

Flourish

Supporter News Summer 2021

ISSUE 10

A gallery in the Gardens

Nurtured by Nature

Recycled Water Treatment

Finicky Fungi



Royal
Botanic
Gardens
Victoria



One staff member's passion for the birdlife

David-John Jenkins, proud Kalkadoon man, Horticulturist (Melbourne Gardens) and curator of the Long Island Collection describes his work as "bringing him back to Country". Country is not just a word to DJ, as he is known. "It is a value, space, time and culture and it includes great interest in and care for all the plants, birds and animals," he says.

DJ, with support from Therese Turner and Terry Smyth, recently planted 162

new lower Yarra River habitat plants into a section of Long Island to regenerate the landscape there. Michael Hall helped with the rock work and Andrew Laidlaw gave his tick of approval to DJ's design.

When he's not planting, he takes the most extraordinary photos of the Gardens' birdlife and he was delighted to see that the resident swans produced several cygnets this spring.

We think DJ could become a wildlife photographer if he decides to hang up his spades and secateurs!

ABOVE

Resident swan on Ornamental Lake. Photo by David-John Jenkins.

BELOW

David-John Jenkins surveying the newly planted section of Long Island and a close up of *Desert Flame*, *Chrysocephalum apiculatum*, freshly planted on Long Island.

Welcome to the Summer issue of Flourish

Summer is here and with it more opportunities to enjoy the beauty of nature, both online and in person.

In Melbourne Gardens, our resident swan family has successfully hatched a new generation of cygnets, who are flourishing on the Ornamental Lake. While over at Cranbourne, young swamp wallabies have been spotted taking their first hops away from the safety of Mum's pouch.

Last month marked our first ever online launch event, when Her Excellency, the Honourable Linda Dessau AC, Governor of Victoria officially launched our new book *WONDER: 175 Years of Royal Botanic Gardens Victoria*. It was excellent to hear the Governor's happy memories of the Gardens at this well attended event.

"...young swamp wallabies have been spotted taking their first hops away from the safety of Mum's pouch."

In this issue you can read more about our new programming, which has been developed to engage the senses in new and interesting ways, while being very COVIDSafe. We also share how we were able to deliver several new education programs to support disadvantaged students, as well as some exciting, new research into fungi.

Fairly soon you will see new perimeter fencing installed at Melbourne Gardens, thanks to a recent grant from the State Government for critical infrastructure and maintenance projects. We will increase the height and use like for like materials to restore this historic infrastructure for better safety and security of our living collections and visitors.

The ongoing work to maintain the heritage features of The Great Melbourne Telescope House have also been able to progress. Early next year, the bluestone pillars will be replaced, thanks to recent Federal Government funding.

Take care and see you in the Gardens.



A handwritten signature in black ink, appearing to read 'Tim Entwisle'.

Professor Tim Entwisle
Director and Chief Executive

COVER

Steve Parker, Aboriginal and Torres Strait Islander Learning Facilitator, Cranbourne Gardens, with school students.



Engaging the senses

Combining nature and tech
for cultural effect

We may have missed out on visits to art galleries and the theatre during COVID-19, but the Gardens have adapted by using new technology-based programs to deliver cultural activities in which you can safely participate: *Seeing the Invisible*, *Sonica Botanica* and *Flora and the Baron*.

Seeing the Invisible is a free, augmented-reality, contemporary art exhibition, showing across 12 botanic gardens in six countries, including at our Melbourne and Cranbourne sites, until 30 September 2022. It is the first exhibition of its kind to be developed as an international collaboration among botanic gardens.

The exhibition features virtual works by established and emerging artists, including Ai Weiwei, Refik Anadol, Sarah Meyohas, Australia's Mel O'Callaghan and many more. They are accessible via a smartphone and tablet through the *Seeing the Invisible* app, in the App Store and Google Play. Thank you to our Official Partner, SpecSavers, and some very special donors, for allowing us to see the invisible!

Sonica Botanica – Stories and Sounds from the Gardens is an audio experience created by Melbourne sound artist Patrick Cronin, which provides an opportunity to immerse yourself in intertwining stories and interviews, atmospheric music and mesmerising sounds of the natural environment. Each episode is available by scanning the QR code in the Gardens or via the website. Episode One is set in the newly designed Arid Garden, while Episode Two is inspired by Oak Lawn. The remaining two episodes will be released in the coming months as part of the Gardens' 175th program.



