

**Featuring:**

*Pohutukawa Pest*

*Summer-house Controversy*

*Man in the Trees*

*Roses for Autumn*

**What Now, Friends?**

Like most organisations, when there has been a change of officers it's also time for a re-think and perhaps a change of direction.

The Friends of Wellington's Botanic Garden has been well-served by past presidents, secretaries, treasurers and committee members.

Now, as soon as possible, we, the Friends of Wellington's Botanic Garden, need a new president, vice-president and secretary to guide and drive the organisation on into the future.

We need to keep the team effort going, we need to be active and not just reactive and we need to keep the Friends as an organisation in the public eye.

Come on, members, tell your interim office-holders who can fill these important positions and how best *you* can help, or come up with recommendations.

Sub-committees are working on two important strategies:

🌲 The Native Forest Management Plan – important because the Botanic Garden bush remnants are significant for their historical and cultural values.

🏛️ An Historic Places Trust designation for the Botanic Garden – more on this soon.

A special thanks to all the Guides for their very successful programme of events and the high profile they give the Friends.

*Richard Nanson, Acting President*



## Man In The Trees

*Last season Philip Tomlinson hosted a hugely successful guided walk he called "Man In The Trees". He has generously allowed the newsletter access to the voluminous file notes on which he based the talk/walk. The first article from Philip's notes backgrounds the genus which includes New Zealand's most significant arboreal import, Pinus radiata.*

In the 1860s, with great foresight, Dr James Hector, first Manager of the Botanic Garden Board, recognised that the early settlers had been removing forest so rapidly from the land to provide grazing for animals, that it might not be long before NZ began to run short of timber for building. The large scale removal of forest also meant that farmland was exposed to wind and that shelter belts were required, especially in the areas of tussock land in Otago and Canterbury, Wairarapa and Hawkes Bay. He was also aware that in some areas trees were becoming scarce for firewood. With these requirements in mind the Botanic Garden Board imported timber and shelterbelt species of tree from around the world, especially from Europe, North America, India, China and Japan. The Government provided funding. It also funded trials of other species for their economic potential, for example, cork oak, sorghum, sugar beet, hops, mulberry, black walnut, pecans, hickory, plums and olives. By 1875 127 different types of conifers had been planted, some 34 of which remain in the Garden today.

The **pin**es are part of the Pinaceae family, which in addition to pines contains the spruce, larch, Douglas fir, cedar and hemlock plus others. It is primarily a Northern Hemisphere group and is the dominant forest of large regions. Many of the species are commercially cultivated throughout the world, producing most of the world's softwood timber. Pulpwood, naval stores (tar, pitch, turpentine) and essential oils are also produced from various species. Food, especially from the seeds, is a significant food source

for some indigenous cultures. It was an important shelter and firewood tree in pioneer New Zealand.

When the world was tied together by sail, pine products often assumed strategic importance and influenced the pattern of Western colonisation. They were the first timber resource exploited in North America, have long been a principal source of timber for all purposes and continue to be a leading genus in agroforestry.

Pines are native to all continents and some oceanic islands of the Northern Hemisphere, chiefly in boreal, temperate or mountainous tropical regions. It has been introduced as an ornamental and timber tree in much of the Southern Hemisphere.

The *Pinus* genus was established by Carolus Linneaus in 1754, *Pinus* being the Roman name for pine. The largest tree in the Pinaceae is the Douglas fir; the oldest, *Pinus longaeva*.

There are some 120 pine species. Some 30 species of pine were originally planted in Wellington's Botanic Garden, with 20 species (including species planted more recently) remaining.

Most species are fire adapted; the recurrence of fire permits the pines to maintain a dominant role in forest successions. Fire may kill the tree, but the seeds are protected in the cones. Over subsequent months the cones will open and there can be a prodigious seed fall onto ground that the fire has left in a state encouraging of maximum seed germination. Their quick growth allows re-establishment

before other competitive plants can become established.

Most conifers will exude resin if wounded. Others will exude resin spontaneously from branches and cones.

The resin harvested from various species of *Pinus* is undoubtedly the *oldest and most important of the non-wood products from conifers*.

Resin products from pines are commonly called 'naval stores'. This term dates back to the days when the British Royal Navy used large quantities of pine resin products to waterproof ships. Three products are involved. From the resin the volatile **turpentine** is extracted. **Tar** is then removed, and **pitch** remains.

