

Newsletter

For Friends of the Christchurch Botanic Gardens Inc.

No 40, Spring 1999

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FCBG

PO Box 237
Christchurch

President's Comment

Dear Friends

My first President's comment and I'm still not sure what I have let myself in for. However, I do know that the committee are a forgiving bunch and I'm sure they'll be gentle on me.

A big thank you to Faye Fleming for all the work she has put into the President's role over the last 2½ years. Our committee meetings are always well attended and I believe we have got through some good work over the year which must reflect on Faye's enthusiasm and hard work.

For those of you who are unable to get to the AGM, there are two very interesting projects about to get underway in the Botanic Gardens.

The Friends Millennium project to provide shelter from the sun and more seating around the children's play area has been reviewed by the Gardens staff and is now ready for more detailed drawings and costings. The proposed pergolas will give additional shade during the summer months and extra seating. The gardens are lacking in good sites to display climbing material and so the pergolas will also provide an additional function.

The second project is the development of a demonstration home garden around the Curator's Cottage. Planning and resource consents are being processed now and we hope to have work completed before Christmas.

The Gardens staff (Louise and Maria) have come up with some great ideas for displaying fruit, vegetables and amenity plants that can be used in the home garden. The concept is to provide gardening inspiration for people who may now have small sections or new ideas for established gardens.

The new demonstration garden will be an appropriate setting for the Curator's Cottage and really lift the profile of that section of the Botanic Gardens. We also think that there may be real opportunities for Friends to help in the interpretation, advice and guidance in the new gardens.

I work for the Christchurch City Council as a Landscape Architect so I would like to use the President's Comment to keep Friends up to date with some of the interesting projects being developed by the Council.

See you all at the Plant Sale.

Dennis Preston
President

Botanic Gardens Jottings

The winter weather has certainly been a common point of conversation recently and while I am not going to state the obvious, the good rains we have had will provide a good reservoir for trees and shrubs well into the forthcoming spring and summer.

Curators House Garden

Now that the Resource Consent has been obtained for this project, progress will be made on work for the building and to additions by the Epicurean Company, with the intention of having their work completed for a December 1999 opening.

Botanic Gardens Jottings continued ...

Simultaneously, work on the garden will be undertaken by gardens staff and this will provide an added educational resource for the botanic gardens, with the culture of vegetables, herbs, fruit, demonstrations of composting, mulching and kitchen garden management within a confined space.

Cunningham House

This conservatory has been the subject of extensive work in recent weeks. Initially, work involved the fitting of a rail to which a special ladder would be attached, so that glass repairs can be done more readily. Currently work is being done on the ridge where extensive rust has developed and for much of the time that this work is being done, unfortunately the conservatory must be closed for safety.

Pied Shags

The colony which has become established on the island of the Information Centre lake will be known to most members, as they are to the visiting public. The number of shags has increased to the extent that their droppings have killed two trees and have threatened others, including a Swamp Cypress (*Taxodium distichum*).

A local ornithologist, Andrew Crossland, advises that these birds use the site for roosting and in search of food travel as far as Lake Ellesmere and the Groynes. In the future, following a successful relocation technique used in Nelson, the shags will hopefully be relocated on to willows growing on the margins of Lake Victoria. These are a protected bird and all work in relocating them will be done in accordance with the ornithologist's recommendations.

Plants around the Gardens

As Spring advances, there are numerous items of interest throughout the gardens. From tiny blooms on rock garden treasures to the magnificence of large Magnolia flowers, perfumes of many flowering shrubs and the spectacle of the daffodil woodland.

Be part of it - come and enjoy your Botanic Gardens.

