



O TĀTOU NGAHERE CONFERENCE NOTES

Back in 1999, Robert McGowan returned to Hamilton from the Hawke's Bay, passing the extensive pine forests at Kaingaroa and Kinleith. On meeting up with his friend and colleague Warwick Silvester, he said "I am sick of looking at pine trees. We should have a seminar on native forests."

"You find a venue Rob, and I will get the people."

A two day seminar was held at the University of Waikato later in the year. A modest number was expected, but in the event 140 people attended. There was clearly a hunger for engagement with native forests, and two years later Tāne's Tree Trust was established.

The recent conference at Te Papa, O Tatou Ngahere, held in association with our friends at Pure Advantage, had an attendance of more than 1000. By some margin this was the largest forestry conference ever held in New Zealand. The participants were highly cosmopolitan, including, not necessarily in an implied order of importance, ministers of the crown, industry leaders, scientists, farmers and townies, environmentalists and students from 33 high schools.

In the 23 years since the first conference, the main objectives of Tāne's Tree Trust have remained intact, although there have been some shifts in priorities. One theme in particular has attained a degree of urgency.

The Climate Crisis

At the 1999 seminar, climate change was a dark cloud on the horizon, referred to but receiving little prominence. Now, 23 years later, the cloud is directly overhead, black and loaded with menace. In its shadow and under imminent threat are the planet with its biotic and abiotic systems, and all our human societies.

The interaction between climate change and our forests dominated the discussions. It was central to the addresses by two ministers, Stuart Nash and James Shaw.

In his presentation, James Renwick gave an apocalyptic vision of the likely future, and stressed the urgency of our response. In this our forests are locked in a paradox, in which they are both victims of climate change, and also tools we can use in responding to it. However they are not a solution, but simply a mechanism to buy time until more definitive strategies are developed. These will involve new ways of thinking, some uncomfortable decisions, personal sacrifices and radical new technologies.

Rod Carr summarised the work of the Climate Change Commission and the role of forests in our response. If we are to reach zero carbon by year 2050, fast growing exotic plantations will have to do the heavy lifting. However beyond that date zero

carbon will have to be maintained for "every year thereafter", and native forests, which lock up carbon for hundreds of years, will take over and help fill that role. Tāne's Tree Trust, with some reservations, supports that analysis, in the knowledge that it may put us offside with some environmentalists on one side, and some carbon farmers on the other.

Tim Flannery, the brilliant Australian polymath who gave our keynote address, described the temperate rainforests of Aotearoa, with their multilayered complexities, as among the most productive forest ecosystems on earth.

Our native forests also store carbon at a faster rate than is commonly supposed. This was supported by a presentation by David Bergin, Mark Kimberley and Warwick Silvester. This is linked to a comprehensive database on native plantation forests, representing more than 20 years' work by Tāne's Tree Trust. It is a landmark study, and merits close reading.

Transitioning

Although central to our carbon response, no one other than a demented cost accountant could take pleasure from the vision of our hills and valleys covered in expanses of pines that were planted for carbon, and left to disintegrate with age. And while doing so they are susceptible to the risks inherent in a monocultural pioneer species with an ecology linked to fire, and susceptible to pathogens including fungi and bark beetles, that are likely to become prevalent in a warming climate.

This is a prospect that would be more palatable if we could be confident that these plantations will transition to native forests when they have served their purpose. We know there are some locations where that is likely to occur. We also know there are some locations where it will not. There is an urgent need to know where carbon forests can be, or should not be, planted and what interventions are needed, such as the establishment of seed sources.

In his address Stuart Nash announced a significant new research project conducted by Tāne's Tree Trust and MPI that will address the conditions and interventions that will be needed for transitioning. He also indicated it is envisaged that "Permanent



TTT Chair, Peter Berg, opening the conference. Photo: @alistairguthrie/ @PureAdvantage

Forest" designation for both new and existing carbon forests will require a management plan and a strategy for transitioning.

Adam Forbes, who with Meg Graham will manage the project, outlined the project, which is now underway. More details will be given in the next newsletter.

Pine forests can be easily established, but the large-scale establishment of native forests that is proposed is very different.



A full auditorium, including trustees Rob McGowan, Wayne O'Keefe and Mike Bergin. Photo: Jacqui Aimers

There will be some tricky issues involving impediments and incentives, and these received much discussion.

