

Newsletter

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

No 62, Autumn, February 2005

President's Report

Change - The world we live in today is in a state of rapid change. During our lifetime many aspects of life have changed - some for the better but many for the worse.

This climate of change has now swept through the City Council as it puts in place a raft of government regulations together with its own philosophy. It is hoped that these changes will lead to more accountability and efficiency.

No longer can the Botanic Gardens be just an enclave in the centre of the city. They have now been engulfed in the culture of the Council. All aspects of the Gardens are under the microscope. This exercise puts a terrific strain on staff who are having to juggle the demands of the day to day running of the Gardens and at the same time prepare strategic and marketing plans. It has been further complicated because use of statistical data when drawing up these plans is rather like finding one's way out of a maze. Management plans take a great deal of time and effort. Added to this is the consultative process which can lead to frustration by staff and public alike. What has been done historically may not be the most efficient method today.

If the Gardens are to regain their former status as a worthy contemporary of the world's major Botanic Gardens then the standard must be raised in all aspects of operation. These standards are not just physical but mental as well. Staff will need to be properly trained to meet these challenges. These changes will not take place overnight. The redevelopment of each border and the realignment of each path will become building blocks in the overall plan. These changes in the Gardens will also impact on the Friends.

Visitors' memories of the Gardens have been one of manicured beds of annuals, roaming through the daffodils and boating on the Avon. What lasting memories are we giving visitors to the Gardens today?

The Guided walks can provide a great deal of good will for visitors. Our plant sales provide an opportunity for the public to purchase rare and difficult to source plants.

The Botanic Gardens are embarking on a Crusade to change a culture. Are we as members of the Friends willing to become part of this crusade?

David Moyle
President

Summer Plant Sale

Sat 26 February 10.00am - 2.30pm

Around the Palm Tree by the Information Centre.

Sale includes many interesting native plants, perennials, succulents and bulbs all sourced from within the Botanic Gardens and grown by the Friends at the Gardens. Bring your friends and neighbours.

Gardens' News

Curator's Comment

Having been away from home base for the last part of January and the beginning of February it is probably appropriate to talk a little about some of the functions of the Botanic Gardens that people may not always think of. In talking with a wide range of groups of people round the City and the perceptions people have of the Gardens the obvious things come up such as the Botanic Gardens as a place of rest, leisure, relaxing, and generally having an enjoyable time. Some see the Gardens as a place to see interesting plants that people can grow themselves. Others appreciate the botanical information that can be gained. For others it is simply the stimulation of colour, texture and smell.

But a Botanic Garden of the twenty-first century is more than this, and one thing that we are talking with institutions about, is the potential for partnerships in science and conservation. Some of the world's leading gardens have built their reputations on science, examples being the Royal Botanic Gardens at Kew and Missouri Botanical Garden. We can never hope to emulate such global institutions but there is scope for research partnerships and for show-casing botanical and horticultural science to the 1.2 million visitors each year.

The Botanic Gardens' herbarium and library are not large but are of very high quality and it will be appropriate for us to concentrate on horticultural specimens for the herbarium just as we do with books. — These days visual images are an important adjunct to pressed and preserved plant material so it is important that we have good photographs of plants to put alongside herbarium specimens. We are also looking to build up our wood collections and especially disks and cores that can be studied in the future, for instance to help determine the response of different species to variations in climate.

Conservation is a second very important function. A study I was involved with last year showed that although there were many exotic species of animals and plants in New Zealand with high conservation value, there was little security of tenure for collections and almost no seed or germ plasm banks exist to preserve such species. We

are hoping to change that with consideration of a seed bank and germ plasm facility associated with the new building for the Gardens. This could also be used for Canterbury endangered native species.

And that brings me to the Chatham Islands. I was there as part of a large research team that over three years will attempt to track the origins and dates of the plants and animals of these islands. We concentrated this time on the outlying islands, even getting to the remote Forty Fours, a group of wave lashed and sheer-sided rock stacks and islets, but a biological treasure-house that is very rarely visited. Some of the propagating material brought back will be used to strengthen our Chatham Island collections which we hope to make a major feature of the Gardens.

There is a very important role for both science and conservation in botanic gardens. And so as the draft master plan is being prepared over the next three months or so, these activities will be incorporated along with more traditional pursuits.
David R. Given

Happenings in the Gardens

'Bio Blitz – finding nature in the city'

Bio Blitz was first developed in the USA and has now become an international event for "biodiversity exploration, education, and investigation". Over a 24-hour period, 3 pm Friday until 3 pm Saturday, a multi-disciplinary group of scientists gather, to work collectively and in full public view, with a common purpose ... documenting the biodiversity in an urban environment. The simple goals are to find as many different species as possible in the study area, and to promote the sciences of taxonomy, biology, and ecology through public participation.

