

No 39, Winter 1999

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FCBG

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Christchurch

This is my final newsletter before confidently handing over the President's role to Dennis Preston who is currently Vice President. It is then your task to help select the new Vice President.

We have a New Millennium Project that is based on shade in the Children's Playground. Shortly we will have plans drawn up and once approval has been obtained there will be a lot of action to have it completed for the coming summer.

Recently I was in Wellington and arranged to meet with Elaine Taylor, the President of their Botanic Gardens' group of Friends. It is always stimulating to talk with another person who has similar interests and to compare our progress against others. I believe we have a very dynamic and diverse organisation that is in good financial health. One of our strengths is our healthy liaison with the Christchurch Botanic Gardens' staff. Thank you to all who have contributed to these results.

As an organisation, it is often diffcult to include everyone in our activities and occasions. Ideas are always welcome to cater for those whom we are currently missing with our programme. We need to continue what has been working well and to add new things to make the next ten years even better.

Today it has been a balmy autumn day and I have been putting my own garden to bed for the winter. The Christchurch Botanic Gardens are not able to have a rest. They are on display to thousands of visitors who expect an interesting spectacle in every season.

Faye Fleming President

Botanic Gardens Jottings

As the 'Indian Summer' continues at the time of writing, many areas of the Botanic Gardens are resplendent with autumn foliage, colour and simultaneously plants such as *Prunus subhirtella* 'Autumnalis' and *Camellia sasanqua* cultivars are in full flower. There is always something of interest within the various areas of the gardens, so I encourage you to make frequent visits even during the winter months.

Information Centre

Staff provide a variety of displays throughout the year. An historic section is always of interest and different themes provide a focus for aspects of botany, horticulture or conservation. Currently, a Wardian case is the centrepiece of a feature on plant collection and transportation earlier this century.

Gardens Restaurant

The lease with the former lessees, Spotless Caterers, has expired and tenders have been invited by widespread advertising throughout New Zealand. It is planned that the new lease agreement will be operative by 1 August 1999.

Warwick Scadden Horticultural Operations Team Leader

Coming Events

In Brief		
Guided Wal	ks and Aftern	oon/Evening Talks
1999		
1 June	Tuesday	9:00am
4 June	Friday	2:00pm
16 June	Wednesday	7:30pm
19 June	Saturday	1:30pm
6 July	Tuesday	9:00am
17 July	Saturday	1:30pm
19 July	Monday	2:00pm
21 July	Wednesday	7:30pm
3 August	Tuesday	9:00am
8 August	Sunday	2:00pm
11 August	Wednesday	2:00pm
21 August	Saturday	1:30pm
7 September	Tuesday	9:00am

Guided Walks

1 June, 6 July, 3 August, 7 September

These Tuesday walks depart from the Information Centre at 9:00am and are conducted by a member of the Botanic Gardens staff. The walks begin at 9:00am and are about one hour duration.

The staff members are:

1 Jun	Bede Nottingham	Rose Garden
6 Jul	Malcolm Shirlaw	Rock Garden/House
3 Aug	Mark Davis	Native Section
7 Sep	Dean Pendrigh	Water Garden

Saturday Walks

Taken by Max Visch and helpers.

19 June A guided walk along the Avon River with Lynn Heaton.
17 July An historical walk in the Botanical Gardens with Adrianne Moore. N.B. Meet at the Museum entrance to the Gardens at 1:30pm for this walk.
21 August The Beauty of Trees in Winter with Max Visch.

Meet at the Information Centre at 1:30pm with the exception of the 17 July walk, which as already noted, departs from the Museum Garden Gates on Rolleston Avenue.

Evening Talks and Lectures

and the AGM in the Information Centre 7:30pm

16 June	David Given, author and past president of 'Friends of the Botanic Gardens'. His subject is: Colour, aroma and culinary delights - A tour of Mediterranean floras of the World.		
21 July	Lynn Heaton - Committee member of 'Friends of the Botanic Gardens' will talk about the History of Parks.		
8 August	Annual General Meeting and a tour of the Cuningham and other display houses. The AGM commens 2:00pm.		

The 16 June and 21 July are Wednesday talks. The 8 August (AGM) is a Sunday.

