Tāne's Tree Trust Newsletter
Native trees for the Future
February 2020
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Sue van Dorsser

It is with great sadness that we acknowledge the passing of Sue van Dorsser. However, it is also an honour to have been able to count her among the wonderful people supporting Tāne's Tree Trust over the years.

As many of you know, Jaap and Sue have established a lovely rural property bordering the Awahou Stream in Hamurana, Rotorua. When they moved there the land along the stream was lost in weeds. Together with enthusiastic friends they tackled a wall of blackberry and willows and have planted 9 riparian hectares with 50,000 native trees and shrubs.

Today's developing forest is testament to their philosophy, dedication and hard work of more than fifty years promoting the planting and management of natives. Their property has been the venue for many workshops supporting the work of Tāne's Tree Trust showcasing riparian restoration at its best. Countless visitors have enjoyed Sue's heart-warming soup, humour and hospitality on these occasions.

A celebration of Sue's extremely busy life was attended by hundreds of friends from far and wide, a tribute to her enormous contribution to the local and wider community, touching the lives of so many and in so many ways.

In these sad days we wish Jaap and his family peace in their sorrow and joy in their memories.

- David and Susan Bergin

AGM and Field Day

Around 24 attendees were greeted warmly at the gates of the Minginui Nursery by Earl Rewi (Operations Manager for Ngati Whare Holdings) and welcomed onto land once the centre of native logging activities in the area. The old NZ Forest Service buildings have been spruced up and a number of well stocked poly tunnels of various designs show a progression towards larger and more sophisticated infrastructure as the business expands towards its goal of producing more than a million native seedlings per year.

Across the road from the existing compound, an area of 3 hectares has been fenced and is in the final stages of being levelled and prepared as a hardening-off area for up to a million and a half plants per year when the nursery reaches its planned capacity. A further 6 hectares will be cleared of scrub and planted with natives to create a sense of arrival into Minginui.

We were officially welcomed to the nursery by manager Matt Jackman and held a brief and efficient AGM in the canteen before Matt gave us a tour of the facilities. He explained that mechanisation is being consciously kept to a minimum to achieve a key project goal of bringing employment back to the village. Minginui was left high and dry by the outgoing tide of native logging in the mid 1980s and economic hardship is evident in the housing stock when driving through the village. While many people own their own houses, they do not own the land on which they stand. Banks have therefore been unwilling to lend money for house repairs and an atmosphere of decay and disrepair is obvious when driving through the village.

In stark contrast, the feeling within the nursery grounds could not have been more positive. Most of the expanding infrastructure is new and everything appeared orderly and well maintained. Staff were friendly and happy to have visitors viewing the fruits of their labour. Matt explained that nursery jobs are being spread around the village with the aim of employing at least one person from each household.

Alongside the usual range of revegetation species, Minginui Nursery is trialling production of rooted cuttings from podocarp species. This is being done in collaboration with Scion and while we were shown through the poly tunnels where these cuttings are grown, exact details of their production was not forthcoming as this is commercially sensitive information.

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Photos from our recent AGM and Field Trip

After the nursery tour and lunch, John Herbert, Chairman of Whirinaki Regeneration Trust spoke to us about the challenges of replanting roadsides, old skid sites and key areas around the village. One major obstacle to these operations is the herd of around sixty horses owned by the locals and allowed to roam freely in the vicinity. Trial and error has shown that Kanuka is the only species the volunteers can plant that horses will not eat.

Photos: Michael Bergin

In areas where a richer species mix is required, it is necessary to fence the horses out. On old skid sites where the ground is heavily compacted, a digger has been used to break through compacted ground and raise mounds of soil into which kanuka can be planted successfully. See photo.

With a cash injection of 5.8 million from the PGF, a committed and experienced management team and high demand for quality native seedlings resulting from 1BT, there may never be a better opportunity for the people of Minginui to re-float their local economy and claim a significant role in the reestablishment of our native forests. We thank the staff of Minginui Nursery for their warm hospitality and wish them every success for the future.