Warwick Scadden
Team Leader
Garden Parks

Recent Events

IVIES, HOLLIES, BOXES AND COLOURS

In late autumn a small group of us escorted by Max set out on our Saturday walk. The colour first seen was in the shape of a pristine white duck amidst a large group of ducks on the 'Kiosk' pond. Across the pond stood a magnificent bronze Swamp Cypress possibly the most spectacular autumn coloured tree in our Gardens. Then a brief description 'why' leaves of deciduous trees fall - as the shortening days deprive the trees of sunshine leaves change colour and fall in the autumn. The chlorophyll with its complex components e.g. xanthophylls, carotenes and anthocyanins gives up its green - nutrients are returned to the tree and what is left gives us the glorious yellow, orange, red and purple we associate with the coming winter. We looked at the oaks, beeches, maples and many others but those ancient lineage ginkgos (*Ginkgo biloba*) stood out for me - their pretty fan-shaped yellow leaves and those pungent plum-like fruits, which several days later I saw a man gleefully gathering up, to eat the kernels (reputed to have a beneficial effect on over indulgence of alcohol). I've since read that the ginkgo which came from China and Japan owes its survival to man made plantings - there are no known wild stands left. I gather this is a somewhat disputed statement. Ginkgos were first introduced into the Netherlands in 1730 or thereabouts and spread throughout the temperate climate centres. On to the topic of the walk!

Ivies - (*Hedera*) great climbers and ground covers from tiny dainty leaves to large green and variegated yellow leaved plants reaching to the sky attached but not parasitic on to some of the great trees in the Gardens. Easy to grow and great garden plants except when we have to deal with those little adhesive roots on the stems which insist on attaching themselves to fences and walls.

Hollies - (*Ilex*) so many varieties of those beautiful shiny leaved plants covered with red berries but unbelievably there are many types without prickly leaves. Other hollies have yellow or silvery leaves and black cherry-like berries or traditionally shaped berries - but are yellow, even a deciduous one *Ilex macrocarpa* is from China. We here down under still associate holly with Christmas although of course it comes into its own in the depths of winter and its use as decorations in houses and a glow on that rich

Recent Events continued ...

dark Christmas pudding. Lovely folklore stories abound amongst which is the holly flaunts its bright red berries which changed from yellow to red after Christ's crown of thorns; (does holly grow in the Middle East?) which goes splendidly with the lovely tale of the cross on the donkey's back.

Boxwood - (*Buxus*). This ancient plant can be traced back to the time of Julius Caesar - a slow grower that maybe lives for several hundred years. Its wood is hard and dense and used for wood engraving. It grows into a dense shrub but is often used for low border edges, divisions and topiary. It survives any amount of trimming and comes back vigorously with green or golden splashed leaves. My cutting - green and gold - generously provided by Max is already flourishing in a pot.

Kay Coleman

LOVELIEST OF TREES

*LOVELIEST of trees, the cherry now
Is hung with bloom along the bough,
And stands about the woodland ride
Wearing white for Eastertide.*

*Now, of my threescore years and ten,
Twenty will not come again,
And take from seventy springs a score,
It only leaves me fifty more.*

*And since to look at things in bloom
Fifty springs are little room,
About the woodlands I will go*

To see the cherry hung with snow.

A.E. HOUSMAN

On the south side of the Central Lawn is a triangle of lawn known as the "Cherry Mound". Wide steps and a path separate it from the tall cluster pines, (*Pinus pinestra*) now well over 110 years old.

In September the cherry trees commence flowering. What a wonderful sight they make! *Prunus 'accolade'* is outstanding with spreading branches and semi double rich pink flowers which hang in pendulous clusters.

The Weeping Rose Bud Cherry, *Prunus subhirtella 'Pendula'* is one of the finest flowering, weeping trees; when clothed completely with sprays of pink blossom the effect is outstanding.

Do visit and enjoy these and the other cherry trees this spring. When the flowers fall the ground is thickly carpeted pink and white.

Peter Mahan

Bits & Pieces

RAFFLE WINNER

Daphne Banks won the raffle drawn at the AGM on August 8th. The prize was a book called *Backyard Bugs* by Christchurch author Bruce Chapman.

