

# The Auckland Garden

Newsletter of the Auckland Botanic Gardens and Friends

March 2024



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**Contributions to the  
newsletter are welcome**  
Material for the June 2024 issue  
should be submitted by  
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**Images** Front cover: *Alstroemeria* 'Indian Summer'. Opposite page, clockwise from top left: New seat in the South African Collection, *Chrysanthemum* Pompon 'Green Buttons', *Gloriosa superba* 'Rothschildiana', *Chrysanthemum* Pompon.

# Front Cover:

*Alstroemeria* 'Indian Summer' has really stood out in our garden this summer. It was one of the most popular plants when we opened our garden last November for the Kariotahi Surf Lifesaving Club fundraiser, and it is still flowering well all these months later. The bright orange and yellow flowers set against bronze foliage require careful placement in the garden, but in the right spot it is a showstopper.

The ever-generous Fiona MacDonald gave me my first division, so if you know someone with this wonderful perennial now is a good time to ask them if they can spare a piece. Otherwise, it is available from plant retailers. It really is a no-fuss plant; I occasionally pull out flowering stems to prolong flowering and otherwise just cut it down each winter and leave it to do its thing.

Jack Hobbs

## Jack's update

Last year was certainly eventful with record rainfall and the memorable acquisition of the Nathan property. We are now looking forward to planning the future use of this wonderful property. Better weather would be appreciated, and we also aim to further improve our gardens, visitor services and the events we deliver. We have a wonderfully collaborative relationship with the Friends that makes such a difference to the experience our million visitors enjoy. One significant fruit of this partnership is *Sculpture in the Gardens* which after a 3-year gap is scheduled to open in November, so it should be another exciting year.

Pōhutukawa certainly had a bumper flowering this summer. I have never quite figured out what triggers such displays. Some suggest it is a portent of upcoming weather, but most agree floral and fruiting displays are largely influenced by

what has happened rather than what the future holds. Even the late Graeme Platt, who had a theory on everything, did not know for sure what influences the variable abundance of pōhutukawa flowering each season. It definitely warrants a research project to satisfy our curiosity and better understand this iconic tree.

The Auckland Domain Winter Gardens have just been awarded a 5-star rating by the New Zealand Gardens Trust which equates to a Garden of National Significance. This is a big achievement by the Domain team who worked very hard since the reopening of the two conservatories last year. The recent renovation of the historic Domain band rotunda is another highlight.

You may have noticed recent media coverage of the theft of metal and plants from the Gardens. The value to the

perpetrators is often minimal, whereas the cost to us is significant and of course it impacts visitor enjoyment of the Gardens. Recent targets include theft of parts of Richard Mathieson's *Reservoirs* sculpture, a gift from our Friends, but fortunately larger pieces of the work that were found by staff are now in a secure area awaiting advice from Council's Public Arts team about the restoration process. Several of our bronze plaques have been stolen, and there has been ongoing theft of plants from various garden collections, our Nursery and Growing Friends nursery. This has been quite distressing for staff and our many supporters, and we are doing what we can to reduce the likelihood of recurrences such as increased CCTV coverage and boosting security.

When Gardens staff visited Waikumete Cemetery late last year to study the wildflowers we noticed that the invasive *Watsonia meriana* var. *bulbifera* was getting out of control. If left unchecked this rampageous weed would eventually dominate much of these magnificent meadows, so in mid-January Barbara Wheeler took a team to remove as many bulbils as possible. I will press for this invasive weed to be included in the maintenance contract to prevent it taking over.

Preparations for our own trial meadow are progressing with 150 mm of sawdust worked into a bed in our Trials area. We have an extensive array of plants collected from Waikumete Cemetery and Terry Hatch, and we have collected seed from meadow trials currently underway at the Gardens. These will be sown and planted this autumn once rains arrive.

Our nursery team keep a relatively low

profile but consistently churn out top quality plants for Regional Parks and the Gardens. Currently a total of 55,695 native plants are growing on in the nursery for Regional Parks revegetation plantings, with another 7532 plants in tubes. The Nursery have also grown 6000 kānuka and 8000 mānuka seedlings for volunteer groups at Shakespeare and Tāwharanui Regional Parks.

I have had a lot of fun this summer with dahlias raised from seed. A few years ago I decided to try 'Bonne Esperance' as a parent. This compact cultivar has been around since about 1940, so has remarkable durability. It is very compact so not requiring staking, and the little single pink flowers appear for months. I selected an outstanding 'Bonne Esperance' seedling a couple of years ago with larger, pink, single flowers that do not fade in the intense summer sun. I planted this selection alongside some of Keith Hammett's hybrids such as 'Home Run' and have been selecting the better seedlings since. I also collected seed from a Hammett hybrid with soft lilac flowers against bronze foliage, and some of the resultant seedlings are simply gorgeous. Lots of fun and much easier than growing from tubers.

I know I am biased but *Canna* 'Gabriel' with its soft coral-pink flowers and bold green foliage remains my favourite canna. I raised it many years ago but do not see it for sale often these days. With luck we can make divisions available for the Growing Friends to sell at their perennial sale in early winter. 'Hampton' is another of my hybrids I rate highly, and with luck we might be able to make a few divisions available through the Growing Friends.



*Canna 'Gabriel'*

When we have surplus material of such quality difficult-to-obtain plants available we will notify the Friends so you can get in first before the general public.

The chrysanthemum displays in the Winter Gardens Temperate House are world class and well worth a visit this autumn. The array of cultivars and plant quality is without compare, and a must-see for all lovers of these old-fashioned treasures.

In late January Kim Stempel finished at the Gardens after completing her apprenticeship. She is a very competent horticulturist with a bright future in our industry, and we wish her well.



Shelley Small

When Shelley Small recently told us she was leaving everyone at the Gardens was saddened. Shelley has been a smiling and friendly fixture in our visitor centre for almost 12 years and having previously been a collection curator she always provided informed horticultural advice. Shelley is much loved by her colleagues and visitors alike and it is very sad to lose her, but we are fortunate to have had her company and excellent service for twenty years from her combined tenures. Also, she will be working for Mace Landscapes just down the road in Alfriston so we will still see plenty of her. So, all the very best from your colleagues Shelley, you will always be part of our whanau.

