The New Zealand Notable Trees Trust online database

Brad Cadwallader¹

Introduction

New Zealand's tree heritage, both native and exotic, is of national and international importance. New Zealand's tree stocks have multiple values; cultural, spiritual, aesthetic, historic, conservation, and scientific.

There is also a wide range of interest groups, including the public, tangata whenua, arborists, regional authorities, local bodies, urban planners, and developers.

Providing a freely available national register of these significant and venerable trees documents our living heritage, and one of the great treasures of Aotearoa New Zealand. Some of these outstanding trees are labelled with plaques that draw public attention and provide a measure of protection.

Many of these trees are coming under threat from urban intensification and rural development and from lack of knowledge about them, including the decline in traditional family stewardship. Many trees are lost because their significance was unknown and there are many more heritage trees needing registration.

Early plantings of our native trees have now matured into outstanding specimens of high amenity value, historical interest and cultural significance. Our native trees also generate international interest and provide tours for overseas tree lovers.

New Zealand has a significant collection of exotic trees that date back to earliest European plantings throughout the country. Because of our cool-temperate climate these plantings have thrived and New Zealand has long been recognised as an important repository and refuge for European tree species. This repository contributes to an international genetic resource pool and seed bank. Many trees abroad

are endangered in their native habitats or no longer exist in the wild

On the other hand, information on cultivated species, including exotic trees, is essential when considering what potential weed species are present in cultivation. It is also essential to biosecurity officers and importers to determine if an organism is already legally present in New Zealand.

This article describes the background and formation of the New Zealand Notable Trees Trust (NZNTT) and the redevelopment of the Notable Trees Register and online resources at www.notabletrees.org.nz.

Background

Pioneering work on documenting the notable tree heritage of New Zealand was carried out by Dr. H.H. Allan (1940) and later by Bob Burstall, who for more than 30 years surveyed the country to locate and catalogue many of our fine trees (Burstall 1970-1974, Burstall and Sale, 1984).

In 1977/1978 the Royal New Zealand Institute of Horticulture (RNZIH) established a national register of notable trees for the purpose of cataloguing and registering New Zealand's tree heritage. For more than 25 years the late Ron Flook of Nelson played a significant role in managing this scheme (Flook, 1984, 1988, 1994, 1996).

In 2004, in conjunction with website developer Kieren Simon, the first Notable Trees New Zealand database was launched online to allow public access and wider recognition of New Zealand's tree heritage. Unfortunately Ron passed away in 2006 (Maloy, 2006) and the associated database became unavailable soon afterwards.

On 24 April 2008, the RNZIH in association with the New Zealand Arboricultural Association (NZAA) established a new charitable trust called the 'RNZIH New Zealand Notable Trees Trust' (NZNTT). This trust was established to continue this important work and David Glenn is the first and current Chairman.

On 8 May 2008, the RNZIH organised a symposium 'Heritage Trees -Our Future Heritage' that explored issues surrounding documentation of New Zealand's heritage trees. During that symposium trustee Bryan Gould announced the formation of the NZNTT and its goal to create a freely available online database and integrated management system.

Aims of NZNTT

The initial aims of the new trust are to:

- Redevelop a public database of New Zealand's notable trees.
- Utilise existing records and newly submitted listings.
- Establish a New Zealand national tree registrar network to assist in locating Notable, Veteran and Champion trees nationwide.
- Populate the database with verified data.
- Ensure all information is accurate and in a consistent format.
- Promote NZNTT nationwide to private and public tree owners.
- Ensure individuals, councils and agencies are aware/supportive.

Whilst most local authorities around New Zealand maintain a list of their own locally significant trees there is currently no centralised register of the data they hold. The NZNTT database is intended to be a valuable resource for this purpose. In addition, the Trust receives a high level of interest from the general public.

The website

At the workshop on cultivated plant names, held on the 9th September 2009 in Wellington, Brad

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Fig. 1 (Above) Screen shot of a search of the register (public view, non-login).

Fig. 2 (Right) Retrieved record showing tree information, measurement details, integrated Google Maps, and image preview.

Cadwallader gave a presentation on the development of the website and database to date (www. notabletrees.org.nz). At that time, only the preliminary (static) web pages were online and the integrated management system and database components were not yet available.

These web pages include information about the Trust, guidelines for measuring and recording trees, contact details, a sponsor's page, and links to related resources.

Online database and management system

The new database and integrated management system went live on 19th November 2009 when it was showcased at the NZ Arboricultural Association Conference held in Blenheim.