Distillation of pine resin yields two products: turpentine and rosin.

Turpentine is a clear liquid with a pungent odour and bitter taste and is composed of a number of organic compounds, primarily a series of volatile fractions known as terpenes.

Rosin is the major product obtained from pine resin. It is the involatile residue that remains after the distillation of turpentine. Rosin is a brittle, transparent, glassy solid insoluble in water but soluble in a number of organic solvents.

Pine resin has been an important commodity at least since biblical times, as attested to by the story of Noah receiving instructions from God to "pitch the ark within and without with pitch". The Roman statesman and poet Ausonius wrote about the tapping of pines for resin in Aquitania in the south-eastern part of France. The pine he referred to is *Pinus pinaster*.

Pine resin was very important to the British shipbuilding industry during the fifteenth and sixteenth centuries. When America was a series of British Colonies, two indigenous pines, *Pinus elliottii* and *P. palustris*, produced resins of excellent quality and quantity and naval stores became an important

export commodity from the South Carolina and Georgia colonies. The tapping of resin from these pines was, until recently, a major industry in south-eastern United States until high labour costs reduced its profitability.

In Asia there are numerous records of the use of pine resin for medicinal purposes. In the Karnali Zone of Nepal, the resin of *Pinus roxburghii*, known locally as *Ahule sallo*, is used to relieve the symptoms of a cough. About two grams of resin and an equal amount of common salt are boiled in 250 -300 ml of water and drunk warm before bedtime for 2-4 days. In addition, the resin from *Pinus wallichiana* is used as a plaster for bone fractures. The resin is also mixed with an equal amount of butter and warmed to make a paste, the resulting ointment being applied to affected parts regularly before bedtime, to soften scar tissue. In Uteri Pradesh State, India, the resin of *P. roxburghii* was applied to boils, heel cracks and on either side of the eye to reduce swelling (Singh *et al.* 1990). A report from northern Thailand describes a traditional remedy for urinary problems. This consists of pitch from *Pinus merkusii*, mixed with the fruit of screw pine, *Pandanus lucratus*, and three river rocks collected from underneath a bridge. The mixture was boiled and drunk (Anderson 1986).

In south-western USA, the Pueblo and Navajo Indians used the resin of various species of piñon pines to give their stone griddles a non-stick surface, predating the Teflon of today.

The Hopi Indians, also of the American south-west, used resin to repair broken ceramic pottery.

*Next issue – Pinus radiata itself*

## Pohutukawa – Mixed Blessing?

*Are we planting problems for the future, asks Winsome Shepherd*

'Pohutukawa trees are considered a pest on the West Coast, according to the Conservation Department.

The New Zealand native...has been listed as a medium priority weed in a report.

..."Mainland pohutukawa is a native to the upper half of the North Island, where it is severely under threat," Conservation Department West Coast community relations manager Chris Hickford said...[He] said the North Island's pohutukawa was an invasive coloniser, particularly in coastal environments, where it displaced the natural ecology.'

*-Dom Post, 30 August 2002*

Recently a stony section of the Town Belt was planted in pohutukawa, a native plant not endemic to Wellington.

For 20 years in the early part of the 20<sup>th</sup> century pohutukawa were planted extensively in Wellington, including the Botanic Garden, by the then Director of Parks J.G.McKenzie, dubbed affectionately as "Pohutukawa Mac".

Pohutukawa seed prolifically and the wind carries seeds to cracks and crevices all through the city – in rocky banks, steep crevasses, near drains – anywhere they can lodge. The plant is too successful in the Botanic Garden.

We need to be alert and careful about which plants, native or exotic, we choose to plant so as not to cause the headaches of tomorrow.

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*Speaking of native trees, the National Rural Fire Authority, NZ Fire Service Commission and Forest Research recently published a "Flammability of Native Species" guide. You might find the following extract a useful reference.*

### Low flammability species

*Fuchsia excortica* Kotukutuku  
*Pseudopanax crassifolius* Lancewood  
*Pseudopanax arboreus* Five finger  
*Coprosma robusta* Karamu  
*Coprosma grandifolia*  
*Coprosma australis*  
*Coprosma repens* Taupata  
*Geniostoma ligustrifolium*  
*Carpodetus serratus* Putaputaweta  
*Corynocarpus laevigatus* Karaka  
*Griselinia littoralis* Broadleaf  
*Griselinia lucida* Puka  
*Macropiper excelsum* Kawakawa/Peppertree  
*Solanum aviculare* Poroporo

