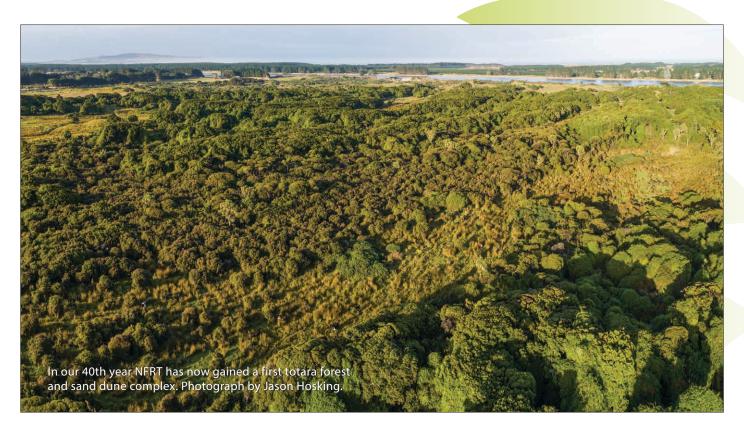


NFRT Chairman's Message

Wow, who could have even imagined, let alone forecast, the past three months around the world. Never before has virtually the entire population of the globe been placed under house arrest with the productive economy shut down and a near 100% reliance on debt handouts and loans. New Zealand as a whole has performed brilliantly in the management of the first phase of Covid-19, and we await future health developments with some optimism. However, the real economy has taken a monumental knock and I can only wish you well for the recovery of your own businesses and those affecting your wider families.

However, this is a very special year for NFRT for another reason too. It marks our 40th anniversary as a formal environmentally-focused organisation and a registered charity. It presents an opportunity for the entire NFRT family to remember and celebrate the numerous achievements over these decades. Originally there were no staff, and Trustees used to meet monthly in Auckland, with the executive group also meeting between each full Trust meeting. No computers or

internet in those times! We now operate with 8 Trustees (Auckland, Coromandel, Waikato and Tasman) and only meet face-to-face every second month, alternating between Auckland and Cambridge. Currently, of course, these meetings are virtual. Almost all correspondence, of which there is now a large volume, is electronic and can easily include all relevant personnel almost instantaneously, regardless of their location. Many decisions can be and are voted on via email, saving hundreds of hours and many thousands of kilometres of unnecessary driving. As our portfolio of conservation properties has grown, so has the need for efficiency as well as effectiveness in our operations. Although there is still no physical office and Trustees are volunteers, we do have a full time Trust Manager (Sandy) based on the Coromandel Peninsula and a very part time Administrator (Sue) in Northland. Working remotely is the norm for everyone. The Trust also has reserve managers, field contractors and supporter groups throughout the country to implement the operational plans for each of the 30+ properties (over 7,000ha) owned and managed by NFRT.



Of the sixteen founding Trustees, we are most fortunate still to have Geoff Davidson as a very active member of our group. He is well known in botanical and conservation fields and is so passionate about NFRT's work that we occasionally need to remind him that we cannot save every piece of worthwhile land that he brings to our attention (Geoff writes about some of the history later in this issue of Canopy). However, in February this year, Geoff brought an important and very urgent proposal to NFRT. A local community initiative to help purchase 80ha of valuable remnant totara forest on sand dunes beside the Oreti River in Otatara, Invercargill. This deceased estate proposal presented considerable risk to the Trust because of the large financial commitment necessary; before any loans, delayed payments and/or grants could be negotiated. Trustees debated seriously before following the leadership of earlier Trustees in taking a significant risk and proceeding towards purchase. No other group was able to act decisively in the minimal time available.

So, in our 40th year NFRT has now gained a first totara forest and sand dune complex and has extended its string of protected properties from Kaitaia almost to Bluff. NFRT truly does have a physical presence nationally. All of you, our wonderful supporters, have made this purchase possible through your incredibly generous donations, which have continued, even after lockdown. The local community have been fizzing about planning and commencing restoration on the block, which your Trustees could not easily do from such a distance. We sincerely appreciate that local involvement and support.

Within our other Trust activities, the 2019 plantings got away to a great start in the spring to help them through an unusually dry summer throughout much of the country. In most northern and eastern areas of NZ there has been significant drought, coupled with warm temperatures. This has impacted some nursery plants for our winter 2020 programme. Recently,

sufficient rain has fallen in some of these areas that the warmer soils should help the new plants to establish.

After some delays with documents, the Taranaki Mahood-Lowe extension block purchase is now complete. Our special thanks to the family who generously funded this area of wetland bush with its whio-populated stream boundary.

Projects in Northland and Rotorua are back on the table, but we do not have funds to proceed with any offers at present. The property containing the rare (possibly unique) restiad peat bog remnant in the Waikato, which I wrote about previously, has been sold. We shall approach the new owner in case there is any opportunity to encourage protection or purchase of the peat area.

The legal/insurance claim from the 2014 fire in the William Upton Hewett Memorial Reserve, west from Whangarei, is still being considered by the other parties.

In closing, I would like to acknowledge our special relationship with QEII National Trust. NFRT has always tried to covenant its properties with QEII, as the strongest environmental protection in perpetuity available in New Zealand. We are proud to be their second most prolific covenanting body and greatly value the support we receive at all levels, including from the Board, Head Office staff and field representatives on the ground. The assistance with suggested strategies, legal issues and with fencing finance and contractors is a real boon with many of our purchases.

Finally, after the momentous and successful appeal towards the purchase of the Oreti totaras in a time of unprecedented national stress and economic difficulty, your Trustees are truly humbled by such widespread generosity for the public good. Thank you for your continued support and trust in our stewardship of this property and the other NFRT reserves throughout New Zealand.