QUESTIONNAIRE RESULTS

We have received 33 completed forms so far. Thank you to those who have returned them. We look forward to more please before it closes at the end of August.

Preliminary results: Quite a few members don't like evening meetings and most wanted meetings more often than two-monthly. There was not much difference between preferences for mid-week or weekend meetings. They prefer lectures to social events and quizzes and they like both botanical and general garden topics. Many thought that meetings should be open to all.

SUBSCRIPTIONS

If you have not paid your 1999 subscription, you will not receive a newsletter, Number 41, in December.

To renew your subscription, the amounts are:

| | |
|-----------------|---------|
| Family | \$18.00 |
| Single | \$12.00 |
| Associate | \$12.00 |
| Student | \$6.00 |

Please pay before the end of November to The Treasurer, Friends of the Botanic Gardens, PO Box 237, Christchurch.

WHAT TO LOOK FOR IN TOWNEND HOUSE THIS SPRING

At present *Kalanchoe blossfeldiana* hybrids and *Impatiens*. To come *Schizanthus*, *Streptocarpus*, New Guinea hybrid *Impatiens* and *Gloxinias*.

Cunningham House is closed for painting and repairs. It could be open mid October.

WANTED TO BUY

Could anybody please sell us a copy of 'Britannica Roses' edited by Geoff Bryant? Without CD ROM. Ph Janet Begg 385-5114.

Coming Events

| | | | |
|--|---|------------------------------|---|
| September 7th | Tuesday 9:00am Information Centre | Walk | Behind the scenes at the gardens. The Water Garden, led by Dean Pendrigh. |
| September 7th | Tuesday 2:00pm Information Centre | Meeting | A spring plants discussion group. Members bring a plant and information to share with the group and staff. Afternoon tea is provided. |
| September 15th | Wednesday 7:30pm Information Centre | Quiz Night | A fun night with teams of members and lots of easy and interesting questions. Prizes for the winning teams. |
| September 18th | Saturday 1:30pm Information Centre | Walk | A guided walk to celebrate the arrival of spring led by Chris O'Sullivan. |
| October 2nd Or 3rd if wet | Saturday or Sunday 9:00am on the Hall lawn | Plant Sale | Annual fundraiser and an opportunity to stock up on those valuable plants. |
| October 5th | Tuesday 9:00am Information Centre | Walk | Behind the scenes at the gardens. Trial on the Fragrant Gardens and Kiosk Lake, led by Angus Allan. |
| October 9th | Saturday 1:30pm Museum Entrance | Walk | Historical Walk in the Gardens led by Adrienne Moore. |
| October 13th | Wednesday 7:30pm Information Centre | Meeting | Dr Noel Porter will speak on the use of healing oils from plants. |
| October 21st <i>be there 10:30 am</i> | Thursday 10:45am Meet in the Botanic Gardens, Armagh Street carpark. | Afternoon Group Outing | A visit to Otahuna historic home and garden and then to see Margaret Long's garden. Members are to take their own lunch and the cost will be \$10 for entrance fee and car travel. Phone Alison Fox (3854933) before October 14th to get a place. |
| November 2nd | Tuesday 9:00am Information Centre | Walk | Behind the scenes at the gardens. <i>Propagating</i> , led by Darren Tillet. |
| November 4th | Thursday 2:00pm Information Centre | Meeting | " <i>Eat the Weeds.</i> " By Pamela Phipps. An advocate of natural foods and natural living. Afternoon tea provided. |
| November 10th | Wednesday 7:30pm Information Centre | Meeting | " <i>Observations on magnolias at Lincoln University</i> " by Roy Edwards. |
| November 20th | Saturday 1:30pm Information Centre | Walk | <i>South American Plants</i> , led by Max Visch. |
| December 3rd | Friday 5:00pm Venue to be notified | Christmas Party | <i>Our annual event shared with the Friends of the Museum. Please bring a plate.</i> |
| December 7th | Tuesday 9:00am Information Centre | Walk | <i>Behind the scenes at the gardens.</i> Botanic Gardens Structures, led by Sue Molloy. |
| December 18th | Saturday 1:30pm Information Centre | Walk | <i>New Zealand Ferns and their Cultivation</i> , led by Max Visch and Neil O'Brien. |

Present Happenings

CONSERVATORY MAINTENANCE

The conservatories are currently experiencing major disruptions, in particular Cuningham House which was built in 1923. Records indicate that no major maintenance has been carried out on the structure since the 1960's, possibly even earlier.