'Friends of the Gardens' Afternoon Group

4 June	Friday - 2:00pm B.G. Information Centre Winter Plants - Discussion with members and BG staff. Bring a plant to discuss. Afternoon tea to follow.
19 July	Monday - 2:00pm B.G. Information Centre How to Poison your Wife the Natural Way with Dr J. Mann.
	Dr Mann is a food consultant and a member of the 'Friends of B.G.'. Among the great lies of humankind is: If it's natural it must be good. Nature is neutral - even inimucal - to humankind. Our ancestors converted toxic plants into nearly
	safe foods. Nevertheless it is still possible to poison one's family using conventional ingredients from the supermarket. Afternoon tea to follow.
11 August	Wednesday - 2:00pm B.G. Information Centre Travis Swamp - History and Development. Afternoon tea to follow.

Coming Events continued

7 September Tuesday - 2:00pm B.G. Information Centre **Spring Plants**: Discussion group with members and B.G. staff. Bring a plant to discuss. Afternoon tea to follow.

For enquiries on Afternoon Group meetings phone Adrianne Moore 351-5915 or Information Centre 366-1701.

Reminders about these events appear during the preceding week in the Christchurch Press Weekend Edition gardening pages under the heading of "Cuttings" and in the Christchurch Star "Around T_{C} "n" columns.

Recent Events

EVENING TALK

17 March 1999

An interested group of Friends heard Colin Neal, who works for the Ministry of Agriculture and Forestry, MAF to you and me, speak about an aspect of his work which he titled 'Grape Expectations'. Colin travels periodically to California where he inspects grapes before they are exported to New Zealand. This is important because bunches of table grapes may harbour many kinds of weed seeds, for e_ nple Skeleton Weed, Johnson grass, Bethhurst burr and wild oats. Colin spot checks 600 trays of grapes to ensure the grapes are free of wind blown seed.

Other fruits will be checked too - Melons are an example - to ensure there are no pinholes caused by fruit flies. Specimens of Oriental and Mediterranean fruit flies along with Asian gypsy moths were displayed and passed around for all to see.

Towards the conclusion, Colin spoke about his visit to the Californian Big Trees (Sequoiadendron giganteum). These trees, in the wild state, are now restricted to the Western slopes of the Sierra Nevada in California. The groves are an awe-inspiring sight, and the slides Colin showed were splendid. How orange the enormous trunks appeared compared to ours in the Botanic Gardens, and their trunks towered up without a branch for fifty or sixty metres. This was an interesting evening, which gave insights into the work and effort required to keep New Zealand free of some of the worst pests, which could affect our agriculture.

LOOKING AT SHRUBS

20 March 1999 with Max Visch

The walk began with a discussion on what shrubs are. They provide a foundation planting and give a garden character. Although there are no hard and fast rules, shrubs are smaller than trees and have several permanent stems branching from or near the ground than a single trunk.

The area covered was from the Kiosk Bridge to the West Bridge, the exotic rock garden and the area around Cuningham House. A little west of the Kiosk Bridge, beside the river was an orange-red flowered shrub, the Lions Tail, (Leonotis leonurus) from South Africa with whorls of showy hooded flowers which come at a time when there is a shortage of bright flower colours. Close by was a Shad Bush (Amelanchier canadensis) or more correctly A. lamarckii. It has exceptional autumn colours.

Further into the gardens was an Elaeagnus. This one was E. pungens 'Maculata'. Elaeagnus falls into two distinct groups; evergreen and deciduous. 'Maculata' is evergreen and the large leaf is glossy green above with a bold irregular gold splash in the centre. It's only fault is a tendency to produce green leaved reversions - present in the one we saw - which should be removed as soon as they appear.

Osmanthus delavayi was pointed out; it has small dark green glossy leaves and little tubular white flowers that throw their fragrance a long way. The leaves are neatly toothed. It is named after Jean Marie Delavay, one of the most productive plant hunters of the French missionary naturalists working in China during the 19th Century.

Raphiolepis umbellata, native to Japan and Korea, is a lesser known shrub. The pure white fragrant blooms are in stiff erect panicles. They are followed in winter by clusters of blue-black berries. It's common name is Indian Hawthorn.

Choisya ternata, known as Mexican Orange Blossom, is one of few Mexican plants which are successful in a cooler climate, although even following a colder winter new soft growth can suffer from spring frosts. It grows well in a sheltered position in sun or half shade. The cultivar 'Aztec

Recent Events continued ...

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Pearl' is smaller and has larger flowers which are sweetly fragrant.

One of a large genus, Clerodendrum trichotomum, this one from China and Japan is hardy. Its drooping panicles of slightly upturned, sweet scented flowers are white ageing to pale mauve. The small turquoise blue berries cupped in large pink calices make an attractive display in autumn. The plant is very inclined to sucker. Skimmia japonica also from Japan, as the name implies, has glossy green leaves, is compact and can be grown among Rhododendrons. Only the females produce berries. 'Rubella' a male notable for its reddish-purple flower buds makes an attractive display all autumn and winter.