Tim Oliver, Chairman, NFRT

40th Birthday Message from Peter Hillary

During the latter part of the twentieth century we often heard the line "well, that's progress" which was shorthand for the destruction of nature in order to generate electricity or build a road or mine coal in a national reserve. But now our consciousness of the impact we have has changed and we see a determination to bring nature back. And how wonderful this is. These reserves spreading across the country is inspirational and its influence is immense. We need more and more of this and I applaud the work of the Native Forest Restoration Trust and all its supporters.

The Covid-19 pandemic has made many of us realise the impact we have on our environment by seeing how the world looked when we were all in lockdown - clear skies in places where mountains had not been seen on the horizon for decades and birds moving into the quiet streets and suburbs. It is a wakeup call.

This certainly is a time to balance the ledger of nature and humanity and extend the collection of forest reserves around this beautiful country. NFRT - you are doing an incredible job with this. And what an example too! I know my father would be proud of what you have achieved over the past four decades. Keep up the good work.

Peter Hillary, July 2020



Rare Southland Dune Forest Safe Forever Thanks to You

Thank you so much once again for your outstanding support, which has helped save an area of nationally endangered ecosystem in Otatara in Southland. With the COVID-19 pandemic making these the most difficult fundraising circumstances we've ever had to contend with, we were overwhelmed to receive donations of almost \$400,000, helping us raise over \$810,000 towards the \$1.5 million purchase price of the property. Even though this is a shortfall, we still consider it to be a significant achievement considering the very tight timeframe we had, and the situation we found ourselves in as a country. Thank you to everyone who donated, whether that was \$5 or \$50,000 – each and every dollar makes a difference and will help to protect more of our precious natural heritage.

The reality is that, with our current economic situation, we will have to on-sell a small part of the property that has been farmed and is therefore of least ecological value. We will, however, ensure that the most ecologically important parts of the property are safe forever and we look forward to letting you know at a future date when the reserve is ready to open to the public if you would like to visit.

The most valuable part of the property, from a conservation perspective, is an area of totara forest on sand dunes, which is a naturally rare ecosystem that is classified as nationally endangered. The property also contains localised areas of matai-pokaka-kahikatea forest. Patches of this kind of ecosystem in the Otatara area are considered the best example of the sand dune totara and totara-matai sequence in New Zealand. This property had been identified as probably the largest remaining unprotected site of its type in Otatara, and possibly even across the whole country. Thanks to our supporters, it will now be protected forever!

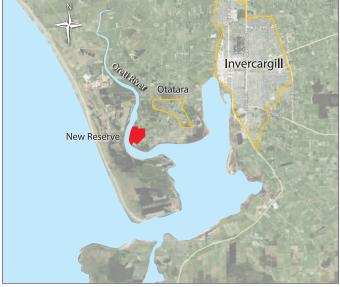
It has remnant native forest, which we will place under careful management to aid the regeneration of the area. We'll be ensuring that the reserve is safely fenced to protect it from any wandering stock, and we're already working with local organisations and individuals to implement a pest and predator control regime. As with all native forests, the area provides habitat for native birds. In this case, potentially fernbirds, which are in decline, and bittern, which are classified as nationally critical, as well as a multitude of other species so we will be working hard to keep them safe.

This property contains wetlands as well as the sand dune forests, which makes it even more precious, as many wetlands across the country have been drained. As it adjoins the Oreti River, it provides a stepping stone from Sandy Point Recreation Reserve, on the Western side of the river, to other forest patches on the Eastern side, which gives native species a link between habitats and allows them to spread naturally.

And finally, not only will the reserve be a haven for native trees, birds and other species, it will also provide a place of learning for local school children, who will have the opportunity to visit. Reserves like this provide school students with the ability to get out into nature and get their hands dirty while learning about our natural ecosystems. Doing this can bring lessons to life and ignite a passion for the outdoors, which can last a lifetime.

So thank you again, to all of our amazing supporters who answered our rallying cry to save another piece of New Zealand's beautiful natural environment at the most difficult of times. We are so proud to have such a committed group of supporters and feel very privileged to work with you all.









Latest from Oreti Road, Otatara, Totara Dune Forest

The Native Forest Restoration Trust became the owners of this 81ha block of land in Otatara, 10km SW of Invercargill on the 20th May 2020.

As a local resident myself, local people in particular were thrilled when NFRT took a great leap of faith in them and dug deep into their reserves to secure this wonderful area of land.

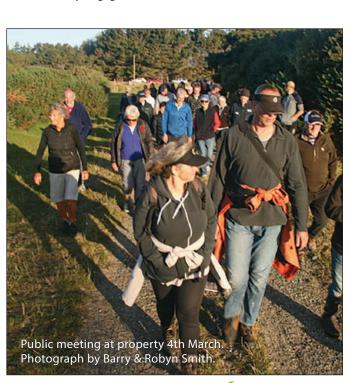
The Land

The property comprises about 40ha of totara forest on dunes, but also has areas of ancient matai forest and patches of kahikatea, along with large old manuka and tī kōuka trees, rising above extensive areas of mingimingi. There are cosy gullies of open grass and sedges between the totara forest fingers that prefer the drier dune peaks and slopes. On recent walks we have been followed by groups of up to 10 fantails. Korimako (bellbird) and tui regularly talk to us from the totara, and on a large pond flocks of scaup and stately black swans study us suspiciously. Heron and stilt stand and feed in the margins. The cathedral-like matai groves open out to open dunes where we can gaze up the Oreti Estuary towards the distant Takitimu Mountains. It truly is a wonderful asset.

The People

An advisory committee has been established to undertake the local management of the reserve. Led by Maurice Rodway the committee consists of:

- □ Brian Rance (DOC Botanist),
- □ Jesse Bythell (QEII rep.),
- □ Dr Jane Kitson (Ecologist and environmental scientist with a background in traditional ecological knowledge research),
- □ Dallas Bradley (Otatara Pestbusters coordinator) and
- □ Cathy Macfie (Background in heritage interpretation and community engagement)





The advisory committee has met and walked over the property looking at prioritising work for the first year. The property is being divided into sections where specific planting/ seeding projects appropriate for those areas can be commenced. A system of tracks for public access is being developed and a car parking area has been identified. Signage and interpretation panels are being planned for these areas. There is still a lot of tidying up to be done to remove old fences, wire, concrete, posts and other farming paraphernalia.

