



---

Newsletter No 8 November 2005  
ISSN 1176-1245

---

## EDITORIAL

*This editorial has been written by Warwick Silvester, who is in the process of retiring as Professor of Biological Sciences at Waikato University. He was the person who, along with Rob McGowan, first conceived the idea of the "Native trees for the future" conference held in 1999, at which the foundations of Tane's Tree Trust were laid. Throughout his career he has been involved with trees; studying their physiology and, in particular, plant nutrition and nitrogen fixation. He Chairs the Pukemokemoke Forest Trust and is a member of the Tongariro – Taupo Conservation Board.*

## Waotu Taitua OTSOG

I wonder how many will associate with the rather cryptic heading I have given to this editorial? These thoughts have been stimulated by the recent severe illness of our very good friend and patron Gordon Stephenson who has been in intensive care with an obscure and debilitating illness; Guillain-Barre syndrome. So in thinking about the contribution made by Gordon I also called to mind another giant of the tree movement John Mortimer who suffered a stroke last year. We in Tane's Tree Trust and in the wider tree and environment movement owe an enormous debt to these two gentle men on whose shoulders we have stood. It is right to acknowledge it and to offer our thanks, our support and our best wishes to them.

So what is **Waotu**? It is the unique and beautiful treed farm, home of Gordon. And **Taitua**? The former home, arboretum, and now city park gifted by Bunny and John Mortimer to Hamilton City. These two properties have long stood out as practical examples of the importance, beauty and utility of trees in the landscape. Both have brought back the dawn chorus. Both have been developed by individual inspiration and passion for trees and stand as oases in the midst of the wilderness of grass that we have created. Over many years these properties

have been planted with such an abundance of trees that they now stand as icons for what trees can do for us and for the landscape.

And what about **OTSOG** (On The Shoulders Of Giants). Gordon, Bunny and John were an enthusiastic part of the planning committee for the initial conference (Native Trees for the Future) from which Tane's Tree Trust arose. These three have been giants amongst us in the movement to re-establish trees in our environment and on their properties, Waotu and Taitua, are a proud and practical testament of their passion for trees and native trees in particular. Thus our Trust and the environment movement at large acknowledges the immense debt we owe these three people, we salute them and thank them for their example and their passion for every aspect of environmental concern. Having stood on their shoulders for so long we now accept the challenge that their passion for trees has given to us. We also hope and pray for a measured recovery for both Gordon and John.

Bunny and John have announced that they are moving from their home into a smaller property and need to move some of their books. Many of you will know John and Bunny's books published over the years;

*Trees for the New Zealand Countryside, Trees and their Bark and A Selection of Alternative Timbers.* They are wishing to sell their remaining stock and would welcome

your orders. Great Christmas gifts! (See note at the back of the Newsletter). If you don't have these on your shelves, you need them.

Warwick Silvester

## **TRUST ACTIVITIES** (June to November 2005)

### **Website:**

The website has been running for over a year and has been the means whereby several new members have joined the Trust network. However it could probably be used to a greater extent and Mike Dodd, or any Trustee would be happy to receive suggestions on possible additions or improvements. **Keep checking the site** [www.tanestrees.org.nz](http://www.tanestrees.org.nz)

### **Renewal of Subscriptions:**

Subscription notices for the 2005/06 year were sent out in June with the last newsletter. There are still a few members who have not renewed. If you are one of these there will be a reminder slip enclosed with this newsletter. However this will be the last communication you receive from the Trust should you not renew before the end of the financial year (31 March 06)

### **Funding:**



Our project "*Opportunities for Native Trees on Farms*" is almost complete and the Trust has decided to produce a bulletin covering the findings. This will be put out through Scion as one of the series of bulletins on native trees. Mike Dodd is overseeing this at present and Peter Berg has been successful in obtaining funding from the Forest Owners Association and the Forest Industries Training Board to cover the cost. It should be available about the middle of 2006

The workshops project is going well although slightly behind schedule. So far seven have been held, the last two in Masterton and Marton. At all workshops we have been successful in getting new members. There are still parts of New Zealand that we would like to visit and planning for the remaining workshops should be complete by early next year. It's still not too late to have a workshop in your area so get in touch with Ian Barton if you are interested.

