Newsletter

For Friends of the Christchurch Botanic Gardens Inc To Promote, Protect, & Preserve

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President's Report

How fortunate we are in Christchurch to have a good supply of water to nurture our plants.

I recently visited Brisbane where the city has imposed a level 3 water restriction which means, no use of hoses, only watering by bucket. Even the lakes in the Botanic Gardens are a metre below normal level and it is winter. Grey water is being brought in and used to irrigate 'at risk' plants. Coupled with this action an extensive programme of soil aeration and deep mulching is taking place. The drought has even affected the number of people wishing to borrow books from the garden's library – few people are thinking of new plantings.

Li was walking around the gardens I was constantly reminded of David Given. After my visit to the region last year, David and I discussed various features of the gardens and how some of them could be incorporated into the Christchurch Botanic Gardens. This was a week before his passing.

I am sure that all members were delighted to hear that the Council has agreed to allocate funds for the upgrading of the Botanic Gardens' facilities together with tree renewal, including the Gardens and Hagley Park. I would like to thank the committee and members who made submissions. It was very timely that Garry Moore recently visited the Wuhan Botanic Gardens in China to learn how a modern Botanic Garden should function. (See enclosed invitation to attend the Mayor's presentation on 16 August).

The long awaited Master Plan for the Botanic Gardens and Hagley Park which incorporates the vision by David Given will be open for public submission in August. Members are encouraged to view this document then make a submission. David Moyle.

Management Plan for Hagley Park and the Botanic Gardens.

At the Society's Annual General Meeting on Sunday 27 August Jeremy Hawker, Botanic Gardens Operations' Manager will explain the implications of the Draft Management Plan and invite discussion on members' views.

The Plan will be available from CCC service centres from 21 August and submissions should be made by Wednesday 25 October 2006. Hearings by the full Council begin 11 December.

Meetings organised by the Council to explain the Plan and to gather general public views will be held at the Canterbury Netball Centre, South Hagley Park, on Monday 28 August from 12.15 p.m to 1.45 p.m and again at the same venue on Thursday 31 August from 7.30 p.m. to 9 p.m.

Heritage Week Event - "Beating the Bounds" Saturday 14 October 2006 – 2.00-4.00pm Community Walk around the boundaries of the Botanic Gardens led by the Mayor See Coming events sheet for details

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Gardens' News

Jeremy Hawker reports-

The Botanic Gardens again heads the list of visitor attractions within Christchurch, and it is pleasing to see that the Port Hills was second as a visitor destination.

With increasing numbers to the City and the flow on to the Gardens, how we provide an enhanced experience is the growing focus for us this coming year. The management plan will be available for public consultation and planning for the staff and visitor facilities will take a large portion of time and resource in the coming months.

With all this activity there is a perception held by some that the core focus of the Botanic Gardens, namely its plant collections, may be neglected. This is far from true. The planning undertaken has identified the need to strengthen collections and develop over time new collections. There is a growing need for the Gardens to take a stronger lead in plant conservation and education, and this will be a focus as the Gardens adds to existing plantings and programs. Our tree collection is managed in a systematic way, with a maintenance program in place and criteria being developed for tree replacement and enhancements.

There have been constraints on development within the Gardens as the planning exercise was undertaken, but it is now time to look forward and enhance both the collections and facilities.

An important outcome from the 2nd World Botanic Congress in Barcelona in 2004 was the development of a series of 20 targets for botanic gardens to be achieved by 2010. They fall within the following categories:

- Understanding and documenting plant diversity
- Conserving plant diversity
- Using plant diversity sustainable
- Promoting education and awareness about plant diversity
- Building capacity for the conservation of plant diversity

The aim of the Christchurch Botanic Gardens is to contribute to the global community and align activities to these objectives. There is considerable work required but the direction and desire to strengthen the Gardens and its role within the international community is clear.

A recent article in a local paper highlighted the wide range of views expressed by those who have an attachment to the Gardens. The article stated that there was a lack of apprentice training at the Gardens. A very successful program for horticultural trainees has been running in the Gardens and currently five staff are at various stages. The trainees undertake both practical and theoretical training. There is a desire to grow skills and knowledge of the current staff and several training opportunities are provided throughout the year. The development of staff capabilities is ànimportant aspect of the Gardens' management.

The Christchurch Botanic Gardens, through the LTCCP process, has been given the resources to provide for residents and visitors, as well as the provision of facilities for staff to contribute on a larger scale to meet international aims. The continual development of staff through training will provide a source of valuable information and enhanced experiences.

The contribution by the Friends of the Christchurch Botanic Gardens in advocating, assisting, supporting and informing in the support of the Gardens is not to be underestimated, and the open dialogue between the staff and Friends encouraged.

Jeremy Hawker.

Staff Notes

Kerry Everingham has joined the Botanic Gardens' staff as Visitor Services Co-ordinator and is based in the Information Centre. Her job will also include working closely with the Friends and volunteers.

Kerry writes "For the last 5 years I have been working in the role of Education and Promotion coordinator within the Communications and Consultation team of the CCC. In this role I was involved in (along with others) the development of the Learning Through Action programme that offers school groups learning opportunities in the city's parks and reserves, heritage buildings, and waste

sites. I was involved in the development of the Creative and Native programme run out of the Botanic Gardens.

Other roles within the CCC have included Environmental Promotions Co-ordinator and "Keep Christchurch Beautiful" Campaign Coordinator.

Dean, Curator area G

It is a cold mid-winter day with a minus 2[°] wind chill and Dean is still in shorts! One gets the feeling that this hardy gardener is very much at home outdoors no matter what the weather.

rean is the curator of section G in the Botanic Gardens, which includes the popular areas of the Magnolia and Azalea Garden, the Water Gardens, Pinetum, Kate Shepherd walk and Succulent Garden.