The Advisory Committee will be responsible for the day to day management of the Reserve by developing and overseeing programmes of work with the approval of the Trust. The committee is preparing a detailed management plan to guide forest restoration in areas logged or grazed out in the past.







A QEII National Trust covenant application has been lodged and input on reserve management and naming of the reserve has been requested from the Waihōpai Rūnaka.

The Work

Two contractors have been carrying out hands-on tasks, initially building traps, bait stations and monitoring tunnels and setting out lines for pest control. We are preparing an application to Environment Southland to help with pest control equipment and provision of plants.

Prior to the Trust's purchase cattle and sheep had free reign of the property so most palatable plants native to the area have been eliminated. Cattle and sheep have now been removed from the forested part of the reserve. This is the first time in many years that there have been no livestock in this area. A fence has been erected to allow some grazing of the open southern area subject to satisfactory forest regeneration in this area.

About half of the property is open space with no forest and this will be grazed using regenerative farming methods intended to facilitate the regeneration of totara forest. Additional fencing is planned to secure the western side of the forest and allow some light temporary grazing. The use of temporary light

grazing is to keep rough pasture areas tidy and allow some initial regeneration while we concentrate our initial efforts on the management and restoration of the existing forest and other priority retired areas.

We will be monitoring recovery and vegetation change in both the existing forest and some of the retired pasture areas.

Moving Forward

We are investigating the possibility of subdividing off a small number of 1ha sections with the least conservation value. This will cover some of purchase costs and provide ongoing funding for management. These sections will be designed to allow sensitive building sites that don't compromise the open space values of the area while covenants will be placed on the sections to ensure sympathetic plantings. It is hoped the reserve will be eligible for the Government's recent Jobs for Nature programme and we will be making enquiries about this.

Research undertaken by University of Otago and Southern Institute of Technology students will be used to measure the effectiveness of the methods undertaken and hopefully we can share these with the wider conservation and farming community so that what we learn here can add to the general conservation







effort in New Zealand. Gorse, lupin and blackberry are the most common weeds. These will be controlled/managed to facilitate forest regeneration where appropriate and to ensure access is not inhibited.

Invercargill City Council Parks and Recreation Department has offered assistance, including the provision of trees and planting labour. The Southland Community Nursery in Otatara will be able to supply locally sourced plants for establishing copses of trees in the areas where there are few trees at the moment. Planting and weed control will be undertaken by our contractors.

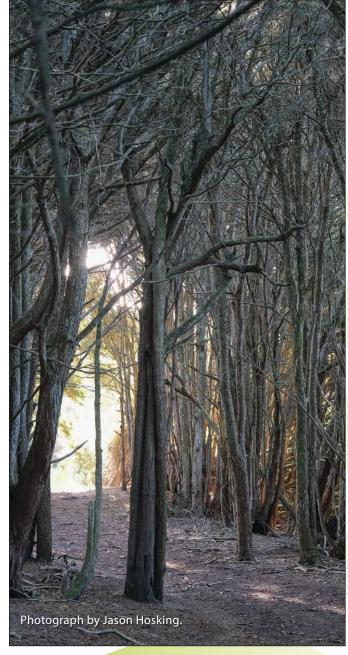
Fish and Game, Southland Region has been asked for advice on the enhancement of wetlands and freshwater ecosystems on the property so the re-wetting of previous wet areas that had been drained will occur. It is expected that wetland birds, plants and native fish will benefit from this.

.... and finally

Once the reserve is officially open, marked tracks and interpretation will be available to allow everyone to enjoy the reserve.

Maurice Rodway, Honorary Ranger, Otatara Totara Dune Forest





New Honorary Ranger Maurice Rodway began his working life as a primary school teacher but then changed direction to follow his love of freshwater science and management. He gained an MSc (Hons) at Massey University then was appointed as Manager of the Southland Fish and Game Council where he worked for 35 years. The Council had a strong conservation philosophy under Maurice's management and had National Conservation Orders granted on the Mataura and Oreti Rivers during his time there. The Waiau Trust was also established during this time. This Trust has developed and protected a large number of wetlands and riparian protection areas in the Waiau catchment. Maurice has also served on the Southland Conservation Board for one term and has been a councillor with Environment Southland for 15 years. He and his wife Alison, an Otatara School teacher, own a 1ha section in Otatara which contains many large old totara, matai, kahikatea, and pokaka trees and other native understory trees. It is home to korimako, tui, kereru, piwakawaka (fantail), with riroriro (grey warbler) and pipiwharauroa (shining cuckoo) in the summer, and a few kakariki.



2020 and 40 years of NZNFRT Activity



For 40 years the NZ Native Forests Restoration Trust (NFRT) has purchased and covenanted well over 7,000 hectares around the country, ranging in size from the 7 hectare Parapara estuary Reserve in Northwest Nelson recently donated by local supporters of the Trust, to the 1,157 hectare Pigeon Bush Reserve on the Rimutaka Range between Wellington and Featherston. Our land stretches from the Honeymoon Valley in the Far North to our latest 81 hectare purchase in the deep south at Otatara, a suburb west of Invercargill. It adds to our other South Island properties at Mangarakau (a 160 hectare wetland in NW Nelson) and the Banks Peninsula 190 hectare ridge line farm above Akaroa and adjacent to Hinewai Reserve. Most of our reserves are open to the public, and all are protected in perpetuity by QEII covenants.