The first job, which commenced on 24 May 1999, was the installation of a travelling external ladder. This will enable maintenance to be carried out on the exterior of the building should the need arise. For the ladder to be installed vast quantities of scaffolding had to be erected within the two storied building, thus making it impossible for safe public access.

However, during this process a closer inspection revealed a serious structural problem, towards the top of the house; large areas of severe corrosion were exposed and the risk of the glazing bars falling along with the sheets of glass to the lower level was considered high. Combined with this, further tests revealed that many of the screws holding the glazing bars in position had also corroded.

As a result of this development the upper reaches of Cuningham House are being replaced. This process involves firstly, the removal of the glass, then the metal is replaced, then the painters follow and finally the glaziers replace the glass. In addition to this the top turret of the house is being stripped back and being re-painted. To solve the problem of the glazing bar screws, the most practical solution was to weld small cleats onto the base of each glazing bar, over 1500 in total. Ideally the entire house urgently requires painting, but the current job has unfortunately gone over budget, so financial constraints will disrupt this.

Greg Salton - Botanic Gardens Staff

SECTION A

Stage 1 on the Art Gallery border is well on the way. Over the last 3 - 4 months, we have slowly removed all the trees and shrubs alongside the Art Gallery south wall and Museum west wall (1/2 the border). The reason is that the trees were in decline and the shrubs were groups of *Aucuba japonica* and *Rhododendron* cultivars, which didn't fit in with the Management Plan.

The Management Plan states that this border will display a range of Southern Hemisphere plants that are shade tolerant. Over the next couple of months we will start to plant a collection of *Eucryphia* species and cultivars. These will form a canopy for the rest of the planting to be undertaken in the next few years.

Four *Eucryphas* are being transplanted from different sections within the Gardens, as they no longer fit into those borders under the Management Plan. These are *Eucryphia lucida*, *Eucryphia glutinosa*, *Eucryphia x nymansensis* and *Eucryphia cordifolia x lucida*. We also have another five *Eucryphas* in poly bags to be planted *E. lucida*, *E. lucida* 'Pink clouds', *E. lucida* 'Leatherwood Cream', *E. moorei* and *E. milliganii*.

Louise Morgan - Botanic Gardens Staff

Conspicuous Plants in Foweraker House, 12 August 1999 - Botanic Gardens

IN FLOWER

Colchicum diampolis
Colchicum szouitsii
Crocus dalmaticus
Cyclamen coum
Fritillaria raddeana
Gagea villosa
Iris reticulata 'Harmony'
Lachenalia alodies 'Pearsonii'
Lachenalia reflexa
Merendera eichleri
Merendera trigyna (Pink Form)
Merendera trigyna (White Form)
Merendera sobolifera
Narcissus cantabricus
Narcissus papyraceus
Narcissus romieuxii
Narcissus romieuxii sub species
romieuxii variety *riffanus*
Ornithogalum sintenisii
Oxalis purpurea 'Alba'
Oxalis versicolor
Puschkinia scilloides
Saxifraga x apiculata 'Alba'
Saxifraga marginata 'Minor'
Tulbaghia simmleri
Tulbaghia simmleri (White Form)

Present Happenings continued ...

