the surf at New Plymouth aged 3.









Gavin Faull's father, Wilf, was born into the Faull family in 1912, the third generation to live on the farm.

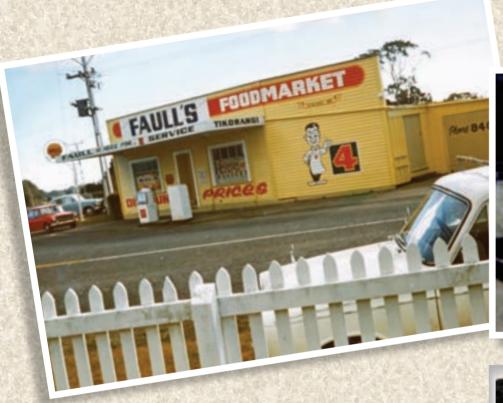
While the land remained an important part of his life until he left Tikorangi to retire in New Plymouth in 1989, his key focus became the nearby shop he set up in 1935 (next page).

For Wilf and his wife, Phyllis, the store on the main corner in the village was the family's focus for about half a century, during which the couple's five sons were raised and sent off to make their own various ways in the world.

Of the five, Gavin retained most interest in Faull Farms and over the years has driven the development into today's major operation, including encompassing the neighbouring property owned by the Alexander family.

He continues in that role, as well as heading a world-wide hotel management company based in Hong Kong.







Faull's 4-Square general store was a popular fixture on the main corner of Tikorangi Village for about half a century.

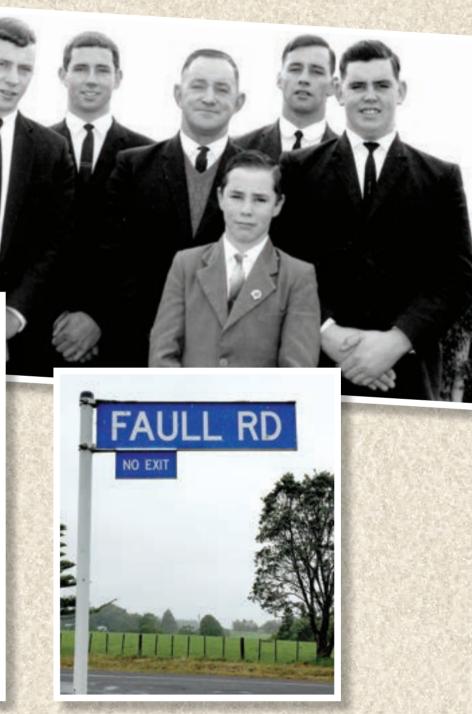
century. Right: Annual motorbike races made life exciting right on the shop's doorstep. Top right is Wilf Faull with his delivery van in which the brothers learned to drive, so they could do the rounds.



Following quite different paths, all five brothers have achieved success.

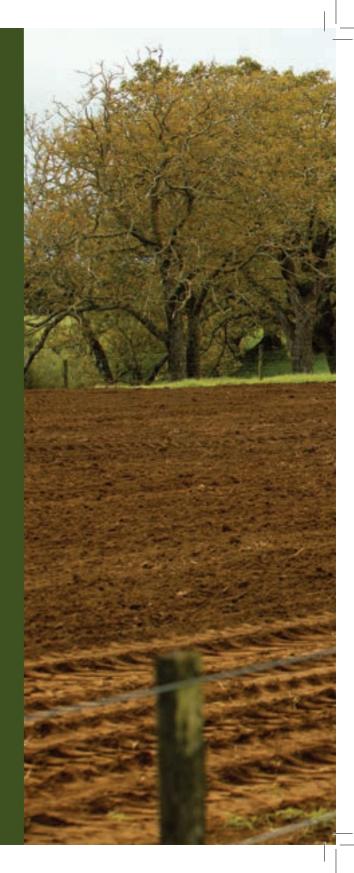
Wilf Faull with his five sons from left: Gavin, well-known Sir Richard, an Auckland neuro-scientist knighted in 2018 for his services to medical research into the functions of the brain, oldest brother Allan, a leading master at Auckland Boys' Grammar until retirement in 2017, Bernard served the church and retired in 2014 as Archdeacon of Kapiti, and Nigel (front) one of Australia's leading modernisers of retirement villages.





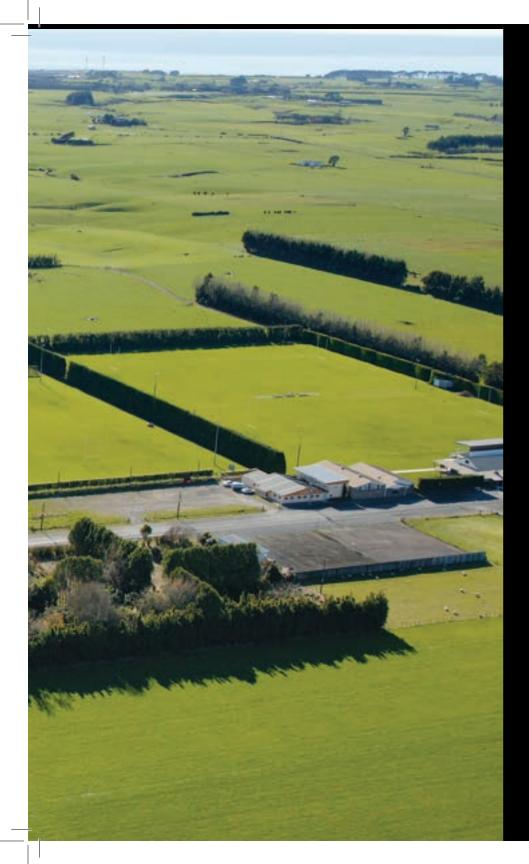


The chimney remains of the original Faull homestead which was burnt down. Right: The present residence at Tikorangi was originally the Boon homestead transported from New Plymouth in the 1980s.