Two other projects, the database of early research work and the writing of a Continuous Cover forestry manual, are well underway and on target for completion by July 2007.

With this newsletter you will receive a copy of "Profiting from Biodiversity". Now that it has arrived we intend to use it as the basis for further discussions with various parties in order to correct some of the major problems with the taxation and Resource Management issues surrounding the commercial planting of native trees.

We will be applying to the next round of the Sustainable Farming Fund for a grant to produce a bulletin on the beech species. This will be in the same series as that on kauri and totara and the one on pohutukawa, which is due out next year.

### **Membership:**

Membership continues to increase and has now reached 244, of which 22 are corporate members. Existing members are encouraged to tell others about the Trust and encourage them to join. The Trust brochure will be reprinted early next year and copies can be sent to anyone who would like them to distribute.

### **Trustees:**

At the A.G.M Warwick Silvester, Mark Dean and Peter Berg had completed their terms but were eligible for re-appointment. This was done and at the same time three new Trustees joined the Board. They are Murray McAlonan, formally a Director at MAF; Toko te Aho who has had 35 years experience in indigenous and exotic forest management until he retired as a District Conservator with DoC. He now consults on forestry environmental and conservation issues and Rob Storey a Past President of Federated Farmers and an MP. While in Parliament he held the portfolios of Minister for the Environment and Minister of Lands.

## **A.G.M JULY 30 2005**

The A.G.M was held at the Waiau Pa Hall, Franklin District with 22 people in attendance. Following the meeting we drove to the nearby Whitecliff's Reserve where Greg Steward showed us around Scion's trial plantings of kauri, totara, puriri, kahikatea, rimu, rewarewa and kohekohe planted under four nurse species –akeake, kanuka, manuka and tagasaste (an exotic). Results are varied but much useful information is being gained. Most impressive results are with puriri, originally planted under tagasaste, which has now completely died leaving the puriri to reach heights of 8 metres and diameters of 15 cm in 13 years. Puriri within a dense manuka cover has also done well. Of the other species rimu and totara are doing well under manuka although the nurse crop needs thinning at this stage. Kauri has not done as well under tagasaste as under the more traditional manuka/kanuka mix. Totara and rimu planted without a nurse crop are bushy and robust, but form has suffered and will require pruning to achieve a single leader and clear bole. The akeake nurse crop has been extremely variable as has been the kauri planted beneath. All of the nurse crop species are regenerating naturally on the site, as are a number of puriri, with some regenerated seedlings up to two metres tall. The rewarewa has been disappointing, suffering insect damage since planting, although there are signs of recovery

## **CHAIRMAN'S REPORT April 2003 to March 2004-06-19**

### **TRUSTEES**

The trustees are:-

Ian Barton  
Peter Berg  
Roger MacGibbon  
Bruce Burns  
Mark Dean

John Kneebone  
Maggie Lawton  
David Bergin  
Robert McGowan  
Warwick Silvester

Non Trustee members of the  
Management Committee are: -

Mike Dodd  
Murray McAlonan  
Greg Steward

I wish to begin by thanking my fellow Trustees and the three non trustee members of the management committee, very much for their efforts over the past year. As all of us are very busy people, getting to meetings has sometimes been difficult. This has caused concern because average attendance has been just under 7, which is our required quorum –so some meetings have not had a quorum present.

Because the management committee does most of the work of the Trust we have decided to add to the number of Trustees in order to better spread the load.

## **NETWORK GROUP**

The number of members has continued to grow with workshops in late 2004 resulting in a big jump. At March 2004 there were 127 members, including 15 corporates. The numbers have now risen to 179 with 24 corporates.

Subscriptions were increased for the current financial year and the corporate group was split into large and small. As well, small non-profit organizations can now join for the same subscription as family members. It is recommended that current subscriptions hold for the 2006 / 07 year.

## **STRATEGIC PLAN**

The Strategic Plan was revised during the year with the new one covering the period April 2004 to March 2007. In this plan we set ourselves 19 targets to be achieved over the three year period. At the end of the financial year 21% of the targets had been achieved, 47% were underway and 32% had not started –some not being required until the end of the plan period.

