
Newsletter No.1, May 2002

FROM THE CHAIR

This is the first newsletter from Tane's Tree Trust. Its main function is to inform members about the activities of the Trust Board and it is hoped that you will find it informative. In case you don't there will be a section of each newsletter devoted to feedback – the place where you tell us what you want.

The Steering Committee apologises for the slowness in getting the Proceedings of the September launch out. The only excuse we have is that all of us are busy people and the time just slipped by.

But we have been busy, as you will see as you read the rest of this newsletter. Main activities have involved the finalisation of the Trust Deed, which is in the process of being signed by members of the Board. The initial Board consists of ten of the original steering committee and information about them is included in this newsletter. A strategic plan has been prepared which clearly outlines the activities and role of the Trust for the next two years. More detail about this will be part of the next newsletter. We have been

busy organising further workshops and these are listed on page 3. The Trust will have a major presence at Mystery Creek, being part of this year's theme. Work continues with tidying up old trial areas in the Hunua Ranges - using funding made available by the Sustainable Farming Fund - and thoughts are being given to new trials that can be established as soon as the Trust can acquire finances. Funding is the most important single item with which we have to grapple; without it we cannot succeed. Preliminary talks have been had with possible funding agencies or with people who can help put us in contact with funding sources and this work will be stepped up over the next few months. One obvious method of funding is to charge a subscription for people who wish to belong to the Trust's networking group and further its work. Details of this are included in this newsletter as well as a subscription form. Finally we are investigating the setting up of a website which will enable us to keep in close contact with all Trust members and any other people interested in our objectives.

Ian Barton, Chairman

OUR VISION

The Trust's foundational vision is "To see the majority of New Zealand landowners successfully planting and sustainably managing indigenous trees for multiple uses by 2020."

OUR OBJECTIVES

In order to realise the vision; the foundational objectives of the Trust are to promote indigenous forestry as an attractive land use option by:

1. Consolidating and advancing the state of knowledge of an increasing range of indigenous tree species – their establishment, growth, and productive use;
2. Maximising the economic incentives for establishing indigenous trees by reducing establishment costs;
3. Resolving legal and political obstacles currently serving as disincentives to the planting of indigenous trees;
4. Building a network of knowledge-sharing amongst stakeholders.

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WHY TANE'S TREE TRUST?

The opening section of our new Strategic Plan explains the genesis of the Trust and why many people see the need for this initiative.

As a nation, we now find ourselves being almost completely reliant on one exotic species for both our own timber requirements and a considerable proportion of our overseas income. This is a dangerous strategy, since Pinus radiata is increasingly subject to attack by pathogens and insects. In addition, there is increasing international concern about the use of toxic chemicals in timber treatment that highlights the value of durable alternatives. Native species can provide those alternatives, but the management of indigenous forests has had a chequered history in New Zealand. Research efforts have rarely been adequately funded and government policy has never been clear.

Our dwindling resources in this area mean that more than ever before, we need to learn how to re-establish those resources and manage them in a way that meets a wide range of objectives. These include enhancing biodiversity, providing a carbon sink, protecting riparian areas, providing habitat and

improving the landscape. Apart from these benefits, native trees could provide our main source of timber in the future. However the current political and legal climate towards any productive use of native species is quite difficult. Hence, the re-establishment of native species is viewed as a cost to society, and an expensive one for individuals.

To make significant progress in re-establishing, through current and future new plantings, the dominance of native species in our environments we should consider sustainable use for multiple purposes including timber production. In a practical sense, that means statutory consistency across jurisdictions, more research, and sympathetic tax structures, all progressed within the framework of a robust national indigenous forest strategy. We know that it is possible to sustainably manage indigenous forests in a way that provides for productive outcomes such as timber yield, in addition to maintaining biodiversity and aesthetic values. The challenge is to find that way in an inclusive fashion, using the best knowledge obtainable – this is what Tane's Tree Trust will be about.