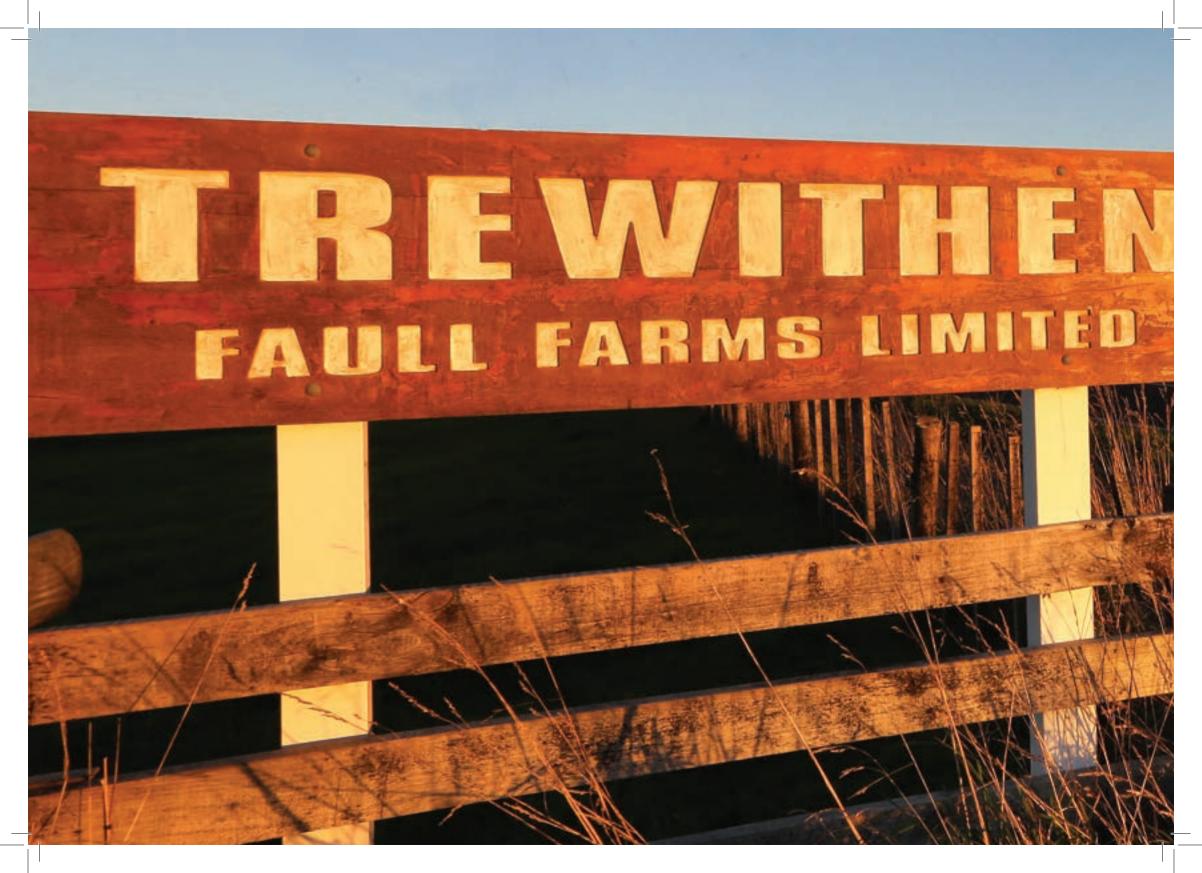








Tikorangi village showing St Lukes Anglican Church opposite the Tikorangi School (left) and across the intersection where the Faull general store was situated. Further down the road on the left is the now Faull Homestead and further down again the Supershed.





THE PRODUCTION TEAM



ROB TUCKER

Rob Tucker has been a photojournalist for more than 50 years working for some of the world's best magazines, including Time, Life and People.

His photojournalism is his life - viewing what is around him and recording these things for generations to come.

His involvement with the Faull Farm Book is yet another example of his photographic work.



JIM TUCKER

Jim Tucker is a journalist and non-fiction author with more than half a century of experience, including five years as editor of New Zealand's second largest daily newspaper, The Auckland Star. Today, he writes and edits books on topics varying from the environment to well-known pioneer families. He recently retired from a five- year stint as a Stuff/Taranaki Daily News weekly columnist.



RENZIE HANHAM

Renzie Hanham QSM has worked as a designer and illustrator for more than 55 years. He was a judge at the New York Art Directors International Awards, and along with Rob Tucker has designed more than 50 books.

He has lectured at tertiary level and continues to work as a freelance designer.