## **PUBLICATIONS**

A major part of the Trust's work is the dissemination of information to our network members and further afield. This is done in several ways: -

**Newsletter:** Two copies a years are produced. As there has been no negative feedback it is assumed that they are adequate. While it would be desirable to increase the number of issues each year and the quality of the publication, the twin factors of inadequate time and finance make this unrealistic at present. More feed back from members and articles for the newsletter would be very welcome.

**Brochure:** The Trust printed 2500 brochures two years ago and all have been used. We have decided on a new print run of 4000 but have held back until new Trustee appointments are made so that information can be included.

**Technical reports:** The Trust did not publish any reports during the year but has opted to work with Forest Research (now Scion) to get their publications on native trees out. By the time of the AGM you will have three of these excellent bulletins –Totara, Kauri and Growing Native Trees. Such has been the demand that the Trust has raised funds for reprints and our thanks go especially to Peter Berg for his efforts here. Funding is also being made available for two more bulletins –one on Pohutukawa and the other to produce final proceedings on the “Native Trees on Farms” project. Both of these should be published next year.

**Proceedings of the “Profiting from Biodiversity” seminars held in 2003:** Lack of time meant that getting this important information published has been held up. However we are almost there and the material will be with the printer in August. Network members will receive a copy and we will distribute them widely to local government and government agencies as well as accountants, lawyers etc

## **SUSTANABLE FARMING FUND**

The 2004 round of funding saw the Trust successful with three of the four projects applied for. These were to run 18 workshops on growing native trees for forestry, producing a handbook on Continuous Cover Forestry and preparing a database from research records held by Forest Research, Archives New Zealand, museums and by private individuals.

At the request of the SFF the three projects were amalgamated into one giving us total funding of \$150 000. A further \$10 000 was later added to cover the cost of editing and publishing the Profiting from biodiversity proceedings.

Mike Dodd's project “Opportunities for Native Trees on Farms” will be completed by June 2006. Results to date have been excellent with several very useful workshops held in the Waikato and Northland. Mike's main task now is to write up the proceedings of this project for publication.

Two workshops on growing natives were held prior last year and at least 6 or 7 will be held next year, with at least four of these in the South island. Tony Beveridge is well ahead with searching the archives at Forest Research and we expect to begin on Archives New Zealand shortly. The CCF hand book has been produced as a first draft and thoroughly edited/ refereed by 4 competent people. It is now in the process of being rewritten and expanded.

## **FUNDRAISING**

Due to other commitments we have not had much time to pursue this very important matter. \$3000 has been obtained from the Lotteries board to help with the Archives database project and we have approached the Robert C Bruce Trust for funding to help with the CCF project; as yet this has not been finalized. An application to Community Post was successful and we received 200 post free envelopes.

Early in August it is intended to begin further fund raising. In particular we will seek assistance for the costs of preparing and delivering presentations at the workshops and producing a CD of the presentations, as well as further assistance with the other two SFF projects. We are particularly anxious to begin creation of a database of planted natives and funding for this will be sought from outside sources before we again apply to the SFF.

## **INDIGENOUS FOREST RESEARCH**

The Trust is particularly disturbed by the difficulties the few people still working in this area have with getting adequate funding. This is particularly so at Scion, but Landcare Research and AgResearch are afflicted to almost the same extent. It is intended to allow time at the AGM to discuss this important issue.

## **FLAGSHIP PROJECT**

The idea was floated that the Trust needs a "Flagship project" which would not only produce useful research results but also raise the profile of the Trust. Several suggestions have been made, mostly involving the planting of demonstration / research areas, but none have yet proceeded past the talking stage. While the main problem is obtaining funding it is felt that we need to identify a suitable project before seriously addressing the funding issue. Ideas from network members for a suitable project will be welcome.