- by Ian Brennan

Tāne's Tree Trust planting native forestry toolkit and carbon calculator

The first year of this three-year project will be completed in December 2019. The project is funded jointly by the Ministry for Primary Industries' Sustainable Farming Fund and Tāne's Tree Trust (TTT). It aims to provide a free comprehensive on-line toolkit from planning to implementation for planting native forestry to meet multiple objectives that includes maintaining and improving environmental values through to sustainable production.

This year tasks have focused on interrogation of the Tāne's Tree Trust Indigenous Plantation Database preparing growth data, checking for integrity and standardising it across all sites and plots ready for importing to the web system. The data structure in the web system has been completed by Robin Sallis of Cerulean Design and Development to accommodate the plantation database.

Refinement of growth and yield models for the key native timber species is well underway using an initial aggregation of species into broad groups including native conifers (e.g. podocarps, kauri, tanekaha), tree hardwoods (e.g. puriri, beeches, kohekohe, rewarewa, etc), and shrub hardwoods often used as nurse cover (e.g. manuka, kanuka, tarata, karamu, kohuhu, etc). Front-end access controls involve design of the growth and yield calculator interface to allow for testing by selected users toward the end of the project, prior to launching on the website.

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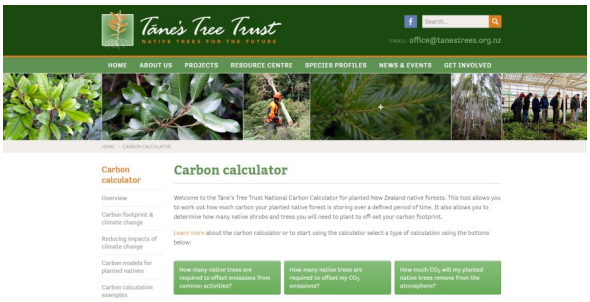
Refinement will include creating growth and yield models for individual key species where there is sufficient growth data, and if practical by region and site type. This may provide an opportunity to develop a basic site index for planted native species based on different site quality, management history, and growth rate for a selection of the most commonly planted native trees within the Indigenous Plantation Database.

The Tane's Tree Trust National Carbon Calculator for Planted Native Forest has been launched and is now available on the TTT website as one of the outputs from the planting native forestry toolkit project. It has been developed using the refined growth and yield models from the TTT Indigenous Plantation Database. Testing has been undertaken in collaboration with Trees That Count where there is substantial interest from the public, community groups, landowners and corporates in planting native trees and shrubs to offset carbon emissions.



The calculator is easy to use and allows you to work out how much carbon your planted native forest is storing over a defined period of time. It also allows you to determine how many native shrubs and trees you will need to plant to offset your carbon footprint. Check it out via this link and send us your feedback:

https://www.tanestrees.org.nz/resource-centre/carbon-calculator/
For further information contact Project Manager David Bergin:
davidbergin.erl@gmail.com

- by David Bergin

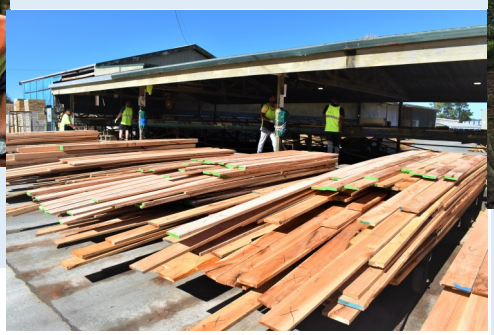
NORTHLAND TŌTARA INDUSTRY PROJECT (TIP)

Tāne's Tree Trust is a partner in the Tōtara Industry Pilot (TIP) project. Peter Berg chairs the project's steering group and SCION provides project management and are major co-funders. This two-year project was initiated in phase 2 of the Our Forests Our Future programme and will run until mid-2020.