The succulents are mainly from Southern USA and Mexico, the Aloes from South Africa where there are hundreds of varieties. The Pinetum which has an impressive conifer collection, used to be just a rubbish tip years ago. Dean himself planned and planted the conifer beds to reshape the parking area.

began his career with a four year Dean apprenticeship in the Gardens in 1986 and after gaining his Trade Certificate he went on to get his National Certificate of Horticulture. In 1989 Dean vas sponsored by the Canterbury Horticulture Society to complete the P.C. Browne Scholarship (The CHS no longer run this in Melbourne. scheme). This involved working for many different Councils over a period of 1 year. He spent 4 months working for the Melbourne City Council, and then worked for St Kilda, Box Hill, Nunawading, Preston and Coberg councils gaining valuable experience.

Although his favourite area is the Rock Garden, he has a broad interest in plants with a special personal interest in native orchids. "I like working outside with plants" he says, "having the knowledge, particularly of plant taxonomy" (knowing the names).

One of the biggest changes Dean has seen in his nineteen years working in the Gardens is the disappearance of old mature trees. He says it is always very sad to see them go. With a grin, Dean recalls an incident when a tree nearly got him, while he was helping the tree unit. He was at Mona Vale, standing on the railway embankment, holding a rope attached to a heavy tree branch that was being cut off. Suddenly the branch fell. The rope got tangled around his leg, hoisted him up about a metre into the air and slammed into him the trunk! However apart from severe rope burns on his hands, he came away unscathed and can now laugh about the episode and has forgiven the tree.

In 2002 a Korean lady came to work in the Gardens. She could hardly speak a word of English but Louise and Dean kindly looked after her in her work endeavours. As her English improved, they discovered that her husband owned a hospital and her family owned 20 hectares in Korea where they were developing a Botanic Garden. Dean was then offered the opportunity of a lifetime. Two weeks working for her in Korea, all expenses paid! Consequently, in that same year, Dean found himself in Korea. The garden is situated 2 hours (by car) north of Seoul and Dean was able to help with the Korean development while enjoying the experience of working in a garden that contains many different plants due to the colder climate. He has been offered a further two-year work experience. but his commitments to the Christchurch Botanic Gardens don't allow it at present.

Dean is hard-working, knowledgeable, well thought of by other staff and obviously always ready for adventure. Candi Gibson

Exhibitions in the Botanic Gardens' Information Centre.

Matariki is the free display presently mounted within the Information Centre. This displays focus is on Matariki - Aotearoa Pacific New Year, Maori horticulture, rongoa (medicine) and harakeke (flax).

In September there will be a small display on The International Exhibition 1906-1907 - A landscape transformed, a nation created.

Mobility Scooters.

Free scooters are available to the public from the Botanic Gardens' Information Centre. To book phone 9417590

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Wild Wonderings in the Botanic Gardens for KidsFest.

Well done to Charlotte McHaffie and the Information Team for their work on the 'KidsFest Wild Wonderings self guided discovery trail'. Interest in the trail has been outstanding with over 450 children participating to date. The theme for this discovery trail was "The strangest of animals live in the wildest of places".

Scientific Research in our Botanic Gardens

On Monday 22nd of May, Consultant Ecologist and Herpetologist Tony Whitaker and his wife Vivienne from Motueka visited the Botanic Gardens, (Herpetology is the study of reptiles and amphibians). They came to collect plant material on behalf of the Auckland School of Biological Sciences for DNA analysis, for a research project being carried out by *Shane Wright et.al. The project sets out to prove that molecular evolution occurs much faster in tropical regions than it does at lower latitudes. Tony was particularly pleased to be able to collect several Australian species namely *Tasmannia stipitata*, *T. purpurascens* and *Asterotrichion discolor*, a relative of our native Hoheria and Plagianthus.

On previous occasions Tony has collected Metrosideros species in New Caledonia, Papua New Guinea and the Philippines for Shane Wright. Tony's first visit to New Caledonia resulted in a new species of Metrosideros being discovered. The plant *M. whitakeri* is named in his honour. A photo of Tony in Papua New Guinea is featured in Philip Simpson's latest book "Pohutukawa and rata, New Zealand's iron-hearted Trees".

As DNA analysis requires fresh plant material for best results it is important that the specimens reach the lab within 2-3 days of collection. Because Tony is an Ecologist & Herpetologist and not a Botanist, when asked to collect plants he is able to focus his energy on the task at hand and not be easily distracted as a Botanist would be in a similar situation - a fact that he told me about when we walked around the Gardens and which is also quoted in Philip Simpson's book.

*(Shane Wright is a lecturer at Auckland University in the School of Biological Sciences. Details of his current research can be found at http:// www.sbs.auckland.ac.nz/people/staff/wrights/ index.htm Dean Pendrigh

New Zealand Peace Bell

Work has started on an area within the Gardens around the woodland toilets and this will become the site for the New Zealand Peace Bell, form part of the Asian plant collection, and provide a focal point as you enter from the woodlands bridge. The existing toilet block will be removed and a replacement facility built.

The bell has been gifted to Christchurch by the World Peace Bell Association and is to be installed in the Christchurch Botanic Gardens as part of a new city peace walk. The NZ bell is a replica of the original World Peace Bell gifted to the United Nations in 1954 and is one of only 19 such bells around the world. It is made of coins and medals from 106 countries, including New Zealand, committed to the promotion of world peace. The bell is 1m tall, 609 mm wide and weighs 365 kg.