Jack Hobbs

# New arrivals

We are delighted to welcome Nathan Burt and Morgan Crecelius into the horticultural team. Nathan has joined us from Natural Habitats and is excited about his new role as a horticulturist and working with us at the Gardens. He will be looking after the main car park and Auckland Border as well as the Courtyard and gardens around the Logan Campbell and Friends Buildings.

Morgan has been working with us as a student gardener over the summer and is looking forward to taking on the challenges and learning that come with being a horticultural apprentice. We are all

looking forward to the value and energy that they will both bring to the team and to the Gardens over the years to come.

I also just want to acknowledge the great work our apprentices are doing, especially in their studies. Kimberley (who recently left us), Justine and Meg all completed their level 3 learning programme at the end of last year. This year, Justine and Meg are now commencing the level 4 component of their apprenticeship. Tremendous work from all of them and a reflection of how enthusiastic and driven to learn they all are.

Shaun Rice





# International visitors

Horticulture is an industry of global sharing, and we receive regular requests for tours with staff and for volunteering through our international network of botanic and public gardens. The 2024 year has started in a busy manner with staff and students from four botanic or public gardens gaining an experience of Auckland Botanic Gardens.

Bill Cullina, Executive Director, and Alison Thornton, Senior Associate Director of Development, Morris Arboretum & Gardens, near Philadelphia, USA, visited the Botanic Gardens in January for an early evening whistle-stop tour. For both, it was their first visit to Auckland Botanic Gardens, and they were blown away by the plants, the landscape and the work that staff do here. They were most interested in hearing about the horticultural opportunities for students, plant trials and Plants for Auckland.

Also in January, Matthew Payne, a horticulturist from Royal Horticultural Society (RHS) Bridgewater, England, visited for a day also and spent time talking with staff and learning about the work undertaken here.

Aidan Hopkinson, from England, volunteered in various collections for two weeks in February, including spending a day with our colleagues at Auckland Domain Winter Gardens. Aidan has worked at The Savill Garden, The Garden House, Chatsworth House and at the University of Cambridge Botanic Gardens. His visit to NZ was a funded scholarship where he was focussed on learning about

botanic gardens work especially around curation, propagation and conservation. We are grateful to our Friends President Viv Canham for hosting Aidan during his stay.



Aidan Hopkinson

Love brought Phoebe Hewitt halfway around the world to Awhitu, and she has recently been volunteering at the Gardens. Her parents are both gardeners so unsurprisingly she is a keen gardener with special interest in herbs, edibles and organic gardening in her allotment back home. Phoebe works at Koru Gardens once a week and she is volunteering to broaden her gardening knowledge at the Botanic Gardens and meet new people. Another of Phoebe's talents is teaching violin, and the staff have appreciated working with such a down-to-earth, keen and interested volunteer.





Phoebe Hewitt

Lastly, Nathan Anderson is spending two months, February-March, with us for his Longwood Gardens (USA) Fellows field placement. The Fellows Program is a leadership development program, and Auckland Botanic Gardens is the first New Zealand host for the Longwood Fellows



Nathan Anderson

Program. Rather than working in the field, Nathan is based in the office undertaking a project-based placement. Nathan's project is shadowing and working with Micheline Newton and Paul Swift on evaluating customer engagement.

Barbara Wheeler

## South African Collection update

Since leaving the Perennial Garden just over 15 months ago to move to the less green but botanically more interesting South African Collection I have made many new additions and changes.

The most recent and perhaps most obvious addition is the new seats. One is located at the bottom of the garden under the shade of a *Vachellia sieberiana* (syn. *Acacia sieberiana*) where a little

more spark was needed. These seats were designed many years ago by previous apprentice Scott Denham, and now with the workshop maintenance volunteers working with great gusto on projects the build was able to be started. Graeme Hauer has managed to bring the design to life with his own added artistic flair and some sharp paint work. It's great to have more seating in the garden, and these seats add something unique to this

garden, quite different from anything else at the Botanic Gardens.

I have been totally seduced by African plants and quickly began adding new ones to the collection as well as replacing ones that have been lost or just needed refreshing. I spent many, many hours compiling a seed order from the incredible Silverhill Seeds, a specialist African seed provider. Having them arrive was very exciting and then sowing them and watching them germinate has been even more exciting. Some of these will be added to the collection this autumn planting season, so keep an eye out. There are some nice trees and proteas that are doing well.

In early summer we added some new *Gloriosa* lilies to the collection where you will find them growing on the rustic looking teepees under the giant *Ficus*. The teepees were constructed out of branches we foraged around the garden and made to fit in with the African theme. Hopefully the *Gloriosa* will bulk up over the years and make a floriferous display.

Near the Rondavel shelter 50 *Scadoxus multiflorus* subsp. *katherinae* have been planted to make an impressive display with their big, coral red, pompom flowers.

Some *Aloidendron* 'Ramochotoma', a cross between *A. dichotomum* and *A. ramosissimum* grown by Martin Walker at Coromandel Cacti, have been added to the bed in the middle of the collection. We have tried *A. dichotomum* in the past, but it can be fickle and has not survived for us in our wet conditions. I'm hoping these will be tougher and planted up on a gravel and rock mound they should thrive. I'm happy with how they are looking so

far and think they look rather smart.

Jack Hobbs sourced some 40-year-old *Encephalartos* cycads, and these have been added to the collection with two existing ones we had. So now for the first time we have *Encephalartos horridus*, *E. natalensis*, *E. ferox* and *E. villosus* in the collection.



*Encephalartos horridus*

I also added many plants to the collection I obtained from Te Horo Ornamentals including lots of new *Protea* and *Leucospermum* cultivars, and a few different *Berzelia* but have struggled to find a spot where they will survive. That is the best part about horticulture, you never know it all.

I have also established a trial of *Leucadendron* that you will find at the Harry Beaumont entrance. I have had issues with some leucadendrons that have turned up their toes as the soil dries out, so in future I will make sure to keep them watered while the plants get their roots

established. For now, they are adding nice colour to the entrance.

As the summer turns to autumn soon look out for the *Amaryllis* and the nerines flowering in the collection. I will also be adding a new rock pile closer to the pathway for public to view some

of the smaller aloes and little succulent treasures, so keep your eyes peeled.

I am seriously enjoying learning all that the African Garden has to offer so make sure you pop by and say hi and check out what's been going on.