The Trust's effort has extended beyond campaigning and purchasing land to protect native habitats throughout New Zealand. Even before the Trust was established in 1980, individual trustees were protesting to save forests at Pureora in the late 1970s, and we rescued Northland kiwi when their habitat was being crushed. Today our reserves are protecting a wide range of species including some of the most critically endangered birds, plants and insects. Kiwi on our northern reserves are still in a tenuous state despite our pest control efforts. Pigs and pig dogs are perhaps the biggest threat to them. Kokako are flourishing because we enabled the population in the Mangatutu Scientific Reserve to thrive through our pest control efforts based at Rangitoto Station. In recent years the Howick and Auckland Tramping clubs have taken on the challenge of continuing pest eradication. We hope to achieve a similar success with Northland's kokako by co-operating with DOC on the Mataraua Plateau situated between our Wekaweka and Cynthia Hewett Reserves. We hope that in the near future the kokako at Kaharoa, north of Rotorua, will benefit from the added protection we can give to land we are currently considering there.

We are always looking ahead. How can we improve our existing properties? How can we add to them to make them bigger and therefore better? In most cases nature benefits from

bigger reserves. How can we link up with other protected land? Or can we create linkages through acquiring 'stepping stones'? We refer to 50 years as 'short-term', with the middle term being 500 years and the long term extending way beyond that. We hope our supporters see the long term vision we see. To think in these terms requires hope. Hope that we as a species do not 'foul our own nest' – nor the nests of any other creature. In a recent Forest & Bird magazine the world renowned author Margaret Atwood speaks of hope. She says, "We cannot save the planet without hope".

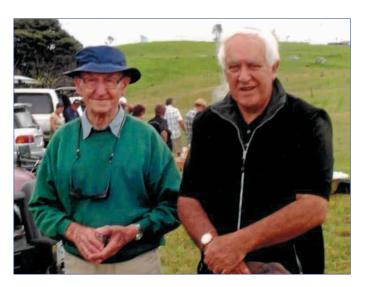
We are grateful to all our supporters, who over the years have been numerous and generous. None more supportive than the Cambridge based brother and sister, the late Basil and Cynthia Hewett. Their support was unwavering, from their initial desire to honour their deceased brother, William Upton Hewett, by funding a purchase in Northland, to willing support over the years for several other purchases, then a bequest of an ongoing Trust fund to NFRT, and still occasional funding from a second fund managed by their surviving relatives. Their faith in the Trust and the benefit we have derived from their support is incalculable.

We are a charitable Trust run initially by volunteers. The Trust arose in the late 1970s when members of the Auckland protest group, the Native Forest Action Council (NFAC), decided to take a more practical approach to conservation and try to ensure replanting of felled forests at Pureora consisted of native species rather than pines. Stephen King, Shirley Guildford and I, decided a new organisation was needed to make it happen. So the NZNFRT was formed with the 'settler' in establishing the Trust being Ian Cowper, and over the 40 year period we have been fortunate in having 5 excellent leaders in our chairmen/women.

- Owen Lewis, 1980 1996. Owen set us up organisationally and established much of the ethos and process to which we adhere to this day.
- □ Jim Dart, 1996 1997. Introduced a degree of intellectual rigour and legal planning which strengthened our approach to decision making and land purchase.

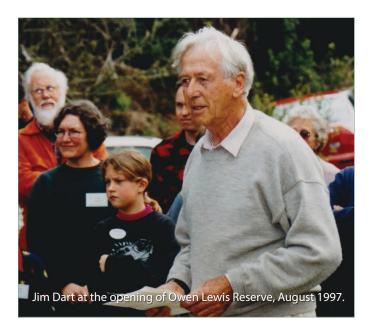


Cynthia and Basil Hewett at the opening of William Upton Hewett Memorial Reserve, May 1992.



Owen Lewis with Patron (Sir) Paul Reeves.



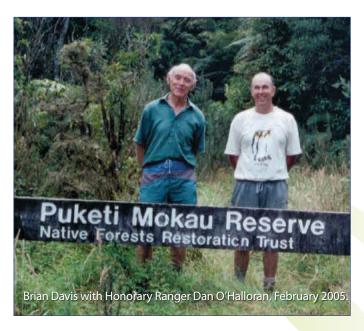


- Brian Davis, 1998 2005. Brought a consensus approach which unified our procedures and speeded the growth of the Trust.
- □ Colleen Newton, 2006 2014. Carried us through the inevitable restructuring necessary as an organisation grows and transitions from a fully voluntary group to having staff, a manager and all the associated fixed costs.
- □ Tim Oliver, 2015 to present. His experience with QEII National Trust part time from 1993-2001, and the mentoring influence of Arthur Cowan, led to Tim becoming a Trustee later in the 1990s.

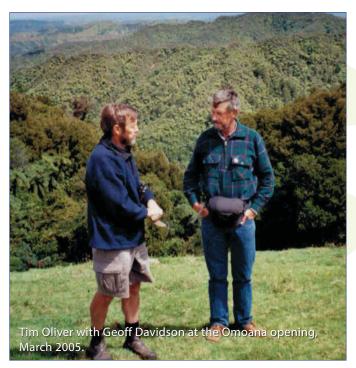
Over the same 40 years we have had very supportive Patrons. The Trust's first Patron to 2008 was Sir Edmund Hillary. He was followed by Sir Paul Reeves (2008 – 2011), whose prior service to nature conservation included Chairing the Queen Elizabeth II National Trust. In 2011 we were able to maintain a strong forest restoration focus with Arthur and Pat Cowan of Rewarewa agreeing to be the Trust's joint patrons.

In the last six years we have employed a full time manager and a part time assistant plus two reserve managers, mostly financed by the sale of carbon credits. Reserve management consists primarily of controlling pests, plus fencing and planting as needed. Our reserve managers ensure we are informed of progress and co-ordinate with the local, appointed honorary ranger to keep an eye on the property and alert us if there is an issue they cannot attend to. In the South Island the rangers' roles have been taken on by local groups. In Northwest Nelson the 'Friends of Mangarakau Swamp' lovingly tend our wetland there, and at Akaroa our neighbour at Hinewai Reserve, botanist Hugh Wilson and his team manage our lands on our behalf. Among the residents of Otatara west of Invercargill there are many enthusiastic supporters who are rallying to assist in transforming a harsh, windblown farm site into the lush temperate rain forest that once thrived on the sand dunes built up by the Oreti River. We look forward to working closely with them all.