The aims and objectives for the New Zealand Peace Bell are:

- To enhance world peace by strengthening positive relationships between people of different cultures, including countries already associated with the international World Peace Bell peace movement.
- To encourage young people of differing cultures to visit New Zealand to participate in outdoor adventure activities they can, in turn, encourage in their own countries.
- To progress world environmental sustainability through exchange programmes aimed at preserving the earth's ecosystem.
- To promote world peace through strengthening trade and tourism.
- To highlight the World Peace Bell in its host city, Christchurch, and to establish a central city peace walk for New Zealanders and international visitors.
- To create an awareness of New Zealand as a country that is making a worthy contribution to world peace.

The unveiling date for the World Peace Bell in the Christchurch Botanic Gardens will be on Tue 3 October. Please phone BG Information Centre on 941 7590 for the exact time.

Mona Vale

There are new metal rose supports being installed near the Fernery. Do visit in November when the roses are at their best.

Articles

Plant Profile Anemone nemorosa - the Wood Anemone

Many of the spring delights in our gardens are the small carpeting perennials whose impact is sometimes brief but so delightful when seen flowering en masse.

Anemone nemorosa, the Wood Anemone, is one of these and the clumps area feature in the Botanic Garden Rockery in spring. On a sunny day the flowers face upwards enjoying the warmth then close up and bend down to protect the pollen. Often the reverse of the flower petals is a ^{re}fferent colour, as in the wild form of *A. nemorosa* which is pure white inside and shows pinky-grey when the flower closes up. These woodland plants are deciduous so take care to mark where they are in your garden.

Jane Mc Arthur, who has for years looked after the small bulbs and alpine plants grown for our plant sales, writes about the wood anemones.

"This dainty little anemone is a native of northern Europe and a member of the Ranunculaceae family.

The Flowers appear to be delicate but are quite long lasting. They are an attractive ground cover in spring and do well under deciduous trees and shrubs where the rich loam seems to suit them. The root of *Anemone nemorosa* is a brown twiglike rhizome which grows horizontally near the surface of the soil. I am forever digging them up as I weed but they happily keep on multiplying. As long as broken pieces have an eye on them they will grow. In the Botanic Gardens there are large groups growing around the rock garden. I once saw a lovely clump beside the car park off Riccarton Avenue. That's tempting fate.

There are several forms of this little treasure.

Anemone nemorosa 'Robinsoniana' with pale blue flowers

A.nemorosa 'Vestal' pure white button with central white boss

A nemorosa 'Royal Blue' a deeper blue than 'Robinsoniana'

A.nemorosa 'Allenii' pale rosy lilac

A.nemorosa 'Bracteata' a loose white double flower

A.nemorosa 'Seemanii', which I once owned. The flower was a pale yellow.

On page 72 of the Phillips and Rix book "Bulbs", a yellow flower is illustrated and described as a cross. It is very similar to my now deceased "Seemanii'. I think I let this patch of anemone dry out in the summer. I also bought *A.nemorosa* 'Wisley Pink' which joined 'Seemanii' in no time at all. A good layer of mulch would have assisted its survival. I believe my soil is lacking in something necessary to give the good colour in the blue varieties. I wheedled some roots of a deep blue variety from a friend but they flowered with the same pale blue colour of my existing plants.

I would love to grow Anemone blanda successfully. It has a round rhizome rather than the twig like appearance of A. nemorosa and needs to be well drained, preferably on a raised bed, but can happily grow in the sun. However I do lose them despite giving them the care I believe they need. I did have a clump of A. blanda 'White Splendour' for years which lived up to its name. I see that Terry Hatch in his book 'Bulbs for New Zealand Gardeners' says they are often discarded once flowering is over. It is not readily available in garden centres.

In conclusion I will mention a plant on my "Everyone Should Have One" list! *Hepatica nobilis* (syn. *H. triloba*) is also a member of the Ranunculaceae family and is sometimes called *Anemone hepatica.* I was instructed to grow it in the shade but it had few flowers. I now find that it likes some sun and will happily flower provided it gets enough water in the summer. Colours are blue, pink and white. Some double forms have appeared at specialist nurseries recently. The clumps of hepatica can be divided in the autumn. I have read that they don't mind a little lime."

News from Jo Osborne at Kew on the African Plants Initiative.

Since finishing my horticultural training at Christchurch Botanic Gardens and having returned to the UK, I've got involved in something a bit different at the Royal Botanic Gardens, Kew. I'm now working in the Herbarium on a project called the African Plants Initiative.

The Herbarium at Kew is one of the largest in the world. It is in effect a huge plant library housing 7 million preserved plant specimens. These include around 350,000 type specimens, which are original specimens on which descriptions for plant names are based. This is a valuable resource used extensively for research. Kew is now attempting to make this resource more accessible to researchers worldwide by digitising the collections to provide access via the internet. The aim is provide digital images of the plant specimens and an online botanical database containing all the historical and taxonomic information about each specimen.

The African Plants Initiative is the first major digitisation project at Kew. It has been running since March 2004 and currently has a team of 12 The work at Kew is part of a larger people. collaborative project between 44 institutions in Africa, Europe and the US, aiming to produce an online, digital library of information about African plants. It is run by a not-for-profit organisation in the US called Aluka, the Zulu word meaning 'to weave', and is funded by the Andrew W. Mellon Foundation. The complete. collaborative database is estimated to reach more than 300,000 records, including a collection of 70,000 African type specimens from Kew.

Digitising this collection is a huge undertaking. Each specimen is carefully scanned to provide a high resolution digital image (at 600dpi) and all the information written on the herbarium sheet is entered into a database. This part is not as straightforward as it might sound since the inky scrawls of botanists from the 19th century are often quite hard to read (not to mention the biro entries from our current botanists). Much of the information is in Latin, French and Dutch, which needs to be accurately transcribed to preserve the original text. The specimens are of great interest historically. Some of the more notable ones that I've seen include plants collected on Livingstone's expedition to the Zambezi.

