

## EDITORIAL

## TTT TAUPO PROJECT

### Saving a Lake and Reducing the Cost of Establishing Native Forest

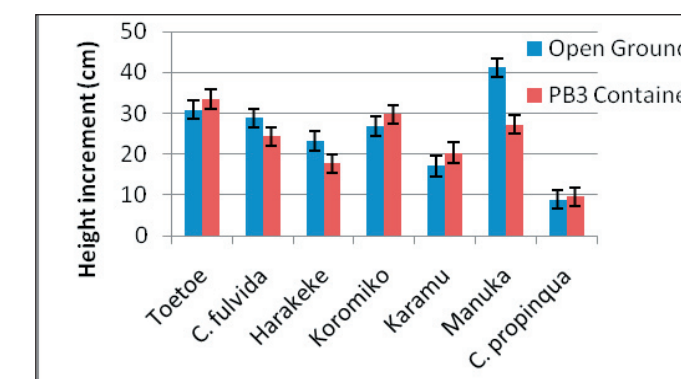
LAKE TAUPO, the largest lake in NZ, with an area of 622km<sup>2</sup> arose in its present form from the Oranui eruption of 181AD and contains an enormous body of exceptionally pure water. The iconic status of the lake has recently been tarnished by the understanding that lake catchment development has caused a significant increase in nutrients, especially nitrogen (N) entering the lake resulting in a disturbing increase in algal blooms and a significant decrease in water clarity. Some 30 rivers enter the lake from a variety of developed and undeveloped catchments and monitoring of these, and of lake water, shows a continuing eutrophication of the lake. In facing this developing problem Environment Waikato (EW) proposed what is called Variation 5, a variation to the regional scheme to provide the Council with powers to reduce N inputs into the lake and to reduce manageable N inputs by 20%. Intensification of land use is identified as the prime cause of the lake decline and a commitment was made by central, regional and district government to actively control N inputs by managing catchment development. The Lake Taupo Protection Trust (LTPT) was formed with a budget of \$81M to manage the progressive capping and reduction of N inputs by a variety of means.

The major N inputs into the lake have been identified as increasing intensification of pastoral farming with, in particular, dairying the major source. On the other hand forests, both exotic and native, produce very little N to the lake and are a preferred catchment option. Return of portions of some farms to forestry is already contributing to a reduction of N load but planting of native forest in the area has not been seriously considered for at least two reasons: firstly native plant seedlings are very expensive to grow; and secondly, there are no good guidelines on how to go about it.

Tāne's Tree Trust (TTT) was awarded a grant from LTPT to set up trial plantings within the Taupo catchment to demonstrate methods of establishing native species and most particularly using open grown plants, as well as container grown plants to attempt to reduce the major unit plant cost of such planting. The project is now into its third year and is managed by TTT member Roger MacGibbon and includes involvement of David Bergin (with support

from Scion and Future Forest Research) and Philip Smith (Taupo Native Plant Nursery).

The project started with a trial planting of 1000 native shrub species at Waihaha in 2009 to test the survival and growth of open grown and container grown plants followed by a further planting of 2700 tree and shrub species at the same site and an additional trial at Kawakawa amongst wilding pines. The results have been dramatic with excellent survival of plants (90%) and up to 40 cm increase in height (refer graph). There appears so far to be no significant difference



Comparison of mean height increment between plants raised as open ground transplants and in PB3 containers one year after planting at the Waihaha site in 2009. Vertical bars indicate standard errors.



Two year old manuka, toetoe, and harakeke at Waihaha.

CONTINUED ►

## The Handbook

### Planting & Management of Native Trees Vol. 1

This has been one of our largest and most costly projects to date and is now published. You will be aware of the very high quality of TTT publications in the past and you will find this one is right up there.

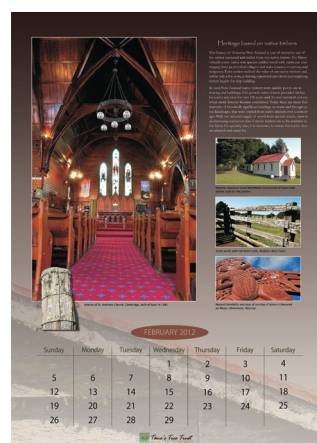
It has been produced by Scion Digital Print on high quality paper and is presented in a loose leaf format so that each chapter can be updated and inserted as time goes on.