Impediments

Cost. Cost is the main obstacle in planting a native forest. The price of seedlings is one component of that. Local initiatives will help. Adam Thompson described his personal journey when setting

up a native forest nursery in the Waikato, with the objective of reducing the cost of seedlings.

However there are irreducible costs in planting at scale. One low cost approach involves "working with nature", in which seed sources are established, and birds and wind are brought in as agents of dispersal. This concept was promoted by Tāne's Tree Trust in our submission to the CCC. Dame Anne and Jeremy Salmond are applying this method, with help from Tāne's Tree Trust, on their property north of Gisborne. In her presentation, Fiona Carswell of Landcare Trust referenced the inspirational work of Huw Wilson, who has applied assisted natural regeneration on his property on Banks Peninsula.

Predators. Our native forests are under constant assault on all fronts from an army of introduced predators, with potential reinforcements for them lining up offshore. There was general agreement that there is no point in planting new native forests unless we can keep predators under control. Our armoury is limited, and many of our weapons are sadly out of date. Unless we can design new and better weapons, the prospect of a predator-free New Zealand by 2050 will be a pipe dream.

In that battle we are in a stalemate. As David Rhodes suggested,

to achieve a breakthrough we may have to consider some radical technologies, perhaps involving genetic manipulations, that many will find unpalatable.

Another sacred cow, badly infected by a lethal cocktail of climate change and a contracting habitat, that we should reconsider, if not lead to slaughter, is the concept of ecosourcing. Threatened by increasing heat and extreme weather events, our forests will need all the genetic resources they can get. With climate change, strict adherence to ecosourcing may become a luxury that we can no longer afford.

Incentivising Native Forests

Currently, incentives for forestation are stacked up in support of exotic, rather than native forests. There was much discussion on the range of benefits provided by native forests, and agreement that these deserve recognition. But to measure and quantify them, and derive a value for financial compensation is problematic. An additional hurdle is that any regulations may have to pass the test of international recognition.

It will not be easy, which is not to say that it should not be done. Three specific issues were identified:

- **ecosystem services.** Jacqui Aimers discussed a range of ecosystem services provided by forests, including erosion control and protecting streams and wetlands.

- **biodiversity.** This is a hot issue internationally. At the COP15 summit at Montreal it was predicted that we are on a trajectory to lose 10% of the world's plant and animal species by the end of this century. Biodiversity credits came under discussion.

- **He Waka Eke Noa.** Rough translation: "We are all in it together." This is undeniably true, however some of us, specifically the struggling sheep and beef farmers, find themselves more deeply in it than the rest of us. Natural justice suggests that a farmer who is required to pay a levy for emissions and who may have spent time and money to protect a wetland, fence and control predators in an old forest, or plant a new one should be rewarded with something more tangible than a simple expression of gratitude.

Native Timbers

At the 1999 seminar, there was a strong focus on the sustainable use of native timbers. This was expected to provide a high quality product to a vibrant local furniture industry.

We know what happened. Our local industry collapsed under a flood of imported timber, and later imported products made from tropical hardwoods, some of dubious provenance.

Recommendations from the O Tātou Ngahere conference:

1. Encourage urgent action by Govt to establish a Biodiversity credit - 'standard'
2. Urgent action and funding to sustain native species planting, protection and management including farm catchment groups and iwi
 - Increase significant lift in investment into predator eradication [PF2050] including deer, goats, pigs etc especially in biodiversity hotspots (e.g. Chathams, Fiordland)
 - Recognise land owners for regenerating understory in native fragments/bush (fencing, pest & weed control)
 - Put in place a system to enable Nature Based Solutions such as 'biodiversity' impact investment (e.g. Toha) to access new capital
 - Accelerate forest regeneration through 'better' information, co-funding
 - Invest in R&D to lower seedling and establishment costs & scale nurseries
 - Measurement data, verification data – integrated data sharing to help monetise your native species/biodiversity
 - Collate, collect, publish and adopt C sequestration information [ETS/voluntary]
 - Review Forest Act controls to support sustainable native timber products
 - Advocate to establish private markets to heal, not further divide us... government to help initiate

Currently, just two species have an established place, but there are others with potential. Paul Quinlan discussed his work with Northland totara, and Jon Dronfield described his Westland beech operation.

A major obstacle to milling native timbers that received attention in 1999 was a minefield of regulations. This has been worked over since then, but in spite of all the effort, there are still mines to clear.

