Friends of the Christchurch Botanic Gardens

No 125: Spring 2021

Newsletter

PRESIDENTS REPORT SPRING 2021

1: Friends new president Jane Cowan-Harris

I'm somewhat filled with trepidation as I step into the enormous shoes that Jeanette Christensen has left but am very relieved that she is still close at hand to give me some guidance over my first year in office.

I thought I'd give you some background of how I ended up in this position! I joined the Friends in mid 2019, six months before retiring from a lifetime career as an occupational therapist, with the last 24 years of that being in workplace ergonomics and injury prevention and management. Part of my entry into the Friends was to be able to train as a Guide in the Gardens, which has been a wonderful journey of discovering so much about the Gardens that I had never known, even though I've been a frequent visitor over the years! After retiring I also took on volunteering in the Gardens one half day a week, a pleasure on flat land, as we live on a steep hill! You learn so much from the gardeners themselves too. Gardening is definitely in the family genes, and I know for many people during lockdown, myself included, that getting out into the garden was a real sanity saver.

You'll have seen, now that the Gardens are open again, that our plant stand is once more being filled on a regular basis with a host of wonderful plants. We made the difficult decision to increase the price of shrubs and trees to $7 as they take a long time to get to that stage for sale. Smaller perennials remain at $5 so this is still great value. Payment for these plants by eftpos will once more be available all week once the Kiosk is fully open from the 4th of October. As the plant stand sales have been so successful, we have decided to not hold a larger plant sale this spring.

Veronica lavaudiana
Sun Hebe
Endemic to Banks Peninsula
Christchurch

The free guided walks will be starting again from the 4th of October, leaving from outside the Kiosk at 1.30pm every day. The list of walks is available on our Friends of the Gardens website.

We have had to postpone the talk on the Art of Beekeeping due to Covid restrictions, but this has been booked in again for February. The next talk is on the Ng King Brothers Market Garden Settlement, with Dame Anna Crighton talking about this heritage site.

There are about 15 volunteers in the Gardens each week, so if you are interested in becoming a volunteer, just get in touch and we can see where best to fit you in. Mona Vale, which is managed as part of the Botanic Gardens, is also keen to have volunteers and a committee is working with the staff there to implement this. If you are interested, contact jeanette.christensen44@gmail.com.

Our current membership stands at 196, but we are always happy to hear from more people, and particularly to encourage those people who may live more centrally in town, without any garden, to come and be more of a part of the Botanic Gardens. If you know anyone in this situation, let them know about the Friends and send them to the website https://friendschchbotanicgardens.org.nz .

This is a beautiful time of year to take a walk through, so make sure you take the time and enjoy the stunning flowers, trees and bulbs which are currently in blossom.

Jane Cowan-Harris

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2: Chattem Island forget me not, (*Myosotidium hortensia*) flowering by the Armagh St entrance. Photo by Annette Burnett.

EDITOR'S NOTE

In looking for a good spring quote I came across this from renowned environmentalist and writer Rachel Carson:

"There is something infinitely healing in the repeated refrains of nature – the assurance that dawn comes after night and spring after winter."

I couldn't pinpoint with certainty if the quote came from her game changing book 'Silent Spring' or another book of hers called 'A sense of wonder'.

Either way it made me pull down the half read 'Silent Spring' from off my bookshelf and set the other — 'Silent Wonder' on my to read list!

We have quite a smorgasbord of articles in this spring edition of the Friends newsletter.

Jane Cowan-Harris writes her first report as the Friends' new president. I am sure that we are looking forward to a fun and productive time with Jane at the helm!

Wolfgang highlights developments in the Botanic Gardens including the restorative work on the historic magnetic observatory; and the modernising of the weather station equipment.

Vicki tells how new developments for the propagating team are increasing the quality and quantity of plants being sold by the Friends.

Pamela gives us some insight into the world of plant collecting in her article 'Do the plants we save have the power to save us?'.

An excellent article from Marcela zooms in on the enigmatic world of ferns, and showcases some specimens in the Botanic Gardens' conservatories.

Alan Jolliffe recounts his time as a resident of the historic Curator's House.

Our relationship with the Canterbury Horticultural Society continues to grow and we have included their latest News and Events letter for your interest. Note that Friends get CHS members' rates for their courses etc.