Full project details and updates are provided on the TIP project website: https://www.totaraindustry.co.nz/

To date, 300m3 of tōtara logs have been sustainably harvested from three different farm properties. The logs have been milled and dried and is now ready for sale in order to test the business case for a new regional industry – based on continuous cover native forestry. For further information, please contact: Paul Quinlan pdq@pqla.co.nz

Photo: P Quinlan— Brett Kewene during the TIP sustainable harvesting operation on Geff Cookson's property.



Farm-tōtara timber milled by Northpine has been kiln-dried and is now ready for sale. Photo: P Quinlan

Continuous cover forestry principles were applied during the TIP harvests of farm-tōtara, according to the sustainable management provisions of the Forest Act. This demonstrated best practice low-impact single-stem extraction. Photo: P Quinlan.

Adaptive Management of Coastal Forestry Buffers

A three-year project replacing coastal pines with native coastal forests managed by Tāne's Tree Trust with support from the Coastal Restoration Trust of New Zealand is well underway. Sand-dune exotic production forests typically have had a sacrificial buffer zone of pines and other exotic conifers providing critical salt and wind shelter to landward forest stands. After one to two rotations of pine production this exotic buffer is starting to fail. This project focuses on the upper North Island as a pilot study exploring practical options to transition failing exotic coastal buffers to resilient permanent buffers comprising indigenous coastal forest species based on an adaptive management approach. The project is partially funded by the Ministry of Primary Industries' Sustainable Farming Fund, with project management and ongoing peer review from Tāne's Tree Trust.

Work involves a review of existing experience, field surveys and establishment of planting trials in collaboration with the forest industry, iwi, landowners, councils and communities to develop preliminary guidelines. An initial literature review of available information on indigenous duneland forest along the northern New Zealand coastline has been completed.

The Project Team comprising Meg Graeme, Jim Dahm, Michael Bergin and David Bergin has been working with project partners in the establishment of the first planting trials at Te Hiku/Aupouri Forest, Northland; Kawhia Forest, western Waikato; and Opoutere, eastern side of Coromandel Peninsula.

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The plant species selected for the trial plots reflect the range of possible historic coastal forest species at each of the sites but constrained by eco-sourced plant availability. For the exposed open coast plots only a limited selection of hardy primary canopy species have been planted in the trials. Planting trials have incorporated a range of treatments including different site types, sheltered sites within the existing pines, exposed sites, artificial seedling shelters, fertilisers and hydrogel.

In total over 6,500 plants were planted in trials during mid-2019 by project partners and community volunteers. The survival and growth of these native trees and shrubs will be monitored as part of the project. Further planting will continue at the three sites next year.

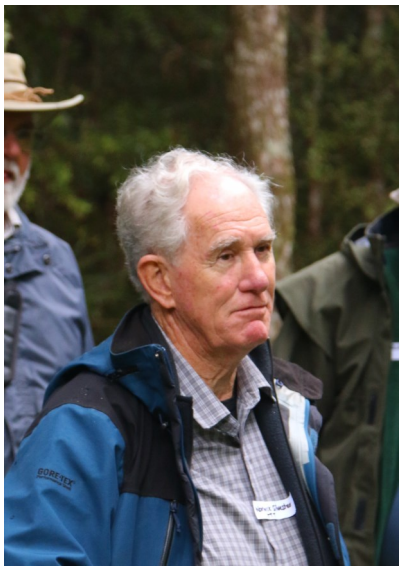
The project team has also undertaken assessments of plantings and naturally regenerating indigenous coastal dune shrubs and trees at various Northland, Auckland and Waikato sites including Te Hiku, Whananaki Spit, Piha, Muriwai, Woodhill Forest, Kawhia and Opoutere/Ohui.

This is a collaborative project with input, advice and field support from our project partners including forest companies Summit, Hancock, Ngā Maunga Whakahii o Kaipara, Rayonier and Tainui-Kawhia Inc; Northland Regional Council, Whangarei District Council Auckland Council and Waikato Regional Council staff; Department of Conservation staff; Far North and Kawhia iwi; and local community volunteers.