*The unaudited Financial Performance and Balance Sheet for 2004 / 05 are attached to this newsletter.*

## **TIMBER TREES OF THE FUTURE**

**HINAU (Elaeocarpus dentatus)      -by Ian Barton**

### **HISTORY**

Maori used the wood of hinau to make various small implements like canoe bailers, spears and wedges. Perhaps of greater importance was the fruit which was crushed, mixed with a little water and made into cakes which were cooked in a hangi. The bark was used to make a black dye and would also fix dyes and for this purpose may have been exported in the early years of European settlement. A decoction of bark in hot water was also used to cure skin diseases. Early European use was as a general purpose hardwood and, although there is normally little visual difference between the sap and heartwood, old trees developed a black heart which was very durable and used for house piles and posts. More recently the timber has been used for boat and motorbody building, furniture, turnery and flooring.

## **DISTRIBUTION**

One of the most widely distributed New Zealand hardwoods, hinau ranges from North Cape to the Catlins; although it is not common in the South Island and is not found on Stewart Island. In the North Island it is found to 1000 metres altitude but is more common below 750 metres. In the South Island it is rare above 50 metres but will grow to 380 metres. Hinau is moderately frost hardy although, where frost is severe, it is confined to fertile soils. The species requires high rainfall for good growth unless the soils are moisture retentive. It is found on a wide range of soils, especially the pumice soils of central North Island, but in the South is usually restricted to more fertile sites.

## **TREE SIZE and GROWTH**

Normally between 15 and 20 metres tall and 60 to 90 cm d.b.h but can reach 1.2 metres. The merchantable height seldom exceeds 9 metres. Hinau is known to reach 50 cm d.b.h in 100 years. Measurements of trial plantings in six New Zealand locations showed initial height growth of about 40 cm per annum, slowing to less than 20 cm for 80 year old trees. Diameter growth averaged just over 6 mm per annum. Assuming that more carefully managed planting would encourage faster growth, it is reasonable to expect that trees 18 metres tall and 50 cm diameter could be grown in 70 years.

## **TIMBER**

The wood is light brown in colour, tough, strong but non-durable, although the black heart will last up to 25 years in the ground. Being of similar colour, the sap and heartwood cannot easily be distinguished from each other although the heart is slightly more durable than the sap, lasting up to 10 years in the ground. Sap and heart are moderately resistant to pressure treatment but can be treated. The wood has a fine even texture which dries, machines and finishes well.

Timber characteristics, with *P radiata* figures shown in brackets for comparison, are as follows: -

Density @ 12% m.c	705 kg/ m <sup>3</sup>	(500 kg/m <sup>3</sup> )
Moisture content: green	96%	(130%)
Tangential shrinkage -green to 12% m.c	7.0%	(4.7%)
Radial shrinkage	2.6%	(2.2%)
Modulus of rupture	89 Mpa	(90 Mpa)
Modulus of elasticity	10.4 Gpa	(9 Gpa)

## **DAMAGING AGENCIES**

Hinau is a hardy species, which, while host to several scale insects seems little affected by them. The sapwood is attacked by the common house borer

## **POTENTIAL**

It would seem that there is room to explore further potential uses of hinau; particularly uses requiring strength and toughness. Its utilization for furniture seems also to have been overlooked.

## **RESEARCH REQUIREMENTS**

Trials to determine optimum site requirements and growth rates are urgently needed, as is further work on its chemical attributes.

## **REFERENCES**

- Allan, H. H. 1961. *Flora of New Zealand Vol. 1*. Government Printer Wellington
- Brooker, S.G.; Cambie, R.C.; Cooper, R.C. 1988. *Economic Native Plants of New Zealand*. Botany Division, D.S.I.R
- Brooker, S.G.; Cambie, R.C.; Cooper, R.C. 1981. *New Zealand Medicinal Plants*. Heinmann
- Clifton, N. C. 1990. *New Zealand timbers*
- Hinds, H.V.; Reid, J.S. 1957. *Forest Trees and Timbers of New Zealand*. Govt Printer Wellington
- Howard, A.L. 1948. *A manual of the timbers of the world*. MacMillan & Co, London
- Pardy, G.F.; Bergin, D.O.; Kimberley, M.O. 1992. *Survey of Native tree plantations*. FRI Bulletin 175

