



TĀTOU NGĀHERE - OUR FOREST

A media campaign promoting the integration of native forests into our whenua for the benefit of all.

Tāne's Tree Trust is excited to announce a new collaboration with Pure Advantage. We will be working together to promote the significant role of native forests in New Zealand.

The focus will be on the fundamental importance of native forests to our economy, culture and environment; and the integral role native forests will play in the future of forestry and land use in New Zealand. It will be a comprehensive and dynamic media project aimed at a wide audience including the general public, landowners and stakeholders, regulators, policy-makers and politicians.

We will tackle the issues, challenges, and opportunities in weaving more native forest into our landscape.

There is much in common between our organisations. Tāne's Tree Trust is a not-for-profit, charitable trust focused on promoting the use of New Zealand's indigenous tree species for multiple environmental and cultural benefits, with the option of sustainable production of high-quality timber and other resources where appropriate.

PureAdvantage™

What is 'Pure Advantage'?

Pure Advantage investigates and promotes opportunities for green growth in New Zealand. The objectives are to transform how New Zealanders understand and manage the relationship between the environment and the economy, and advocate for economic models that generate positive social and environmental outcomes as well as profits.

Pure Advantage is a registered charity led by business leaders and supported by a collective of researchers and writers who investigate and promote opportunities for New Zealand to fulfil its massive potential for green growth.

The campaign will be rolled out in the first quarter of 2021. Watch this space!

Our collaborative media project will follow on the heels of Pure Advantage's very successful Our Regenerative Future
(www.pureadvantage.org/ourregenerativefuturecampaign)

ADAPTIVE MANAGEMENT OF COASTAL FORESTRY BUFFERS

SFF Project 405618 (2018-2021) - Written by Meg Graeme

Sand dune exotic forests typically have a sacrificial exotic forest buffer zone providing critical salt and wind shelter to production stands landward. The Coastal Buffers project focuses on the upper North Island as a pilot study exploring practical options to transition failing exotic buffers to resilient permanent indigenous coastal forest buffers. To date the project has undertaken a review of existing experience, field surveys and established initial planting trials in collaboration with forestry managers, iwi, landowners, councils and communities. The final output from the project will be to use the trial and survey results to develop preliminary guidelines for transitioning exotic coastal dune buffers to indigenous buffers.

The key objective is to determine a suite of cost-effective methods for conversion of the exotic dominated coastal buffer to natives. This is likely to comprise a number of approaches where the aim is to assist natural succession wherever possible.

During the 2020 winter, further trials have been established at the Te Hiku (summit Forests - Far North), Kahwia (Tainui-Kawhia Inc - Waikato west coast) and Opoutere (DOC/iwi - Coromandel) sites. Additional species to those planted in 2019 were established to evaluate suitable species for conversion of exotic coastal buffers to indigenous coastal shrub and forest sequences. Initial early indications (*continued over page*)...

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Te Hiku Forest

The initial 2019 trials at Te Hiku were reassessed following the severe drought over summer. Indications from this assessment are that there may be a beneficial effect from the pine shelter although the limited survival rate makes drawing conclusions difficult.

Browse from horses and rabbits/hares was more frequent in the open coast sites compared with the pine gap and canopy sites. Pohutukawa did not show any pressure from browse but there was heavy loss due to low soil moisture.



Figure 1: Kaitaia Intermediate School children planting a southern (T4) sheltered pine canopy trial plot, Te Hiku.

Kawhia Forest

Reassessment of the initial 2019 plant trial found similar plant losses with the extreme summer drought. Another finding from the plastic plant protector treatment (to avoid animal browse) was the unintended consequence of overheating some plants during the summer.

There were indications that the natives planted in close proximity to shelter and shade provided by the northern slope of pine trees had higher survival rates. Similarly, there appeared to be higher survival rates for plants where there was extra shelter at a microsite level from slash piles, dead pampas or lupin.



Figure 2: Planted 10m diameter trial plots - Takapuwahia trial site, Kawhia Harbour.

Opoutere Forest

Reassessment of the initial 2019 plant trial found the plantings were significantly affected by the extended 2019-2020 drought. Some species were also affected by rabbit browsing. There were clear results for which species could survive planted out in the open and despite the summer drought, e.g. karo, akeake. Results from plants with some shelter from pines showed indications that a few canopy species could establish. However firm conclusions could not be drawn due to the high mortality rate exacerbated by the drought.



Figure 3: Planting of new trial under forest canopy at Opoutere.

Support for this Tāne's Tree Trust project was gratefully received from project partners including the Sustainable Farming Fund, Summit Forests, Northland Regional Council, Far North iwi, Kaitaia Intermediate, Waikato Regional Council, Kawhia-Tainui Inc, Kawhia community volunteers, Department of Conservation Hauraki, Ngāti Tara Tokanui, Opoutere community volunteers, Hancock and the Coastal Restoration Trust.

OBITUARY: ANTHONY ERSKINE BEVERIDGE

MSc (NZ) BA (Oxon) BA (Auck) HonMNZIF HonMCFA - Written by Mark Smale

With the passing of Anthony Erskine (Tony) Beveridge on 27 July 2020, a leading light in native forest research has departed. His long career at the Forest Research Institute was overshadowed by changing national attitudes to and policies for native forests and their role in timber production and nature conservation.



Tony was born in 1925 in Hamilton. His abiding interest in the natural world began on weekend cycling visits to Ngutunui on the southern slopes of Mt Pirongia, where he stayed with the redoubtable Valder sisters on their small holding with stands of native bush. The Valder's were daughters of one of the founders of Ellis & Burnand, the biggest native sawmilling company in the North Island, and passionate conservationists, Lilian being long-time patron of the Waikato branch of Forest & Bird. I had the pleasure of taking Tony back to the property some 70 years later, the original house and acre of bush behind it still there, replete with king fern and other treasures.