Annette Burnett.

DEVELOPMENTS IN THE CHRISTCHURCH BOTANIC GARDENS IN RECENT MONTHS

Kia ora to this latest Spring in the Botanic Gardens.

Welcome to this latest newsletter. In a week where the rain god was ever-present, it is so nice to see the sun warm us as we enjoy a walk in the Gardens.

The Gardens are resplendent with spring colour, most of the flowering cherries are nearing their end of flowering. The early magnolias were wonderfully packed with flowers. The rhododendrons and azaleas and many other late spring flowering plants are still providing spectacular colour. The new magnolias alongside the river by the Armagh carpark have delighted with their colourful displays in just their second season in that position. You can watch them year by year get bigger and have many more flowers, like our mature trees in other parts of the Botanic Gardens.

You will notice that more of the larger trees have been mulched and nicely edged. Visually it gives a much-improved presentation and allows easier mowing access. For the trees, it means they become less stressed and should live for longer, as they have less competition around the roots, the ground stays cooler and the organic material, as it breaks down, feeds the soil, the roots and the soil fauna. Remember that many trees naturally grown in woodlands or clumps of trees and shrubs where the annual dropping of foliage, smaller branches and other organic material is not tidied away but allowed to break down and support the current and future growth. The mulch is helping us do that.

The Magnetic Observatory Workshop is now open for the public to inspect and enjoy. The display, both inside and outside, has much information and brings the rich history of the site to attention.

It was opened in 1901 and used for magnetic, atmospheric, gravitational, seismic and celestial studies. Captain Robert Falcon Scott used the base, as did Sir Ernest Shackleton, before heading to the Antarctic.

There is still some work to be done, the paving around the exterior is not yet completed, another exhibit is to come outside, a little more interpretation but already it is most impressive and warrants study. You will learn more about this project in a future newsletter. It is a great achievement by the team at the Gardens and the Botanic Gardens Trust, as well as the Friends and many others that have helped with donations and support. Thank you to all of you for making this possible.

3:Inside the magnetic Observatory Workshop

The weather/meteorological station is undergoing a major transformation by being automated. Taihoro Nukurangi, the National Institute of Water and Atmospheric Research (NIWA) is installing new recording devices, all of which are connected to an automatic “Data-Logger”.

4: Three rain gauges; the two traditional models at the front and and the new automatic one at the back

The station will no longer require daily manual readings and all data will be electronically conveyed to NIWA for more accurate readings and faster data transfer for the public and research purposes. The next phase of engagement will see the development of more interpretation, alongside a display in one of the Workshop windows.

5: The new Weather Station Data-Logger

The new Boardwalk at the edge of the native garden lake, is completed and proving very popular.

6: The new board walk in the native garden

Luke continues to plant and enhance the area. Now that the lake has been replenished and refilled it is quite a spectacular development to progress through; good wheelchair access too. Please do go and have a look.

7: *Geranium maderense* by the Kiosk

Have a look the next time you are near the Kiosk, where you will find this stunning *Geranium maderense* from the Atlantic Island of Madeira in full bloom. I never tire of enjoying its flowers but also the way it holds the plant — such a joy.

Enjoy your explorations. Thank you for your support and remember, we need more Friends so do spread the word amongst your personal friends about how they can help us by signing up.

Thank you

Ngā mihi
Wolfgang Bopp
Photographs by Graham Chick

New Propagation Benches

8: The new propagating benches

Ever since the first Lockdown ended, plants have been flying out the door at nurseries and garden centres around Aotearoa New Zealand. Our nursery is benefitting from this unprecedented demand. Luckily we had some additional space in the nursery and our team of trusty and skilled builders stepped in to build 18 new benches, which enable the Friends volunteers to increase production without too much bending. Working to a proven design by Alan Morgan, Neil Fleming, Derek Goring, Claire Mulcock and Alan completed the task with a production line that would have impressed Henry Ford.

Each 1.8 x 1.2 m bench can hold a maximum of 150 plants in 1 Litre pots, so the total increased standing-out area can hold 1500 new plants. In recent weeks sales have exceeded 200 plants per week. The newly established Wednesday group is producing large quantities of high-quality perennials, which are selling extremely well.