Such detailed study of an urban area generates an extensive list of species — a 'biodiversity snapshot'—and highlights the value and range of taxonomic sciences to explore the biodiversity all around us. Public get a chance to appreciate the less obvious, yet mega-diverse groups such as invertebrates (insects, mites, nematodes, etc) and fungi, and a chance to talk to 'experts' with whom they would otherwise have little or no contact. In addition, Bio Blitz may discover species of note that are surviving in the urban environment, such as

rare species or pest species, but which were previously unknown from the area.

For the science participants, Bio Blitz is a rare opportunity to work as a team with so many other taxonomists from a variety of organisations. It is a great deal of fun.

In this first Bio Blitz to be organised in Christchurch, four areas in Hagley Park will be targeted concurrently:

- Little Hagley Park
- North Hagley Park
- South Hagley Park
- Botanic Gardens

A science base from which scientists will work over the 24-hour period will be in the Botanic Gardens, the heart of Hagley Park. As well as being convenient for recorders, this site provides easy access for public and media.

The event is scheduled for 8th & 9th April 2005 (rain or shine). Setting up of equipment and displays at Base Camp will take place on Thursday afternoon / Friday morning. Bio Blitz officially starts at 3 pm Friday. Traps for insects and other arthropods can be set in advance. Bacteria will need to be cultured in advance. "Black-tracker" ink mats will also have been retrieved to evaluate footprints of rodents and large arthropods. However, identifications will not begin until BioBlitz starts at 3pm Friday.

Media, public, and school students will be invited to visit at any stage during the 24-hr period. Microscopes, computers, and macrophotographic facilities will be operated by specialists, and demonstrated to visitors.

Scientists will be working in shifts throughout the 24 hours, using microscopes, literature, and computers to examine key features of material collected or observed in situ, confirm identifications, and record findings. While one aim of Bioblitz is to document as many species as possible, another is to demonstrate the ways scientists identify and study material and then prepare it for storage in the national biological collections held at Landcare Research, Lincoln University and at Canterbury Museum.

Display material will be prepared by contributing organisations so that visitors can also see posters

and information about the science of biodiversity research.

The BioBlitz will conclude at 3 pm on Saturday. At that time, a collated list of species and grand total will be prepared, and the totals announced by an invited celebrity.

Security personnel will be present throughout to protect participants, visitors, and equipment. Additional security measures will be provided for valuable equipment.

Facilities at the 'base camp' will include trestle tables and chairs, electricity, display boards, and toilets. Meals and lots of snacks will be provided for participating science staff. Equipment and facilities will be cleared by Saturday evening.

For more information about BioBlitz events, please visit:

<http://www.landcareresearch.co.nz/research/biodiversity/bioblitz/index.asp>

<http://www.mnh.uconn.edu/BioBlitz/>

or

Judy Grindell,

PR/Communications Manager, Landcare Research
325 6701 x 3767

grindellj@landcareresearch.co.nz

or

Professor Steve Wratten

wrattens@lincoln.ac.nz Lincoln University

From Dr David Given

david.given@ccc.govt.nz

Bioblitz needs you

The Bioblitz will soon be upon us - a frenzied twenty four hours when experts in all sorts of animals, plants and fungi from millepedes and worms to birds and trees will be combing the Botanic Gardens and Hagley Park to see what they can find.

The date - 3 pm Friday 8 April and finishing 3 pm Saturday 9 April.

The start - Garry Moore will launch the event at 3 pm on the Friday.

The place - "Base Camp" will be the Botanic Gardens' depot from where teams of intrepid

4 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

experts will penetrate all parts of the Park and the Gardens.

The result - a 24-hour compilation of the biodiversity of this big inner city green space.

The participants - YOU! What, me? Yes, you.

The collection and identification will be done by teams of experts. But they cannot do it all on their own. So we are asking for Friends who are interested in participating to please phone the BG Information Centre 9417590.

What sort of help do we need? Well, we are still sorting out some details but these are the kind of jobs that have emerged:

Keeping a watch on the Base Camp and its equipment

Joining the botanical team under Colin Meurk to look for plants

Collecting and identifying fungi (see note below)

Staffing the vehicle bridge especially after hours

Staffing the main car park and letting people out the gates (we will need people probably up to midnight and starting 5 am Saturday)

Able-bodied people to help set up trestles, chairs, equipment on Friday morning/early afternoon

Acting as guides and welcomers for the public at Base Camp and also taking public out to places where there are teams of scientists working and collecting

A small team to man a desk to ensure that we know where the team experts are working and maintaining cell-phone contact with them

A small group to help the experts find their way round after dark (some may not be as familiar as us with the locality)

Although catering and feeding is not fully sorted out we may need a group to help feed some of the researchers, especially hot soup and tea/coffee and muffins for the evening watch and the early morning (5 am) few.