Pippa Lucas

## Upcoming attractions

We have two new exhibitions planned for Huakaiwaka (the visitor centre) between March and May this year. On the West Gallery wall there will be an exhibition celebrating the watercolours of New Zealand mycologist Marie Taylor (1930 – 1999). It was developed with Manaaki Whenua Landcare Research's New Zealand Fungarium where her original works and many of her collected specimens are stored. Marie Taylor was a high school science teacher, then university lecturer and she described at least 21 species that were new to science, and she was a central figure in mycology in New Zealand. Three fungi were named in her honour. She published and illustrated books on New Zealand fungi, *Mushrooms and toadstools in New Zealand* and *Mushrooms and toadstools*. Another work, *Meanings and origins of botanical names of New Zealand plants*, was published in 2002 after her death. All three books are held in the Botanic Gardens Library.

In 2017, Taylor was selected as one of the Royal Society Te Apārangi's "150 women in 150 words", celebrating women's contribution to knowledge in

New Zealand. It is fitting that this new exhibition is scheduled to open on 8 March 2024, International Women's Day, when we can join in celebrating an important female scientist in New Zealand. The exhibition continues until 21 May 2024.

As part of the Auckland-wide Festival of Culture we are developing a photographic exhibition that celebrates some of the 100 vibrant community gardens in Auckland. We have partnered with a variety of community gardens including those linked to churches and social impact organisations. One of the exciting aspects of this exhibition is the invitation for different groups to come into the Gardens and run cooking demonstrations showcasing how they grow and prepare some of their favourite traditional dishes. We are fascinated to see the difference between how Tongans and Samoans prepare taro and bananas, and we are also excited about sampling some spicy snacks from members of the Asian community. The exhibition should open mid-March.

Paul Swift

# President's report

Best wishes to all for a new year which exceeds your expectations!

The Gardens news has been dominated by the recent spate of thefts. I want to share my frustration and disappointment with all of the volunteers who work to raise funds for acquisitions only to have them stolen. And to the staff whose hard work is undone in a night. The house on the newly purchased "Nathan Land" was a possible source of income to aid the transition to becoming part of the Gardens but it is damaged beyond recovery just for the sake of a couple of hundred dollars worth of metal.

Let us hope that, through the education of the hundreds of school children who are hosted by the Gardens each year, the next generation appreciates and respects this precious property.

I'd like to add my voice to that of Jack Hobbs and his staff, asking you to keep an eye out for any suspicious behaviour when you visit the Gardens. Some of the plant thefts occur during the day! Please speak to a staff member or the folk in the Visitor Centre. Or the Police if it is after hours.

This year, the Committee is working hard to attract new members. Our numbers hover around 250 to 300 - with many people having been involved with the Gardens over a long period of time. But we feel that we need to make more people aware of the advantages of membership - besides receiving this excellent quarterly newsletter, members can get discounts

at the Growing Friends plant sales and at Cafe Miko. They can attend monthly events such as day trips, addresses by popular speakers, demonstrations and workshops, and enjoy the ever-popular Spring and Autumn Bus Trips. The Art Group has a strong following with both beginners and accomplished artists trying new ideas and enjoying speakers and exhibitions. Members also receive invitations to premiere occasions, such as the *Sculpture in the Gardens* opening events, all of which are ONLY available to Friends members. Jack is working on another amazing advantage to add to the list - let's hope that it works out and I can then give you further details.

With the upsurge in interest in gardening, especially vegetable gardening, since COVID times, it would be great to attract younger people to our membership.

Members of the Friends Committee and Gardens Staff are working hard together presently to produce the next *Sculpture in the Gardens* Exhibition, running from 16 November 2024 to 2 March 2025. Suitable works are being selected from the applications and next comes a meeting of the artists, the engineers (who donate their work), the photographer, patrons, etc. Mich Newton has an incredibly detailed handle on the work required and steers the ship very ably.

The  *Holding Ground* indoor exhibition will close around the time of publication of this issue. I think that the curator Cheryl Wright has done a fabulous job of attracting artists with interesting, quality



pieces. *Holding Ground* has certainly done the job of maintaining interest in our sculpture exhibitions during the year that we had to delay our major event by a year as a repercussion of COVID.

Thank you to all of the Committee members who work so assiduously for the betterment of the Gardens.

Kind regards,

Viv Canham, President

## Growing Friends report

The Growing Friends have been working through the holiday time, keeping the nursery running and working to produce more plants. We have a good number of visitors; many of them are tourists so don't buy a lot of plants, but they enjoy our nursery and the Gardens. Sales are a little slow: the heat is a problem for many and also families are paying for Christmas and now back to school.

We are having fun selling peanut plants

which we got from the Gardens Nursery and people are quite interested in the idea.

We have moved to EFTPOS only for our sales, this means there is no money on our site ever.

Currently we are planning for Ayrli's Open Day and Sales on 15–16 March. It is always a fun time.

Bronwen Rowse

## *Entoloma hochstetteri*

Included amongst the watercolours of Marie Taylor (see pages 11 and 31) is one of several specimens of the blue fungus *Entoloma hochstetteri*. This is remarkable as being a beautiful indigo blue with the gills having a pinkish tinge because of the spores. It appeared on a stamp issued about 20 years ago. It also appears on the \$50 note, apparently the only banknote in the world to portray a mushroom.

Its Māori name is werewere-kōkako because, as legend has it, the kōkako got its blue wattles by rubbing its face against the mushroom.

It is not uncommon in the bush but is extraordinarily beautiful. Hence Barbara Wheeler's excitement on seeing it (see page 19).



# Friends Art Group - latest news

We started off the year well with a meeting on the last Saturday of January – Auckland Anniversary weekend. I'm never sure how many will show for this meeting but as we only have 11 meetings a year, I don't like to miss January out and was pleased to see a good number show up. Lots of lively chatter as we caught up with each other, discussing holidays, families as well as what we had been up to art-wise.

Some of us have enjoyed holiday sketching, others have been researching their chosen plant for *Botanical Art Worldwide 2025* – entry opens 1 September – or thinking about what they will paint for our annual exhibition, *Winter to Spring*, later in the year.

Helen Gunter had been experimenting with egg tempera, an age-old technique, which involves mixing pigments in egg yolk. She came along with an egg and paints and gave an impromptu mini demonstration for those interested in knowing more.