The display space in the plant stand has been doubled by using both tiers, with perennials on the top tier and exotic and native trees & shrubs on the bottom

If you haven't stopped by for a look recently, do visit. Sales can now be made by cash in the honesty box or by EFTPOS at the Kiosk, 7 days a week. Good-sized hydrangeas, sourced from the Botanic Gardens including lace caps, will be available soon.

Propagation Workshop

9: An informal propagation workshop for Friends nursery volunteers

As the number of volunteers in the Friends' nursery grows, it was decided to hold an informal propagation workshop for old & new volunteers. This was conducted by Carolyn Dixon, team leader of the Wednesday group and a very experienced professional propagator.

Carolyn showed us how to take softwood cuttings from perennials and how to trim plants to encourage bushier growth form. Carolyn doesn't use rooting hormone but discussed the use of "willow water" as a natural alternative. We were very interested in the "Chelsea chop" which can be used to encourage plants to flower at a specific time e.g, for a wedding. We can already see the results of Carolyn's attention to plant quality in the increased sales of perennials on the plant stall.

Vicki Steven

VOLUNTEER GUIDING

Do you have a passion for plants and for the special place that is our Botanic Gardens here in Christchurch?

Perhaps you, or someone you know, would like to become a Volunteer Guide?

We want to grow the number of active guides to fulfil our role as ambassadors for the Gardens and carry out free daily walks from October to end of April. We have a great team who enjoy working and learning together with regular upskilling and training.

Find out more from Friends of the Christchurch Botanic Gardens Guiding Coordinator Susan Lawrence on 021 120 6258, susan.l@xtra.co.nz.

DO THE PLANTS WE SAVE HAVE THE POWER TO SAVE US?

10: The Allan Herbarium Christchurch New Zealand. Photographed by Pamela Niskanen

For more than 500 years, people have carefully stored dead plants. A person, not a robot, had to snip off a piece of a plant, carry it back to town, dry it, then label it and put it on a sheet of paper.

11: Herbarium sample of *Leptocarpus simplex* from 1928 later identified as *Apodasmia similis* at the Allan Herbarium. Photo by Pamela Niskanen

Then another human had to come along and look at it, and agree on what it was, and put their initials on the label. Then the plant had to go in a folder and the folder would go onto a shelf in a cabinet, one of hundreds of cabinets in a climate-controlled room called a herbarium, one of thousands of herbariums in the world. Why on earth do we go to all this trouble? All that labour, all that real estate, for dead plants?

Half a millennium ago, collecting would have been simple. Doctors and healers were very interested in plants for their medicinal properties, and often kept a garden with their favourite curatives. All they had to do was step outside the door, snip off a branch, dry it out and attach a label to it with the name. If they kept the plants in a dry place away from bugs, the specimens could last a lifetime, and anyone who visited the doctor could look at the plant and know how to find one like it.

If you want to collect today, collecting is more of a "clear your calendar, gear up and strap on the GoPro™" mission. First, all the abundant plants in your area are probably already represented in the nearest herbarium, and more duplicates aren't needed. You must either look for uncollected plants or go to more inaccessible places. At

minimum, sturdy clothes and shoes, various clippers, a camera, a GPS, large and small plastic bags or envelopes and labels, a field press, food and water, dry socks and a reasonably large pack are needed. You must never take plant material before asking permission of the landowner and/or the local indigenous body, and always of the plant itself. Whole plants must not be taken unless there is a sustainable community of them. Tools must be wiped with alcohol before cutting another plant. In addition to the precise location coordinates, environmental data must be recorded, to note the terrain, the weather, what types of other plants are nearby.

If your trip lasts longer than a day, a field press is required so the specimen doesn't disintegrate before you get back. The field press is several layers of cardboard and newsprint, sandwiched between frames of wood which are screwed together to flatten the specimen. You carry the largest one you can carry. Back at base, the identity of the specimen can be confirmed, and it can be properly mounted on a herbarium sheet, formally labelled and put in a drying room and/or a freezing room. Then it gets reviewed by someone else with plant smarts, to confirm its identity, then it finally gets stored and, and if you are the first to find it, it is recorded as a "type", meaning your specimen is representative of the species.