Recording botanical names in the database is another key aspect of this project. The current recognised name for each specimen is recorded along with any synonyms that are written on the herbarium sheet. This provides an interesting history of the taxonomic work carried out on the specimen over the years. It also highlights the need for constant maintenance of digital resources as our understanding of plant taxonomy progresses and plant families and plant names are revised.

My work on this project has involved sampling and checking the quality of the digital material produced by the digitisation team, including much painstaking checking for accuracy of plant names and their authors. It definitely calls for lots of patience and an eye for detail. Lunch breaks out in Kew gardens away from the computer screen have been very welcome. In exchange however, I've gained a fascinating insight into the history of herbarium taxonomy.

The initial launch of the African Plants Initiative is now imminent and should take place later on this year. Institutions all over the world will be able to subscribe and the costs will go towards maintaining a sustainable digital resource and providing free or subsidised access for developing countries. Hopefully this initiative will lead the way for future digitisation projects, allowing valuable botanical information to be shared globally.

Further information about this project and the herbarium at Kew can be found at: http://www.ithaka.org/aluka http://www.rbgkew.org.uk/collections/herbcol.html

Divaricating Shrubs

One of the unique features of New Zealand flora is the number of plant species known as Divaricating Shrubs.

This refers initially to the branching patterns which are at a wide angle, as in "diverge", along with other possible botanic reasons for these forms. (Tomlinson, 1988). The angles of the branches can be up to 90 degrees or even more obtuse.

The plants are small-leaved, mainly evergreen, woody shrubs that have a dense pattern of growth, interlacing branches, long internodes and small inconspicuous flowers. The branches are tough, strong, rigid, to wiry and flexible. They grow from ground-hugging plants up to 5m trees. Many have lovely coloured fruits. Because of the form they often create their own internal microclimate. E.g. the outside twiggy branches protect the inner bush from wind, frost and browsing.

Normally in trees and shrubs the apical bud releases auxins which suppress growth of other tip

buds. In divaricating shrubs this does not happen, which means there is an abundance of multiple lateral growth.

They can be found in forests and forest margins, riverbeds, scree slopes, plains, rocky outcrops, swamps and grasslands. In the North Island they are mainly coastal and in the South Island, Canterbury has an abundance.

There is also another group of divaricating plants and these are the trees that have a distinctive juvenile growth form. (This sometimes led in the past to the same plant being given two different names!) Examples of these are: houhere, narrowleaved lacebark, Hoheria angustifolia; saltmarsh rebonwood, Plagianthus divaricatus; pokaka, Elaeocarpus hookerianus; kaikomako, Pennantia corymbosa; and turepo, small-leaved milk tree, Streblus heterophyllus. There are a number of theories as to why they grow this way. The two most prominent ones are: The growth pattern is a reaction to extreme climate such as a glaciation period first proposed by Diels in 1897, and the other, that they are an adaption against Moa browsing, (Greenwood and Atkinson, 1977). However there are factors that appear to negate both so they are just interesting hypotheses.

The only other place in the world where it could be said there is a community of these types of plants is Patagonia in Southern Argentina. (17 species). These however are systematically different from New Zealand divaricating shrubs and virtually all are spiny (McQueen, 2000). In New Zealand the only spiny one is matagouri, *Discaria toumatou*. In the Botanic Gardens there is a 2m example of one of these South American species, anchor bush, *Colletia paradoxa*, in the border of the western lawn of the Native section. It has thorns and fragrant inconspicuous flowers as does the matagouri which is in the same family, Rhamnaceae.

The matagouri, or wild Irishman, is usually deciduous from late summer. It grows well in phosphorous rich soils. It can be long-lived, 100 years, and reach 5m in height and 30cm diameter. It has nitrogen-fixing nodules and the leaves and young stems are 2-3% nitrogen dry weight. It has explosive seed dispersal and needs winter chill for germination. (Put seeds in the fridge for a few weeks). It needs light (like gorse) so young plants can be overtopped in grassland.

Another of our iconic divaricating shrubs is *Muehlenbeckia*. There are five species and they belong to the Polygonaceae family which are mainly herbaceous such as dock and rhubarb - also buckwheat. They all have a clasping sheath at the base of the leaves. *Muehlenbeckia* have been important in New Zealand for 25-35 million years. They provide a diverse ecosystem in their own right (as do most plants), a perfect home for insects, spiders, moths, butterflies and lizards. More than 100 moths and butterflies feed on *Muehlenbeckia* and of 15 lizards in Otago, 12 live in or near *Muehlenbeckia*. In the Botanic Gardens there is a *M. astonii* in the rare species border opposite the *Colletia*.

Mention should be made of *Coprosma* of which there is an abundance of species which vary in form and also cross readily with other species. This provides a great challenge to upcoming botanists!

Other interesting facts are that around 80% of New Zealand flora is endemic and approximately 10% of these are divaricating, especially in Canterbury. There are nearly 60 species in 20 genera and that is not counting the juvenile forms! Divaricating plants have a form which enables them to cope with, and function, in a climate that can give any season virtually any day of the year. Many are ornamental, make good hedges and are great for biodiversity. Created for New Zealand conditions, Divaricating Shrubs are well worth celebrating.

Sources:

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A Field Guide to Alpine Plants of New Zealand. John T. Salmon. Godwit Press. 1992.

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Divaricating Shrubs in Patagonia and New Zealand. D.R. McQueen, New Zealand Journal of Ecology. 2000.