Over 40 volunteers from the local Kawhia community and surrounding area helped plant the pilot planting trial site at Te Arai O Te Wiwini Nature Reserve, Kawhia harbour in mid-June. This is one of several planting trials being established in the upper North Island within the zone of coastal pines to evaluate establishment of a native forest buffer to provide long-term protection for production forestry landward.

- by David Bergin

Warwick Silvester awarded ONZM



We are extremely proud to report that our esteemed Treasurer and Foundation Trustee Warwick Silvester was recognised as an Officer of the NZ Order of Merit (ONZM) in the New Year's Honours for his services to the environment. TTT's letter supporting his nomination is copied below and addresses some of the important contribution Warwick has made. A number of Trustees and others were also able to join Warwick at Woodlands last weekend to help him celebrate his 80th birthday.

Dr Silvester is a person who has worked hard to both ensure better understanding of the needs of New Zealand's flora, fauna, forests, wetlands and waterways, and to also ensure they are better protected and represented in this country's landscape. As a Waikato University professor he lead teams and initiated work relevant to our native species, striving to better understand the physiology of our native species so that their management and, where necessary restoration, could be achieved. His enthusiasm inspired many of his students and his willingness to work with others outside the university environs was also notable.

This approach has continued more or less unabated to the present, and it was in this capacity that he worked with a small group to set the processes in place to found Tane's Tree Trust – an organisation devoted to promoting and facilitating the planting of native trees in the NZ landscape. It was evident to Dr Silvester and his colleagues that mythology and mis-information about the growth of native trees had led to them being almost absent from tree planting programmes, which were instead dominated by exotic tree species such as pines and eucalyptus.

Dr Silvester was a founding Trustee of the organisation which has now been active for almost 20 years, and he has continued in that same capacity to the present (he is also the Trust's treasurer). Trustees are not paid for their time and even expenses are not reimbursed unless specifically requested.

Dr Silvester's input has been of particular value as the Trust have worked to establish research programmes targeting better performance with planting native trees, including understanding siting requirements and subsequent management processes. He has been particularly active in establishing links with other workers in allied fields to ensure where practical maximum value is gained from these programmes. As a consequence of his and his colleagues work the Trust have developed a handbook which addresses the key aspects of planting and managing native trees, and Dr Silvester was very instrumental in ensuring that this was made available on line. Importantly this is one of the facilities developed by the Trust which is now attracting attention from Government and its officials as they strive to achieve their One Billion Trees planting target. Equally important the information about growth and silviculture that the Trust has developed and also made available has been helpful in convincing Government that a large portion of the trees to be planted under this programme are to be native trees….. indeed a lot of the credibility the Trust has gained has been through the association of Dr Silvester with this work and the certain knowledge that it would be done well. More recently funders such as the Tindall Foundation (Warehouse Group), Foundation North (ASB) and the Sustainable Farming Fund (MPI) have all engaged with Tane's Tree Trust to fund further work in allied areas and in the realisation that the Trust is providing leadership insofar as planting more native trees is concerned.

Outside Tane's tree Trust Dr Silvester's ongoing roles have also been helpful in sourcing better information and providing links to others involved with native trees and native ecosystems, such as the Tongariro/ Taupo Conservation board, the Technical Advisory Group for the Rotorua Lakes and he still advises many other community groups on planting, conservation and native forest management. This includes some fairly hands-on work on his own forest but also from time to time with others such as the David Johnstone Pukemokemoke Trust.

A lengthy list of papers, publications and submissions also attest to his activity and his contribution and advice continues to be keenly sought on matters of relevance to the planting and performance of NZ's native trees.

I am accordingly able to testify that Dr Silvester has been a tireless and willing advocate for Tane's Tree Trust and for the planting of native trees and plants over at least the last couple of decades and am of the view that he is exactly the sort of person worthy of the sort of award you are nominating him for. I can also confirm that this view is shared by all trustees, both past and present of Tane's Tree Trust and I wish you well with this nomination.

Peter Berg ONZM

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. We will be able to send you a certificate of donation for you to submit to IRD with your tax return.

Please remember us in your bequests.

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