That is not by any means the end of the story. A century from now, the species you collected may have gone extinct. A climate ecologist might use your specimen as proof that the plant existed in your area as late as that date. If your specimen is very rare, it will be viewed many times by other researchers who are trying to match their collections with your type, to confirm the species. If one day scientists decide that your species properly belongs to a different group, or "genera", your specimen and all the other copies of it will have to be relabeled (by humans) and trundled (by humans) to a different shelf in a different cabinet.

These days, of course, herbarium specimens are good for so much more than just looking at. Tiny snippets can be removed from the types to perform DNA analysis on. Doing this might confirm the species, or it might confound it – what you thought was a *Coprosma repens* may turn out to be a *Coprosma baueri*. DNA analysis brings us a clearer picture of how certain plants are related, so we can build a phylogeny, a sort of plant family tree or map. If the turmeric plant *Curcuma longa* ever goes extinct, we will lose a nutrient which can be beneficial against numerous conditions including inflammation and cancer. Mapping the family tree of turmeric could help us find a near relative with similar chemical compounds.

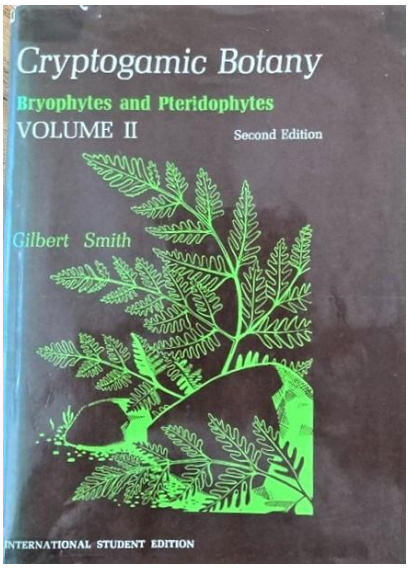
Think of the incredible technological advances we have made to understand natural specimens: high power microscopes, x-ray imaging, chemical analyses, machine learning and DNA analysis. Despite this, no technology known to man can replace the value of having a real physical specimen of a plant to study the morphology – the physical properties of the plant. As long as we have human senses, we must have herbariums, so that we can look at and potentially feel, smell, taste or even hear what a plant is like.

Finally, every one of the hundreds of thousands of plant specimens has the potential to invoke memories and emotions, nostalgia, shame, faith, awe or respect.

The plant is dead. Long live the plant.

Pamela Niskanen

A CRYPTIC GROUP OF PLANTS



12: Cryptogamic Botany Volume 2

Cryptic refers to something hidden or obscure. Around the Middle Ages, that was the nature of ferns and their means of reproduction. With no visible flowers or seeds, much was speculated about the ways in which ferns produced offspring. Ferns, along with lichen, fungi and others were grouped together and aptly named *Cryptogams*. In recent times, however, and thanks to the power of magnification, we can much better observe and study this unassuming group of plants and the intricate structures involved in their survival.

These days, ferns (along with horsetails and club mosses) are collectively known as *Pterydophytes*. Read along as we place some of the ferns housed in the Conservatories under a magnifying lens, and set off to learn some more about them.

A King Fern in Decline

***Ptisana salicina* -**

King fern is, without doubt, a fitting name for this outstanding New Zealand native fern. Its lustrous green fronds can reach up to five metres in length and two metres in width. Its rhizome was once a traditional food for the Māori people, who through soaking, steaming, roasting and pounding removed toxic compounds and made it fit for consumption. We are very fortunate to have an excellent specimen at the Fernery as, according to a conservation assessment published in 2017, it is becoming relatively rare in the wild. Feral pigs and cattle are the main threat, while plant collectors are also to blame for its decline.


13: Uncoiled frond of *P salicina* (Botanic Gardens Fern House)


14: *P Salicina* specimen (Botanic Gardens Fern House)

But there is more to *P. salicina* than meets the eye. This fern provides a great opportunity to explore the structures where spores develop (known as sporangia). The family Maratiaceae to which the genus *Ptisana* belongs is unique in that the sporangia have fused to form a structure resembling a barley grain (synangia). Upon close observation, the underside of fertile young fronds reveals immature synangia. Each of these 'barley grain' look-alikes houses between 1000 to 7000 developing spores. Older fertile fronds, on the other hand, show synangia with visible slits that have opened to release spores in their thousands.