Convolvulus cneorum produces a long succession of flowers of a dazzling white with a yellow centre. It remains dwarf about 45-60 centimetres. There is one on the north side of the alpine house.

A taller shrub is 6 to 10 feet high Garrya elliptica, it has tassel-like pale green catkins. Those of male plants are much longer and more decorative. The tassels are a feature from mid-winter to early spring. The 'Lemon Scented Verbena' (Lippia citriodora) has flowers in multiple spikes which are too small and pale to be effective, but if brushed against, or a leaf is bruised the scent liberated is strong and refreshing. It is from Chile. There is a plant in the fragrant garden against the west side of Cuningham House.

Nandina or Heavenly Bamboo belongs to the Berberis family. The one we saw Nandina domestica 'Nana' is red when young and then becomes intense yellow, orange and red when winter arrives. The height remains low. Nandina 'Richmond' which we also saw is a hermaphrodite form first located in a garden in Richmond in the Nelson area. Each winter it produces a crop of brilliantly coloured scarlet berries without the aid of a nearby male plant. Nandinas do not generally berry freely in our climate, even if planted in groups - but Richmond is an exception. Nandinas were traditionally planted in the gardens of Oriental temples, hence the name 'Heavenly Bamboo'.

Oleander (Nerium oleander). The one we saw was on the north side of Cuningham House. There is another beside the Kiosk Lake on the western side. Both were flowering. The wild form which grows around the Mediterranean area has pink or white flowers. Cultivars range from white to salmon to deep pink. Every part of the plant is poisonous and so bitter that even goats do not eat them. Plants flower from spring to autumn but flower more profusely with a hot summer.

In the border at the front of Cuningham House Punica (Pomegranate) is growing. The name comes from puniceus, meaning scarlet and refers to the flower or fruit. There are two species in the genus but P. granatum is the only one cultivated. It fruits in some parts of the north of New Zealand. However it is worth growing for ornament alone. The scarlet flowers consist of eight petals arranged in the form of a funnel emerging from a funnel shaped calyx and the leaves are shining green. Punica is the old Latin name of the pomegranate which Romans called poma punica or apple of Carthage.

On our return to the Information Centre we skir the path on the east of Kiosk Lake. On our right in the broad border was a specimen of Callicarpa giraldiana (syn. C. bodinieri). It is striking in autumn for its densely clustered rich lilac berries.

There were many more shrubs that we looked at but it is neither possible nor desirable to mention them all. The hour and a half walk was most fruitful and a good introduction to the shrubs to be found in the gardens.

BIRDS OF THE BOTANIC GARDENS

An address by Geoffrey Tunnicliffe 21 April 1999

Geoff spent about three years studying ducks in the Botanic Gardens and Avon River area. The study involved some 200-300 nests, very few eggs failed to hatch and nest predation was low. Mortality was high when ducklings made for the river. Many became victims of Black-backed Gulls; others were harassed by people in canoes, or caught by dogs near the boatsheds. Nests have been found up to 70 feet high in poplar trees. Of 100 ducks banded at Botanic Gardens many were shot at Lake Ellesmere. It was found that ducks ate acorns, especially those broken by feet of walkers and by car tyres.

The introduced mallard and the native grey duck have hybridised to such an extent that there are few pure grey ducks on the river. Although the females of each species may be confused there is no possible confusion between the males, the male mallard being unmistakable, viz. glossy dark green head, white collar and purplish-brown breast.

FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

Recent Events continued ...

The pied shags nest in the alder trees on the island on Kiosk Lake. There are three colour forms; pied, white throated and black. They have greatly increased their numbers over the years. The New Zealand scaup is becoming more common on the Avon. It has dark plumage; both sexes have a broad white wing bar. It sits higher in the water than other ducks.

The little owl has supplanted the native morepork, about 10 pairs live in the Botanic Gardens. They like big trees with nesting holes e.g. macrocarpa. Fantails are often seen and both forms, pied and black are present. Exotic European birds are common. The starling probes with beak open. They walk and do not hop. Usually in groups. Blackbirds, the male with orange-yellow bill, female brown with brown bill; partial albinos are not uncommon. The males are none common.