At the age of 14, Tony was sent to board at Nelson College, where the beech forest of nearby Maitai Valley, then alive with the chorus of yellowheads, now home to the Brook Waimarama Sanctuary, provided further stimulus for his interest in natural history. Five years at Auckland University College followed, culminating in a Master of Science with Honours in Botany, his thesis being on marine algae at Piha.

A Colonial Service Scholarship enabled Tony to spend two years studying forestry at the University of Oxford. The seven years that followed in the Malayan Forest Service, mostly as a District Forest Officer and later at the Malayan Forest Research Institute in Kepong, led to a lifelong interest in tropical forests and forestry. He spent his final year at Kepong as an instructor at the Malayan Forest School of Silviculture.

Returning to New Zealand in 1957, Tony joined the Forest

Research Institute, then only a decade old and expanding steadily with the arrival of new personnel from Britain and the Continent as well as locals with forestry degrees from overseas universities. He was posted initially to Pureora Forest, a remote sawmilling village in the King Country, as a research forester. Logging was in its heyday, with two big mills in the village and several others nearby churning out truckloads of sawn rimu, matai and tawa for the post-war building boom. Here began the first of what was to become a ground-breaking series of management trials in selective harvesting, an alternative to the destructive logging practices of an era when most cutover forest was destined for clearance for agriculture. The great pity is that it was implemented too late; by the time selective management became the national policy for indigenous State Forests in 1977, the public appetite for timber harvest from them had largely evaporated, with strident demands for a total end to native logging. All this and more has been skilfully described by Professor Kim King in her book *The Drama of Conservation. The History of Pureora Forest, New Zealand*.

In 1960, the Beveridge's shifted in what was to become a long sojourn in Rotorua. Tony began work at the Forest Research Institute in the first of several offices he occupied in Silviculture House, built originally in 1905/1909 for Halbert Goudie, the nurseryman who ran the original Lands Department forest nursery at Whakarewarewa and later became the first Conservator of Forests, Rotorua. Mamaku, Rotoehu, Pureora and to a lesser extent, Whirinaki, were the main forests of focus. Alas, in 1962, a new director, Dr A. Denis Richardson, ordered the dismemberment of the Indigenous Silviculture group. Only Tony and John Nicholls survived in a mere token investment in indigenous forest research in the North Island. Another blow fell in 1969 when the first Forestry Development Conference recommended conversion of large areas of cutover native forest to exotic plantation and this became government policy (*continued over page*)...



Image from when Tony Beveridge was the leader of the Indigenous Forest Management group at Forestry Research Institute.

Already with years of research on rehabilitating logged forest behind him, Tony was given the odious task of finding the best way of replacing diverse tall forest of tawa and hinu and a hundred and one other plant species with an apparent monoculture of radiata pine. Subsequent research has revealed a surprising diversity of native flora in older plantations of exotic conifers, but they are no match for ancient natural forest.

The flowering of the conservation movement in the mid 1970s brought native forest management into the spotlight more sharply than at any time in New Zealand's history and by the late 1970s, Tony found himself and others embroiled in bitter national controversies over the future of iconic forests such as Pureora and Whirinaki. With his love of native forest and his personal and professional integrity, Tony found them particularly traumatic. Relief came with government decisions to end logging at Pureora in 1978 and Whirinaki in 1984, and the renewal of his research field from 1980. A band of enthusiastic young researchers

arrived fresh from university, and research expanded into exciting new areas such as predator impacts on native birds and comprehensive vegetation surveys of the large conservation reserves designated somewhat curiously as Ecological Areas. Recognition of his professional achievements came with honorary membership of the Commonwealth Forestry Association and of the New Zealand Institute of Forestry.

With his extraordinarily observant eye for and catholic interest in the natural world, Tony was very much in the mould of the natural historian. His leadership was marked by unconditional support and endless encouragement for younger scientists, in stark contrast to the often unprincipled and self-serving managers of today's science world. His concern for the personal and professional welfare of his staff never wavered. Neither did his passion for native forest, particularly his beloved tall podocarps: rimu, miro, matai, kahikatea and totara.



Further images from when Tony Beveridge was the leader of the Indigenous Forest Management group at Forestry Research Institute.



BRING IN THE BIRDS

Native Forest Restoration under Exotic Canopies - Written by Ian Brown, with other Tāne's Tree Trust trustees

Tāne's Tree Trust has been active in the search for low-cost solutions to native forest restoration – including bare-rooted seedlings and exploring the possibilities of direct seeding. However, most of the work will continue with containerised planting stock and teams of planters making their way across open hillsides.

There is a tendency to regard our native and exotic species as mutually exclusive. However, with a little planning, they can be harnessed into systems that meet the short-term objectives of reducing establishment costs, sequestering carbon and meeting our climate change commitments, while generating income from carbon and timber, and achieving the long-term objective of conversion to native

forest.

The biggest concern is the knowledge gap on the transition of exotic plantations to native forest, which Tāne's Tree Trust hopes to help fill. There is strong advocacy for 'plant and leave' radiata-pine regimes. However, the limited available information indicates the transition from radiata pine to native forest is likely to be difficult, although other exotic species may be more amenable in this regard, particularly the eucalypts and acacias.

A comprehensive summary of options can be found in the full report online at www.tanestrees.org.nz/site/assets/files/1321/bring_in_the_birds.pdf

DONATIONS: A note from the Treasurer

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