Selective Forces Influencing the Evolution of Divaricating Plants. M.S. McGlone and C.J.Webb. New Zealand Journal of Ecology. 1981.

Life on a Humble Shrub. Geoff Keey. Forest and Bird Magazine. May, 2003.

lan Oxley, Friends' Guiding Group.

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Recent Events

Bus trip - Trents Nursery & Broadfields New Zealand Landscape Garden.

In April a group of the Friends visited Trents Nursery at Prebbleton. Keiran, the Nursery Manager, proved to be an enthusiastic and informative guide as she took us on a tour of the propagating shed, the hot-houses and growing-on houses where there was a huge variety of plants growing. We also saw the re-potting machine working and then the seed store and dispatch Room. All the plants for delivery were beautifully packed in cartons in order to arrive in the best condition.

After lunch in the staff lunchroom we headed off to the Broadfields in Selwyn Rd. just off Shands Road. Here we were met by David and Jacquie Hobbs, the owners of this property, and the righthand man, also David, who has been helping to care for this amazing garden. It is essentially a Native Garden with New Zealand-raised varieties of exotics which add extra colour. The 4.2 hectares includes a kowhai walk, a beech forest and a young kauri forest. There are 1.5 km of beautifully clipped totara hedges, creating a large number of 'rooms' on either side of a central walkway bordered by wide strips planted with groups of wonderful natives. The garden was designed in 1992 by Robert Watson and the Camellia Garden, is by John Marsh.

Broadfields is open on Saturdays and is well worth a visit at any time of year. Allow at least an hour and ask about a 'Season ticket' Alison Fox

Gardens, Gardeners and Gardening.

Those members who attended Margaret Long's presentation on Monday 13th March certainly enjoyed an armchair ride through many of the world's best known gardens. We were taken to private gardens in England, Wales, Scotland and Ireland, to castles in England and Europe, to Monet's garden in France, to Cathedrals, and even to the garden of the wife of Henry 11, Catherine de Medici, which appeared to be close to the garden of his mistress, Diane de Portiers. There is no doubt that history and gardens can be mentioned in the same breath.

Many of the gardeners we met were well known to most of us. Beth Chatto, Christopher Lloyd,

Penelope Hobhouse, Gertrude Jekyll, Edwin Lutyens, and Vita Sackville-West are just a few of those mentioned and all had their own idea of gardening. We saw formal gardens, cottage gardens, water gardens and knot gardens, and we were introduced to some new garden ideas. I found the marrow arch at Barnsley House particularly fascinating.

All in all an enjoyable and pleasant evening with much of interest to keep us all entertained. As Alison Fox said, in thanking Margaret, she would love to have a magic carpet to enable her to travel to the places mentioned. I'm sure we would all agree with that.

Around the World in Eighty Plants –Part 1. From at least as early as 1495 BC when Queen Hatshepsut sent an expedition from Egypt to Somalia for incense trees, people and plants have moved with increasing speed around the world. Our Botanic Gardens display plants from many different countries but it is most rewarding to grow introduced plants for ourselves at home, to see plants in their natural environment and notable plants which now thrive in new homelands.

Members met early for the April 19th meeting to share a delicious finger food meal before being led on an express round the world journey, featuring plants of note chosen by members. The very wide range of plants selected had either been grown, visited, photographed, or studied by the presenters, who were Alan Morgan, Biddy Pollard, Bill Sykes, Alison Fox, Max Visch, Neil O'Brien and Adrianne Moore.

Our journey began in Christchurch with exotic plants from Biddy's home garden as well as her story of the Monkey Hand Tree from Mexico *(Chiranthodendron pentadactylon).* Then Alan shared his studies of *Dodonaea viscosa,* which has a wide distribution and is not only native to New Zealand. With Bill we travelled eastwards with slides and stories of a number of plants he has studied in the Pacific Islands. Alison chose exotic plants photographed on her recent travels to Honolulu, Florida and UK. These included the cannonball tree *Couroupita guianensis* (seen in Honolulu) and ancient trees in Kew Gardens.

Max shared his enthusiasm for a number of North American, European and Japanese plants. Adrianne's selection included North American trees, and ancient and notable trees visited in Britain. From there we turned homewards via the northern region of Pakistan with Neil O'Brien.

It was very ambitious to think we could 'travel' and view so many plants in one evening - we did manage around forty plants. There are plans to present Part 2, the other 40 chosen plants, on a future occasion, or perhaps two, to allow 'armchair plant hunting and travel' in a more leisurely fashion.

Adrianne Moore

The Christchurch International Exhibition of 1 November 1906 – 15 April 1907 and the effects on our gardens

Talk by Laurence Eagle at our May meeting. After coping with an unexpected last minute change of venue, members enjoyed Laurence Eagle's extensive research about the Christchurch Exhibition in Hagley Park. Several members had stories and souvenirs from the Exhibition.

We heard of the history of 'exhibitions' around the world from the first in France in 1798 through to the 1900 exhibition in Christchurch to mark the city's 50th Anniversary, when the Civic Theatre was built to house the displays.

The Hagley Park site was ideal for the Government-sponsored New Zealand International Exhibition in 1906-7 which was designed to promote trade and tourism. It was open for five and a half months and attracted nearly 2 million visitors.

The Horticulture and Gardening committee included prominent citizens, nurserymen and members of the Beautifying Association, who planned the landscaping and plant requirements to complement the enormous exhibition building. This was constructed within Hagley Park alongside the Avon River extending from Armagh St to Peterborough Street. This was the biggest building built in New Zealand until the advent of the huge shopping malls and it was gone within six months after the exhibition ended.