Flora and the Baron is a narrative audio journey that takes you on a walking tour of the Gardens, in the company of the Gardens' first director, Baron Ferdinand von Mueller.

This work allows us to imagine what it would be like if we re-entered the Gardens in his company, reveling in his scientific legacy and the plants in the Gardens today. The Baron's humour, warmth and eccentric charm is entertaining, and the piece also explores the history of the Gardens. Scan the QR code at Gate F to access the recording and begin the tour.

LEFT

Artist credit: Ori Gersht, *Forget Me Not*, 2021, Royal Botanic Gardens Melbourne. Courtesy of the artist.

ABOVE

Image: Artist credit: Sarah Meyohas, *Dawn Chorus*, 2021, Royal Botanic Gardens Melbourne. Courtesy of the artist.



Excursions for all

Help us provide opportunities to some of Victoria's most disadvantaged students

ABOVE

A group of school students gather on Oak Lawn at Melbourne Gardens for an excursion.



Research demonstrates that engagement with nature in cities provides opportunities for creativity, exploration and risk taking. For young people, these activities enhance beneficial emotional states, reinforce a sense of self and strengthen psychological resilience, which, in turn, have positive effects on cognitive development. It also contributes to the creation of the next generation of warriors for nature!

There are a variety of financial, social, and geographical reasons why many students across Victoria lack the opportunity to visit a botanic garden or regularly access natural outdoor environments for learning or leisure. We aim to reduce those barriers by connecting as many Victorian students as possible with these opportunities through our *Nurtured by Nature Access Program*. Our priority schools include regional schools, those with high Aboriginal and Torres Strait Islander student enrolments, specialist schools and socio-educationally disadvantaged schools. As part of the *Nurtured by Nature Access Program* Royal Botanic Gardens Victoria educators also offer on-site guidance and resources to regional botanic gardens.

Within the *Nurtured by Nature Access Program*, we are proud to offer *Excursions for All*, which is designed to assist disadvantaged schools to

ABOVE

Emily Barrow, Senior Learning Facilitator, leads a group of students on their excursion.



undertake an excursion to the Gardens to support a related unit of work. Schools can choose from our comprehensive list of curriculum-based programs, including Aboriginal History and Culture, Health and Wellbeing and STEM (Science) focused programs. The program covers subsidised travel costs to either Melbourne or Cranbourne Gardens, a free of charge curriculum-based learning program, a range of digital resources to complement classroom learning and an optional in-person or online follow-up session at school.

“I learnt all about the biomimicry world, you made it entertaining... You’ve made me think twice about my dream career.”
– Student feedback

Excursions for All was generously seed funded by wonderful donors but requires your support to ensure our learning programs remain open to all in 2022. Please consider giving to our current appeal, via the tear away tab at the end of this publication, to help disadvantaged students from across Victoria gain access to the wonderful benefits of nature.

ABOVE

Students investigate plant matter under microscopes on their excursion.



Launching *WONDER: 175 Years of Royal Botanic Gardens Victoria*

We were delighted to finally be able to launch (virtually) our new book, *WONDER: 175 Years of Royal Botanic Gardens Victoria*. The event was hosted by TV identity Catriona Rowntree with Her Excellency, the Honourable Linda Dessau AC, Governor of Victoria, officially launching the book.

A donation of \$5,000 to the Gardens will secure your exclusive edition of this magnificent publication. Please contact the team on (03) 9252 2383 or development@rbg.vic.gov.au.

ABOVE

Peter Wilmoth and Sophie Cunningham, our *WONDER* authors.

The "Green Room" at our virtual launch with, clockwise from top, Maraika vanWessem, Communications and Media Advisor, Peter Wilmoth, *WONDER* Author, N'arweet Dr Carolyn Briggs AM, Yaluk-ut Weelam clan Elder, The Governor and Mr Howard, Catriona Rowntree, Chris Trotman, Chairperson, Leigh Henningham, *WONDER* photographer and Prof Tim Entwisle, Director and Chief Executive.

Supporter Spotlight: Meg Bentley

Book excerpt by Sophie Cunningham

Meg Bentley's love affair with Royal Botanic Gardens Melbourne has endured for more than half a century – ever since she and her husband, Garry, spent part of their honeymoon there. She is the author and illustrator of *A Manual for Salvia Growers*, writes a regular column "Notes from Gruyere" for *Salvia News* and is recognised nationally for her expertise in the field. Meg is also a volunteer horticulturist at the Gardens.