15: Developing synangia of *P salicina* (Botanic Gardens Fern House)


16: Mature synangia of *P salicina* after releasing spores (Botanic Gardens Fern House)

Staghorn Fern
Platycerium superbum

Elkhorn Fern
Platycerium bifurcatum

Moving over to our neighbours across the Tasman, we find a most remarkable fern: *Platycerium superbum.* Native to lowland rainforests in Queensland and Northern New South Wales, this fern is widely cultivated and rightly so, as mature specimens are very ornamental. *P. superbum* usually grows on trees but occasionally on rocks. What I find interesting about this fern is how unlike ferns its overall look is. Two types of fronds are present in the genus *Platycerium*. The sterile frond at the base of the plant which anchors it to its support. Often known as 'nest' or 'basket' leaves, they overlap to form a trap for dead insects and leaf litter that nourish the plant as they break down. The second type is a spore-bearing (fertile), antler-shaped frond. White felty scurf sometimes gives the fronds a silvery green appearance while an attractive reticulate pattern of venation provides additional interest.

17: *P superbum* displaying felty surface (Botanic Gardens Gilpin House)

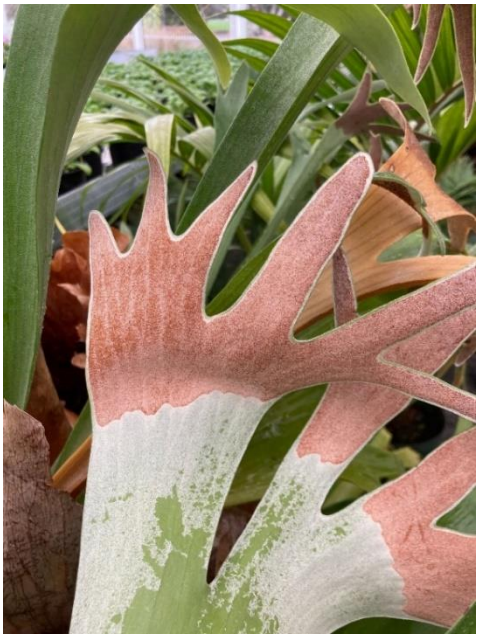
18: Reticulate venation of *P superbum* (Gilpin House)

A very popular and relatively easy to care for relative of *P. suberbum* is *P. bifurcatum*, also known as the common Staghorn fern. Belonging to the same genus, both ferns have separate sterile and fertile fronds, however they do develop in a rather different manner.

P. superbum's striking nest (sterile) frond can reach up to a meter wide at maturity. In contrast the sterile frond of *P. bifurcatum* takes the form of a shield and although it is smaller in comparison to *P. superbum'*s nest frond, it makes up for it with numbers. Developing numerous shield fronds side to side with its corresponding antlers. When it comes to fertile fronds, *P. superbum* has longer fronds again, and they tend to be broader and multi branching in habit.

In contrast to *Ptisana, Platycerium* has a very different arrangement of sori (clusters of sporangia). Dense patches can be seen in the undersides of mature fertile fronds, concentrated at the tips.

Figure 19: *P bifurcatum* seen from below, note shield shaped sterile fronds with its corresponding fertile fronds (Gilpin House)



20: Fertile frond of *P bifurcatum* (Botanic Gardens Nursery)

Figure 21: Close up of fertile frond of *P bifurcatum* (Botanic Gardens Nursery)

Lessons From a Felled Silver Fern; *Cyathea dealbata*

Figure 22: Cross section of *C dealbata* (removed from the Fern House)

It is rather by chance that around the time of the writing of this article, a large specimen of *Cyathea dealbata, a few* decades old, was removed from the Fernery due to its height. While I was not involved in the task, I did manage to snap a photo of the departed specimen before it went. I trust that the reader might find this image as striking as I did. It certainly made me curious about the inner workings of a tree fern.

Although *C. dealbata* is known as one of our native 'tree ferns', its way of supporting itself doesn't involve woody tissues like in actual trees. In fact, what we might think of as the trunk or stem is actually a modified upright rhizome. This might be a somewhat simplified explanation, but instead of wood the 'trunk-like' rhizome is covered in a mantle of tiny interlocking roots which give it strength. The photo shows a cross-section of the stem about 1m off the ground. The darker, outermost ring is precisely this mantle of roots. As to the quirky ring of strands in the brighter coloured inner circle, these are the tissues responsible for water and food transport, the gaps between them corresponding to individual fronds.