While we have never failed to purchase a property once we have had agreement with the vendor, there are many sites we hoped to acquire, but didn't. The reasons differ for each



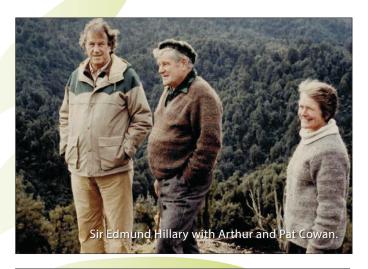






property but they range from the 'too expensive', to 'no agreement reached, 'outbid' and 'too complex'.

One of the great strengths of the Trust is that it is an enduring Trust and as such it will probably outlive individuals and even families or corporations. We regret the occasional potential reserve that we haven't purchased and perhaps the day will come when we can acquire them. One example is the kanuka covered hills above our wetland at Opoutama, Mahia Peninsula. There we were outbid and over the years we have witnessed the extensive kanuka forest on precipitously steep hill country being whittled away, creating erosion, blocking streams and threatening the health of our wetland. It is our continuing intent to acquire and restore that kanuka forest should the opportunity ever arise. Other properties we have seriously considered in the past were located at:



From Canopy No. 2.

from our patron: Sir Edmund Hillary, KBE

"The Restoration Trust has made a really worthwhile contribution to the health of our forests in its first ten years. I know that the Trust will be able in its second decade to restore still more forests, and improve the condition of others that are threatened in some way.

The Trust deserves the full support of all New Zealanders".

-MESSAGES

from our honorary trustee: Prof David Bellamy

"The restoration of the World's Native Forests is the only hope for the future of humankind and the plants and animals with which we must learn to share this Earth.

A decade of hard work behind us. now begins the decade of reconstruction."





- □ Mount Watson, north of Dunedin,
- Cave Road, Gisborne,
- Paterson Inlet, Stewart Island.

Despite those disappointments, the 40 years spent creating the Native Forest Restoration Trust has been full of excitement and great satisfaction. Is there anything more fulfilling than knowing your actions have restored a portion of New Zealand and knowing it will be protected and maintained in perpetuity?

If you require any further information about the NFRT I would be happy to hear from you. You can contact me on 09 813 0229, or by email at geoff.bev.davidson@gmail.com

Geoff Davidson, Founding Trustee, NFRT



Our Chairman's Speech

to the International Dendrology Society 3rd March 1990

The Chairman, Mr. Owen W.G.Lewis, thanks the Lady Anne Palmer and members of the touring party of the International Dendrology Society for the award to the Trust of a Plaque reading:

ARBOURETUM DISTINGUISHED FOR MERIT BY THE INTERNATIONAL DENBOLOGY SOCIETY 1990 3 MARCH 1990: AUCKLAND, N.Z.

I want to thank Lady Anne, and the Interna-tional Dendrology Society for the honour you have accorded the NZ Native Forests Restoration Trust by the award of this fine plaque. It is an honour that recognises the efforts of the Trustees as a team, and of all our supporters, voluntary workers, and con-tributors.

On this tour, members of the IDS party have

of all our supporters, Voluntary workers, and contributors.

On this tour, members of the IDS party have seen a cross-section of New Zealand forests. You have seen many noble trees, from the great kauri of the north, to the tall kahikatea and totraa of the central North Island, and the great beech and rate of the central North Island, and the great beech and rate of the central North Island, and the great beech and rate the central North Island, and the great beech and rate the central North Island, and the ground the variety of epiphytes.

You have seen the lushness of the foliage, sub-tropical nikau and the dark-shaded taratir. You have seen the tiny flowers of the dendroblum orchid and the ground loving pratia. You have seen brids and insects and all the relaized thattall these elements are inter-leated; each part depends on all the others, and all are mutually dependant so that the whole ecosystem can perpetuate itself. If only we leave it alone...

You have also seen that our record in this country is not good. Only one fifth of all that splendid ecosystem remains. And what there is is threatened by opossum or goat or browsing cattle, or by mines of gold, or wood-chippers. Erosion scars our hills that were once covered in forest, con by mines of gold, or wood-chippers. Erosion scars our hills that were once covered in forest, this tremendous power to re-create itself should be given every encouragement. The first step is to secure and protect an area of forest, preferably one

adjacent to and part of the ecology of a major forest of national significance; then to assist by selective and appropriate planting the full re-growth of a natural forest. So the cycle from nurse crop through to canopy can begin again. Thus land that has been cleared, or where the bush has been cut over, or where it has been degraded, can once again stand proud. It is a long-term project which none of us will see completed in our life time. But then, are not all the worthwhile things in life long terms at the work of the control of the con



Here is our native forest, a unique and living organism. There is nothing like it anywhere else in this world. It is beautiful, it is precious, it is not for plunder, it is to be cherished and respected in the world. We will be the control of the





Gwenda Margaret Harris, 2 December 1936 – 8 December 2019

Gwenda was born in Christchurch elder daughter of Richard and Marjorie Harris, and sister of Brian, Peter and Judith. She lived her early years in Harewood, attending Harewood Primary School and Christchurch Girls High School. Always having had an interest in plants and flowers, she had intended to become a florist, but after obtaining her MA university degree, she and five friends embarked on extensive travels to Europe and beyond, where her horizons expanded to include art, history and travel.