To present Christchurch at its best to the thousands of international visitors, (the whole world was coming), enhancement and planting around the exhibition site included a weir in the Avon, a fernery, (later bought by Annie Townend and moved to Mona Vale), native plant areas, a rockery and over forty flower beds, all surrounded by lawns and trees.

The plan was to show Christchurch as the city of gardens. Sir John Gorst, when British Commissioner during the Exhibition, is believed to have first called Christchurch the 'garden city' and the Press took up the idea. Private citizens grew two thirds of the plants needed for the displays and also planted up their own gardens to be worthy of the special event.

Nurserymen contributed and wealthy citizens loaned their gardeners to help. Street competitions were held and the Canterbury Horticultural Society organised several flower shows. A garden party Fete was held in the Botanic Gardens.

All this effort to beautify the city for the Exhibition attracted favourable comment from residents and visitors and engendered much enthusiasm for developing Christchurch as the Garden City. A. Moore

Philip Simpson on his book - "Pohutukawa and rata: New Zealand's iron-hearted trees" Many members remembered Philip's wonderful presentation in 2004 on his book 'Dancing Leaves' and came again to hear of his most recent book on our symbols of summer.

"Pohutukawa and rata: New Zealand's iron-hearted trees" is very readable, fully illustrated and hard to put down. Since speaking to us Philip's book has won the Montana medal for non fiction in the Environment section of the 2006 Montana New Zealand Book Awards. Our congratulations have been sent to Philip.

He spoke with passion about these magnificent New Zealand trees and covered their evolution, botanical and cultural features, the need for their preservation and the many uses of these celebrated plants. His magnificent slides showed us pohutukawa and rata growing throughout New Zealand and overseas.

Max Visch who won this book in the raffle, will be writing more on pohutukawa and rata for our Summer edition. A.Moore

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Friends' Groups

Guiding group Report

The Guides at the Botanic Gardens are an enthusiastic bunch as you know and this is well exemplified by the recent photo taken on Tuesday 18th July on a bitter and dismal winter morning, when Dieter Steinegg took us out to look at trees.

When you look at the number of guides, their enthusiasm and passion, then you come to understand that with an average of 2.3 clients per day guided over the season, there are not many customers to go around. In fact, such is the enthusiasm that if one is a late comer when filling out the roster, all the days are taken and one might be lucky to get a day a month.

At present there is just one guided tour a day from 1.30-3.00pm and the tour season runs from September through to April. In 2005 total clients amounted to 552 and there were a total of 90 blank days, so on 37% of the time these passionate guides turned up to NO clients. This was particularly the case on the weekends and Mondays, and those days also had the lowest numbers of clients. The busiest days were Wednesday through Friday, with Friday topping the bill. The busiest months were, as would be expected, January through March but in general the numbers were biased towards being better later rather than earlier. Only 15 clients were guided in September with 23 unproductive days whereas in April there were 57 clients and only 11 unproductive days.

Taking all these factors into consideration the May meeting of the Guides agreed to:

- 1. Delay the start of the guiding season until 18 September.
- 2. Extend the guiding season until the 13 May.
- Introduce extra guiding sessions commencing at 9.30am each day for the months of November through March.
- 4. There was also considerable discussion concerning how to publicise the guiding service to broaden the client base.

Only 2% of clients were NZ based. The greatest numbers were from North America predominantly USA; and Europe, predominantly UK. Australians came third on the client list. Very few clients came from the Asian continent despite their frequency in the Gardens - undoubtedly a language barrier there.

It was generally considered that the numbers and enthusiasm of the guides was sufficient to give these changes a trial run for the 2006-7 season.

The guides continue to meet regularly during the non-guiding months to share individual guide's research and for on-going training. Guides are available throughout the year for tours or to give talks to groups. Bob Crowder

Saturday Guided Walks.

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Our thanks go to our Guides for their time and research for our monthly walks. Topics covered in recent months were *Trees for the Home Garden* with Don Bell; *Autumn Colours* with Max Visch; *Highlights in May* with Daphne McConchie; *Divaricating Plants* with Ian Oxley; and *Treasures in the Conservatories* with Max Visch.

These events are a great way to introduce new people to the Friends. Do bring family members, friends or neighbours along and discover more about our Gardens. (Next walk Sat 19 August with Nedra Johnson on *Rock and Alpine plants.*)

Propagators' Report Winter 2006

We had a warm autumn so that our perennials kept flowering and sold well. The perennials' team is already propagating new cuttings. We repotted many of the native shrubs and are now adding a top coating, of a mixture of sawdust and pumice, over the potting mix in an attempt to keep liverwort and weeds at bay. Some Hebes and the Correas are flowering now and the older plants have responded well to an application of Osmacote.

The bulbs have grown well and many Narcissus species are coming into flower already, just now peeping through a snow cover! In some pots we have as many as 6 or 7 buds showing, good value indeed.

Succulents and cacti have grown well and some are going out for sale, although the larger specimens will have to go on a sale table as they take up space and are spiky.

We reserved some of the *Ensete ventricosa* ("banana plants") and hope to over winter them in the Quarantine House. So far, so good. We also put a few in the cactus tent but they are not looking so well. Over last summer we put a double layer of shade cloth under the roof of the tent. This was successful in preventing sunburn in the top shelf of cacti, but I doubt if it will keep out frost.

We have installed a mister in the second bay of the Quarantine House, with 6 fresh propagating trays filled with pumice. Neil and Don fitted the mister themselves so the cost was kept low. This second bay will double the space available for cuttings and will doubtless by filled soon.

^{re}ur next Sale is to be on 23 September 2006, 10 - 1pm. This will be the Bulbs and Early Plants Sale, with possibly some miniature conifers.

There will only be two tables offered so it will be advisable to come early. If you would like a list of the Bulbs, please ask Jane, 384-2170.