Knowledge Transfer

Over 20 years, Tāne's Tree Trust has published in print and online a comprehensive series of publications on native forests. This is an invaluable resource, but increasingly we have moved towards hands-on communication through field days, seminars and the use of demonstration sites. People who plant trees on their farms expect their advisers to have dirt on their hands, and to engage directly with them. They also like to engage with each other.

The power of collaboration was highlighted in a panel led by David Norton, in which a group of farmers discussed their involvement in community groups in joint projects in predator control, and forest establishment. There were two messages from the panel. There is a lot of native forest, often fragmented, some well managed and some degraded, on sheep and beef farms. And a lot of effort is being done by farmers to protect and enhance it, mostly under the radar, and deserving recognition.

Rangatahi

A highlight of the conference was a panel of young people. From a range of backgrounds they share attributes in common: intelligence, confidence, energy and passion. They represent a generation with an enormous resource of talent and, as one of them observed, a grasp of technologies that most of us cannot imagine.

It would be patronising to say that the time of the rangatahi will come. As the young people on stage insisted, and to loud applause, the time of the rangatahi is now. If we do not make space for them, they will create it for themselves.

The mood of the audience was to create that space. We will see what happens.

- Ian Brown

Report on the Annual General Meeting

October 2022, Wellington

32 members and Trustees attended the AGM which was held in Wellington on the evening of Wednesday the 27th of October.

In his report, the Chairman discussed the building consensus around planting and managing more native forests. The Trust's role in partly facilitating this – a consequence of a great deal of hard work over many years – was recognised and also meant that important funding support for the Trust was continuing in a number of areas. Consequently, and despite Covid, 2022 had been another good year for Tāne's Tree Trust (TTT). However the Chairman also noted that this was only possible because the entire team worked hard to ensure all TTT's work was of a high standard and well supported. The Chairman accordingly thanked the entire team for their effort and also noted that additional support would be welcome.

The CEO, Mel Ruffel, reported that member numbers were robust (and indeed increased significantly as a consequence of events such as the subsequent conference). The basic membership subscription was being held at \$45, although some folk were also contributing additional donations which made a very meaningful difference to the ability of the Trust to keep in touch and provide valuable information to members. The various media being used to communicate our messages were successful and in every case growing in terms of contacts and information exchange.

Treasurer Professor Silvester spoke to his report which really illustrated that the financial position of the Trust was robust both now and into the future. A clean report had been provided by the independent reviewer. A particular facet of the Trust's investment is its ability to leverage project funding – resulting in more comprehensive work programmes and wider participation than might have been possible otherwise.

The Annual Report was otherwise noted as a thorough account of the Trust's work over the past 12 months and all members and other parties interested in keeping up with developments in the native forest management area were encouraged to read it as a useful point of reference.

- Peter Berg

Tāne's Tree Trust at the National Fieldays:

The period from Labour Weekend until the end of the year is generally the time when organisations begin to 'wind down' for the end of the year. But this year TTT certainly couldn't be accused of easing up, with our Conference at Te Papa (see article in this newsletter) and then from 30 Nov to 3 December having a stand at Fieldays, the Southern Hemisphere's largest agricultural event, at Mystery Creek, Hamilton.

Michael Bergan did a great job with all the work of organising and setting up TTT's stand for Fieldays. He spent most of every day on the stand too. There was a very good representation from the rest of TTT's trustees on the stand too and, because of the reduced numbers at Fieldays this year, there were times where the stand hosted more trustee than visitors.

TTT's stand was in the forestry hub along with Te Uru Rākau – New Zealand Forest Service, Forest Owners, NZ Farm Forestry, Manuka Farming, Scion and a number of others. It was great to be part of mainstream forestry – something that at least a couple of visitors to the stand commented on. The Forestry Hub though, at the western end of the site – where forestry things have typically been in past Fieldays – was a little bit out on its own. As forestry becomes a more normal part of most farming activities the Fielday organisers might perhaps give some thought to placing this hub a bit more centrally and nearer hubs for other agricultural activities.

A lot of the people visiting the TTT stand had come specifically wanting to talk in detail with someone about specific issues relating to their block, species they might plant, and how they might manage their forest. In most cases we were able to oblige. There was also good interest in our videos, which were playing continuously, and TTT's publications – particularly on Totara, Continuous Cover Forestry and NTVs.