Gwenda's career after a stint at nursing and office work, included a role as Editor of the NZ Journal of Botany in the 1970's and training as an Editor at the DSIR, then Advisory Officer for the Nature Conservation Council, during which time she was the Council's representative at the 15th Session of the General Assembly of the International Union for the Conservation of Nature (IUCN) in Christchurch October 1981. The conference took place against a backdrop of anti-apartheid protests which were vociferous in the streets outside. But inside there was a who's who of world conservationists including Sir Peter Scott. The New Zealand contingent was led by P.H.C. (Bing) Lucas, one of the creators of New Zealand's national parks and reserves system.

Then Gwenda moved to the role of Executive Officer for the Environmental Council, followed by Executive Officer for the Nature Heritage Fund, where she worked closely with Allan McKenzie, and then the New Zealand Conservation Authority. One of her proudest achievements/duties was in helping in the establishment of the Kahurangi National Park which of course adjoins the Mangarakau Wetland area.

Which brings up Gwenda's connection to the Native Forests Restoration Trust. One of her friends from university days was Rosemary Middleton who became the Director of Gisborne's Tairawhiti Polytechnic in 1985. Around the same time Gwenda purchased an iris nursery in Gisborne and their friendship continued. They built a beach house together at Mahanga. Years later Rosemary died leaving Gwenda as the trustee for her estate with the wish that it be gifted to an organisation for the purpose of protecting wetlands and natural habitats. NFRT proposed purchasing the 68 hectare wetland at Opoutama and Gwenda agreed, giving the bulk of the funding to the Trust and agreeing that part of the Mangarakau purchase could also be funded from Rosemary's bequest. There remains unspent a portion of the bequest which we have dedicated for the purchase of a suitable wetland in the future.





Left: Rosemary Middleton at Tairawhiti Polytechnic. Right: Mangarakau opening celebration with Di Lucas, Gwenda Harris and Brian Davis cutting the 'after-party' cake.



We were fortunate that Gwenda was available to speak at the opening of both the Mangarakau and Opoutama Reserves, where she gave insights into Rosemary's life and the reasons for her bequest. The serendipity of the Opoutama purchase became evident when Gwenda mentioned the beach house they built was just 7 km away at the end of the no-exit road to Mahanga. Rosemary might well have had the Opoutama wetland in mind when she made her last will & testament.

At the opening of Purple Peak Curry Reserve near Akaroa my wife Bev and I were pleased that Gwenda was able to stay with us for the weekend. It was a delightful time as Gwenda and Hugh Wilson, the manager of the adjacent Hinewai Reserve were old friends and enjoyed catching up at such a happy event.

In her seventies, Gwenda, determined to improve, took herself to Otago University for further study and in 2008 graduated with a Bachelor of Science degree in Botany and Geology. Beyond conservation and related topics, Gwenda pursued an interest in growing Irises. She joined the New Zealand Iris Society in 1986. During her time in the Society, which continued until her death on 8 December 2019, she contributed many articles and gave many talks at Conventions and Seminars, both in New Zealand and overseas. Her life culminated with her book "Why Irises?" being published weeks before she died.

We would like to express our deep gratitude to Rosemary and Gwenda for their generous support.

Geoff Davidson, Founding Trustee, NFRT (material sourced from the Iris Society bulletin with help from Gwenda's sister Judith Nielsen)

Leaving a gift in your will is a wonderful way to continue your legacy and continue to care for our natural environment after you have gone. Every gift, large or small, can have a huge impact. We have seen the beautiful and important areas that gifts of this nature have helped to save – wetlands like Opoutama and Mangarakau – areas that may have been lost to development or neglect. For more information about how to leave a gift to NFRT please go to our website: www.nfrt.org.nz/leave-a-gift/ or contact Sue Cameron: admin@nfrt.org.nz



25 years of trampers' kokako protection in Pureora Forest, where it all began

Canopy 44, distributed in the summer of 2005 included an article from the Chairperson of the Howick Tramping Club Conservation Subcommittee, Colleen Grayling. Canopy 44 (Summer 2005) is available to download on our website.

Colleen wrote about the ten years of predator control, since 1995, which saw kokako numbers in Northern Pureora rise from six pairs in 1995 to forty-six pairs by the 2005 census. This success allowed a number of birds to be translocated to assist in re-establishing a population at Mount Bruce in the Wairarapa. The pest control mahi included rat monitoring, toxin programmes and track maintenance over areas owned and managed by the Native Forest Restoration Trust, Whakarere Maori Trust as well as public conservation land. Below, Colleen updates us on the last 15 years of the Howick Tramping Club's continued efforts in protecting these areas for kokako and other taonga of the bush.



Colleen Grayling receiving QSM from Dame Patsy Reddy.

From 1995, contractor Laurence Gordon set up a bait station network to protect kokako in the Northern Pureora Mangatutu catchment. Support by Rosemary Gatland, and Sharen and Mike Graham followed, then the Howick Tramping Club, Pukekohe Tramping Club and many other volunteers became involved.

Hard work began paying off with the kokako population growing firmly from 6 to 185 pairs over 1600ha in the 2016 survey. This increase enabled 82 kokako to be translocated to support five other projects. Robins have also thrived and 160 have been translocated to five projects.

In 2011 a remnant kokako population was found holding on in the nearby Tunawaea catchment and a bait station network was also set up there. The Auckland Tramping Club carry out this predator control, and have much success with kokako numbers rising from 13 to 28 pairs over five years.

Much appreciated support has been essential to our success. The Native Forest Restoration Trust generously make their

house on Rangitoto Station available as a base and the Waikato Catchment Ecological Enhancement Trust have funded materials since 2012. DOC Maniapoto provide advice and fund the kokako surveys.

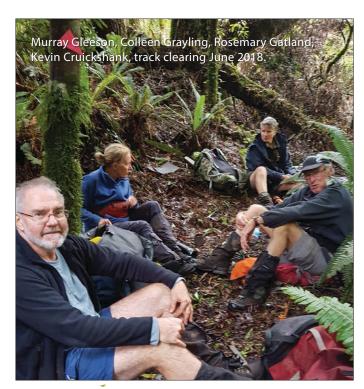
Now, Northern Pureora has four kokako projects – with Okahukura and Waipapa – and is a stronghold for kokako with birds moving between these protected zones. In 2016 Northern Pureora was recognised as the first area to reach the target of >250 pairs of genetically robust kokako since predator control began.