Tecophilaea cyanocrocus
(Just coming into flower)

FOLIAGE

Cyclamen hederifolium 'Pewter'
Oxalis purpurea 'Nigra'
Helichrysum coralloides
Helichrysum coralloides x depressum
Helichrysum plumeum
Chamaecyparis lawsoniana 'Green Globe'
Chamaecyparis obtusa 'Kosteri'
Chamaecyparis obtusa 'Nana Rigida'
Chamaecyparis obtusa 'Tonia'
Chamaecyparis pistera 'Tsukomo'

Malcolm Shirlaw
Botanic Gardens Staff

Feature Articles

Phoenix canariensis - Have palm will travel (as distinct from the travellers palm)

Roy Edwards

In the spring of 1992 Owen Huggins asked about a tree he was thinking about removing. The tree was beginning to outgrow its allotted space and was being crowded between his house and a fence. During the discussion he asked if I knew anyone who might want the tree. The plant was a Canary Island date palm (*Phoenix canariensis*).

The following week in a telephone conversation with Walter Fielding-Cotterell (Senior Arboriculturist for the Christchurch City Council Parks Department) I mentioned Owen's palm. Walter asked me what was it about these palms as this was about the fourth offer of Canary Island palms he had in recent weeks. As it happened the area in front of the Information Centre in the Christchurch Botanic Gardens was being remodelled by the Landscape Section of the City Council and a Canary Island palm was just what was needed. Of the palm trees on offer to the Council at the time the Huggins' tree was selected.

Jill and Owen Huggins donated their Canary Islands date palm tree to the Christchurch Botanic Gardens. Dieter Steinegg, an arboriculturist for the Christchurch Botanic Gardens prepared the palm for

STOP PRESS - MEETING NOTICE

Locally Threatened Endangered Native Plants

with Richard Pender, recipient of the Peter Skellerup Scholarship in 1998

7:30pm Thursday 2 September 1999 in the Botanic Gardens Information Centre

Richard has now completed his apprenticeship training at Christchurch Botanic Gardens and leaves early September to train further at the Royal Horticultural Society Garden at Wisley, U.K.

The Friends wish him every success in his future endeavours.

moving by cutting and digging around the roots, finally undercutting a suitable sized rootball. (Palms have fibrous root systems and are generally regarded as easy to move). The exercise moving the tree required a crane capable of lifting upwards of ten tonnes, much of which is contained in the soil within the fibrous root ball. According to Owen the crane operator suggested the tree weighed 9.95 tonnes. The local Canterbury television station also recorded the move and this was shown on television at the time. The palm tree had many of the lower fronds removed after transplanting by Dieter and the tree was secured to prevent it moving around at the base. The palm soon settled into its new site amongst the new paving. The Canary Island date palm is now the central focus near the entrance to the Information Centre and the seating that encircles the palm is well used.

All palms belong to the *Arecaceae* (Palmea) family. The Canary Island palm is one of about seventeen species of palms in the genus *Phoenix*. Commercially the most important of these is *Phoenix dactylifera* or the date palm that has long been cultivated in North Africa and western Asia. The date palm thrives in areas with hot climates and will grow well in saline soils. The individual palms are either male or female. The true date palms in New Zealand may be seen in the warmer parts of New Zealand, but are unlikely to fruit. The Canary

Feature Articles continued ...

Island date palm is more tolerant of cooler conditions, produces fruit and is much more common in New Zealand. A number of large Canary Island date palms can be seen in Christchurch and there are some very large specimens along the waterfront in Akaroa. Mature Canary Island date palms have a height and spread of about seven to ten metres locally, although they may grow much taller. Nine years after planting a specimen at Lincoln University is approximately two metres in height with a similar spread and no discernible trunk. The "Huggins' palm" outside the Information Centre appears to be about six metres in diameter and slightly more in height, its probable age is about twenty five years based on the age of housing in the area it comes from. The pinnate leaves are glossy, evergreen, sharp pointed growing to many metres in length forming a terminal crown. The trunk of palms develop from the overlapping leaf bases as the old fronds die and differ from the familiar 'other' trees in that there is no rim of vascular cambium present, hence the trunk of a palm does not incrementally increase in diameter as the palm ages. Aged palms therefore tend to have very long slender trunks. The young developing trunks of Canary Island date palms look something like a pineapple initially.