Can you use an advertising poster e.g. in a shop window

An important request - we are totally short of anyone to tackle fungi as there is a major fungal foray in the North Island that overlaps with the Bioblitz. **Anyone out there who would like to look for fungi** and has some knowledge of different sorts of fungi (even if it is just toadstools and mushrooms) please get in touch with David Given at the Botanic Gardens 9417583.

We expect members of the public to attend during the day (it is being advertised in various ways) so this may also be an opportunity for the Friends to sell plants, hot dogs and cool drinks at the depot.

Anyway - it will be a lot of fun, a very useful exercise to find out what is in the green space that we love so much (we might even find some new species). More information at the web site: <http://www.landcareresearch.co.nz/research/biodiversity/bioblitz/index.asp> or contact Jeremy Hawker or David Given.

New Faces in the Information Centre

The Gardens' Information Centre is now pleased to report a full compliment of staff, as it welcomes both Charlotte McHaffie and Candy Gibson to the team of Anne Dobbs, Anna Coventry and Jo Rooke.

Some Friends may already know Charlotte from the Gardens, as she has been a trainee here for the last 18 months and although Candy is new to the Gardens, she is very keen to become acquainted with life here, so do pop in over any weekend and say hello. The whole team are now able to look forward to the many challenges facing the Info Centre and Gardens in the future and to explore the role they can play.

Rescuing the Ducks

No longer is the Botanic Gardens' Potting shed only a place for plants, pots and peat. For a short while it has served as a temporary duck drying depot.

After the recent diesel spill into City waterways, hundreds of damaged ducks have been cared for at the Botanic Gardens where they have been washed dried and fed by teams of volunteers and Environment Canterbury.

The special Botanic Gardens' disposal system for toxic products was used for the washing site and once the ducks are stabilised they will be moved on.

Well, Well, Well.

A new water supply for the Botanic Gardens will hopefully soon be available from new drilling. The area near the Botanic Gardens' yard and towards the Herb Garden will soon be covered in equipment to put down a new well.

Recent Events

Friends' visit to Akaroa.

We are most grateful to Dr Warwick Harris our host in Akaroa in November at the museum display and the Garden of Tane. Warwick updated us on the history and future of this historic Garden where he is contributing many hours and his botanical expertise. A surprise invitation was extended by Nancy and Brian Tichborne to visit their garden and Nancy's studio on our return. What generous hosts in a truly magical garden.

Christmas Party.

Members in party mood arrived at the United Croquet Club in weird and wonderful hats to enjoy our Christmas gathering and Derrick Rooney's brilliant play about grass growing in Christchurch. Thank you to the players, David and Karina Given and Jim Crook. Our thanks also go to those who contributed the raffle prizes and the delicious food.

Herbaceous Border Highlights.

The very timely feature in the gardening pages of the weekend Press recently, on the Botanic Gardens' Herbaceous border brought a capacity crowd to our meeting in the Petanque Rooms on February 7th to hear first hand about the border from David Barwick Section Curator. After moving plants about within the border to give them more suitable growing conditions, the response has been very rewarding. David came armed with a huge collection of plant samples to discuss and encouraged us to try new plants and to move them if they do not at first grow well. Thank you to the Friends' propagating folk for their sales table. A.M.

Book Raffle prize. This was drawn at the Christmas party and won by Elizabeth Wolff.

Articles

"Delightful Dahlias"

Fashions, even in the garden world come and go, although to some of us, Dahlias which are on the comeback trail, have always given delight.

As a child of seven staying with my friend Beryl, playing in her Mother's cottage garden, no grass, just narrow paths between a wondrous display of flowers, I could look into the faces of those large double tawny blooms, and some delicate singles, mostly scarlet and lemon shades. Well time has moved on, and today we grow an amazing array of colours, from poms, decoratives, cactus to water lily varieties, as part of our mixed borders, or in rows in the vegetable garden, for cut flower purposes.

Named in honour of the Swedish Botanist Dr. Andreas Dahl (1751-1789), the seeds of this Mexican wildflower were sent to Europe, where Empress Josephine of France took a fancy to them, and in fact forbade anyone else to grow them.

Today, we can all grow them. To stake is a must, water and good drainage are essential. Winter can take its toll, so better to lift and store, unless your winter garden is dry and sheltered. Divide your clumps every couple of years, although

cuttings by heel and tip take readily thus ensuring continuity of the varieties you like.

Look about you while the season is with us - go to the Botanic Gardens, look over your neighbour's fence, seek out a Dahlia Nursery. These flowers are most rewarding, long vase life, long season. Enjoy.
Liz Wolff.

Botany at the Royal Horticultural Society

Before coming to New Zealand, I worked as a Botanist at the Royal Horticultural Society's garden Wisley in Surrey, England. While the garden at Wisley is well known for its horticultural displays and plant trials, many of its visitors are unaware of the botanists hard at work in the herbarium, behind the grand façade of the laboratory building.