Despite our challenges of weather, terrain, vandalism and road access, we use our tramping skills and fitness to get the work done aided by a sense of purpose, humour and camaraderie which drives our hardworking and loyal volunteers.

Colleen Grayling, Howick Tramping Club, and coordinator of the Northern Pureora Kokako Recovery Project







Covid Cartoons Support Nature's Protectors

A series of 60 cartoons, produced by award winning illustrator Anna Crichton during Lockdown, are to be brought together in a book celebrating the heroes of New Zealand's enforced holiday, as well as our flour and toilet paper moments. It will be a humorous if poignant reminder of weeks that were difficult for some... a holiday for others.

And what you may ask, is the relevance of this book to our 40th anniversary and Canopy? Ms Crichton has kindly offered a percentage of profits from the sale of the book to go towards our work. So we look forward to watching the sales soar, and

the memory of our Covid battle survive in cartoon in many houses around New Zealand and beyond.

In another 40 years, on our 80th year anniversary, when our future supporters and Trustees look back on the first 40 years of Canopy editions, this cartoon may just serve as a reminder of that other historic moment when our fast-paced world changed and New Zealand became an isolated island at the bottom of the world once more.

Sue Cameron, Administrator, NFRT



Prophetic words... the expansion of the Waipa Rerenoa Restoration Project

Back in the summer of 2015, Native Forest Restoration Trust Trustee, Rosemary Davidson, finished her article about the Waipa Rerenoa Restoration Project in Canopy 61 with the following comment:

"By the time the first 11kms are complete we might be working on the next section. Why stop now!"

Prophetic words indeed as the project is now aiming for 44kms of riverbank to be completed over a decade. Rosemary, founder of the project, updates us on progress:

The original goal was to restore 6km of river, (12km of riverbank) with native riparian planting over a period of three years. We are now in our fifth year and the target is now to restore 22km of river, (44km of riverbank) over the period of a decade.

To do this we needed to get the landowners on board, remove the crack willows, retire a 10m riparian strip, build rock revetments on areas suffering from erosion, re-fence the entire length and plant the whole area with natives and some matsudana willow poles in vulnerable areas. Quite a mission overall. However, to date we have completed 18km of the proposed 44km, involving over 70,000 native plants, 1300 willow poles and numerous erosion control structures.

Some unforeseen, positive opportunities have developed in the course of this work. We are just about to start on a walkway which will give a local Marae walking access to the river, something that they have not had for many years and something that we were able to negotiate for them while working with the adjacent landowner. I'm personally very excited about this as it will benefit both parties and to reconnect a Marae with their river feels like a really special thing to do.



We have suffered some setbacks this year thanks to the Covid-19 situation. Unfortunately lockdown was right over the time when the planting zones are prepared. No contractors could work over this period so sadly no planting will be able to be done this season. We will just have to redouble our efforts next year.

All this hard work was recognised when the Ballance Farm Environment Awards organisers asked to showcase our team and the project in the launching of their new Catchment Group award category. This involved a day of filming, an experience I found quite stressful, but was going to give good exposure to the project. Unfortunately Covid-19 again had a big influence as the award night was cancelled and the entire thing was done online. The resulting film can be viewed at: https://youtu.be/hTgcagmMeiU

Rosemary Davison, Trustee, NFRT



Before and after photos taken from same bend in the river. Photographs by Rosemary Davison.

Positive impacts from trapping at Taranaki Mahood Lowe Reserve

A network of almost 100 DOC250, A24 and SA2 traps now encircles our Taranaki Mahood-Lowe Reserve targeting rats, possums, mustelids and feral cats. The benefit of this intensive trapping has been demonstrated with the sighting of a pair of whio with five fledged ducklings last summer on the Kai Auahi Stream, our western boundary.

In 1945 the Mount Taranaki whio population was designated "functionally extinct" because of predation by stoats and rats. This means there were not enough remaining birds to recover a

healthy population. Thankfully there are now at least 31 breeding pairs because of a North Island breed-for-release programme.

Monitoring of DOC's overall mounga whio breeding programme for summer 2019-2020 resulted in a new record with up to 87 ducklings on 8 rivers.

Sharen Graham, Reserve Manager – Southern Reserves with information provided by Dean Caskey, Senior Environment Officer – Biodiversity, Taranaki Regional Council



Kiwi Catching for Operation Nest Egg (O.N.E) – Omoana Reserve

Last year the Native Forest Restoration Trust gave permission for Kiwis for Kiwi to catch kiwi on our Omoana Reserve as part of a national initiative to help boost kiwi numbers by 2% each year using Operation Nest Egg (O.N.E).

The Trust are really excited to support this initiative which entails collecting six eggs per year, from males tracked in the reserve, over the next three years (it is the male of the species that incubates the eggs). These eggs will be hatched and reared at either Kiwi Encounter Rotorua or the Kiwi Burrow Taupo (Wairakei Golf Course). They will then be released into predator free Sanctuary Mountain Maungatautari. These kiwi will form part of a genetically diverse founding population of Western North Island brown kiwi on the predator fenced maunga.

In several years, once the Maungatautari population has grown to carrying capacity, kiwi will be taken from the sanctuary and returned to our reserve and other reserves in the Taranaki region where pest control is being undertaken. The kiwi released back onto our reserve will be over 1,200g and therefore able to defend themselves from stoats. Unfortunately, adult kiwi are still susceptible to ferret and dog attacks, but with pest control and O.N.E it's hoped the populations will continue to grow.

The catching programme began last year and I was lucky enough to be contracted to do the work using my conservation dogs Tui & Charlie. NFRT long term volunteer Liz Crane and assistant reserve manager Alana McLeod also joined me as part of a support team.