Immediately to the north of the transplanted Canary Island palm along the eastern approach to the bridge to the carpark, there are a number of Chinese fan palms (*Trachycarpus fortunei*). Many of these have produced viable seed with many young seedlings currently growing in the ground below.

P.S. In case you are wondering about the title, while the Botanic Gardens Canary Island date palm has travelled, the travellers palm (or travellers tree) is *Ravenala madagascariensis* which is only like a palm in appearance and belongs to the Strelitziaceae (Bird of paradise family).

LLEWELLYN MITCHELL

Llewellyn reminisces on a walk in the Christchurch Botanic Gardens 1 July 1999, with Adrienne Moore of Friends of the Gardens.

Supplementary information within square brackets i.e.[]

Llewellyn started work in the Christchurch Botanic Gardens in August 1931 as a lad of 16 years. Bill Treleaven who had been at the Technical College with Llewellyn joined at the same time but stayed

only about nine months. James Young was the Curator and the Gardens were under the administration of the Domains Board. Mr. Young originally came from Laxley Glen on the Isle of Man and had been a forester. He is remembered as a small man on a bicycle and for his interest in trees.

In 1933 when James McPherson became Curator, Ivor Harvey and John Mashlan joined Llewellyn as the initial intake in the new School of Horticulture Scheme for trainee students. They were accepted for five years apprenticeship training. This was the first official training scheme. The students received £1 per week in their first year, the Curator's pay was £300 per year and the annual budget of the Gardens was £6000. Another four (Bob Balch, Dougald McKenzie, Ted Barnett and Terence Grofski) subsequently joined the original students.

Clarrie Jones and Mac Eaglesome were in the Gardens prior to 1931. They were known as 'youths' and received on the job training only. Clarrie went to Kew Gardens then came back to Christchurch to develop his father's nursery in St Martins Rd. Llewellyn was employed part time in their nursery where Mrs. Jones was the pay clerk. Mac Eaglesome remained as a long-term employee in the Gardens.

In 1931 the small staff included the Curator, foreman, caretaker/cleaner, office lady, horseman, mowerman, general hands, ranger, glass house and propagating department staff, plus the students.

During Llewellyn's time the female staff were Misses Campbell, Cull and Raine and Mrs. K Cole. She was the mother of Jimmy Cole who started when he was fourteen and became a long serving staff member. When Jimmy died (around 1972, in Lawrie Metcalf's time), a Rimu, was planted for him. [This Rimu has a plaque commemorating Jimmy and is on the northern side of the steps leading into the New Zealand garden, off Beswick's Walk.]

James A. McPherson was the first New Zealander to hold the Curator's position. He had trained under David Tannock at the Dunedin Botanic Garden, then had two years as a student at the Royal Botanic Gardens at Kew before returning to New Zealand. After further experience in Dunedin, Westport and Invercargill he took over the Christchurch Botanic Gardens. James McPherson was very dedicated to training students and his priority was to pay the staff first and then pay for plants next. [He was somewhat ahead of the times with his enlightened attitude to

Feature Articles continued ...

training especially for women as well as men. He published an article in the journal of the Royal New Zealand Institute of Horticulture with conditions and pay rates for both men and women. students].