### Low/moderate flammability species

*Hebe salicifolia, H.stricta* Koromiko  
*Melicytus lanceolatus* Mahoe wao  
*Melicytus ramiflorus* Mahoe/Whiteywood  
*Aristolelia serrata* Makomako/Wineberry  
*Coriaria arborea* Tutu  
*Myoporum laetum* Ngaio  
*Pittosporum crassifolium* Karo  
*Pittosporum eugenioides* Tarata/Lemonwood  
*Hoheria* spp Lacebark  
*Knightia excelsa* Rewarewa

*Nothofagus menziesii* Silver beech  
*Phyllocladus glaucus* Toatoa  
*Plagianthus regius* Ribbonwood  
*Weinmannia recemosa* Kamahi

### Moderate flammability species

*Beilschmiedia tawa* Tawa  
*Cordyline australis* Cabbage tree/Ti kouka  
*Pittosporum tenuifolium* Kohuhu  
*Dacrydium cupressinum* Rimu  
*Metrosideros umbellata* Southern rata  
*Agathis australis* Kauri  
*Phormium* spp Flax  
*Podocarpus dacrydioides* Kahikatea/White pine  
*Weinmannia silvicola* Tawhero/Towhai

### Moderate/high flammability species

*Podocarpus totara* Totara  
*Dodonaea viscosa* Ake ake  
*Cyathea & Dicksonia* spp Tree ferns  
*Cyathodes fasciculata* Mingimingi

### High flammability species

*Kunzea ericoides* Kanuka  
*Leptospermum scoparium* Manuka

## Profile of a Gardener – Kate Kidman

### Collection Supervisor (nursery permanent collection, cacti and succulent, exotic fern and New Zealand threatened species collections)

In the news recently as an enthusiastic supporter of Integrated Pest Management, Kate Kidman has always had her eye on tiny critters. “I was into insects when I was a little kid. I did School C Art and made papier mache insects for that,” she admits.

Kate has been at the Garden for ten years, going from labourer to apprentice to nursery propagator to collection supervisor. In that time she has earned National Amenity and Nursery Production Certificates (level 4), and is not far off completing level 4 Organic Philosophy.

Previous jobs have contributed to the skills Kate uses now. Her first career was as a florist “but I got sick of trying to keep flowers alive long enough to sell them, and thought I’d rather be growing them,” she says. She has also been a colour grader in the film industry, which she feels helped her to develop the good eyesight she needs for spotting pests, parasites and predators (and discriminating between them). She also once ran her own business, making and selling hippie clothes and belts in New Plymouth!

In 1996, when Kate did an IPM course with the Open Polytechnic of NZ and began implementing the IPM regime at the nursery, information on techniques and suppliers was initially hard to come by. She sometimes had to make decisions based on partial guesswork and intuition, while she observed and learnt insect lifecycles. She has always valued the support her colleagues have given her; in taking the nursery from decades of conventional pest management to the untried and unproven land of IPM, she appreciates her workmates “trusted that I did somehow know what I was doing,” as she says, although she suspects it caused some of them to have the odd sleepless night.

Switching to IPM certainly wasn’t instant. Kate says it took three years to build up enough stock of beneficial insects to

enable them to stop using chemical sprays.

Kate’s day to day work involves daily watering in all the glasshouses, various nursery tasks, propagating and monitoring pest and beneficials. “I suppose it’s attention to detail and very good eyesight,” is her comment on the required skills in this area.

The Begonia House needs about 1,000 begonias each year and Kate grows these, supplying plants in bloom from late November all the way through to May.



*“Begonia flowers are a bit too blowzy and girly for me - a bit like Barbara Cartland - but I really love growing them”*

On sunny days Kate can be found outside maintaining her outdoor collections, and in rare spare moments she grows the small cacti and succulents you see for sale in the Treehouse. A propagator through and through, Kate also grows succulents at home. Not so much taking her work home; she reckons plants are more likely to move in the opposite direction.

Kate is another classic car enthusiast, her ‘daily driver’ being a 1965 HD Holden stationwagon. “I know it’s a serious hobby,” she says, “because it’s cost me a lot of money.”