To catch the kiwi, we spend long nights camped out listening for kiwi and identifying their territories, an especially tiring experience during the summer months when the nights are short. In the morning when there is an abundance of scent, the dogs and I head out to search the areas where we heard the kiwi. This may sound pretty straightforward but when the territories are large it can be very difficult and take up to three days to find the male kiwi.

Reserve Manager James McLaughlin with Tui and Charlie.

We generally only want male kiwi as North Island male kiwi are 'equal-opportunity practitioners' and stay at home to incubate the eggs; the female checks in every now and again to make sure all is well but generally doesn't incubate the egg once the male has taken over. Once a chick is hatched it will leave the nest at about two weeks of age with very little guidance from its parents. South Island species of kiwi are much different with both parents incubating the egg and young chicks staying with the parents for up to 18 months.

The team and I undertook three kiwi catching trips on the reserve catching a total of six males and three females. The males all had transmitters attached and this year the males will be tracked in order to take their eggs to the hatching unit where they will be reared safe from predators. Kiwi chicks in the wild often only have a 5% chance of survival.

We were pleasantly surprised to find this many kiwi on the Omoana Reserve and we suspect there are more.

James McLaughlin, Reserve Manager
– Waipoua and William Upton Hewett Reserves, NFRT







Covid Lockdown's Weedy Impact

Across New Zealand there must be hundreds of thousands of ecosourced native plants being raised in volunteer run nurseries for restoration projects. What happened to these precious plants during Level 4 of the Covid 19 lockdown? Official advice about nurseries was that only essential maintenance was acceptable; propagation and weeding were not considered essential work.

One of many such nurseries in the Waikato is run by Waikato Ecological Restoration Trust (WERT) from premises on the Mystery Creek Fieldays site, just south of Hamilton. The trustees adhered strictly to the rules; the only activity during the four weeks of Level 4 restrictions was very limited spraying for disease control to manage an outbreak of mildew on some of the most precious species, in particular swamp maire, *Syzygium maire*.

The consistently warm and dry weather, combined with an automated watering system meant that plants grew vigorously but so did the weeds. In early autumn, plant numbers are at their maximum, just before orders are filled for the winter planting season. Weeds always spread rapidly when plants are packed into the minimum area.

Immediately after the reduction in restrictions to Level 3, a maximum of 5 volunteers at a time returned to start on the mammoth weeding task, adhering strictly to a written health and safety plan. Despite multiple weeding sessions in both weeks of Level 3 the impact on the weed problem was barely discernible, so large was the problem. The further relaxation to Level 2 restrictions provided a maximum of 10 volunteers at a time in the nursery, allowing for the most urgent weeding to be completed. Potting during levels 4 and 3 was limited with fewer people able to participate due to physical distancing. Fortunately a number of volunteers collected seedlings and supplies before the lockdown began and continued potting at home. One of the biggest frustrations of the lockdown was not being able to collect seed which will mean that some species may be in short supply next year.

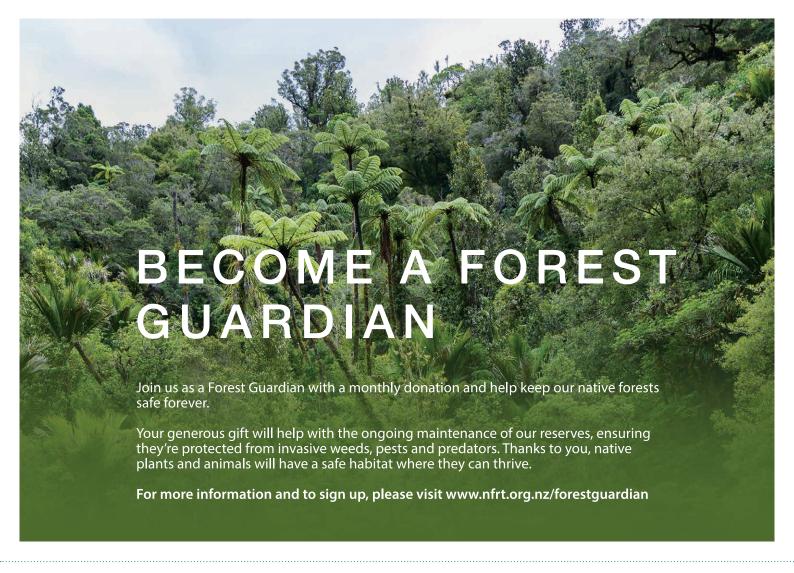
The WERT nursery supplies the majority of the plants for restoration at the Trust's Ed Hillary Hope Reserve to the west of Hamilton, and ecosourced plants, most grown from seeds collected from the reserve will be available for planting there this winter provided pandemic restrictions permit.

Dell Hood, Trustee, NFRT









Our Landscape Our Legacy - Protecting, Inspiring, Managing, Restoring

Come and stay at Mangarakau Wetland Field Centre, North-west of Nelson

Attractive 10 bed lodge situated amid wonderful scenery with walking tracks around the swamp. Close to outstanding natural wilderness areas with access to Kahurangi National Park, Farewell Spit and Te Tai Tapu Marine Reserve. Bring own bedding and food.

For more information and Lodge Bookings: Ph: Robyn Jones (03) 524 8266 mangarakauswamp@gmail.com www.mangarakauswamp.com



Come and stay at Rangitoto Station Reserve, The King Country

Modern 3-bedroomed house, 34km from Otorohanga, King Country. Well-equipped and ideal for small to medium groups but sleeping space depends on how many workers are there at the time. Camping permitted near the woolshed. Hours of walking tracks through bush or open country with superb views. Many native bird species including kokako, kaka and falcon.

Relax and enjoy the peace and quietness.

House Bookings: Ph. Rosemary (07) 873 7354 rkmgdavison@xtra.co.nz