BELOW

Meg Bentley and Terry Smyth, Horticulturist, at the launch of the Sensory Garden.



Meg began to grow her fascinating salvia collection when she was just eighteen. It was an unconventional pastime for a teenager, but such was her interest in this genus of plants that she felt she wanted to learn more.

Now, several decades later, Meg has over 400 of the approximately 950 known species in her personal collection. She likes plants with herbal and medicinal properties, the curved shape and colours of the flowers, the beautiful fragrance.


Meg's contributions to Royal Botanic Gardens Melbourne have been substantial, sustained and devoted. Thirty years after her 1965 honeymoon, spent partly in the Gardens, Meg joined Terry Smyth, senior horticulturist and curator of the Gardens' Southern China Collection, along with other

horticulturists, for a month of plant collecting in China. A few years later, Terry injured her hand and Meg stepped in as a volunteer horticulturist.

Long before her trip to China, Meg began to donate to the Gardens from her extensive personal collection of salvias for both the Southern China Collection, as well as a recent donation for the Sensory Garden. But it's not just plants and her time that Meg donates. She is a significant benefactor to the Gardens, having funded the Horticultural Enrichment Scholarship Grant and many other projects over the years.

You can read more about Meg's deep connection to the Gardens in *WONDER: 175 Years of Royal Botanic Gardens Victoria*, available through the Gardens' shops and major booksellers.



A full-page photograph of a man with a mustache and brown hair, wearing a tan button-down shirt, a dark jacket, and tan trousers. He is leaning his right arm on a blue industrial machine in a workshop setting. The background shows more industrial equipment and a concrete floor.

Many of the plants in the Australian Garden are adapted to low nutrient soils and are particularly sensitive to high levels of salts and chemical elements.

Recycled water helps Cranbourne Gardens bloom

A new recycled water treatment plant and pipeline will save the equivalent of 12 Olympic sized swimming pools of potable water per year, providing a drought-proof, secure and protected water supply at Royal Botanic Gardens Cranbourne.

The completed works allow the Gardens to adopt sustainable water management practices to better respond to climate change related rainfall and temperature changes. This will benefit over 100,000 plants representing 1,900 different taxa in the Australian Garden, including over 400 rare or threatened taxa, many from the Victorian bushfire recovery program.

The new 1,040 metre pipeline delivers class A recycled grey water from the recycled water main from the Melbourne Water Eastern Treatment Plant, located in Bangholme. It has been treated to allow safe usage by consumers, including the Cranbourne Training Track (CTC), City of Casey recreation areas, golf courses, vegetable growers and 'purple pipe' domestic usage.

As many of the plants in the Australian Garden are adapted to low nutrient soils and are particularly sensitive to high levels of some salts and other chemical elements, including nitrogen, phosphorous and potassium, the water goes through a reverse osmosis filtration treatment in the new onsite water treatment plant to reduce these salts and nutrients to make it more suitable for the Australian native plants.

The project began delivering recycled water this spring to the award-winning Australian Garden. The \$3.25 million project was funded by the Victorian Government as part of the 2017 State Budget commitment to the Victorian Government's water plan. Water For Victoria includes actions to build resilient and liveable cities and towns by increasing the use of recycled water and stormwater to protect green public spaces and reduce pressure on our precious drinking water supplies.



LEFT AND ABOVE

Warren Warboys, Curator Horticulture and champion of the water treatment project, in the plant at Cranbourne Gardens.



Finicky Fungi

After discovering a large population of the threatened fungus commonly known as Tea-tree Fingers at French Island, the scientists at the National Herbarium of Victoria are working to create captive backup insurance populations for future repopulation needs, in case they are threatened by fire, climate or other factors.

"I've placed over one thousand bits of Tea-tree Fingers tissue onto agar. Still, we haven't had that eureka moment yet," says scientist Dr Sapphire McMullan-Fisher as she examines petri dishes filled with agar and fungi.

Growing Tea Tree Fingers in a controlled environment is tricky. It is a mycoparasite, which means it is a fungus that lives on top of another fungus. In growing a captive population, the host fungus must first be developed as a captive population itself. The job involves working on both fungi genomics and seeing how they relate to each other.

To support our work or learn more please contact us on:

03 9252 2731

development@rbg.vic.gov.au

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IMAGE

Dr Sapphire McMullan-Fisher examines fungi under the microscope in the National Herbarium of Victoria.