The herbarium at Wisley is an unusual one; housing dried specimens of the plant cultivars that are central to horticulture, in addition to the species. One day, these specimens, along with photographic images, may provide the vital records that allow a future gardener to determine whether an unknown plant from the past might be *Heuchera* 'Plum Pudding' or *Heuchera* 'Chocolate Ruffles' for example. This is exactly the type of work that the present botanists at Wisley are doing today, along

6 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

with a wide variety of botanical queries and plant identification.

Plant identification was the most interesting part of the job for me. The plant identification service is provided free for the Society's members and receives over 4000 enquiries a year. The result is a steady stream of boxes, parcels and envelopes arriving each day and in alarming quantities during the summer months. These might contain samples and photographs of wild or cultivated plants from Britain or around the world, with many surprises and the odd mystery.

The quality of the material varies enormously, from useful samples of foliage with flowering or fruiting material (usually essential for ID), to the odd small, squashed leaf with accompanying note 'This plant just appeared in my garden...' No time to dither, as after a few days in the fridge the curling brown fragments become very difficult to recognise. While some people request only the common name, many others seek details of species and sub-species or the name and provenance of a particular cultivar. Although it is not possible to identify everything, most can be found through use of the herbarium specimens and research in the botanical library.

Certain plants arrived quite frequently and for these we had standard letters in reply. One example was the strange, knobbly, green, tennis-ball-sized fruit, which often seemed to perplex the finder. For those who may not have come across them, they are the fruit of *Maclura pommifera* the osage orange, a member of the Moraceae or mulberry family. The first one to arrive after I started work certainly surprised me.

Photographs presented a particular challenge, as many of the flower parts that are required for identification may not be visible. Distant holiday snaps of attractive street trees were a favourite and could be quite tricky to identify as they are often exotic to the country where they are seen and may grow differently as a street tree to their natural growth form. In contrast it was sometimes a pleasure to receive a photograph of a well-known garden plant growing in its natural habitat.

One unusual query concerned some old labels found in a walled garden, bearing only cultivar names from the past. These turned out to be varieties of fig that are unobtainable today (though might hopefully be rediscovered in the future).

Another unusual query requested the identification of a seed capsule found in pot pourri. With the help of a pot pourri expert from Kew, this was identified as being *Thespesia populnea* a tropical tree in the Malvaceae or mallow family, mainly grown for pot pourri in India.

In wintertime the influx of identification enquiries slows down somewhat and the focus moves over to the annual editing of the Plant Finder. This is an invaluable directory for the plant addict, listing the nurseries and suppliers for huge range of plants. As new plants are added to the directory each year, the names are checked meticulously through the literature, hopefully providing a reliable directory of plant names for the gardener.

Another role of the RHS is the provision of hazardous plant information. This service is provided free to the public and includes advice on plants that are hazardous to humans and animals. Common enquiries included unexplained rashes, plants chewed by exuberant puppies and berries eaten by children. Luckily most of the berries tended to be harmless ones such as hawthorn, so very few trips to the emergency room were advised.

Coming to Christchurch Botanic Gardens, I was surprised to see many of the same cultivated plants that are popular in English gardens. In addition, Christchurch gardeners are lucky to be able to grow many of the more tender plants that need careful, indoor cossetting through England's wet winters. Also interesting for me is the use of New Zealand's native plants in horticulture. I had paid close attention to New Zealand plants at Wisley before leaving and noted kaka beak *Clianthus puniceus* (warm in the glasshouse!), broadleaf *Griselinia littoralis* and Chatham Island forget-me-not *Myosotidium hortensia* among many others. Now that I've been introduced to many more, I can see that their potential in horticulture is enormous. The New Zealand display at Chelsea Flower Show last year has no doubt inspired many UK gardeners and the botanists at Wisley will no doubt be receiving many more samples of New Zealand plants to identify.

Details of RHS membership can be found at www.rhs.org.uk or by post at:

The Royal Horticultural Society,
Membership Department,
PO Box 313,
London SW1P 2PE UK

Joanna Osborne, Botanic Gardens' Staff Member.

The Royal Horticultural Society.

A group of eminent British horticulturalists, both amateur and professional formed the Horticultural Society in London in 1804. Members included Sir Joseph Banks and John Wedgwood, son of the famous potter and future uncle of Charles Darwin, William T Aiton, (Director of Kew Gardens), T.A. Knight and William Forsyth. The first Secretary was R.A. Salisbury assisted by John Lindley.

The Society aimed to improve horticulture in all its branches and once funds built up, plant hunters were employed and sent out around the world, taking over this role at a time when Kew was going through a difficult period. The Horticultural Society grew stronger and more influential, became the Royal Horticultural Society and established 33 acres of experimental gardens at Chiswick.