It was lovely to see people pop in, wanting to see what we get up to – and decide to join us. Our group is very friendly, and we welcome everyone.

I had been asked by some members last

year for a demonstration on how to use dip pens and multiliners for botanical drawing and sketching. As I use them quite a bit in my own artwork, I decided it would be a great subject for our first demonstration of the year. The workshop was well attended and it was good to see those who hadn't tried them before having fun experimenting with them.

I do have sad news. Jan Barker, one of our art group members and very talented artist, passed away last week after a long illness. Jan exhibited in our exhibitions for many years – you may remember her very delicate watercolours or even own one – and we will miss admiring her beautiful work in exhibitions to come. A highlight for her was being selected for the *Botanical Art Worldwide* exhibition in 2018 and she was looking forward to submitting some work for the next *Botanical Art Worldwide* exhibition in 2025. We will miss her at our meetings.

If you would like to join us, get in touch with me, Lesley Alexander – 021 1617070 or email me: [lesley.alexander.smith@gmail.com](mailto:lesley.alexander.smith@gmail.com) or pop in to see what we are up to, our meetings are held on the last Saturday morning of each month in the Friends Building.

Lesley Alexander

# Introducing Chris Allen and Linden Johnson

## New Committee members

At the 2023 AGM Chris Allen and Linden Johnson were elected as members of the Friends Executive Committee.



Linden Johnson (left) and Chris Allen

## Chris Allen writes:

I first became interested in the Auckland Botanic Gardens when my husband and I moved to the Gardens in the mid-1990s. As we lived within an easy walking distance, the Botanic Gardens was our special walking place. I joined the Friends of the Botanic Gardens at that time and

enjoyed the occasional bus trip but had no firm commitments with the Friends Committee.

I also joined the Manurewa Horticultural Society which I understand was formed in 1948 and have had a long and happy association with that community group of keen gardeners. I have also been involved with the Seedsavers Association and the Manukau herb group. I have had a love of flowers from childhood, which then became a love of gardening when older and a passion for healthy eating for my family from my own garden.

I have no botanical qualifications other than the knowledge passed on by both my parents – dad in the huge vegetable/fruit tree section and mum in the flower garden, and never the twain did meet!!

It was suggested by one of my friends who is a member of the Friends Committee that I might be interested in joining the Committee. She continued on her quest in her quiet way and here I am. I am a practical person and hope that my skills will be of some value to the Friends Committee which is such an integral part of the Auckland Botanic Gardens.

## Linden Johnson writes:

I can thank my parents especially for my love of gardening and all aspects of natural history.

Growing up on a dairy farm near Reefton with native bush nearby was a great introduction to flora and fauna. When my

parents moved to Nelson, I was fortunate to work as a technician at the Cawthron Institute on plant diseases, followed by several years on biological control at DSIR Entomology Division working on a range of insect pests.

Moving to Wellington I worked at Ministry of Works and Development, Water & Soil Division, ending up as assistant operations manager for Computer Services, liaising with the various MWD district branches.

I enjoyed being involved with the Wellington Herb Society when herbs were becoming “fashionable”.

Next move was to a lifestyle block in West Melton, Canterbury with a large flower and vegetable garden. I was involved in

the establishment of a very active garden club.

My husband’s transfer to Auckland required adjusting to the urban challenge on a semi-rural property in South Auckland where we found a serious possum, rat and rabbit issue to contend with.

I became involved in a wide range of volunteer activities, including Boards of Trustees, Forest and Bird, guiding on Tiritiri Matangi, and the Point View Heritage Society Inc.

I am looking forward to working with the Friends and supporting their activities to contribute to the community and the environment.

## Preparing the newsletter, *The Auckland Garden*

Although I am listed as the editor, getting the newsletter to your mailbox is very much a team effort.

First, and most important, are the contributors. Without their efforts, there would not be a newsletter. Jack Hobbs edits the contributions from the staff – I think he should sometimes be listed as a co-author. Then I go through all the material. Kim Stretton does the formatting and arranges the photographs. Formatting is not always easy because the newsletter must be printed in units of four pages – sometimes material has to be delayed or extra photographs added. Kim is now near Cambridge and I am in Auckland but this doesn’t seem to create

problems.

Nearly all the photographs are taken by Jack Hobbs and they add greatly to the attractiveness.

After I have proofread the formatted files, they are proofed again by Kim’s mum, Meryl Stretton, and by Barbara Wheeler. Both of them always find things that I have missed.

After the newsletter has been printed, Liz Powell organises the packing and posting. After the problems of COVID, she usually does this all by herself. Then it is at the mercy of NZ Post...

Ross Ferguson



# Wiri Rambler report

Recently, after an examination by a consulting engineer, the Wiri Rambler was able to meet the requirements for a 2-year registration with WorkSafe. This has enabled us to extend our Council permit to operate. The tractor has also been serviced after running for 400 hours.

Rides on the Rambler are very popular on these very hot days. We are usually fully booked. We have had two new people join our team. We would be delighted to have more new members which would enable us to run regularly on Saturdays as well as Sundays.

Kate Moodie

## New books in the Library

*Books recently purchased or donated to the Library include:*

*Secret gardens of Aotearoa*

Jane Mahoney & Sophie Banham.

*Flower: exploring the world in bloom*

Phaidon Editors.

*The magic of seeds*

Clare Gogerty.

*Grasses for gardens and landscapes*

Neil Lucas.

*A virgin for eighty years: Aucuba, an overlooked national treasure*

Linda Eggins

An enticing title! This plant was introduced from Japan to English horticulture in the 1780s. However, *Aucuba* is dioecious, having male and female flowers on different plants, and all the English plants

were female. Japan had closed its border to European explorers and it wasn't until the 1860s that a male plant could be obtained and that bright red berries were produced.

*Flora: celebrating our botanical world*

Carlos Lehnebach, Claire Regnault, Rebecca Rice, Isaac Te Awa and Rachel Yates, Te Papa.

*Flowers are my passport*

Autobiography of the late Barry Ferguson.

*Kiwifruit: science and management*

Edited by I.J. Warrington and G.C. Weston.

*The kiwifruit genome*

Edited by R. Testolin, H.-W. Huang and A.R. Ferguson.