Thrushes with boldly spotted breasts. Both blackbirds and thrushes have bold, varied song. That of the blackbird is mellow and more fluty than that of the thrush. The Hedge sparrow, introduced in 1868 is at home in the Botanic Gardens. More evident in autumn when song restarts. Seldom seen to fly far. Feeds on ground, slender beak, and moves with a slow shuffling gait, often with a flicking of the wings. Its nest is beautifully made and the eggs are clear deep blue. Of the introduced finches, the yellow-hammer males have bright yellow heads. The green finch has a solid beak and likes holly berries. The Chaffinch is common and the males are handsome with chestnut-red breast. The Gold finch i Onspicuous with black, white and red head and a gold bar on the wings. Finally the redpole has a red crown and black chin. The redpole is often recognised by its graceful, dipping flights over trees.

The native Wood Pigeon likes crab apples. About 10 pairs of these large native birds fly from Riccarton Bush to the Gardens and return. They feed on a wide range of both native and exotic trees. Much of this evening was devoted to the many questions asked and in the course of this a large amount of information was exchanged.

Geoff suggested in answer to what are the best trees to attract birds, "Study the birds needs first, and then plant for them; not forgetting trees for nesting, and protect them from predators.

P Mahan

Bits & Pieces

We Need Guides

A small group meets regularly to practise taking walks and to compile material on the Gardens for ready reference. Anyone who can help is very welcome to join this group. For details of meetings, phone Lynn Heaton 355-7563.

What will be on Show in the Townend House?

The winter flowering Primula malacoides, is an example of candelabra primulas; they bear several tiers of flowers at the same time. Also Primula obconica – the most glamorous of greenhouse primulas will be on show also.

PLANTS IN THE SERVICE OF PEOPLE

The Date Palm (Phoenix dactilifera) is an ancient food plant which dates back to before 4-5000 BC. Iraq, Saudi Arabia, Iran and Egypt are major growers. Our dates used to come from Iraq but now seem to come mostly from Iran.

Israel grows large soft luscious dates of six centimetres or so but they are not seen much in New Zealand. Californian dates are also of good quality.

Conditions for successful growth are low humidity, hot summers and low rainfall; although date palms respond well to irrigation. Offsets which are produced at the base of the young stem may be used for propagating new palms with the same genetic qualities.

As date palms are either male or female it is necessary to plant one or two male palms per grove. After eight years or so a date palm can produce about 100 kilograms of fruit. The fruit varies in colour from light to rich brown red. Moisture content determines variation from dry to semi dry. Cultivars vary in colour and time of harvesting.

Sugar content also varies according to cultivar and may be 50% of glucose and fructose, or glucose, fructose and sucrose. Vitamins B and E are present in small quantities and Vitamin C in larger quantities. Vitamin C is reduced to a trace when the dates are dried. It is not surprising an Arab can cross a desert on a few handfuls of dates while his camel exists on the water in its hump.

Feature Articles

THE ROWAN BERRY MYSTERY

It all started with the making of the quince jam. Fired with enthusiasm to make something different, I decided I would have a go at the apple and Rowan jelly which my Scottish mother-in-law used to make.

I had found some wild apples growing by the side of the road. However the Rowan berries remained elusive. Trees I did track down had been stripped by birds. Then one morning there was a ring at the door and there was my little granddaughter. She handed me a plastic bag, saying "Dad has sent you these".

I enquired what they were. "Just little cherries" said Jessica. I was delighted to find they were Rowan berries. My son had been to Twizel. I promptly got on to the jelly making and it turned out a beautiful orangy red. But the taste! It was quite bitter. Something was wrong, and I made endless enquiries but no-one could help. However there appeared in the gardening page of the Star an article on Rowan trees. There are several varieties.

The sweet berried one is the mountain ash (Sorbus aucuparia) as the leaves and berries on the red varieties look much the same, the only true test is to try a berry and if it isn't sweet, don't use it.

Mystery solved at last.

A contribution by member Dorothy Strathdee

More contributions of this nature would be appreciated. Please send to 'Friends of the Botanic Gardens', PO Box 237, Christchurch.

THE ENGLISH OR COMMON YEW

(Continued from Newsletter No. 38)

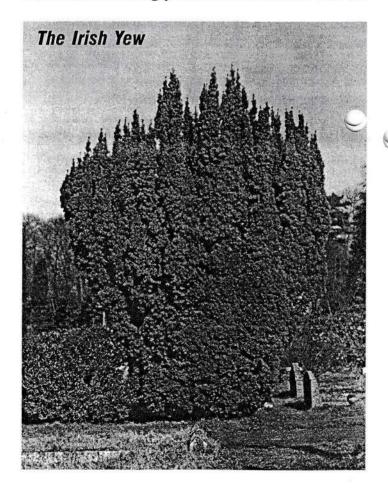
The Common Yew has given rise to a large number of cultivars varying in such features as shape, size, colour and vigour, but only two of the most distinctive will be described here.