Today the Society has 4 gardens; Wisley, at Woking in Surrey, Rosemoor at Great Torrington, Devon; Harlow Carr, Crag Lane Harrogate; and Hyde Hall, Rettendon, Chelmsford, Essex. Wisley was given to the RHS by Sir Thomas Hanbury in 1904 and today it covers 240 acres.

The 2005 RHS members' handbook explains the Society's aims: "The RHS is the UK's leading gardening charity dedicated to inspiring, delighting and informing anyone with an interest in gardening – whatever their age group, whether they measure their garden in acres or have a window box..... Our goal is help people share a passion for plants and to bring them the pleasure and emotional, physical and therapeutic benefits of gardening." A.M.

Plant Variety Rights (PVR)

Increasingly more and more plants at garden centres are now protected by a PVR.

A PVR is an intellectual property right designed especially for plant breeders. With a PVR the breeder has the exclusive legal right to propagate his new variety for sale and to sell propagating material e.g. seed or plants. The breeder can licence others to do these things and can collect royalties. A NZ PVR applies only in NZ.

PVRs were originally known in NZ as *plant selector's rights*. Elsewhere other terms are used:

plant breeder's rights (Australia), *plant patents* and *plant variety protection certificates* (USA). The generalised term *plant variety protection* is sometimes used.

PVRs are available for varieties (in the sense of cultivated varieties or cultivars) from virtually the whole plant kingdom; only bacteria and algae being excluded.

Why do we have a PVR scheme?

In the absence of a PVR system there is no incentive for people to get involved in plant breeding. Breeding a new variety can take much time and money with no certainty of success. A breeder who produces a good variety would lose control of it soon after its release as anyone is free to propagate it and sell seed or plants. With a PVR breeders can control the commercialisation and have a chance of recouping the breeding costs and even making a profit.

As well as providing an incentive for New Zealanders to invest in plant breeding the PVR system is an incentive for foreign breeders to release their new varieties in NZ. Increasingly breeders will not release varieties in countries not having a PVR scheme.

PVR also has benefits for farmers, horticultural producers and home gardeners who buy new improved varieties

How did PVRs arise?

The earliest plant breeders were farmers who saved seed from better plants in their crops for planting the next season. In the 19th century plant breeding emerged as a specialised occupation. These early specialised plant breeders realised that they had to be able to control the commercialisation of their varieties if they were to make a living from their efforts. The famous plant breeder Luther Burbank summed up the problem for breeders in a speech to Congress.

A man can patent a mouse trap or copyright a nasty song, but if he gives to the world a new fruit that will add millions to the value of the earth's annual harvests, he will be fortunate if he is rewarded by so much as having his name connected with the result.

Progress was made in the USA in 1930 when Congress introduced the Plant Patent Act which provided protection for breeders of vegetatively-

8 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

propagated varieties.

The next significant development occurred in France. Immediately before the outbreak of World War 2 French rose breeder Francis Meilland sent bud wood of his new rose 'Peace' for safe keeping to Robert Pyle in the USA. Pyle released 'Peace' in the US market under a plant patent where it earned a considerable continuing income from royalties. Part of the royalties was remitted back to the Meilland enabling them to re-establish their business. 'Peace' also sold well in other countries but because of the lack of any PVR schemes the profits were minimal. This clearly demonstrated to European breeders the value of a system of breeder's rights.

Meilland and other rose breeders then succeeded in obtaining (industrial) patents for new roses in a number of countries. This was a step forward but breeders found that although patenting a plant variety was better than no protection it was not ideal. Patent laws have been designed for inventions - inanimate things - and don't take account of the peculiarities of living plants. And patents were not available for the seed-propagated crop and vegetable varieties.

Breeders were now calling for a special system of plant breeder's rights. This call came at an opportune time in Europe where governments saw that encouraging the breeding of improved food crops was a vital part of reconstructing agriculture after the ravages of war. The French government hosted conferences to discuss setting up an international system of breeder's rights leading in 1961 to the Treaty of Paris which established the International Convention for the Protection of New Varieties of Plants (UPOV Convention). The UPOV Convention is an international model law for protecting plant varieties which countries can follow when introducing national laws.

In NZ it was the Irish rose breeder Sam McGredy who prompted the government to enact the original Plant Selectors Act 1973. This came into force in 1975.

NZ joined UPOV in 1981 as the 11th member state. (There are now 54 members.)

Facts about PVR

Criteria for a PVR

The following criteria must be met before a PVR is granted:

New. The variety should not have been sold

before application in NZ for more than 1 year, or overseas for more than 4yrs for non-woody plants, or 6 yrs for woody plants. The variety must be distinct from all other varieties belonging to the species, uniform and stable.

The breeder must propose an acceptable denomination - a name under which the variety will be known around the world. Breeders of some crops choose to give their varieties a second, commercial name which may differ in different countries e.g. the Meilland rose with denomination 'Melanie' was given the commercial name "Charles de Gaulle" in France but "Katherine Mansfield" in NZ.