## from the AGM...

Treasurer     **Elizabeth King**  
Committee     **Walter Cook**  
                  **Angela Hill**  
                  **Mary Hutton** (guides rep)  
                  **Richard Nanson** (chair)  
                  **Florence de Ruiter**  
                  (membership secretary)  
                  **Winsome Shepherd**

In the absence of any nominations for President, VP or Secretary, Richard Nanson agreed to act as President until someone can be found.

Honorary auditor     **Malcolm McCaw**

An honorary life membership was presented to Mike Oates, former curator of

the Garden and a longtime member of the Friends.

Guides badges were awarded to Julie Hawkins, Mary Hutton, Kath Kerr, Betty Neumayr and Margaret Barry-Gallen to mark the completion of their training.

Presentations were made to the outgoing President Monica Dearden, Treasurer Malcolm McCaw, Secretary Rae Fehl and auditor Athol Mann.

Subsequently Winsome Shepherd has agreed to be acting secretary in the meantime and **Gwenda Sutton** has joined the committee.

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## Plant Sale

Held at the beginning of October, the Friends' 'Special and Unusual' Plant Sale was a great success.

Propagated by Friends and Garden staff, there were many wonderful plants, including some very interesting species, all beautifully and professionally presented.

Manned by several Friends, the stall was intended to be opened at 10am, but such was the keen interest shown by the buying public, that \$100 worth had been sold by 9.30am!

After lunch sales slowed dramatically, but the morning's rush and apres-lunch trickle gathered \$368 for the Friends.

Feedback from buyers was very pleasing and the interaction with the public and opportunity to promote the Friends was taken up enthusiastically.

Given its success, the sale might become an annual event, with the date perhaps being changed to Tulip Sunday to take advantage of the crowds and the fact that the guides are on duty and might be able to steer people in the sale's direction!

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## Guides

Five guides completed their training in August, and were presented with their badges (see 'AGM', above). They began their training in September 2001, and had been attending training sessions and our regular walks since then. Before receiving their badges they took a group of the guides on a prepared half-hour guided walk in the Botanic Garden, with a group discussion at the completion of each walk. We are very pleased to have them with us as qualified guides. Of course training does not end here, as we are all learning new things about the Garden all the time.



*A Guides' refresher walk*

## Cuttings

- ∴ Leanne's replacement, Amber Wilkie, is to start work on November 4<sup>th</sup>.
- ∴ The new retail manager, Eljay Maunder, will start work, at Treehouse reception, on November 7<sup>th</sup>.
- ∴ The Botanic Gardens have been invited to a start-up meeting of the International Marketing Group (IMG), organised through Totally Wellington, through Tourism New Zealand, which gives us free advertising in numerous international publications and tourism conventions organised by these groups in Europe, Asia and North America.
- ∴ The Wellington Botanic Gardens is to be included in a soon-to-be published book on world famous Botanic Gardens by an American author, prompted by the author seeing a copy of our Souvenir Booklet.
- ∴ A new map board has been installed in the Garden at the main entrance at Glenmore Street.
- ∴ Spring Festival events got superb coverage in the Dominion Post this year, all through Bethney McLennan, several TV images, and notices of Otari Open Day and tulip displays. James Jones and Rewi Elliot were also interviewed by Bethney McLennan for the gardening section of the Dominion Post.
- ∴ The Botanic Gardens will soon be included in the Centre Stage of New Zealand website, which will expand our publicity internationally.
- ∴ All the road markings have been resprayed throughout the garden.
- ∴ Repairs have been carried out on the rose garden pergola
- ∴ Jason Temel has been appointed to the position of Assistant gardener at the cable car area. This position is for a 6-month term and Jason will start in November
- ∴ A new security/ night light has been installed in the Kauri courtyard area at the Tree house.
- ∴ A new memorial seat has been gifted to the garden. It is positioned outside the stables mess.
- ∴ The Consumer Home and Garden plant trial site in the Garden is to stop due to the closure of the magazine.
- ∴ Despite the wet weather Tulip Sunday went ahead as planned, and although we had to cancel the entertainment there was a steady flow of visitors. Bouquets to Jeff and the team for a fantastic display.
- ∴ The Begonia House upgrade project (toilets, shop and functions kitchen) has been put on hold until February to avoid conflicts with the summer season. It is now due to be completed in July.
- ∴ The Lady Norwood Begonia House will remain open an hour longer now that Daylight Saving is 'on'.
- ∴ Toilets in the main garden are to be upgraded in March 2003.
- ∴ Charles Gordon, WCC Landscape Architect, has prepared an outline concept for improvements to the Camellia Garden.

