Fernglen Native Plant Gardens

Spring Newsletter 2012

Contents:

An invitation to our annual open day
Sunday 28th October 1pm-4pm

A very warm invitation is extended to all friends of Fernglen to attend our annual open day. This is a chance to enjoy a conducted tour around the gardens, meet members of the management committee, and share refreshments.

2. Spring at Fernglen – New plants for the Gardens

With spring on its way, many species have come into flower in the gardens. Look out for:

Clematis cunninghamii – pale green flowers growing up *Metrosideros bartlettii*
Clematis paniculata – seen from the roadside near the gate
Pennantia baylisiana and the hybrid with P. corymbosa (kaikomako) –offshore Islands section
Corokia buddleioides
Metrosideros carminea – carmine rata - up towards the house
Hebe townsonii
Alseuosmia macrophylla – on the track to the fernery
Machaerina sinclairii
Scandia rosifolia – opposite the top *Dracophyllum* collection
Pomaderris oraria
Olearia cheesemanii – by the gazebo
Xeronema callistemon
Corokia cotoneaster – in the garden in front of the alpine house
Hebe diosmifolia – covered in deep purple flowers near the off-shore ngaio tree

We have recently purchased an interesting new consignment of plants for the rockery areas:
Pimelea longifolia
Pimelea aridula
Hebe hectori – a whipcord hebe
Hebe treadwellii from Bald Knob Ridge
Hebe diffenbachii
Pittosporum kirkii
Leptinella albida
Leptinella rotundata
Rubus squarrosus
Rubus schmideliodes
Carmichaelia egmontiana
Carmichaelia robusta
Carmichaelia arenaria
Carmichaelia virgata
Carmichaelia uniflora
Cyclosorus interruptus
Dicronopteris linearis
Leptolepia novae-zelandiae
Jovellana repens
Veronica jovellanoides

These photographs have been reproduced from the NCPCN network with kind permission
1.John Barkla 2. Jeremy Rolfe
3 Sir John Smith- Dodson who has recently passed away and left a legacy of wonderful photographs


Pimelea longifolia


Hebe treadwellii


Leptolepia novae-zelandiae

Check some of these out by referring to the New Zealand Plant Conservation Network website http://www.nzpcn.org.nz

3. A look at some of our lesser known *Pittosporums*

Pittosporum eugenioides

When we think of *Pittosporums*, most of us are very familiar with the kohuhu (*Pittosporum tenuifolium*), tarata (*Pittosporum eugenioides* – lemonwood), and karo (*Pittosporum crassifolium*). These have all been incredibly popular as garden plants since the 1980s. There are however, many other *Pittosporums*, of all shapes, sizes, and colours, deserving of a place in a plant lover's garden.

Pittosporum anomalum :
This is one of our smallest *Pittosporums*, as it only grows to one metre. It has distinct juvenile and adult foliage. Plants are found in scattered populations throughout the North and South Islands. Unusually for our native plants, the creamy yellow flowers are strongly scented.

Pittosporum divaricatum:
As the name suggests this plant has a divaricating form, with both juvenile and adult form being quite dissimilar. It is a large shrub which can grow up to three metres. It is located in both islands, and often in association with beech forests.

Pittosporum obcordatum

Pittosporum obcordatum:
This was first discovered by Etienne Raoul in 1840 in the forest behind the settlement at Akaroa. Surprisingly, no other specimens have been found in the area. Classified as an endangered species, this *Pittosporum* only occurs in scattered sites throughout both islands. The plant maintains a distinct divaricating habit throughout its life.

Pittosporum patulum:
This small tree grows up to six metres and is classified as an endangered species. It has juvenile and adult forms and in the spring, it has strongly scented deep red flowers. It is only located in the South Island.

Pittosporum rigidum: A medium sized shrub growing up to four metres. It is divaricating in habit, with juvenile and adult forms. Its natural habitat is mountain to sub-alpine forest and it is especially abundant in Arthur's Pass National Park.

Pittosporum turneri: This is a small tree growing up to seven metres with a divaricating form. It naturally occurs in mid-altitude parts of the North Island, especially the Volcanic Plateau. It is named after Phillip Turner an early plant collector.

Pittosporum virgatum. A small tree growing up to six metres which is classified as an endangered species. It has significantly different juvenile and adult forms.

Specimens of these lesser known and often rare Pittosporums may be obtained from Oratia Native Nursery, or from Joy plants in Pukekohe.

Pittosporum turneri. A juvenile plant (left) which has small leaves and divaricating branching and a tree (right) that has the lower part with the juvenile form and the upper part with larger leaves and non-divaricating branching

All Pittosporum pictures reproduced with kind permission from Bruce Clarkson, Waikato University. From the website: http://cber.bio.waikato.ac.nz/courses/226/Pittosporaceae_new/Pittosporaceae_new.html

4. Native Epiphytes

Our native flora is often described by botanists as ‘complex and diverse’. Epiphytes are a significant and fascinating element in this diversity. They are perching plants that grow naturally on other plants. Unlike parasitic plants that can obtain water and nutrients from the host plants, epiphytes simply utilize the host as a place to perch and grow. The seeds or spores of our native epiphytes naturally germinate on the branches and trunks of trees once they have been deposited by the wind and native birds. Once ‘anchored’ successfully the plant can thrive for many years. There are a considerable number of epiphytes including ferns, orchids, herbaceous plants, small shrubs, and even trees. Epiphytic ferns, especially filmy ferns, can often be observed on the lower parts of tree ferns - particularly on *Cyathea dealbata* and *Dicksonia squarrosa*. Spores are trapped in the fibrous material of the trunk where they germinate and then develop into mature ferns.
A number of native orchids are epiphytic, and as a result they are easier to observe than many of our terrestrial orchids. *Winika cunninghamii* and *Earina autumnalis* are two superb examples of epiphytic orchids, both producing stunning floral displays.