## TANE'S TREE TRUST CALENDAR FOR 2012



NOW THIS IS a really ambitious project presented to us by Trustee David Bergin who always challenges us to think big and outside the square. The Trustees are so enthusiastic about this project that they have individually agreed to fund it by each purchasing 15 copies to sell.. Look at

the front cover and February and see the quality is right up to high TTT standard. Each month will highlight a particular species of tree or a particular end use and include, as well as pictures of the tree, useful information on cultivation properties and uses. The calendars will be A3 printed on high quality glossy paper and make useful and informative gifts. These are ideal for sending overseas and for promoting the TTT cause. Avoid disappointment by ordering now!



### HOW TO PURCHASE

You can purchase a calendar and/or handbook in one of the following ways: **1. Send a cheque** to PO Box 12094 Hamilton 3248 with item and quantity required (don't forget your delivery address) OR **2. Direct Credit** the TTT account: 12 3162 0066049 00.

Put your membership number or surname in the reference field. Finally send me an email telling me the item, quantity and delivery details to [office@tanestrees.org.nz](mailto:office@tanestrees.org.nz) I will post the goods once both payment and email are received.

#### Handbooks

Members \$35.00 plus \$9.00 p&p  
Non-members \$55.00 plus \$9.00 p&p

**Calendars** \$20.00 plus \$5.00 p&p

**STOP PRESS:** Purchase both handbook and up to 2 calendars and pay only \$9.00 total of p&p!

Any queries please email Sarah at the above address.

## Welcome to our new Executive Officer Sarah

TTT is now 10 years old and has been remarkably successful in attracting funding and in spreading the message. Ian as chairman has carried a large part of the burden of administration and the trustees have made this leap of faith to employ an Executive Officer to assist with the mounting complexity of the organisation. Sarah Bodley-Davies has been appointed and will shortly be taking up an office at Landcare Research in Hamilton. Let Sarah introduce herself and the changes that it will bring about.

**Kia Ora everyone:** I was the lucky candidate who was offered the job as the Trust's new Executive Officer. Being an advocate for sustainability from "way back", I look forward to working with Tāne's Tree Trust and supporting them in their work in championing the use of indigenous trees.

As I live in Hamilton, the Trust has a new postal address:

**PO Box 12094 Hamilton 3248** and a new email address:

**[office@tanestrees.org.nz](mailto:office@tanestrees.org.nz)**

These changes are effective now so please take a moment to jot them down.

As of the beginning of June, we move into our office space which we are fortunate to be leasing from Landcare Research, situated on the Waikato University campus. With the move into the office, we will have a designated landline connected – **07 858 4404**.

My current hours of work are Tuesday, Wednesday, Thursday 10am till 2.30pm. The best way to contact me is either email or till the end of May, ph 07 853 6280 after which date the new phone number will be up and running.

I look forward to talking with you.

Kind regards, Sarah

## SUBSCRIPTIONS

Please note that from 1 April 2011, subs are to be as follows:-

- \$45** Basic supporter
- \$95** Totara supporter for family and non profit organisations.
- \$250** Kauri supporter for major supporters and Councils.

The \$45.00 basic subscription is GST inclusive. For those who were on the previous family or corporate rates, your support in the past qualifies you for either the Totara or Kauri membership. A donation to our research fund of \$50 for totara and \$205 for kauri will maintain that status. All donations can be claimed as tax deductions as Tāne's Tree Trust is a registered charity. Sub accounts will be sent out with this May newsletter.

This increase is the first since 2003; since then inflation has increased costs by 25% and GST has increased to 15%. Our costs (excluding those involved with projects) cannot now be covered by the old subscription rate and the increase is necessary to maintain Trust operations at the current level.



#### ◀TTT TAUPO PROJECT – Continued

in either survival or subsequent growth of the open grown plants compared to container grown and the plants, especially in the 2009 trial, are now competing well with the grass.

There are two major outcomes of this project. Firstly, even though it is early days in the trial, there has been excellent survival and growth of all plants and using the methods developed here it is plain that native species including trees can be established into grass at Taupo. Secondly and perhaps more importantly open grown plants, that is plants grown and conditioned in open ground nursery beds and transported and planted bare rooted (similar to establishment of radiata pine) can be established effectively. The main benefits of this are cost – container grown plants of natives cost \$3 to \$5 per plant to produce whereas preliminary estimates from this project indicate open grown plants may be produced for less than half this cost (\$1.50) per unit depending on species. These cost estimates are based on relatively small scale trials so there is potential for cost of open-ground plants to reduce even further for large scale production. This very successful project is showing the way to effectively establish native forest species in the Taupo catchment with all the environmental and economic benefits that accrue from that.