*Kiwifruit: botany, production and uses*

Edited by A.C. Richardson, J.N. Burdon and A.R. Ferguson.

# Blueberries – they're berry good!

Blueberries (*Vaccinium* spp.) are appearing more regularly in many Auckland home gardens, either by themselves in the garden or as a low hedge. Not only are they attractive to look at when in flower, they are now referred to as a “super food”, producing copious amounts of edible, flavoursome berries, which are full of antioxidants and vitamins and provide other health-related benefits.

Blueberries are very easy to grow in Auckland, requiring only a minimal amount of effort in their ongoing care and maintenance. They are typically semi-deciduous, bursting into leaf and flower in early spring. Depending on the cultivar, fruit typically appear after flowering in late spring and ripen through mid to late summer.

Blueberries favour a sunny sheltered position in the garden, with a free draining, slightly acidic soil that is rich in organic matter. This will encourage strong vigorous growth and a good crop of fruit. Watering, mulching and fertilising through the growing season, particularly when fruit are forming, is key to ensuring plant health but also reasonable fruit quality. Blueberries are voracious feeders and need to be fed regularly but sparingly through the spring and summer months. Ideally use a fertiliser that is suitable for citrus or acid-loving plants, that also has added potassium for encouraging flowering and fruiting. Soil moisture should be regularly monitored, as too much or too little can adversely affect plant health, as well as the size and

quantity of fruit produced.

Winter is generally when blueberries are in hibernation and is typically the best time of year to prune them. One thing to bear in mind though is that blueberries generally fruit on the previous season's wood. If too much of this is removed, it can affect the amount of fruit that is produced the following fruiting season. Key branches or stems that should be removed are those that are dead or diseased, or that are crossing over one another. Taking those out will allow more light and better air flow into the centre of the shrub, thereby helping to reduce the occurrence of pest and disease.

Although most blueberries are often partially self-fertile, planting a combination of cultivars of the same type will ensure good cross pollination and therefore generous amounts of fruit being produced. Different cultivars can also have different foliage colours in autumn and winter, which are an added aesthetically pleasing feature at those times of the year.

There is a wide variety of cultivars available, although some are better suited to Auckland conditions than others. “Rabbiteye” cultivars are well suited to our warmer climate because they are known to be more drought and heat resistant and more tolerant of variable soil conditions. In terms of some of those cultivars that I can recommend, based on what we've seen at home as well as here at the Botanic Gardens, look out for the following in your local garden centre:

- Blueberry 'Blue Dawn' – white flowers tinged with pink in spring, with medium to large blue fruit in the summer months. It has a spreading to upright growth habit. Foliage turns red-bronze in autumn.
- Blueberry 'Tasty Blue' – white flowers tinged with pink in spring, with reasonably large berries in summer. It has a spreading upright growth habit. Foliage turns red-bronze in autumn.
- Blueberry 'Sapphire Blue' – white flowers tinged with pink in spring, with reasonably large berries appearing in summer. It has a compact growth habit with long arching stems. Foliage turns red-bronze in autumn.
- Blueberry Burst™ – white flowers tinged with pink in spring, followed by medium-sized blue fruit in the summer months. It has a spreading to upright growth habit. Foliage turns red-bronze tones in autumn.

Shaun Rice

## Wonders of wild places

It was autumn and I was walking in Waharau Regional Park on the eastern extremity of the Hunua Ranges. My eyes were drawn trackside, darting from one side of the track to the other, searching for plants and fungi of interest. Near the finish of the track, just before the change from moist to dry forest environment, I stopped suddenly, took a sharp intake of breath and uttered an audible gasp. I had happened upon werewere-kōkako, the blue mushroom, *Entoloma hochstetteri*. Seeing plants growing in their natural environments is special and while seeing the unusual is exhilarating, seeing common garden plants in their natural environment is equally so.

Each natural area has its own character and while the suite of plants may be similar across each of the specific Auckland habitats there are variations that make each worth exploring. I have managed to pack in a lot of exploring over the 2.5 years I have been in Auckland and

have selected a few of my exciting finds.

Smiths Bush was my first introduction to urban forests within Auckland City, almost 15 years ago. Pūriri, *Vitex lucens*, are common forest trees around Auckland but I never tire of seeing them as I've not grown up with them outside of the garden environment. Their gnarled trunks and delicate flowers that lay strewn on the tracks all add to the atmosphere within any pūriri forest. Widow maker epiphytes, *Astelia hastata* (syn. *Collospermum hastatum*), perch high up in the pūriri canopy and on some trees are so numerous it is hard to fathom how the tree can hold such weight. After storms, the forest floor is littered with the remains of branches with widow makers still attached and becoming part of the diverse forest floor collage. At just under 6 hectares in size, Smiths Bush is a true remnant within a city of 1.6 million whose urban sprawl is fast lapping up the wider hinterland.

Clevedon Scenic Reserve, at just over 93 hectares, has various vegetation zones that the track takes you through. On the lower slopes, pūriri/nikau dominate, then there are zones of broadleaf/podocarp, kānuka scrub, tree fern/broadleaf/podocarp, and a small band of kauri at one location. My favourite track in Dunedin, Leith Saddle, had distinct vegetation zones too so I was immediately drawn to the Clevedon Reserve summit track for the same reason. While it is regenerating forest, there are still magnificent podocarps to be seen and the diversity of flora is outstanding for a forest that has only been regenerating post European settlement. The short walk to the old quarry and waterfall is a worthwhile side trip. Parataniwha, *Elatostema rugosum*, line the banks of the Taitaia Stream. The foliage displays the natural variation within the species.

Exploring the Waitakere Ranges can be challenging, but you need not walk far for some great finds. The short track to Kauri Cathedral is where I saw korokio, *Corokia buddleioides*, a plant I had seen a lot in cultivation but seeing it in the wild growing strongly as an understory plant of magnificent kauri trees was a sight to behold. Equally so was seeing kohurangi, *Brachyglottis kirkii* var. *kirkii*, in full flower under those majestic kauri trees.

Awhitu Regional Park has sweeping coastal views, but it was a plant I spotted as I walked the dry and dusty gravel road that captured my attention. Karo, *Pittosporum crassifolium*, not with the usual burgundy flowers but creamy white with some tinged pinkish. As with the parataniwha at Clevedon, spotting natural variations of species known to you is just as exciting, if not more, than spotting new

or highly unusual plants.