MEMBERSHIP OF THE NETWORK GROUP

It would be wonderful if an organisation such as this could operate without having to charge a subscription. But the plain truth is that we cannot. Enclosed in this issue of the newsletter is a subscription form for those who wish to become part of the Tane's Tree Trust network. We hope that you will be able to join. For those who do not this, unfortunately, will have to be the first and last newsletter that you receive. If you do elect to become a network member then you will receive quite a number of benefits: -

- 2 newsletters annually
- Notices of all workshops/seminars
- Copy of the Trust's annual report
- Input into research directions
- Copies of free publications
- Discounted price for priced publications

Subscriptions:

Ordinary members	\$25.00 annually
Family members	\$35.00 annually
Corporate members	\$100.00 annually

Subscriptions for the year April 1 2002 – 31 March 2003 are now due. (Subscription Form attached)

KAURI 2000 WORKSHOP

Several Trustees were invited to speak at a workshop held by Kauri 2000 Trust at Tairua on the 27th April 2002. About 40 people attended a very good day where the following topics were covered.

Opening address by Kauri 2000 Chairman
History of Kauri planting
Performance of Kauri 2000 planting
Ridge top planting concept
Ecology of Kauri
Management of kauri and Tane's Tree Trust

Cliff Heraud
Max Johnston (Kauri 2000)
David Bergin (Forest Research)
David Stubbs (Kauri 2000)
Bruce Burns (Landcare Research)
Ian Barton (Tane's Tree Trust)

Following the papers there was a general discussion on kauri after which the group went to look at one of the successful planting areas just off the Kopu/Hikawai Highway.

FEEDBACK

This is the place where network members can have their say on indigenous forest issues, but as this is the first issue there is nothing to report. One item you could think about is a name for this newsletter!

UPCOMING MEETINGS

- Mystery Creek Tane's Tree Trust will be part of the 2002 Premier Feature "Landcare –Action on the Ground" at Mystery Creek. Make sure you visit us there between 12th and 15th of June.
- October 4 2002 Workshop on the management of planted kauri stands in New Plymouth. Hosted by Bryan Gould of the New Plymouth District Council this workshop will examine the various options available to manage a stand of 65 year old trees from now on. It will also look at management so far and highlight the most appropriate treatment at various stages of their development. Members of Tane's Tree Trust network who would like to attend this workshop will need to register with Bryan before the 20th September. (Telephone 06 759 6087 or e-mail gouldb@npdc.govt.nz).
- November 2002 Workshop in Northland based on totara
- Projected We are working toward the running of a seminar to look at the legal and taxation problems associated with growing native trees for timber. This seminar will probably be held in Hamilton and repeated in Christchurch.

GROWTH AND MANAGEMENT OF TOTARA

David Bergin
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Totara (*Podocarpus totara*) is a highly valued, naturally durable native conifer tree that is widely distributed in lowland forest throughout New Zealand. As harvesting from natural forests has declined there has been increasing interest in planting and managing totara for timber production. A 'new' indigenous forest resource not only gives landowners options for extraction of high value specialty timber in the long-term, but also fulfils a wide range of other non-timber objectives, such as increasing biodiversity and enhancing the cultural and heritage values of our flora.

Factors influencing the growth and management of totara for timber production have been investigated by Forest Research over recent years, including genetic variation, age estimation techniques, growth and productivity of natural and planted stands, and tree form and wood quality.

Totara seedlings are easily raised in nurseries either as bare-root stock or in containers. Seedlings can be planted on open grass sites but performance is improved especially on exposed sites if planted within a 'nurse' cover such as manuka. As with all natives, planted seedlings require regular releasing from vigorous grass, ground ferns and woody regrowth for up to five years after planting. Totara planted on warm lowland sites at 2 m x 2 m spacing (2500 stems/ha) has achieved canopy closure within 10 years with trees averaging 5 m in height. Where interplanted amongst an existing planted or natural nurse crop, totara can be planted at lower densities of less than 1000 stems/ha. Annual growth rates of up to 50 cm in height and 10 cm diameter can be expected on good sites. Removal of multiple leaders

and steep angle large branches at an early stage will improve stem form.

Provenance trials indicate there is considerable variation between and within different geographically separated populations of totara in both growth and stem form. Planned breeding trials are likely to provide significant improvement in productivity and wood quality.

A preliminary growth and yield model for totara, based on a small number of established plantations, indicates that while total stem volume growth is slow over the first 50 years, yield increases significantly over the following 50 years. A mean basal area of about 100 m²ha⁻¹ and mean volume of 800 m³ha⁻¹ are predicted at age 80 years. The few log sections sawn into boards produced good quality timber, although heartwood development tended to be low.