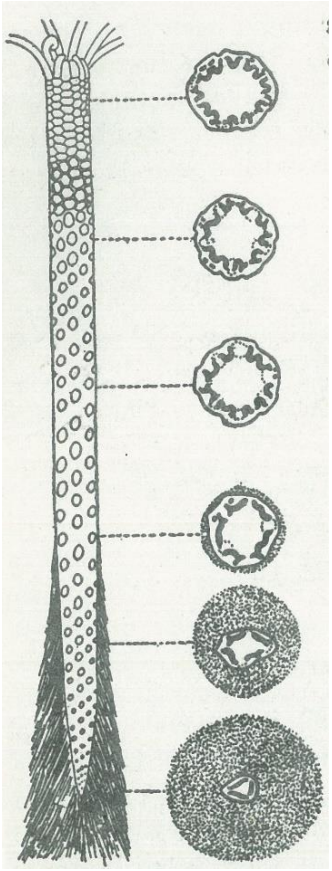


Figure 23: Diagram of *Cyathea sp* stem showing vascular organisation at different levels (Smith 1955)

Pteris cretica and *Pteris vittate* — hope for the remediation of contaminated soils

So far we have looked at the ornamental qualities of some of the ferns at the conservatories as well as some of their inner workings. For this last species, I want to highlight that even humble ferns such as these two do have a pivotal role to play when it comes to current environmental challenges. *P. vittata* and *P. cretica* are exotic ferns that appear to have naturalised in New Zealand. While at times these species might appear where unwanted, they do have a remarkable ability to transport heavy metals such as arsenic from contaminated soils through their roots and to their fronds, where they accumulate at very high levels. Plants with this ability are known as Hyperaccumulators.

The fact that these types of plants can accumulate amounts of heavy metals 100 to 1000-fold higher than non-hyperaccumulators and not suffer toxicity is an extraordinary adaptation to the presence of these substances in their environment. This adaptation can be utilized as a cost effective, environmentally beneficial strategy for soil decontamination. Perhaps much more is yet to be known about the ways in which plants in general can support the restoration of our environment.

24: Cultivated variety of *P cretica* (Botanic Gardens Nursery)

I hope this short account serves as an invitation to not discount ferns as lesser when compared to their showy, brightly coloured, flowering counterparts. This group of plants are as interesting as they are beautiful if we dare to look closely and dig a bit deeper. What's more, they might even serve as solutions to some of our most pressing environmental challenges.

Marcela Moreno

Parks and Gardens Maintenance Officer (Conservatories)

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8. diagram taken from Smith, 1955 page 340.

All photos are my own.

THE BOTANIC GARDENS CURATOR'S HOUSE

Figure 25: The Curator's House, Christchurch Botanic Gardens (Photo by Annette Burnett)

Fond memories of this house give me a strong personal interest in the current developments and the future projects that will expand the work of the Botanic Gardens with a home demonstration garden, and add a fine restaurant as an added, and welcome bonus.

In 1971 I joined the Christchurch City Council, Parks and Recreation Department, as a transfer apprentice. I had previously worked for two years for the Oamaru Borough Council Reserves Department. I recall vividly coming to Christchurch at Labour Weekend and going with some trepidation, but confidence, to see (the late) Mr Huia Gilpin who was the then Director of Parks and Recreation to ask him if he would accept me on transfer. He agreed and we decided I should start in the New Year. Lo and behold one week later I had to tell him that I had been caught up in the Compulsory Military Training Scheme and would be in the army for three months. We agreed that I could start at Easter.

The apprentices had a "club" which organised weekend field trips to the mountains, reserves or other remote places to go on seed collecting or plant identification trips.

Mr Gilpin took an interest in this group and invited us to his house - The Curator's House – to discuss ideas. My first visit to this house I can still recall as awesome. There were bookshelves filled with many horticultural and gardening books, a large open fire burning and Huia (Mr Gilpin) presiding. Mr Gilpin's wife (the late) Florence provided some sustenance for us young and hungry people.