## The Summer-house

*Donal Duthie delves into the foundations of this charming structure and unearths controversy*



The small Edwardian summer-house to one side of the Botanic Garden Main Drive seems such a peaceful little building. It is hard to imagine anything controversial should be associated with such a blissful structure. But for many years there has been speculation as to who built the summer-house.

In 1977 the summer-house was featured in the Evening Post, as part of a series of articles called 'City Scapes'. Grant Tilly drew a little pencil sketch and David McGill wrote a story called "The Gazebo at the Bottom of Our Garden".

McGill recounts negotiations between the Amalgamated Society of Carpenters and Joiners and the City Council in 1914 [the building was purchased that year by WCC for the sum of twenty pounds]. He goes on to speculate on the age of the summer-house, suggesting that it could be close to a century old and "due for a letter from the Queen."

McGill describes an old man coming into the Garden twelve years previously, who said that as a lad, he held a candle while his father built the summer-house, which was to be put on a dray for a Labour Day procession. McGill then says it was built by William Mudge, and quotes a Mrs H.M. Smith of Khandallah, who says it was

erected by William Mudge, her great grandfather.

In 1994 I personally became much more interested in the history of the summer-house. I was contacted by a lady who gave me a copy of some memoirs written by an aunt. Her aunt was Hilda McArthur, daughter of George Blatherwick, secretary of the Amalgamated Society of Carpenters and Joiners Union of NZ.

Hilda McArthur's memoirs were written in 1994, when she was 90 years old. She describes, in wonderful detail, how her father decided to build a gazebo to represent his Carpenters and Joiners in the Labour Day parade. George built the gazebo, in his own time, on the premises of Munt Cottrell Carriers on the corner of Victoria Street and Chews Lane. Hilda says, "Well I remember going with my father and spending many hours holding the light whilst he hammered and chiselled his way to the completion of his dreams."

For the day of the grand procession the structure was loaded onto what Hilda calls a "lorry" (dray). The floor of the gazebo had to have holes cut in it to allow the lorry wheels to turn. Hilda was allowed to ride in the gazebo as a special concession because Labour Day, October 26, was also her birthday and because she had assisted her father with the construction.

The procession wound its way through Wellington streets to a carnival and sports day at Newtown Park. However, Hilda explains that all was not well. As they turned into Kent Terrace, Hilda's new raincoat fell and became entangled in the lorry wheel. The procession had to be halted while they extracted the coat.

The detail and tenor of Hilda McArthur's notes convinced me that George Blatherwick was without doubt the builder.

A search of the Evening Post revealed an account of the 1914 Labour Day parade. It described the Amalgamated Society of Carpenters and Joiners as being to the fore. It gives a description of what they call a "summer-house" and says that it was built out of heart totara, "the best that could be got for the purpose."

The summer-house is listed as a gazebo in the WCC 'heritage inventory', which states the structure was built in the 1900s, the architect is unknown and the style is "Federation Carpenter Gothic". Under 'History' is a quote from David McGill's story, boldly stating, "It is reported to have been built for the Labour Day procession by William Mudge..." Both the heritage inventory and David McGill say that the 'gazebo' was built of redwood.

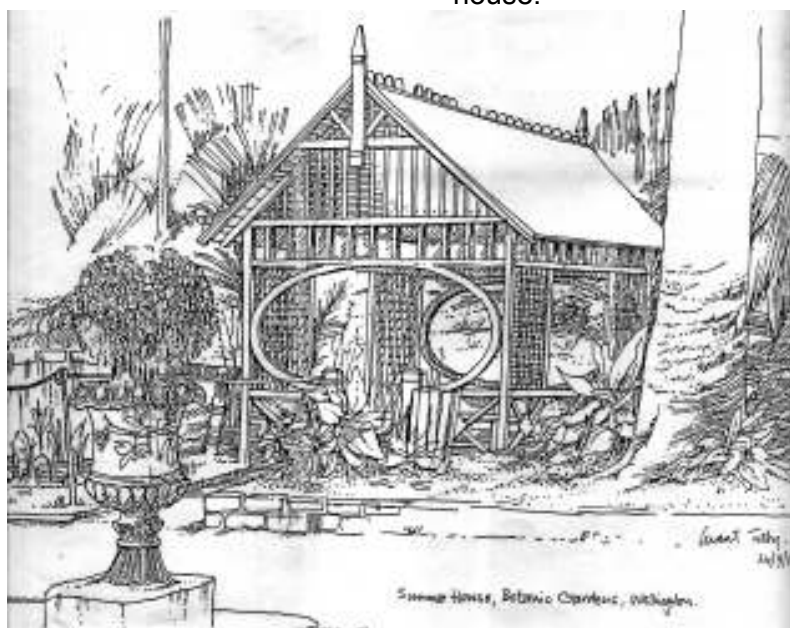
The original WCC summer-house file itself has vanished.