Clearance of original forest cover has provided conditions in which totara can successfully colonise open, grazed, steep slopes dominated by weedy pasture and bare ground, often in mixture with other unpalatable species such as manuka, kanuka and gorse. Evaluations of these naturally regenerating totara-dominant stands in one region, Northland, show that with natural thinning, stands slowly develop into single-species, semi-mature stands that are relatively uniform in stem size and form. With appropriate management, there is good potential for improving growth of such stands as a future wood resource that is integrated with the current pastoral land use.

TRUST

Ian Barton, JP (M.Phil. Waikato) is a forestry consultant who has had a lifelong interest in kauri. He has authored several papers on the species and is currently involved in trials to determine the detailed site requirements of kauri.

(Chairman)

Roger MacGibbon (B.Sc Hons. Canterbury) is a practising restoration ecologist, operating his own company Natural Logic Ltd. Roger's work is focused on restoring native trees and shrubs to modified landscapes and in recent times has worked with government agencies and landowners to promote the use of native plants for riparian retirement, shelter, habitat restoration and for sustainable timber production.

(Secretary)

Peter Berg is the President of the NZ Forest Owners Association, NZ Chair of the Commonwealth Forestry Association and on the Board of Forest Industries Training. He is immediate past President of the NZ Institute of Forestry, former Chair of the Victoria, Kaweka and Kaimanawa Forest Park Advisory Committees and former member of the Wanganui-Rangitikei and Westland Catchment Boards. Peter has been involved in many aspects of NZ forestry for more than 40 years and has jointly authored two books on aspects of New Zealand's forest history.

Warwick Silvester is Professor of Biological Sciences at University of Waikato. He is a plant physiologist and plant ecologist with interests in plant nutrition and productivity and has published papers on nitrogen fixation, nitrogen cycling and tree physiology. He has a long-term interest in ecology of NZ forest species. Is currently on the Tongariro-Taupo Conservation Board and is Chair of Pukemokemoke Forest Trust.

Mark Dean is Executive Director of Naturally Native New Zealand Plants, which he founded over 20 years ago. The company specialises in growing and marketing NZ native plants for the landscape, amenity and garden centre markets. Mark is a past president and a life member of the Nursery and Garden Industry Association and was the founding chair of the Horticultural Industry Training Organisation.

John Kneebone is a Waikato farmer and past President of New Zealand Federated farmers. He was the Founding Chair of Landcare Research NZ Ltd and Chair of the Ministerial Advisory Committee on Biodiversity on Private Land 2000.

Robert McGowan is a Continuing Education Officer at the University of Tauranga and is based at the Tauranga Campus. Currently chairman of the BOP Conservation Board. Involved in teaching and researching traditional uses of NZ native plants, particularly for medicine (rongoa Maori); also involved with Waitangi Tribunal claim Wai 262 (Flora and fauna).

Maggie Lawton (PhD chemistry) began as a forensic scientist with DSIR. She was General Manager of forensic science in the new CRI before moving to Landcare Research in 1995 as General Manager of Environmental Quality, overseeing research and consultancy in land management and greenhouse gas related science. She is responsible for the Landcare Research staff and sites in Hamilton and Auckland. She was on the Board of FRST for six years and was an inaugural member of the Marsden Research Committee. In her spare time she works at farm forestry on the family farm.

David Bergin (PhD Waikato) is the senior scientist at Forest Research responsible for the planting and management of NZ's major conifer and hardwood indigenous trees for timber and non-timber benefits. David's main areas of interest are in establishing and evaluating growth, silviculture and productivity from planted and young naturally regenerating stands. His other areas of research are restoration of coastal dunes and riparian areas using indigenous grasses, shrubs and trees and sustainable management of culturally significant plants.

Bruce Burns (PhD) is a forest ecologist and programme leader with Landcare Research. He leads a programme of research entitled "Restoring indigenous biodiversity in human landscapes", which is seeking new ways to maintain and enhance native species in rural and urban environments. His main interests are in the population ecology of native trees, and in the management, restoration, and integration of native forest areas into pastoral farming systems.