Over the next few years, I often visited the Curator's House on errands for Mr Gilpin or Mr Laurie Metcalf (Assistant Director Botanic Gardens). These short visits gave me glimpses of this magnificent house.

Then in 1976 Laurie Metcalf resigned to become Director of Parks and Reserves in Invercargill. I was fortunate to be appointed Curator of the Botanic Gardens and developed a closer working relationship with Mr Gilpin.

Shortly afterwards Mr & Mrs Gilpin decided to move to their own home in Styx in preparation for his retirement. As Curator, my wife Robyn and I were offered the Curator's House. We were living

in Rangiora then so it was going to be quite a change moving into the big smoke, but it was close to work!!

We moved in in 1978 and we were able to have redecorating completed to our own taste. (It was the 1970's). There was wallpaper to choose to provide extra colour and life into what was a famous home.

Living there was interesting. With the stone exteriors the downstairs was cool in summer — and unfortunately cold in winter. Many a roaring fire in the living room was fuelled by a selection of firewood from the dead trees of the Gardens and Hagley Park. The best were the roaring fires of Maritime Pine.

During the week we would both go to work and come home to a quiet cosy house. Weekends, however, were quite different. Every morning we would hear Bob Marks or one of the other staff drive up and unlock the gates just on dawn. Soon after, many of the Botanic Gardens visitors would be crunching along the wide gravel walkways in front of the house.

Many would stop and stare at the house — probably wishing they could live there too. It was surprising the number of people who climbed over the low hedge, walked across the display garden and had a look in the window. Others stood and had their photos taken.

The section at the back of the house went right down to the Avon River not too far from the Antigua Boat Sheds. All weekend those boats went up and down the river accompanied by all the usual screams, shouts and goings on. After a while you get used to all this.

In 1979/80 we went to the USA where I studied and when we came back we had two months to fix up the house for the arrival of another family member. Our son Evan had the smallest of the upstairs bedrooms, we had the main bedroom and the third bedroom was large enough to be a dormitory for a large family.

We thoroughly enjoyed living in the Curator's House and were sad to leave it in 1982 when we moved to Nelson where I was appointed Superintendent of Parks and Recreation.

Alan Jolliffe

A NOT SO WELCOME BUG
***Harmonia axyridis* Larva**

Wandering the Gardens on a sunny afternoon last May, I came across this interesting beetle, resting on a poplar tree, between Lake Albert and Park Terrace.

I was able to identify it as *Harmonia axyridis*, using the iNaturalist app.

Apparently, it is a bit of a pest, having arrived in New Zealand in 2016 and having spread since. The adult form is a type of ladybird, but not a welcome one.

If you are interested, the Landcare Research web site has more information.

https://nzacfactsheets.landcareresearch.co.nz/factsheet/InterestingInsects/Harlequin-ladybird---Harmonia-axyridis.html

Annette Burnett

26: *Harmonia axyridis* larva

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GROWING HYDROPONICALLY

THURSDAY 25 NOVEMBER 7 -8.30PM

HydroGarden

$5
$10 Non-Members

An informative talk on home hydroponics with Kane McNeill

BOOK ONLINE
www.chsgardens.co.nz

The Kiosk
Canterbury Horticultural Society

Kane McNeill grew up around hydroponics and began working in the family business when he was still at school. His passion has grown with him and to this day he loves problem solving different hydroponics issues, from water quality to a whole host of other environmental factors.

His talk will be followed by a Q & A session and is a great opportunity to learn more before investing in your own system.

Coming up at The Kiosk this November and December

Macramé Plant Hanger Workshop

Thu 4 November *6.30pm - 9pm*
Beginner class. Take home two plant hangers for trailing plants.
$40 Members/Friends

Macramé Wall Hanging Plant Holder Workshop

Thu 18 November *6.30pm - 9pm*
Intermediate class. Create a wall hanging plant holder.
$34 Members/Friends

Horticulture at Home

Tuesday evenings in November
Grow your garden confidence in our HortSkills intro course. Six sessions to kick start your passion for horticulture!
$160 Members/Friends

Christmas is coming!

Kokedama | Terrariums
Living Wreaths
Embrace the spirit of Christmas in these soon to be announced Christmas workshops. Bring a friend and send off 2021 in style.

Keep up to date with all our great courses, workshops and events

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