All-in-all the assessment of those involved was that the effort associated in participating was worthwhile, the contacts made and renewed useful and the exposure for TTT from participating likely to prove beneficial for the future.

- Gerard Horgan

Mike Bergin is director of Environmental Restoration (ERL) with 15 years of experience in the environmental field in applied research and technical advisory roles. He works on a wide range of projects with councils, landowners, iwi, community groups and government agencies including Crown Research Institutes. Mike is also involved in a number of environmental entities including Tāne's Tree Trust, Coastal Restoration Trust of New Zealand, Trees That Count of Project Crimson Trust and Northland Totara Working Group.

Michael specialises in setting up planting and weed control trials, monitoring of performance, managing databases and undertaking technical reporting across a range of indigenous plant ecosystems including forests, wetlands, geothermal landscapes and coastal dunes across New Zealand. He has a particular interest in the establishment and management of mixed-use forests in the rural sector and helping landowners achieve their desired outcomes whether they are for increased biodiversity and conservation, timber production or carbon sequestration.

In his spare time Mike can be found planting trees, trapping pests and spraying weeds on his small forest block, hunting, riding the mountain bike trails or kayaking on the lakes of the central north island.



Michael Orchard

In addition to all my work in plantation forestry my work has included:



- Long Term Member of the Royal Forest and Bird Protection Society and several other environmental groups.
- District Forester and Management Plan preparation for Whirinaki Indigenous Forest (in the Ureweras).
- Senior Indigenous Forester for Westland Conservancy of the NZ Forest Service.
- Senior Conservation Officer for West Coast Region of the Department of Conservation (including Mining site restoration and Nursey management).

· Significant Natural Area Landowner, Liaison Manager for the Grey District Council.

· QEII Covenant owner of the Orchard's 'Kahikatea Memorial Forest and Wetland'.

Plus terms on the Council/Executives of the NZ Institute of Forestry and NZ Farm Forestry Assn (currently Executive and FFA/FOA Environment Committee member, West Coast Chairperson), and NZ Tree Crops Association.

25 years managing my own business 'The Tree Centre', as an Environmental, Conservation and Forestry Advisor.

Kia ora, I'm **David Horgan**. I come with a science background and science training specialising in plant physiology; I'm motivated by a love for the environment and for people. I may also add, I'm motivated by food, wine and beer too! When it comes to work... I have worked for or with a number of crown research institutes but most of my career has been spent as a research scientist for Plant Protection Chemistry NZ, a small independent Rotorua-based research company. We were focused on improving the sustainable use of pesticides and herbicides through understanding and controlling plant/agricultural spray interactions. This work covered horticulture, agriculture and forestry sectors and led to my involvement in projects researching issues such as the kiwifruit disease Psa, myrtle rust and kauri dieback. It also involved working for/with many clients – from chemical companies, large grower groups, farmers, universities; in the latter years most of our clients were from overseas.

Since becoming a father in July 2020, connection to the whenua, which has always been important to me, has taken on even greater importance. Currently I am lucky enough to have a bit of career flexibility and over the last couple of years I have been my son's primary carer, while my wife has travelled in her role as a doctor/surgeon. My role looking after our 2 ½ year old son, is a challenging one. It brings both joy, and at times, frustration! I have learnt much!



The community and volunteer sectors are also important to me. I've been a committee member for the Rotorua branch of the Royal Society, as well as for the Rotaract committee, a volunteer for St John and the Team Leader for the Rotorua Red Cross DWS Team, dealing with everything from a tourist bus accident, floods, and the aftermath of the February 2011 Christchurch earthquake.

For the past 12 years, I've been a member of Tāne's Tree Trust and have really enjoyed many great experiences, field trips and conferences the trust has put on. The ethos, knowledge, experience, passion and commitment of the trustees and members is inspiring. I am privileged and delighted to have been invited to be a trustee - I know I will learn much and I hope I can also contribute well to the mahi ahead.

DONATIONS: A note from the Treasurer - all members should be aware that all donations (but not subscriptions), are eligible for a 33.33% tax rebate on your income tax. If required, we can send you a receipt of donation for you to submit to IRD with your tax return.

SUBSCRIPTIONS: Membership renewal notices are sent out annually on April 1st via email or post. Members can access all resources at www.tanestrees.org/resources. If you need to update your contact details, simply email us at office@tanestrees.org.nz