#### References

MacGibbon, Roger and David Bergin, 2011. Lake Taupo Protection Trust project, Planted native trees and shrubs. Progress report - year 2 (2010). Tāne's Tree Trust report to LTPT. 20p.

Smith, Philip, 2010. Reducing costs associated with establishment of native plants in the Lake Taupo catchment. In: Managing Native Trees. Towards a National Strategy. Proceedings of the Tāne's Tree Trust 10<sup>th</sup> Anniversary Conference, November 2009. Pp 52-55.

*Warwick Silvester*

## RECENT TRUST ACTIVITIES

### Landscape Architect's Conference, Kerikeri

David Bergin and Ian Barton attended this in mid March. It was a two day field conference, visiting properties on the coast and inland. Ian and David spoke at various times about the Northland Totara project, the work of Tāne's Tree Trust, the use of continuous cover forestry to convert pine forest to native and on the planting of natives for production. A considerable amount of interest was shown by the landscape architects and one has joined Tāne's Tree Trust.

### Northern Totara Working Group (NTWG)

Peter Berg, David Bergin and Ian Barton attended a meeting in Whangarei on 8 March. Current focus is on Paul Quinlan's survey of totara use and he reported on this at the ANZIF Conference. Mick Kelly and Sarah

Granich's house, which contains quite a lot of totara, has been nominated for a 2011 House of the Year award. Mick and Sarah, as well as Paul, are all members of Tāne's Tree Trust.

### Australia and New Zealand Institute of Forestry (ANZIF) Conference (2 – 6 May 2011)

There was quite a heavy Tāne's Tree Trust involvement in this conference. Trustee Andrew McEwen is the current President of the NZIF, Peter Berg was Chair of the conference organizing committee and contributed a paper of the afforestation of the Muriwai sand dunes, Paul Quinlan presented a very well received paper on the work of the Northland totara working group (NTWG), Trustee Roger MacGibbon presented an equally highly regarded paper on the use of native species in controlling nitrogen input into Lake Taupo and the Trust and NTWG had a display in a central location, manned by Ian Barton, Glenda Berg and Paul Quinlan about the work of the two organizations. The conference was attended by foresters from NZ and Australia, along with colleagues from around 20 other countries including many Pacific nations, and proved to be an ideal opportunity to make our activities and successes more widely known. The interest in growing and managing native trees was a particular highlight of the conference with Iwi in particular seeking more involvement.

### Northland Field Days, Dargaville, 3 – 5 March 2011

Tāne's Tree Trust and the NTWG had a stand at this show in a marquee along with DoC, Landcare Trust, QE II Trust and several other groups. David and Michael Bergin and Ian and Jan Barton were there for the three days and Peter and Glenda Berg for the first day. There was quite a lot of interest in what we had to display and talk about and four new members were signed up to the Trust. Many more were recorded as being interested in the work of NTWG.

### TTT Submissions to Government

Since our last newsletter, the Trustees have been active in the preparation of submissions to Government, two in fact. Thanks to Andrew Caddie for his work on this. The first was a submission to the Ministry of Agriculture and Forestry appointed Review Panel covering the Low Sequestration Category (read indigenous forestry) of the Afforestation Grant Scheme (AGS). TTT is advocating for the retention of this scheme (see our newsletter of September 2008) for details of the AGS. Andrew appeared before the Panel and was well received. The second submission was in relation to the release by Government of the Proposed National Policy Statement on Indigenous Biodiversity. As can be anticipated, the Trust is broadly in favour of the proposed policy. However, as always, the devil is in the detail! To read either of these submissions, go to our website [www.tanestrees.org.nz](http://www.tanestrees.org.nz) and click on the "Submissions" tab.

## UPDATE ON CURRENT PROJECTS

See above Editorial for update on the Lake Taupo project.

### The Beech Bulletin:

The eagerly awaited beech bulletin is proceeding well with the text all but completed. One last task has been the collating the measurement data of over 700 beech trees made as part of the TTT Indigenous Plantation Survey. Our application to the Lotteries Board for a grant to assist with publication was turned down but we are able to proceed as originally intended and have requested an extension of time from SFF to October when the bulletin would be available for distribution.