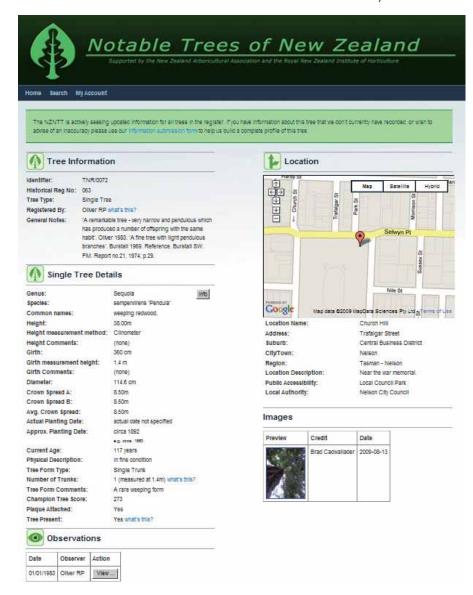
The integrated management system makes the registrations and associated images much easier to organise, update and access, all directly through the website2. There are currently about 700 records representing approximately 3000 trees. Data held on the website will be viewable on four registers:

1. The New Zealand Tree Register

This is the main register and all trees submitted are held here. The general public can view the records here (nonlogin) or they can create an account to become a registered user to submit new tree records.

Tree records can currently be searched by:

- Botanical name
 - Genus
 - Species, subspecies, variety, forma, cultivar, hybrid
- Region (16 regions, such as Auckland - Coromandel, Canterbury, Southland, etc.)
- Location
 - Citv
 - Town
 - Address
- Local Authority (84 listed -Ashburton District Council, Auckland Regional Council, Buller District Council etc.)



² The information held in the old hardcopy-based notable trees register was difficult for professionals and the public alike to access and became increasingly unwieldy to maintain. The first online database held only some of the information within Ron Flook's mostly paper-based notable trees register.



Fig. 3 Retrieved tree record with image

Records are also divided into 'Verified' and 'Unverified' trees - Verified trees have had their details confirmed by a regional tree expert authorised by the Trust. These experts belong to the regional tree recorder network and may confirm that the tree is still living, re-measure and photograph it. Unverified trees are provisional listings that are currently being processed or require updating because the tree needs to be remeasured.

Other search criteria will be added in the near future along with the remaining three registers which are subsets of the main tree register:

2. Notable Trees of New Zealand Trees identified as having notable characteristics, i.e., age, tallest, largest, historical, rarity etc. A vetting process determines this notable status.

3. Champion Trees of New Zealand A ranking of the top trees by species.

4. Historical Tree Records

When a tree on the general register dies, its record will be preserved as a historical record. Historical records of trees not already on the database can also be entered here.

Next steps

The Trust will continue developing the website through uploading further information pages and making further improvements to the database.

The Trust will also establish a regional tree recorder network. This network will be a group of researchers and volunteers willing to provide their time and

enthusiasm. They will help to maintain and update records of our notable trees. We also welcome any additional information or corrections for our records.

Funding

The NZNTT operates on a voluntary basis and funding and sponsorship is essential for the Trust to achieve it goals. Initial seed funding was obtained through successful applications to the Lottery Environment & Heritage Fund and the Peter Skellerup Plant Conservation Scholarship. Individuals and organisations have been very supportive of the project and current funding includes the following sponsors:

- Bev McConnell Avrlies Garden. Auckland
- Greenscene Ltd.
- Horttraining NZ Ltd.
- Lottery Environment & Heritage Fund
- Peter Skellerup Plant Conservation Scholarship
- Ralph Ballinger, the vice-patron of the RNZIH
- RNZIH Auckland Branch
- SCION Research and the National Forestry Herbarium – for allowing us to use their botanical names database

- Specimen Tree Company Ltd.
- Treescape Ltd.
- Regional authorities:
 - Auckland Regional Council
 - **Dunedin City Council**
 - Far North District Council
 - **Hastings District Council**
 - **Hutt City Council**
 - Marlborough District Council
 - Queenstown Lakes District Council
 - Rodney District Council
 - Tasman District Council
 - Timaru District Council.

Without this financial support, the project could not have been completed to a credible standard, if at all. Any offers of additional funding or support will be warmly received.

Acknowledgement

We thank Murray Dawson for his work in providing the initial web pages used in the new website, assistance with the seed funding applications (on behalf of the RNZIH and NZNTT) and suggestions and additions in adapting a presentation to the cultivated plant names workshop into this article format.

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