Winika cunninghamii
(Pekapeka – lady’s slipper)

Earina autumnalis
(Raupeka - Easter orchid)

Photographs kindly reproduced with permission from New Zealand Native Orchid Group
http://www.nativeorchids.co.nz/Epiphytic_Orchids.htm

Collospermum hastatum
Courtesy of Maurice Needham ,Te Aroha
http://www.epiphytetree.com/

Collospermum hastatum is possibly our best known epiphyte. It usually forms large clumps high in the crowns of a number of tree species, particularly old pohutukawa and puriri. When you gaze up into the tree the number of *Collospermums* can be quite staggering. In severe storms *Collospermums* are often dislodged and fall to the ground (hence the moniker 'widow- maker'). On the ground they take root and continue to grow – how amazing!

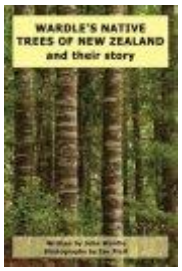
Some of our native shrubs have adopted an epiphytic lifestyle. These include *Pittosporum cornifolium, Pittosporum kirkii, Coprosma lucida, Brachyglottis kirkii* and *Griselinia lucida.* All of these plants can be cultivated in your garden. It is important to remember their natural habitat and plant them 'high' in a raised garden bed. *Griselinia lucida* is a very popular garden plant today much to the surprise of many. It naturally begins life in the fork of branches and often in mature pohutukawa.

Northern rata, Metrosideros robusta

Published in 1966 in *An Encyclopaedia of New Zealand*, edited by A. H. McLintock.
From http://www.teara.govt.nz/en/1966/ratas-northern-and-southern/1/3

Possibly the most amazing of all of our native epiphytes is the northern rata - *Metrosideros robusta*. This forest giant begins life deposited as a seed in a mature tree. It germinates, and slowly develops both in foliage and root system, to slowly envelop the host plant.

5. Book Review: Wardle's Native Trees of New Zealand and Their Story by John Wardle



This is a rather different publication about our native trees. The chapters are defined by common name classifications, for example celery pines, native cedars, laurels and myrtles. Within this framework, each species is given a comprehensive botanical description. An outline of the natural distribution of each is provided and a guide to its propagation is laid out. An enlarged last chapter deals with some fascinating aspects of our native plants under the following headings: Trees and the Natural Landscape, Trees for Horticulture, Food Trees for our Native Birds (with lists for each season), and Trees for Shelter and Protection. This is a very readable publication especially for members of the public who appreciate the "broader" picture of plants, rather than very detailed botanical descriptions. The book is brilliantly illustrated throughout with stunning photographs of entire landscapes and very clear close-ups of various plant inflorescences. John Wardle, the author, has obviously devoted many years to observing and studying our native plants, and his depth of knowledge shines through his writing, as in the following excerpt:

> *Our landscape is highly variable ranging from high mountain ranges to coastlines, from warm temperatures to cold climates, from high rainfall to semi arid conditions. These large changes in the environment, and growing conditions over short distances, result in our forests being correspondingly complex. This is a major factor determining the comparatively large number of tree species which are found in New Zealand. According to one estimate New Zealand has more tree species than the whole of Europe, even though it has less than three percent of the land area..."*

Pseudopanax crassifolium, *horoeka, lancewood; showing distinctive juvenile and adult forms*

6. Growing Our Native Lancewoods in Great Britain

Following the incredible popularity of flaxes and cabbage trees in Britain, there is now considerable interest in plants from 'down under'. Recently gardeners in the U.K. have discovered the two lancewood species *Pseudopanax crassifolium* and *Pseudopanax ferox*. To quote an English botanist "like them or loathe them, lancewoods have perhaps the most bizarre appearance of a shrub or small tree that can be grown in the U.K."

While the lancewoods cannot be considered fully hardy across the U.K., they have survived temperatures of -13C at the Royal Horticultural Society Garden, Wisely, and -9C in Hampshire. It is possible that it is the sticky resin or wax that covers the young shoots of the lancewood that protects vulnerable tissues from extreme frosts.
Of course the fact that the lancewood has distinctive juvenile and adult forms adds to the intrigue of these fascinating plants. Just as intriguing are the possible theories to explain this metamorphosis. One possible explanation is that historically, the plant only produced unpalatable leaves, until well clear of the moa's beak. The alternative explanation is that the plant evolved downward facing lances to push through lower plant canopies, then only protruding adult leaves when well clear of competing foliage. Whatever explanation you prefer- the lancewoods, along with other *Pseudopanax* species, such as *Pseudopanax chathamicus, P. discolor, and P. lessonii*, are all becoming very popular in the warmer parts of Great Britain.

Picture reproduced from: An Encyclopaedia of New Zealand, edited by A. H. McLintock, originally published in 1966. Te Ara - the Encyclopedia of New Zealand, updated 22-Apr-09 URL: Http://www.TeAra.govt.nz/en/1966/vegetation-indigenous/1/1