Another plant that I knew from my Dunedin days, which grows in small localities off the coast north of Dunedin, is rauparaha, or shore bindweed, *Calystegia soldanella*. I spotted it at Umupuia Beach, near Duder Regional Park, and have seen pockets of it at other coastal areas around Auckland. The small, glossy, kidney-shaped leaves built to withstand the dry habitat and salt-laden winds are attractive and when the pink and white striped flowers bloom, well in my eyes they make very attractive plants. On reading up I see they can be invasive but interestingly on the New Zealand Plant Conservation Network website they make a note to try growing rauparaha as a lawn instead of kikuyu at the bach. Less mowing and more attractive.

Finally, I'd be being remiss if I did not mention an orchid or two. New Zealand's many orchid species do not have the size nor colour range of orchids from the rest of the world, but that makes them no less fascinating. Amidst the umbrella moss, clubmoss and other forest floor dwellers in moist spots along the track to Wairēinga Falls I spied the foliage of what I believe is spider orchid, *Corybas trilobus*. I have yet to see it flower so cannot be exactly sure of the species identity. When looking for orchids in the New Zealand forest, you do need your eyes in sharp focus as they are easy to miss. I took a trip to the Hunua Ranges (Wairoa Track) and was busy photographing a pixie cap orchid, *Acianthus sinclairii*. Walkers approached me interested in what I was photographing expecting to see something large and spectacular. They were visibly stunned when I pointed out the diminutive orchid whose transparent



green flowers were barely visible to the naked eye. Not everyone shares our passion for plants. Beauty, after all, is in the eye of the beholder. I'm only pleased

they had not been around 10 minutes before to hear me yelp with pure joy at seeing my first Auckland orchid in flower in the wild.

Barbara Wheeler

## To stake or not to stake

That is the question asked by James Wong, a British ethnobotanist and columnist for the magazine *New Scientist*. He is a self-confessed plant obsessive – he has over 500 house plants in his “tiny” flat.

Wong writes a monthly column in which he challenges some horticultural myths. In his *New Scientist* column of 17 June 2023, he pointed out that adding coffee grounds to the garden is not necessarily a good idea. Even used coffee grounds are a rich source of caffeine which can inhibit the growth of plants or restrict the germination of seeds. Indeed, coffee grounds have even been considered as a herbicide for agricultural use.

In his column of 22 July 2023, he claims that it is nonsense to break perfectly good terracotta pots to add a layer of broken pottery or “corks” to the base of pot plant containers to ensure adequate drainage. *Which* magazine (the British consumer magazine) tested the performance of *Calibrachoa* plants in pots with and without a layer of corks. *Calibrachoa* is particularly susceptible to root rots if drainage is not adequate. *Which* found no difference and as Wong points out, drainage is faster through a homogenous soil – corks should actually impede drainage.

On 9 December 2023, he wrote that there is no point in being a “tidy” gardener and raking up fallen leaves from lawns. Research at the University of Wisconsin-Madison indicates that even if 50% of the lawn surface is covered in leaves, just run the mower over the leaves. Mowing is recommended even if the layer of leaves is up to 45 cm (18 inches deep).

In a very recent column (*New Scientist* 20 January 2024) Wong questions staking newly planted trees. Research has shown that staking young trees alters their growth. The response of trees to the rocking caused by strong winds (thigmomorphogenesis) encourages trees to grow sturdier trunks and deeper roots. Furthermore, ties if left too long can strangle a tree – this type of damage affected over a third of all trees sampled in London. At the best, staking for a short time (a year or so after planting) can be beneficial for trees maintained by professionals but not for those of home gardeners. Home gardeners generally didn't remove the stakes in time.

I am not always convinced but certainly Wong issues real challenges to customary thinking.

Ross Ferguson

# Growing a leafless mistletoe

As Senior Regional Advisor (Flora) for Auckland Council, Emma Simpkins has been leading conservation efforts for threatened plants in the Auckland region. A key tool is working with the Botanic Gardens to enhance our ex-situ conservation collections, which can be used for insurance for the wild population, seed orcharding, and research on growing plants atypical for garden situations.

On Thursday 25 January we made a trip to Manukau Domain (confusingly, in Lynfield) to a stand of mānuka known to be host to the leafless mistletoe *Korthalsella salicornioides*, which has a conservation status of “Threatened – Nationally Critical”. This mistletoe is in the Santalaceae family, along with sandalwood and the Australian quandong. It is a naturally sparse plant, and threatened by deforestation of its main hosts, mānuka and kānuka.



Searching for these small plants is an exercise in patience as they are very close in colour to the mānuka leaves and mostly we found very small specimens, with a

Seed of *Korthalsella salicornioides* on mānuka host.



few sprigs of 5-10 cm each. The flowers are tiny, only a couple of millimetres, and give rise to small green fruits. In the wild the seeds disperse explosively, popping out of the fruit and it is hoped onto a suitable neighbouring plant. As they don't have their own root system, after germinating they must infiltrate the host tissues and form a connection with their vascular system.

They are hemiparasites, meaning that they do have green tissues and do at least some of their own photosynthesis. However, they rely on the host for water, minerals and some other nutrients.

Back at the ABG nursery after collecting the seeds, we picked up six young mānuka plants to place them on. A firm squeeze of the fruit released the tiny sticky seed, which we placed in the crotch of a branch and marked the site with white-out to ensure we could find them again. We set the mānuka aside for bottom watering for the next week to ensure the seeds weren't washed off.

Now we're biding our time. If this planting works, it is unknown how long germination will take, and after that how long for a connection to form with the host and then for us to see evidence of the new plant forming.

We hope to have these fascinating plants on display before long in the Threatened Native Plant Garden, but this experiment will also help to form advice on how to grow these in their natural range. Hopefully we can show how these seeds can be planted on wild trees to establish new populations.

Ella Rawcliffe

# Buchanan Award report

As the grateful recipient of the Friends Buchanan Award 2023 I was able to undertake a study tour of Singapore and the United Kingdom.