One of the oldest trees in the Christchurch Botanic Gardens is the Dovastonian - or Westfelton Yew. *Taxus baccata 'Dovastoniana'*. Its massive dome like structure occurs on the Central Lawn southeast of the rose garden.

It is not known when and by whom this tree was planted but it is believed to be well over a hundred years old.

The Dovastonian Yew is very distinctive in its widely spreading branches from which large numbers of slender branchlets droop down to the ground like a green curtain - completely hiding from view the solid fluted trunk and the large cavernous vault beneath its canopy. This space is large enough to accommodate some 50 people. Recent measurements of the tree give a trunk diameter of 136cm at breast height and an average branch spread of over 20 metres. The Dovastonian Yew was first noticed about the year 1777 when a Mr John Dovaston of West Felton near Shrewsbury, England bought a young yew tree from a cobbler for sixpence. He planted it in his garden where it gradually developed its distinctive shape so popular with gardeners. The Christchurch tree is reputed to the largest of its kind in New Zealand.

Much more common is the Irish Yew - Taxus baccata 'Fastigiata' of which a good sized specimen occurs on the south east side of the Archery Lawn. The most distinctive features of this cultivar are its strongly fastigiate or upright growth habit and the dark green needles, spirally arranged around the upright branchlets. As the tree grows older the branches increasingly crowd each other so that the



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Feature Articles continued ...

tree broadens as it gains in height, ultimately developing the compact, columnar, multi-topped shape so typical of the mature Irish Yew.

The Irish Yew was first found near Florence Court in Ireland around 1780 by a farmer named Willis. There were 2 bushes, both female of which one became the progenitor of all existing trees of the Irish Yew obtained by cuttings and grafting. While female trees produce an abundance of viable seeds, the offspring of such trees is usually highly variable with a large percentage reverting back to type and only a smallish number possessing a more or less fastigiate habit.

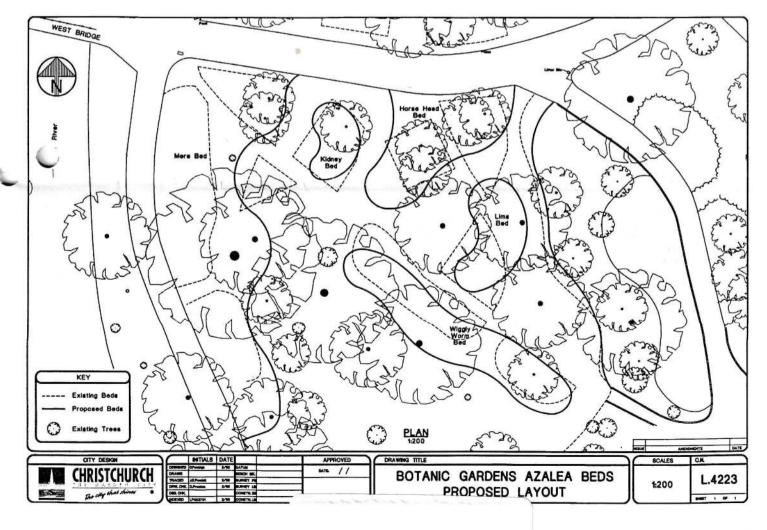
Because of its compact, fastigiate growth habit, demanding a minimum of space, ease of cultivation, grot longevity and undoubted beauty - the Irish Yew, pernaps even more than the English Yew has been much planted in churchyards and cemeteries over the last two centuries. Some magnificent well grown specimens can be seen at Church Corner in Upper Riccarton, Barbadoes and Addington Cemeteries to mention only a few.

AZALEA GARDEN REDEVELOPMENT

The recent removal of two Birch trees (Betula pendula) in the Azalea garden marks the start of a planned redevelopment of the area. This will involve the reshaping of the beds giving them a more rounded flowing shape; improving access and creating new vistas. Lawn areas will be resown and soil conditions in the plant beds will be improved with the addition of compost.

The planting scheme although not finished will include more evergreen shrubs and perhaps some small evergreen trees to increase winter interest. Deciduous Azaleas will still feature as the main theme with more named varieties of Ilam and Exbury hybrids. The addition of Evergreens and groundcovers will enhance and compliment the Azalea. With careful selection of plants it is hoped to increase the flowering season from one month as it is at the moment to 3-4 months. In accordance with the management plan the western side of the Azalea Garden along the river walk will be formed into a border with a North American planting.

Dean Pendrigh Botanic Gardens Staff



Max Visch

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