On September 5, 2000, the descendants of George Blatherwick wrote to the Botanic Garden asking permission to put a small plaque on the summer-house. The wording would be to the effect that it was built by George Blatherwick and that it was part of the 1914 Labour Day parade. Hilda McArthur had died, but she had one remaining brother and the family hoped to have the plaque in place before he passed on.

The Botanic Gardens were sympathetic, but explained that while the Wellington City Council heritage inventory claimed William Mudge was the builder, they could do nothing.

At this point a letter was sent to WCC Heritage asking them to revise the Summer House history and from here on the plot really thickens. A huge wad of correspondence reveals mislaid letters, unanswered letters and general confusion. For instance, one letter from WCC Heritage says the summer-house is not included in the 'non-residential inventory'. Ten months later another letter says that it is.

In the meantime, Kenneth George Blatherwick, the last remaining son of George Blatherwick, has died. And nothing has changed in the two years since the family made application to the Botanic Garden for permission for a plaque to be attached to the summer-house.



*Drawing, for the Evening Post, by Grant Tilley. Title postcard circa 1915, photograph by Aldersly, from the Donal Duthie collection*

## What the Gardeners Have Been Up To

October was a busy month for us. We were weeding, mulching and feeding the bulbs, perennials and shrubs and also lifting the tulip bulbs as they finish flowering, in preparation for the planting of our summer bedding displays.

If we keep the tulip bulbs for next season we store the bulbs in seed trays, tops and all, covered in earth until the foliage turns completely brown.

The daffodil bulbs are fed after flowering to ensure the development of flowerbuds for next season.

The camellias were being pruned and fed after flowering .

The roses got fed with a foliar feed and the first IPM monitoring begins.

Some of the new growth on the rose bushes may be thinned if there is too much - it is better to have fewer stronger canes than several weaker ones.

The first of the shading was applied to the glasshouses as the sun is getting stronger and likely to burn or bleach the foliage on some of the more delicate plants.

*Tony Williams*

## Coming Events

- 16 -24 November**      **Rose Week** - Lady Norwood Rose Garden and The Bolton Street Memorial Park, Wellington Botanic Garden.
- 17 November**            'Heritage Roses' guided walk 11.00am - meet at the entrance to Bolton Street Memorial Park, beside the Seddon Memorial.
- 24 November**            Rose Sunday - Lady Norwood Rose Garden and Annual Rose Show, Wellington Rose Society at the Begonia House.

## Guided Walks 2003

I have a tentative (with the emphasis on tentative) schedule of our guided walks for 2003. The topics are not likely to change, but the dates are. Once again they will be held on the third Sunday of the month, except perhaps for the September Spring Festival Walk, which has to avoid the Otari Open Day, and fit in with the Spring Festival activities in the Botanic Garden. I have not been able to pin the guides down as to which month they would like to do their walks. I find that they make sudden decisions to go overseas, so some of the walks may change places. Meeting place for the walks will be at the Founder's Entrance, in the meantime.

February 16, 11am 'Insects, Birds, and Plants'

March 16, 11am 'History and Herbs: a tour of the Herb Garden'

April 20, 11am 'Autumn Foliage: a family walk to discover what you can make with colourful fallen leaves'

May 18, 11am 'People and Plants: Aussie Survivors'

June 15, 11am 'Trees in the Service of Man: a continuation of our 'Man and Trees' walk in 2002.

July 20, 11am 'People and Plants: Kiwi Survivors'

August 17, 11am 'Historic Sites in the Botanic Garden'

September 21, 11am 'Spring Festival Walk'

October 19, 11am 'People's Pines: Part of the Past'

November 16, 11am 'Plants and Sculptures'