I arrived in Singapore in late August where my first stop was the renowned Gardens by the Bay. The science fiction film *Avatar* was the theme in the biodomes which were very busy with many people taking photos of the stunning displays including lots of orchids. It all looked so perfect with a great selection of plants including an impressive 1000-year-old olive tree. I took a train around the outdoor park area which enabled me to see the highlights.

My next stop was Singapore Botanic Gardens which has a great range of individual gardens in a huge area. I soon realised I wouldn't be able to do all I wanted to in one day so I focused on what was most relevant to me. I loved the trellis garden which showcased lots of plants on different styles of trellis and provided lovely shade as well as height. The national orchid collection was amazing; I really enjoyed the celebrity orchids with the white 'Princess Diana' being my favourite. Other world leaders honoured with an orchid include Dame Jacinda Ardern.

Hort Park and Jurong Lakes Gardens are quite new gardens on the outer edges of the city. This is where all the allotment and community gardens and education are located. I spent time volunteering at Jurong Lakes along with mainly retired people who were very surprised to have me as a volunteer as this was uncommon for "tourists". These are nice quiet parks

as they are away from the city, and both have a good community vibe.

The highest food forest garden in the world is on the on the 51st floor of Capita Springs building along with two restaurants and a bar. The very exclusive garden is lovely with spectacular views. Each month it supplies 90 kg of fresh salad, herbs, edible flowers and cucumbers to the restaurant and bar. One problem is it is too high, so they don't have a wide variety of crops only those that they know work.

Capita Spring Building, Singapore



This garden is one of the most popular on social media and I thought that it feels like it is more for that than anything else. I went back up there in the evening and there were few birds and mainly moths visiting. There are also plant health issues. As there are few insects it is spray free. The bar serves botanically themed “mocktails” at \$20 each, and it was lovely to sip one while looking across the city in the evening.

Then on to London where I had a wonderful visit to the Royal Botanic Gardens, Kew. The kitchen demonstration garden was excellent! They have a small greenhouse at the back of the garden where the curator grows seedlings for the garden, quite different to me when I give my order to Owen in the nursery who supplies them on time in perfect condition! Lots of interesting ideas for espaliering which I think we could do more of at the Gardens as it is a great space saver if the right varieties are used. I loved the work Kew Science are doing on dry climate plants and bees, all accompanied by good signage for the public. One problem we thankfully do not have is badgers which are very destructive.

Wisley, the Royal Horticultural Society garden in Surrey, had a huge flower show on when I visited. Dahlias were the main flower in the competition tent, and there were heaps of stands selling plants and accessories. The allium display was stunning but sadly most do not do well in Auckland. I met Sheila Das who designed their “Food Garden of the World”, with lots of small areas featuring Asia, Africa, Europe, Caribbean food plants alongside lots of signage. An idea I loved was a recipe book made with metal pages featuring recipes from each country

with ingredients from the garden. Most of the harvest is used at their cafes, and they also sell to visitors. They are doing a major renovation of their original 1950s orchard, keeping some of it but focusing on having fewer trees, more beneficial insects and no spraying. Other highlights of Wisley were the rock garden which has a 200-year-old yew tree, the wide and colourful perennial borders, the water features, and the amazing shop that looks like a horticultural library with books and much more for sale.

I attended an informative guided tour of Chelsea Physic Garden in west London set amongst expensive Chelsea housing with magnificent old trees and awesome history. The layout was interesting, with groupings according to plant uses and country of origin. It has a small New Zealand plant section. They have had a female curator for the last 25 years after being exclusively led by men for over 300 years. It has a huge variety of plants in quite a small area and was evidently one of the late Queen’s favourite gardens to visit in London.

My visit to the Lost Gardens of Heligan in Cornwall was very exciting. I loved its history, including a shed called the Thunderbox which was the “smoko” room for the original gardeners before the First World War. Fourteen of them signed their names on a clay wall which although faded can still be seen. Sadly, only four survived the war and came back. The head gardener Chris showed me around. They are very focused on trying more of our native plants as the climate is changing so much. It was great to see their heritage plants and seed-saving programme, their espaliers, the cold houses for new plants, and the



Victorian pineapple pit growing perfect pineapples. It was a great experience to see their traditional practices, although they are starting to have to change some such as double digging as it is very labour intensive and there are newer ways now to get the same results with less labour.

Julie Kendall was my host at the Eden Project in Cornwall which aims to become totally self-sufficient. They have a huge glasshouse growing tomatoes, herbs, salad greens and going into lots more crops to supply the cafes and restaurants, a recycling centre in which all food scraps and rubbish which are made into compost, and they have just had geothermal gas connected to run the glass houses. The biodomes are incredible! The temperature of one is kept to that of the Amazon rain forests, providing options for crops from coffee to sugarcane and

more. The Mediterranean biodome was beautiful, full of bougainvillea in many colours, grapevines, lots of sculptures, bright flowers and a 500-year-old olive tree. Outside I loved the prairie area where they burn off the vegetation once a year and it regrows to become a beautiful field full of golden flowers and lots of insects. The food gardens were great with areas representing eastern Europe, Africa, the Caribbean and the United Kingdom. They grow great bananas as it is generally warmer in Cornwall than in the rest of England although this last summer was very wet and cooler. The nut orchard was different, being an old clay pit transformed by bringing in all the soil and worms to start the garden. On a quiet day there are 2000 visitors to the Eden Project, on a busy day 6000. Even if you are not a plant enthusiast, there is something for all ages and interests.

Espalier at Heligan



The Royal Botanic Garden Edinburgh sits in the heart of the city. It is a lovely garden, well-established old trees, a modern visitors centre and a science centre. I worked as a volunteer in the Demonstration Garden which attracts many tourists and locals. I did community cooking classes, meet the gardener sessions, and spent time with Ben the kitchen gardener who grows the food for the café and restaurant. There was a harvest festival while I was there with huge displays of produce and flowers from the garden, soup tastings, and activities like making a potted pea plant. My highlight was making a lovely floating bowl of edible flowers for the harvest festival display. They are not doing very much with edible flowers there so it was great to show them some that you can use and taste. I loved walking to work

through the garden each morning with squirrels running around.

It was early autumn so the trees and temperatures were just starting to change. Seeing the threatened Scottish plants garden reminded me that each country has threatened plants they want to preserve. I really enjoyed the Garden to Table concept with produce from the edible garden going to the café, the best example on my trip. I really felt part of the team. Volunteering is definitely what you make of it and my experience was one of the best things I have done. I look forward to implementing my new ideas and knowledge at the Gardens and wish to thank the Friends for making this wonderful experience possible.