A list of conifers on offer was circulated to members in May and many of them are still available and looking well. The propagating area is well used with many frost tender plants and ferns under the Plagianthus tree and on the shelves on the new fence. We hope to remove the ivy from the brick wall this winter.

(NB October sale see Coming Events insert) Helen Constable, Coordinator, Propagators' Team

Newsletter Editor.

Thank you to everyone who has supplied material and supported me during my time as editor. I am delighted to welcome **Bill Whitmore** as the new Editor from the Summer 2006 edition

Bill has had a lifetime interest in plants. His training for a degree in agricultural science focused very much on the plant sciences. Until he retired in 2002 he had been for 24 years Commissioner of Plant Variety Rights.

He has always had a great affection for the Christchurch Botanic Gardens and as a volunteer guide has enjoyed sharing the delights of the Gardens with overseas visitors. After visiting a number of public gardens abroad he believes that from an aesthetic view our Gardens rate very highly internationally.

Bill looks forward to the outcome of the current strategic review in the hope that it leads to the Gardens being further enhanced. Adrianne Moore

Friends' Committee

Can YOU help in the exciting times ahead?

We are always looking for keen and active members who are willing to join the Committee or Sub-committees. If you have energy and passion to contribute to the Friends' work - to support, promote and protect the Gardens, please contact our Secretary for a Committee nomination form. There are several vacancies and even if you cannot offer for the Committee this year but can help occasionally with meetings or events, do contact Jim Crook on phone 358 5845.

Thank you all.

As I will be retiring from the Friends' Committee in August I would like to sincerely thank the Botanic Gardens' staff and members for the support and help with the many events in our programme over the years.

As the Gardens enter a new era of redevelopment with the funding approved by the City Council, there will be new opportunities for the Friends to promote and support the Gardens. The Society was established in 1989, seventeen years ago and first meeting was held in June 1990. Perhaps it is time to rethink what sort of programme is needed from now on. Be part of the planning for the future and come to the AGM with your ideas. Adrianne Moore.

Volunteer opportunity – Friends' Programme Co-ordinator

There is a vacancy for a Programme Co-ordinator on the Friends' committee.

The 2006 programme is in place so the new person will be responsible the 2007 programme. If you are interested to know more about the Programme Co-ordinator's role, please contact Adrianne Moore, Phone 351 5915, or our Secretary Jim Crook, Phone 358 5845.

Membership

It is with much sadness we report the death of Dick Bouman, who was one of our Guides in the early days of the Friends. He was a very enthusiastic Toast Rack driver, had extensive plant knowledge from his early training in Holland and loved showing visitors around the Gardens. He was not able to attend many of our evening functions because they clashed with his volunteer work as a prison visitor. Dick worked for many years at Middleton Grange School. There, as well as amongst the Friends, he was respected for his warm friendly and generous nature. We extend our sympathy to his family.

New members

We warmly welcome recent new members -Margaret Coghill, Nola Bowron, Jantina Buter, Margaret Graham, Joyce Lardner, Kim Roberts, Elisabeth van de Par, Susan van de Vorstenbosch, and Robin Mc Gregor.

The next new members' morning is planned for November.

Please contact Ruby Coleman 355 8811 if you wish to come and have not been able to attend in the past.

Member's Letter

The following letter to the Newsletter Editor is published for the information of members. Until the Draft Management Plan is released on 21 August and considered by the Committee it would be premature to make any comment.

Dear Editor,

"The Canterbury Museum's Environment Court Decision of 17 May 2006 means that the Museum has to go back to basics and rethink everything. All the Canterbury Museum's resource consents have been declined in the courts.

Opportunity now exists for the future use of the Robert McDougall Art Gallery to be reconsidered.

Members could state in their individual submissions on the Botanic Gardens draft management Plan that they want the Robert McDougall Art Gallery Land and buildings to be returned to the Botanic Gardens, just as the current 1993 Management Plan states. That would provide the Botanic Gardens with a splendid information Centre, library, herbarium, offices, gathering place, etc, at the face of the Botanic Gardens, very close to Rolleston Avenue.

Please have your say. Pick up the forms or CD's from council, or go on line, from Monday 21 August.

Submissions close Wednesday 25 October. Speaking rights can be requested. Hearings by the full City Council begin Mon. 11 December.

Come to the Friends' AGM on Sunday 27 August and hear Jeremy Hawker, the Operations' Manager speak on the Management Plan."

Janet Begg."

For details of the Councils' public meetings for discussion on the plan, see Page 1 and the Coming events insert.

The Botanical Art Society of New Zealand

This group of enthusiastic artists meet at the Avice Hill Centre, Memorial Ave on the first and third Tuesdays each month. A monthly field trip is held and the group are currently working in the Botanic Gardens' conservatories until the warmer weather.

New members are welcome, tuition is available and a resident Botanist attends to assist with botanical matters. Affiliated membership is offered for Friends of the Botanic Gardens for \$20 p.a. For more information contact Helen Nutt, President 3324 750 or Irene Mc Bryde 343 0468.

Snippets

Limericks

Dr Murray Parsons would appreciate receiving a copy of any of David Given's limericks that they might have. His email is parsons_whanau@xtra.co.nz or mail to Murray J. Parsons, PhD, 242A Main Road, Moncks Bay, Christchurch. Telephone 384 9998 Fax: +64-3-384 6996.

Raffle Winner

Max Visch was the delighted winner of "Pohutukawa and rata: New Zealand's ironhearted trees" at the June meeting.

Coming Events

Invitation to members of the Friends of Christchurch Botanic Gardens.

Mayor Garry Moore cordially invites you to a public presentation on the Wuhan Botanic Gardens in China, which he and a delegation visited in April of this year.