These are the only criteria used. No judgement is made of the merit of the variety. Also a PVR can be given irrespective of how the variety originated - the fact that variety has been genetically-engineered would not disqualify it for a PVR.

Term of grant. A PVR can remain valid for a limited time only - 20 yrs for non-woody plants and 23 yrs for woody plants. Many PVRs are voluntarily relinquished by the breeder before the end of the full term.

Processing applications.

The PVR scheme is administered by the small PVR Office. Its chief function is to evaluate new varieties in comparative growing trials in order to determine that they are distinct, uniform and stable as required for a PVR. The trials carried out depend upon the kind of plant. In the case of new roses 30-50 varieties are tested each year in PVR trials held in the Palmerston North Public Gardens.

Fees. The cost of getting a PVR depends upon the kind of plant, ranging from \$800 (excluding GST) for an ornamental to \$6900 for a pasture plant. Once a PVR has been granted there is an annual grant fee of \$160

How do PVRs affect us?

You are quite free to propagate PVR protected plants for use in your own garden. If, however, you propagate a protected variety for sale or sell plants or seed, without the agreement of the breeder, you infringe the rights of the breeder who has the legal right to stop you. The action the breeder takes is up to him and may depend upon the magnitude of the infringement. The breeder may first explain that he has exclusive commercial rights over the variety and ask the infringement to stop. If the infringer takes no notice the breeder can seek Court action

to stop the infringement and claim recompense for lost royalties, damages and court costs.

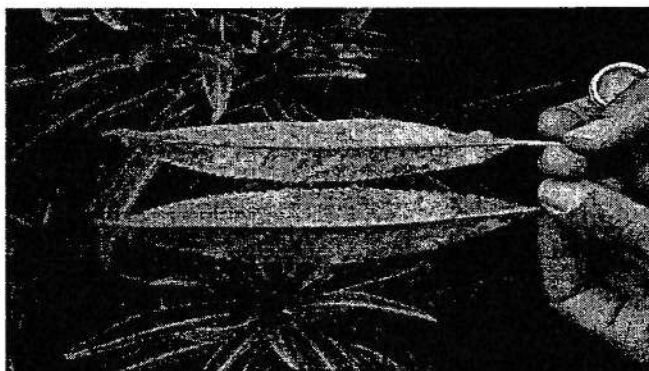
As distinct from infringements of a breeder's rights where it is up to the breeder to take corrective action, certain other actions are illegal and if these occur the Commissioner of PVR may take action. For example it is illegal while selling seed or plants to claim that the variety has a PVR when in fact it does not. Breeders warn buyers that a variety is protected by putting on the plant label words such as "Protected by PVR. Unauthorised propagation prohibited." One can find out if a variety is protected by searching the website www.pvr.govt.nz

Municipal authorities, through a loophole in the current law, are free to propagate protected varieties for planting out in public gardens, traffic islands, roadsides, etc.

Bill Whitmore, former commissioner on Plant Variety Rights in New Zealand.

Keep Watch for new whitefly

It's Biosecurity New Zealand's mission to reduce the risk to New Zealand from introduced unwanted pests and diseases. But it is not always obvious whether an organism is actually new to New Zealand as many of our unique organisms are not known to many people, including scientists.

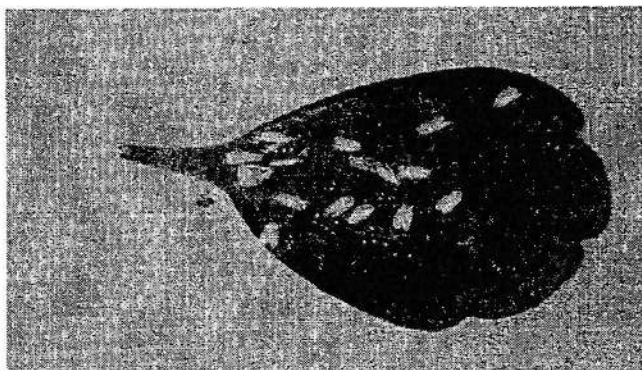


Whitefly on *Melicytus lanceolatus*

Potentially, one such insect is a recently-discovered, unnamed whitefly found infesting some species of *Melicytus* in Christchurch. Biosecurity New Zealand is now investigating other regions to see how widely distributed this whitefly may be.

If you are out and about, or if you have *Melicytus* in your garden, have a close look to see if whitefly is present. Another clue may be the presence of black sooty mould which grows on sugary secretions excreted by immature whiteflies. It is

the nymphs or pupae stuck to the underside of the leaf that are required for identification. If what you see looks similar to the pictures below or at www.biosecurity.aovt.nz/whitefly, please collect a leaf sample into a plastic bag, place in a non-breakable container and send to:



Whitefly adults on *Melicytus obovatus*

**Freepost 120201
Whitefly Survey
MAF Laboratory,
PO Box 24,
Lincoln, Canterbury 8152.**

Please include your contact details, the date and location of collection, and the species of *Melicytus*.