Many unemployed men were given routine work such as raking leaves, pot washing etc. The students worked where needed, under a foreman and attended to the many seasonal tasks. The "Senior Boy" supervised the other students who did the glasshouse work. Diaries were kept of when cuttings were taken and seeds sown, and an accession book started in Mr. McPherson's time. Students worked a 48-hour week between 7.30am and 5.00pm weekdays, with 45 minutes for lunch and till 4.30pm in winter, when they had 30 minutes for lunch. Saturday hours were 7.30am till 12.45pm. Night school attendance for their training was compulsory. There was no general Library but staff used the Curator's own references. School children were taken on tours of the glasshouses and sometimes to the grounds. The young lads often used to race down to the kiosk for a hot pie for lunch. Some of them left a little early one night leaving a colleague to finish cleaning and locking up. This lad caught them up in what is now the carpark and challenged the supposed culprit to a fight under the poplar, which is still there today. The challenger ended up in the river, not the culprit. The park came right up to the Kiosk Bridge, as no cars were allowed in the Park in those times.

Llewellyn rode his bicycle to work and wore short trousers. Although staff were not supposed to ride their bikes within the grounds except to and from work, Llewellyn used to ride his bike to the herbaceous border when working there and store it behind the stone seat that is in the centre of the border today. This seat had come from the original rose garden.

[The sundial now in-between the herbaceous border beds was donated in 1873 by the Superintendent of Canterbury, William Rolleston. It was made by Wise of London and had been in several sites. At first it was inside the Hereford St entrance, then near where the Moorhouse Statue now stands and later in front of the Curator's residence. (P147, A Garden Century, Christchurch City Council 1963)] Unemployed stone masons put in the stone paving surrounding the sundial about 1934.

The border was spade dug annually by two gardeners and two students. Once when they were digging and tidying in the herbaceous border, James Young the

Curator came to check the work and was aghast to discover the disappearance of three recently planted Tibetan blue poppies, *Meconopsis baileyi*, now known as *Meconopsis betonicifolia* which had been a precious gift to the Curator. The plants were never found even after searching through the rubbish so there was much sadness at their loss.

[The discovery of *Meconopsis betonicifolia* "is credited to the French missionary and collector Pere Delavay ... in north-western Yunnan in 1886." Lt. Col. Bailey of the Indian Army collected other specimens in a neighbouring region of south-eastern Tibet and around 1915, described as *Meconopsis baileyi*. In 1924 Frank Kingdon-Ward introduced the species into cultivation as *Meconopsis baileyi*. It was some time later that it was recognised that these two "represented in all probability geographical variants of a single species." (P95, Christopher Grey Wilson 1993 in Poppies, BT Batsford Ltd. London.)].

In 1931 the *Pinus radiata* still growing beside the Kiosk pond, was declared dangerous. (Now trimmed up, secured with cables and carefully monitored). The children's playground area had one big pond with a mud bottom and possibly a few swings. To the south of the playground the area was a broom covered wilderness with only the major trees planted. The weather station was in use where the ranger's hut now stands. The driveway beside the Pawlonia lawn was then gravel, as were the other paths, and a box hedge edged this drive and enclosed an iris border. Llewellyn remembers the azalea garden being much the same as at present. The Malus groups behind the Iris pond were planted in his time were an acclaimed and notable feature.

Adrienne Moore

To be continued...



PLANT SALE

SAT 2 OCTOBER or SUN 3 OCTOBER 1999 if wet

9:00am - 1:00pm

Hall Lawn - North of Young Persons Play Area

Feature Articles continued ...

Mediterranean Floras of the World

On Wednesday night June 16th, Dr David Given spoke to a gathering of Friends about the colours, aromas and culinary delights of plants from Mediterranean climates.

David explained that when we talk of Mediterranean floras, we think of a distinctive type of vegetation which has evolved in response to a climate dominated by hot dry summers and relatively cool and wet winters. Such conditions occur in the coastal lowlands of countries in southern Europe bordering the Mediterranean Sea and also elsewhere in the world where similar types of climate exist. They occur roughly between 30 and 40° latitude on both sides of the equator and lie on the western margins of the continental land masses. Typical areas are Southern California, Central Chili, the Cape Colony of South Africa, South West Australia and the Canary Islands.