### Planted native trees project (TTT Plantation Survey):

This is a prodigious effort and recent activity has seen South Auckland and Amakiwi plantations completed over last month and all data (7000 trees) entered on spreadsheet.

This SFF funded project is due for completion by the 30 June.

### Sustainable Farming Fund Applications (SFF):

We applied to SFF for two projects this year. The thinning trial project in the Hunuas was granted \$14,000 and that will be led by Ian Barton. The business case for indigenous forestry application was declined but we intend to revisit this proposal and make the case for the economic and conservation values of native forest to be properly recognized.

### NETWORK GROUP

The number of members is 279 with Corporate (now kauri) members numbering 24. It is intended that, as part of our regular review process, we will examine membership conditions and benefits to ensure that the membership is receiving value from belonging to TTT. With this in mind please take a look at the updated and expanded website [www.tanestrees.org.nz](http://www.tanestrees.org.nz) and also note the new initiatives advertised here, both the calendar and the handbook. The Trust will review the membership conditions and benefits later this year in order to make them more explicit and meaningful.

### STRATEGIC PLAN

The Strategic Plan sets 22 targets to be achieved over the three year period, 2010 - 2013. At Feb 2011 18% of the targets had been achieved, 50% were underway, 9% are stalled and 23% had not started -some not being required until the end of the plan period– the 31 March 2013.

### INFORMATION TRANSFER

**Newsletter:** Newsletters continue to be put out every four months. Now that the new E.O. has started, it is intended that she will produce the bulk of more focussed newsletter material with a Trustee acting as supervising editor. With this in mind we would welcome copy from members. Experiences you have had and results of planting and management would be most useful for the membership to know about.

**Bulletins and Handbooks:** The Conference Proceedings and part one of the Planting and Managing Native Trees handbook have been published. Copies are available from the Trust – refer to our website [www.tanestrees.org.nz](http://www.tanestrees.org.nz) for details. The Beech Bulletin will be available before the end of the year.

## UPCOMING ACTIVITIES

### AGM and Workshop

The Annual General Meeting for 2011 will be held on August 21<sup>st</sup> in conjunction with the Northern Totara Working group workshop at the Jordan Valley dairy conference room 259 Jordan Valley Rd. This is just north of Whangarei, the road is left off SH1 near Hikurangi. See details in the AGM insert.

The workshop beforehand will consist of brief reports on the Beech bulletin project and the Planted indigenous trees survey before we move on to the main item which is a report by Paul Quinlan on Existing uses and market development opportunities for naturally regenerating totara timber.

This in-depth survey of key stakeholders documents practical experiences and knowledge about the felling, harvesting, milling, drying, and use of regenerated totara and its market potential. The survey targeted a very wide range of end users and the results are very encouraging. It found that 'farm-totara' timber is considered an excellent native softwood timber suitable for many purposes. An opportunity may also be made available during the day for a visit to a local stand of managed totara. Anyone interested in attending please register that interest with Sarah at [office@tanestrees.org.nz](mailto:office@tanestrees.org.nz) and you will be advised details of the full programme when it becomes available.

### West Coast Workshop

A workshop / field trip is planned for the West Coast from the evening of Friday 27 to the afternoon of Sunday 29 May. This will be the first workshop run by the Trust on the Coast and will have a major beech component. Mark Smale will be there to speak about the almost completed beech bulletin and to collect final information for this; other speakers will be Ian Barton and Helmut Janssen.

Once details are finalized Trust network members on the Coast, in Nelson and in Canterbury will be advised by mail or email.

## STUDY TOUR 2012 EUROPEAN SUSTAINABLE FORESTRY

This study tour led by TTT trustee Mark Dean will now take place in August – September 2012. The tour will depart on 26 August and travelling via USA to Germany, Italy, Scotland and England will be fully guided and visit areas where sustainable forest management has been practised for centuries in some cases. Mark Dean is organising the itinerary and House of Travel are managing the travel. Mark would like expressions of interest for the trip next year and suggests this is a very good way to spend your SKI money.

Please contact Mark Dean at

[mark@naturallynative.co.nz](mailto:mark@naturallynative.co.nz)

or telephone him at 07 543 1494 or 021 942 339