Keep Watch and we can all protect New Zealand.

Canterbury Botanical Art Society

Monthly meetings for 2005 will be held in the Arts Centre.

1 March The delights of Plum Painting

5 April Annual General meeting

During April visit by Australian Fiona Mc Kinnon

For more information contact Dianne Smith 03 3120 318

Snippets

World Peace Bell

New Zealand's World Peace bell was officially unveiled in the foyer of the Civic offices Tuam St by the Mayor, Garry Moore on Thursday 10 February. The bell, which has come from Tokyo Japan, 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.

Christchurch City Council International Relations co-ordinator, Barbara August said "Peace Bells are usually given to the country's capital city but this one has come to Christchurch in recognition of the fact that we are New Zealand's official Peace city."

The New Zealand Peace bell is a replica of the original world Peace bell gifted to the United Nations in 1954 and is one of only 19 Peace bells in 15 countries around the world. It is made of coins and medals from 106 countries, including New Zealand, who are committed to the promotion of world peace. The bell is one metre high, 609mm wide and weighs 365kg, making it one of the largest display bells in New Zealand.

Fundraising is now underway to build a specially designed \$70,000 pavilion to surround the bell. It is hoped the bell will take up residence in the Botanic Gardens later this year. Ongoing maintenance of the bell will be the responsibility of the newly formed New Zealand Chapter of the Peace Bell Association. Mrs August said "There was no cost in getting the bell from Japan to New Zealand. The Peace boat Topaz carried the bell to Auckland and from there it was couriered to Christchurch by New Zealand Post, free of charge."

Email address.

If you have not registered your email address with us and wish to be kept up to date with news in between our main newsletters, please contact the membership secretary or Faye Fleming.

New Friends' Treasurer

The Friends' Committee is pleased to warmly welcome Lesley Godkin who has accepted the position of Treasurer.

Sad news.

Several of our members have lost close members of their own families recently and we send them our sympathy.

Many of the Friends will remember **Marjorie and Deryck Morse**, long time members of the Friends and well known in gardening and mountaineering communities here in Christchurch. For many years they together supplied wonderful plants for our sales and raffles prizes, Marjorie growing the plants and Deryck writing the labels, (for their home-grown plants and those grown by our Friends' propagating teams.). Trays of mini hostas, trilliums, rhodohypoxis, lapagerias, (red and white) and other much sought-after plants, would appear for our spring sales. Their garden won many prizes over the years and was a wonderful place to discover treasures at any time of year. Marjorie's glasshouse and potting up facilities were the envy of many and she produced hundreds of plants to donate for fundraising for their favourite clubs and Princess Margaret Hospital.

We were aware of Deryck's frail health but Marjorie's sudden death just one day after his in November was wholly unexpected. Their memorial service, attended by a huge crowd, was held at the Old Stone House in Cashmere where they had contributed many plants and hours of work in the garden over many years.

Both Marjorie and Deryck were regular supporters of our events and tours away when they were in better health. They were encouraging, inspiring and generous in sharing their time and vast plant knowledge with our members.

We remember them with much affection and both will be greatly missed. Those who grow Marjorie's white lapagerias and their other treasures will have lasting reminders of these very special Friends.
A.M.

Leave of absence.

Several of our committee members will be away overseas or on leave of absence at various times in the next few months. The alternative contact will be Faye Fleming 3517798.

Guiding Group

What a fantastic month January has been with 88 tourists and locals being shown through our lovely Gardens. This does not include those who were in Elderhostel groups. February numbers are also up on last year and soon the Festival of Flowers and Romance will add to our numbers.

We are starting another training programme on Feb 28th 9.30-2.30 and then for another seven sessions on Mondays and Wednesdays, the same as we had last time. This includes botany, history of the Botanic Gardens, health and safety, Maori interpretation and Communication principles. Each section curator will spend some time talking about their section and there will be ample time to practice guiding skills. So far we have eight prospects. We could do with a few more to increase the participation and interactivity. Any enquiries to me please, on 3517 798. Faye

Plant Propagation News

The Propagation Area is showing the wonderful effects of the new irrigation system. The sprinklers come on once a day and that, with some individual watering once a week seems to be sufficient. Thanks to Don Bell for directing our efforts. We still have to water manually inside the Tunnel House of course, and Max Visch, our consultant, comes in to supplement the system.

The Propagating Teams could now take new members. Are you interested in growing bulbs or perennials? You do not need special knowledge, as you would be trained as you go. We work half day a week, on various days, and there is little work to be done at some times of the year, so it is not too onerous. We all have coffee breaks and do a lot of socializing too!