The floras of all these areas are rich in species and exhibit a high degree of endemism. The vegetation is dominated by evergreen trees and shrubs possessing hard, tough, leathery leaves adapted to resist excessive loss of water during prolonged hot summer droughts.

Lack of water during the summer months is a major problem which plants have solved in a variety of ways. Annuals have side stepped the problem by surviving the summer as seed. Many perennials die down at the end of the growing season and pass the hot dry summer under ground by means of bulbs, corms, rhizomes etc. Others again have transformed part or all of their plant body into special water storage organs. Examples are the many types of succulents which form such a prominent element in the floras of Southern California, the Cape Colony and the Canary Islands.

Some trees and shrubs have evolved extensive and deeply penetrating root systems - to absorb whatever water is available and keep their water losses to an absolute minimum by shedding part of their leaves during summer. Young stems and leaves of evergreens such as the Cork and Holm Oak, Arbutus, and Bay laurel are covered with a thick, waxy waterproof layer. Others such as Lavenders, Jerusalem Sage and lambsear are protected from the sun's rays by a thick, woolly layer of hairs.

Countries bordering the Mediterranean Sea have been the cradle of several great civilisations and the original forest cover has been much reduced by thousands of years of exploitation for timber, fire wood, conversion to farmland for crop production and the grazing of sheep, goats and cattle. The result of this mismanagement has been the development over large areas of a dense tangle of low growing scrub and bushes - a vegetation type commonly referred to as "maquis". Anyone walking through these maqui shrublands becomes immediately aware of the fragrant aromas given off by the leaves of so many plants

which have enriched so many New Zealand gardens with their spicy fragrance - to mention a few examples - Lavender, rosemary, cistus, santolina, Artemisias, Myrtle Sage, Bay Laurel, thyme, coriander, majorum, lemon balm are all derived from Southern European countries.

The Mediterranean region is also an area from which we have obtained so many of our food plants. The many cabbages we grow from Cauliflower, broccoli, savoy, kale to Brussels Sprouts are derived from the Wild Cabbage *Brassica oleracea*, which grows on cliffs along the Atlantic and Mediterranean coast. From these we also obtained our lettuces, sugarbeet, beetroot, leeks, lentils and the globe artichoke. Of Mediterranean origin are also the fig, the Olive, Almond, Sweet Chestnut, grapes and pome-granate. Most of these have been cultivated for thousands of years by the ancient Egyptians, Phoenicians, Arabs, Greeks and Romans - expanding the areas of cultivation to such an extent that the "original homes" of some species are unknown.

The other Mediterranean climates have not given us many plants of great economic importance but on the other hand have enormously contributed to the ornamental aspects of our gardens. Only a very few examples can be given here.

From the Canary Islands the early settlers obtained species of *Echium* and *Aeonium* as well as the tree daisies which in early spring each year produce such a wonderful display of blues, yellow and white along the sea cliffs at Red Cliffs and Sumner.

From Southern California we acquired many species of Evening Primrose, *Ceanothus*, *Lewisia*, *Clarkia*, *Godetia*, *Yucca*, *Agave*, Cacti and other succulents.

Central Chili is the homeland of *Lapageria rosea*, Chili's national flower, *Alstroemeria aurantiaca*, *Berberis darwinii*, *Tropaeolum*, *Calceolaria*.

Two of the world's evolutionary hot spots of the Flowering Plants are the tiny Cape Colony of South Africa and South West Australia. Both regions are enormously rich in species and exhibit a very high degree of endemism. The Cape Colony has enriched our gardens with many species belonging to the genera *Agapanthus*, *Kniphofia*, *Protea*, *leucospermum*, *Leucodendron*, *Erica*, *Aloe* and many bulbous plants and succulents.

South West Australia is the source of many NZ grown species of *Banksia*, *Hakea*, *Helichrysum*, *Acacia* and *Eucalyptus*. The magnificent Flowering Gum *E. ficifolia* is from South West Australia.

Thank you David for a most interesting and informative talk.

Max Visch

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