The presentation will be held at

5.00 pm, Wednesday 16 August 2006 in the Theatre of the Christchurch Art Gallery.

The format of the presentation will be:

- 1. To look at the way Wuhan has set up its Botanic Gardens (this will be shown in photos.)
- 2. To look at some of the "greening" techniques which are being put into place in Wuhan to enhance streetscape.
- 3. To open up the debate on what form our Botanic Gardens could look like and possibly how they are managed in the future.

Would you please let me know by Thursday 10 August 2006 if you will attend or not. Thank you.

Rosie Halligan-van Riel JP, Personal Assistant, Mayor's Office, Christchurch City Council, P O Box 237 Rosie.halligan@ccc.govt.nz www.ccc.govt.nz Ph: 03 941 8558 or Fax: 03 941 8547

Subs renewal

Our financial year runs from 1 July to 30 June each year so our new 2006-7 year has begun. <u>We do</u> not send invoices so please renew your subscriptions now by filling in the enclosed form, both sides please, including offers of help and email address if applicable.

Please mail to the Treasurer, Friends of Christchurch Botanic Gardens, P.O. Box 2553, Christchurch, or bring it with payment to the AGM

Bus Trip to three North Canterbury Gardens - Saturday 25 November.

Our bus departs from outside HMS Pegasus, Montreal St. at 9.30am and returns to Montreal St. at 4.30pm.

We will visit the garden of Kay MacLachlan and Rudi Steyn, designed by Ben McMaster and written about by Diana Madgin in June 06 NZ *Gardener* as "Roses and Rabbits". This is a lovely life-style property with something to appeal to everyone.

Next to 'Glencoe' the farmhouse garden of Joanne and John Judson, where there is a collection of natives, rhododendrons, clematis and many other interesting plants against a backdrop of trees, planted over the many generations that the Judson family have farmed here.

The third garden is that of Rosemary Harper at the Priory, Cust. In 20 years on this property Rosemary has developed an area of peaceful interest. The stone walls which she built are great backdrops. The Priory was built in 1866 as the home of the local Vicar.

The lunch break will be at the Ashley Gorge picnic area. Bring your lunch and drinks. As bus costs have gone up this trip is a little dearer than in the past but I hope for a full bus for an enjoyable day. Your friends are welcome. Please get your application on the enclosed form to me as soon as possible. See Coming Events insert. Alison Fox

Contact Numbers		
President	David Moyle	358-8914
Vice President		
Immediate Past President	Faye Fleming	351-7798
Treasurer	Lesley Godkin	388 0043
Membership Secretary	Ruby Coleman	355-8811
Minutes Secretary	Jim Crook	358-5845
Committee Members	Dennis Preston	351-4131
	Don Bell	343-6699
	Elizabeth Wolff (03) 313-5046	
	Robyn Gordon	388-7737
	Jay Rogers	365-1152
Outings/trips	Alison Fox	942-4989

Outings/trips

Book Review

George Forrest Plant Hunter by Brenda McLean

Published in 2004, by the Antique Collectors' Club in collaboration with The Royal Botanic Gardens Edinburgh.

"A garden stroll and the twinkle in an old lady's eye started me on the search of George Forrest."

This is the opening to a fascinating book on George Forrest the great plant hunter. The stroll was in the Botanical Gardens at Ness near Chester, founded by the enterprising Liverpool cotton broker A.K. Bulley who started the nursery known as Bees Ltd. This nursery paid George Forrest to go to the remote mountains of Yunnan in China to collect seeds.* He set out in 1904 and found an amazingly rich flora. He later returned for six more expeditions during his 28 year career.

George Forrest was born in Falkirk in Scotland on 13 March 1873 then moved to Kilmarnock where he received his early education at the Academy. This background enabled him to master Botanical Latin which is used by botanists worldwide. (It was through this that he was later able to converse with the French Missionary botanists in China.).

After receiving a small legacy he travelled to Australia and returned to Scotland to temporary Newsletter Programme Ex Officio Helpers Programme helper Plant Sale Newsletter mail out Botanist Walks Guide Co-ordinator Enquiries Computer Newsletter layout

	Adrianne Moore	351-5915	
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	Jeremy Hawker	941-7580	
	Carolyn Collins	382-4212	
	Helen Constable	980-9358	
t	Jean Norton	379-2464	
	Bill Sykes	366-3844	
	Max Visch	338-2273	
r	Pat Whitman	384-3475	
	Info Centre 941-	6840 x 7590	
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	Maria Adamski	5	

work in the Royal Botanic Gardens in Edinburgh where he received valuable training and experience that would increase his skills as a collector. There he met a young lady of 26 Clementine Traill and married her in July 1907 after his 1904-7 expedition to China. He subsequently made five more expeditions to China before dying suddenly in 1932.

Sponsors for these early plant hunters included many of the great horticulturalists of the time. Leonard Messel's great garden - Nymans, at Handcross West Sussex, has a bothy in the kitchen garden outlining the history of the plant hunters and is well worth a visit.

Ness Garden was presented to Liverpool University in 1948 with an endowment of £75.000 by Lois Bulley daughter of the founder and is now administered by the University. The Friends of Ness celebrated their silver jubilee in 1987 and contribute greatly to maintenance, admission and sales. I visit this garden each time I go home as it is directly opposite my family home across the river Dee in North Wales.

Jay Rogers. Friends' Committee member

*Today the garden displays plants grown from seed from George Forrest's expeditions and the *Pieris formosa* var. *forrestii* is a spectacular specimen and regarded as the best for the brilliant red colouring of the new growths. Ed.

Email addresses

If you wish to have reminders of our events sent by email please add your address on the enclosed membership renewal form.