Donations of pots will be much appreciated, as usual. But all pots must be washed, in hot water or Jeyes Fluid, to prevent the spread of disease. Please leave your gifts at the Information Centre or the Propagating Area, in plastic bags.

We are having some difficulty in getting our own used pots washed and would appreciate help if anyone could spare an hour or two. Humdrum work but you would be so much appreciated! A new pot-washing Station is being set up to make it all much more convenient. Does anyone know where we could buy one of the old double laundry tubs? It would be so useful to our teams.

The new Bulb Sale List will be available from Jane McArthur in mid-February but if you have special requests phone Jane at home, 384-2170. Dry bulbs could be available now if wanted.

The Summer Plant Sale will be held 10.00am till 2.30pm on Saturday 26 February 2005,

around the Palm Tree by the Information Centre as usual. This will be the end of the Perennials' season so don't miss out. Many of the beauties you have seen in the Perennial Border are still available and will make further growth before winter dormancy. Get them established now. The shrubs and natives have grown well over summer, but equally have sold well from the Plant Trolley. The February Sale may be your last chance for this year, for some species.

If you would like to join one of the Plant Teams, please phone Helen, 980-9358, Trudi, 981-7033; Jane, 384-2170; or Jim, 338-9538. Or indeed any team member! See you at the Sale, on Saturday, 26 February 2005.

Helen Constable, Coordinator, Plant Propagation

What's On in the Christchurch Botanic Gardens

March—August 2005,

Information Centre open: 10.15 am till 4pm, September—April
11am till 3pm May—August

During March
Sun 6 March

Biodiversity Displays and Children's Garden activity. Free from the InfoCentre.
2.00pm -3.00pm Sunday Bandstand. Free. Opposite the Children's Playground on the Weather station Lawn.

During April
Fri 8 - Sat 9 April

Biodiversity Displays and Children's Garden activity. Free from the Info Centre
Bio Blitz from 3.00pm Friday to 3.00pm Saturday. Free entry. A 24 hour, indepth study of Garden and Park Biodiversity. All are welcome to observe and chat with the wide variety of national experts as they cover every aspect of Garden life! Site information from the Info Centre.

During May-June
During July-August

Asian theme Displays
Displays on Weather.

12 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

Contact Numbers

President	David Moyle	358-8914	Ex Officio	David Given	941-7583
Vice President				Jeremy Hawker	941-7580
Immediate Past President	Faye Fleming	351-7798	Helpers		
Treasurer	Lesley Godkin	388 0043	Programme helper	Caroline Collins	382-4212
Membership Secretary	Ruby Coleman	355-8811	Programme helper	Tony MacRae	359-8486
Minutes Secretary	Jim Crook	358-5845	Plant Sale	Helen Constable	980-9358
Committee Members	Dennis Preston	351-4131	Newsletter mail out	Jean Norton	379-2464
	Don Bell	343-6699	Botanist	Bill Sykes	366-3844
	Elizabeth Wolff (03)	313-5046	Walks	Max Visch	338-2273
Outings/trips	Alison Fox	942-4989	Guide Co-ordinator	Pat Whitman	384-3475
Newsletter	Adrienne Moore	351-5915	Enquiries	Info Centre	941-6840 x 7590
Programme	Adrienne Moore	351-5915	Computer	Sylvia Meek & Fay Jackson	
Education Subcommittee			Newsletter layout	Maria Adamski	
Co-ordinator	Lynne Rowe	358-8412			

Coming Events

Styx River trip - 2nd. April 2005.

This bus trip will leave from a different place than usual, Montreal Street, in order to leave more parking places available, and be less of a problem for the bus driver. We will go from there to Bishopdale, Nunweek Park, Gardiners Road, Husseys Road and into Styx Mill Reserve, where we will have afternoon tea. Then the trip will continue on to cross Marshlands Road, along Lower Styx Road and on to Brooklands. The driver will be John Knox who has been closely involved with the Guardians of the Styx, and we have booked the best bus in the Red Bus fleet. In order to keep the cost as low as possible we will need a full bus so **please book early** using enclosed booking slip, as I must finalise at least 3 weeks ahead. Alison Fox 9424989

Breakfast with the Birds Saturday 28 May.

Andrew Crossland works as a park ranger/ornithologist for the Christchurch City Council with a specialist role in the management of bird populations and wildlife habitats. Prior to his current employment he worked as an Embassy Officer and freelance environmental consultant in Singapore, specialising in the study and conservation of wetland birds. He has studied the birds of the Christchurch area, particularly wetlands for over 20 years and has worked with the Christchurch City Council either as an advisor or as a member of staff since 1987, being involved with research, wildlife management and habitat enhancement projects.

For dates and full details see separate insert

Friends of the Christchurch Botanic Gardens Inc
PO Box 2553
Christchurch
New Zealand