## PUBLICATIONS AVAILABLE

*On joining members have the choice of one free publication from those on the list marked \*. Others can be purchased at the members rate listed below, sales to non-members usually being \$5.00 more. Some publications, because they have been paid for from grants are free and these are usually sent to members when they become available.*

Back numbers of Newsletters 1, 2, 3, 4, 5, 6 & 7	\$1.00 ea
Proceedings of the launch of Tāne's Tree Trust (first copy free)	\$6.00
Tāne's Tree Trust brochures (free copies to pass to others)	No charge
Totara: Establishment, growth and Management by David Bergin *	\$10.00
Kauri: Ecology, establishment, growth and management by David Bergin and Greg Steward *	\$10.00
Native Trees: Planting and early management for wood production by David Bergin and Luis Gea. *	\$15.00
Indigenous Forestry: Sustainable Management. MoF & NZFFA (212p)	\$25.00
Performance and tree health of a six year old planted kauri stand in the Bay of Plenty by Greg Steward & Ian Barton. Tāne's Tree Trust Bulletin No. 1	\$3.00
Profiting from Biodiversity: Reducing the impediments to planting native Trees. Proceedings of seminars held May 2003 Eds: Ian Barton, Roger MacGibbon, Bruce Burns and Peter Berg.	No charge

### **Send requests to:-**

Ian Barton P O Box 1169, PUKEKOHE Telephone 09 239 2049 [ibtrees@wc.net.nz](mailto:ibtrees@wc.net.nz)

### **Copies of John and Bunny Mortimers books (see editorial) can be ordered from:**

Taitua Books  
283B Duck Road  
R D 9, HAMILTON.

Telephone: 07 849 8004  
[johnmort@wave.co.nz](mailto:johnmort@wave.co.nz)  
[www.taituabooks.co.nz](http://www.taituabooks.co.nz)

Trees and their Bark	\$39.00
Alternative Timbers	\$19.00
4 copies of "Trees & their Bark"	\$100.00
2 copies of "Trees & their Bark"	
<i>plus free copy "Alternative Timbers"</i>	\$80.00



Tāne's Tree Trust is indebted to Ensis for assistance with the printing and mail out of this newsletter.

**TANE'S TREE TRUST**  
**STATEMENT OF FINANCIAL PERFORMANCE**  
**FOR THE YEAR ENDED 31 MARCH 2005**

	2004 / 05	2003 / 04
<b>Operating revenue</b>		
Sustainable farming fund	41,023	30,207
Other grants & sponsorship	21,390	0
Sales	258	0
Subscriptions	8,836	5413
Donations received	454	0
Interest received	<u>257</u>	<u>155</u>
	72,218	35,775
 <b>Expenses</b>		
Accountancy	600	600
Advertising	0	2,328
Bank fees	77	70
Contractors and consultants	33,459	17,553
General expenses	0	83
Printing –publications	9,673	0
Printing and stationery	1,393	283
Seminars	0	1,744
Travel and accommodation	0	847
Website & internet	<u>255</u>	<u>360</u>
	<u>45,457</u>	<u>23,868</u>
 <b>Operating surplus before taxation</b>	26,761	11,907
Provision for taxation	<u>0</u>	<u>2,143</u>
<b>Trustees income</b>	<u><u>\$26,761</u></u>	<u><u>\$9,764</u></u>

**TANE'S TREE TRUST**  
**STATEMENT OF FINANCIAL POSITION**  
**AS AT 31 MARCH 2005**

	2004 / 05	2003 / 04
<b>Current Assets</b>		
Bank	47,714	21,906
GST Overpaid	0	85
Stock on hand	<u>90</u>	<u>90</u>
<b>Total assets</b>	47,804	22,081
 <b>Current Liabilities</b>		
Accounts payable	676	1,350
GST Due	1,303	0
Taxation	<u>1,979</u>	<u>3,646</u>
	3,958	4,996
 <b>Trust equity</b>	<u>43,846</u>	<u>17,085</u>
<b>Total funds employed</b>	<u><u>\$47,804</u></u>	<u><u>\$22,081</u></u>