Angela Anstis



# No longer the rarest plant in the world

The Botanic Gardens has a keen interest in the conservation of rare and endangered New Zealand plants. Its collections include many that are endemic to the Three Kings, a group of islands at the north of New Zealand.

The islands were so named (*Drie Koningen Eyland*) by Abel Tasman who passed by on 6 January 1643, the feast day of Epiphany, of the three biblical Kings. Melchior is commemorated by *Macropiper melchior*, endemic to the Three Kings, Caspar was by *Cordyline kaspar*, also on the Three Kings, but this is now treated as a synonym of *C. obtecta* also found on Norfolk Island. Balthazar has missed out.

Great Island (Manawatāwhi), the largest of the islands, was largely cleared by Māori settlers. Much more damage was done by goats which had been released to provide food for shipwreck victims. The goats were eradicated in 1946 but by then most of the island was either grassland or kānuka scrub with only a few remnant other plants. This was concerning as there were many endemic species on the islands since they are separated from the mainland by a deep submarine trench. Geoff Baylis (later professor of botany at Otago University) was part of an expedition arranged by the Auckland Institute and Museum in 1945. He found two plants endemic to Great Island which had been reduced to a single specimen, in sites "even for goats a bit inaccessible". A severe storm or a landslide could easily have resulted in the loss of these last plants.

The vine *Tecomanthe speciosa* (akapukaea) has since been reproduced by cuttings but there is still only a single plant on Great Island. No seed have been set on the island, but seed have been produced on the mainland and plants are readily available from nurseries.

The other was *Pennantia (Plectomirtha) baylisiana* (kaikōmako manawa tāwhi). Baylis found this on the northern face of Great Island down a scree slope of boulders more than 200 m above sea level. This proved much more difficult to propagate by cuttings as hardwood cuttings took up to ten months to root. Most early attempts were unsuccessful until Baylis followed the advice of George Smith, the then chief propagator at Duncan & Davies, New Plymouth. Professor Baylis told me how, with great trepidation, he cut back one of the four trunks of the last plant on Great Island. The resultant vigorous new shoots provided good propagation material. One of the resultant plants ended up at the Mt Albert Department of Scientific and Industrial Research campus.

Another problem was that *P. baylisiana* is dioecious (i.e., with plants carrying female flowers and plants with male flowers) and the original plant and all the plants vegetatively propagated from it were female. There was a single female and sadly no males. Hence *P. baylisiana* was once labelled by the *Guinness Book of Records* as the rarest plant in the world. An article by Robyn Simcock and Jessica Beever in *Trilepidea* (Newsletter of the New Zealand Plant Conservation



Network) describes the success of Jessica's late husband, Ross Beever, in propagating *P. baylisiana* sexually by producing seed. Ross, then a member of Plant Diseases Division, DSIR, noted that the plant at Mt Albert had flowers each year and set young fruit which failed before reaching maturity. In 1983, he self-pollinated flowers and then sprayed the inflorescences with the plant hormone auxin. Fruit were retained and three of the seedlings raised from the seed produced were given to Geoff Davison of Oratia Native Plant Nurseries. One of the two seedlings successfully raised, nicknamed "Martha", produced large quantities of seed without application of hormone. Hundreds of seedlings have since been produced. All so far have proved to be female so although *P. baylisiana* can no longer be considered as the rarest plant in the world, the females could claim to be the loneliest.

It seems that dioecy in *P. baylisianna* is not absolute. The female flowers may appear hermaphrodite but the anthers are deformed and although the pollen

grains can contain living cytoplasm, the apertures or pollen pores in the thick walls are blocked. Hence the pollen usually cannot germinate. However, it appears that a few of the pollen grains produced by the female plants are effective, presumably because their pollen pores are not blocked. In 1989 the sole wild tree of *P. baylisiana* was recorded for the first time as producing fruit but very few of the seed proved to be viable. It is likely that in "Martha", a higher percentage of the pollen grains have functional apertures. "Martha" and Ross Beever can therefore be thought of as the "saviours" of the species.

Five plants of *P. baylisiana* are at the Botanic Gardens, three along the NZ Native Id Trail and two in the Palm Garden. Pollen from the mainland *P. corymbosa* can set seed of *P. baylisiana* but these seed are, of course, hybrid, and should not be used for propagation.

I thank Jessica Beever for helpful comments.

Ross Ferguson

Ross Beever and *Pennantia baylisiana* on Great Island: the original sole plant.





The leaves of *Pennantia baylisiana*. Baylis (1977) concluded that the differences in the leaves were sufficient to separate *P. baylisiana* from *P. corymbosa*, common on the mainland. This has since been confirmed by molecular studies.

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Further reading:

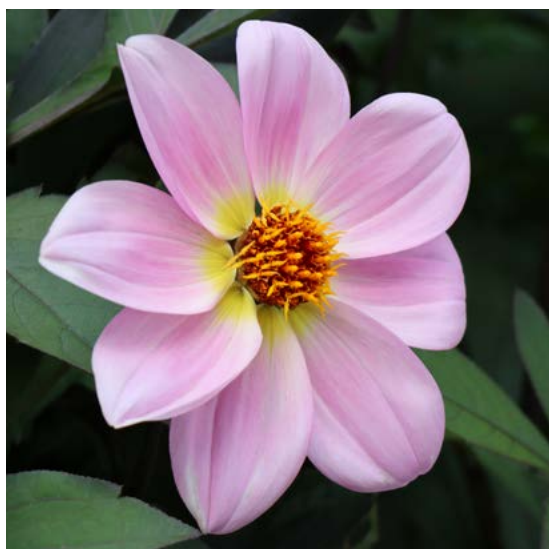
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Clockwise  
from top left:  
Blueberries,  
Jack Hobbs' seedling from  
*Dahlia* 'Bonne Esperance',  
*Chrysanthemum* Pompon  
'Purple Muriel',  
Jack Hobbs' seedling *Dahlia*,  
*Entoloma hochstetteri*:  
watercolour by  
Marie Taylor ©





*Metrosideros excelsa* 'Manukau' selected by the late Phil Jew.



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