CEREMONIAL PLANTING

The Honourable James Marape MP, Prime Minister of Papua New Guinea and Mrs Rachael Marape, alongside Ms Joy Burch MLA, planted a *Magnolia grandiflora* ‘Alta’ (Magnolia Alta) in the Central Valley at the National Arboretum Canberra. Ms Burch spoke of the close ties between our two countries and how the growing tree represents the continuing growth of the Australian and Papua New Guinea relationship.

From the Senior Director, National Arboretum Canberra.

With Friends Chair Trish Keller OAM sunning herself in the UK, we asked Scott Saddler, Senior Director at the Arboretum to give us an update.

These are some of the changes we will see coming up in the future:

- Funds have been approved for the purchase of a generator which will be installed at the Arboretum to ensure sufficient backup power, particularly for major events and during commercial operations to ensure power is maintained to all facilities in the Village Centre, kitchen and outbuildings.
- Funds have also been approved to upgrade the air conditioning in the Village Centre. This will be greatly welcomed for functions held at the Village Centre in the summer months.
- Funding approval for the water infrastructure, which will enable the Arboretum to draw 200 megalitres from Lake Burley Griffin, will ensure sufficient water supply into the future for 100 Forests, 100 Gardens. This will not happen until around May 2020. The front dam will remain in its current state until then. When the time comes, the front dam will be filled with a combination of lake water and our bore water.
- Approval has been granted to acquire a 14 seat electric Tourist Bus, to be funded by the Friends through an annual reimbursement arrangement. The bus has been ordered and is expected to arrive in the next 8-10 weeks.
Growing saltbush in the city limits

By Susan Parsons

There were three surprises on the Xplorer train from Sydney back to Canberra recently. The buffet car menu of the day included roasted salt bush lamb (tender and tasty), Rodda’s Cornish clotted cream on the warm scones and Young Henry’s Stayer, a pale ale with stone fruit, lychee and hop aroma crafted in Newtown. Tours of Young Henry’s brewery in Sydney were a prize at King O’Malley’s Beard and Beer Day last month.

I first ate salt bush lamb in South Australia at Tasting Australia 2001. A busload of food writers were taken to Thorn Park by the Vines in the Clare Valley. In the homestead owner and cook David Hay gave a cooking class featuring yabbies, then saltbush lamb and eggplant custard with lemon thyme pesto. We went on to Annie’s Lane where lunch was served in old stone cellars. The main course was rabbit with shiraz jelly and salt bush.

The plant grazed by sheep is Old Man Saltbush (Atriplex nummularia), a large woody shrub, native to Australia, which provides high-protein green feed for livestock. Adam Shipp, a Wiradjuri man, appeared in Kitchen Garden when he was raising indigenous edible plants for Greening Australia in Aranda. He is now running Yurbay a small Aboriginal business specialising in cultural themed projects and bush tucker workshops including foraging in Jerrabomberra Wetlands.

“Old Man Saltbush grows in more arid areas of Australia,” Shipp says.

“There are many species and plant families that get called saltbush. I use Atriplex and Rhagodia in some of my demonstrations and talks. They are a lovely and culturally important plant/food. In terms of local Canberra saltbush, generally they are Einadia and some Atriplex species but they lack the real salty look and taste of their more arid-growing cousins. Much more like a leafy green veg.”

Gerwurzhaus in the Canberra Centre in Civic sells a native lemon pepper blend which you can buy in small quantities and it contains salt bush.

A Canberran and Aboriginal elder from the Kungarakan people tells me, “I sprinkle ground saltbush leaf sparingly with cracked pepper after oiling the skin of lamb roast. I have also thought about, but not yet tried, inserting rehydrated leaves into stab pockets of the lamb like we do with garlic.” He added, “A friend is soon to share some venison and goat meat with me as I smoke it into a jerky. I will be trying saltbush as a rub as an alternative to bringing some of it.”

At the National Arboretum Canberra the new Friends sponsored garden in the Central Valley is planted with salt bushes (Rhagodia spinescens). Amalie Shawcross, operations manager at the Arboretum, says the plants were purchased from Yarralumla Nursery which propagates the majority of the saltbush it supplies as it is highly successful and is grown to Canberra conditions. This is not a plant grown for eating by humans but it makes a very attractive silvery accent in the garden.

Scott Saddler, executive manager of the Arboretum, who has Australian indigenous heritage, has planted saltbush extensively in his family members’ gardens as well as rental properties, as it is very low maintenance and requires minimal watering. Owen Bolitho, horticultural manager, strongly advocates for planting saltbush particularly in Canberra as it is such a hardy and beautifully textural species that suits a range of different garden styles and planting palettes.

The Friends are fundraising to support this garden and you can have your own share in it by visiting the Support Us page on our website.

The Friends’ Zig Zag garden was launched by Friends’ Chair Trish Keller OAM earlier this year.

The Canberra Times Food and Drink, August 13 2019

DONATE NOW
As part the recognition of National Reconciliation Week, on 30 May the Arboretum formally opened the Bush Tucker Garden and the new weaving area at Forest 20. On hand were many executive and staff from the Chief Minister, Treasury and Economic Development Directorate (CMTDD). Kathy Leigh, ACT Head of Service and Director-General, planted a *Eucalyptus pauciflora* to mark the occasion, dubbed the RAP (Reconciliation Action Plan) tree.

The planting of this particular species is consistent with the layout of tree planting at Forest 20. Much interest was shown in the basket weaving demonstrated in the newly completed area of Stage 2 of the Bush Tucker Garden devoted to this activity.

On 31 May, visitors from Transport Canberra and City Services met at The Clearing also to celebrate Reconciliation Week. STEP members attended and provided guided tours for small groups of these visitors.

While the Winter season usually signals a lull in activities, events and activities continue. Students from the CIT came to observe and engage in tree measuring and recording of data. Jens Svenssen was on hand to demonstrate techniques. Some primary school teachers from Queanbeyan came to see what plants they could use to establish a bush tucker garden at their school.

Seeding has been completed on the scrapes made by Parks and Conservation so we eagerly await germination on these plots, and Marg Bourke organised a visit for STEP members to the Mount Annan Botanical Garden and Seed Bank. It was an extremely interesting outing and we thank Marg for organising this.

Plans are now well underway to plant more Acacias along the edge of Forest 20. David Shorthouse proposed the idea of an “avenue” of a range of Acacias from the Southern Tablelands to enhance Wattle Week activities. Suzette Searle is working with Jane Cottee to source trees and holes are being prepared for Spring planting.

We watch the weather forecasts and hope for good rains to come.

Judy Smith
(President STEP)
Discovery Kitchen Garden Update

If you visited the garden in July you will have seen the colourfully decorated bicycle wheels adorning each post and making the garden look very festive indeed. These decorations were part of Warm Trees 2019 which this year was particularly outstanding. The bicycle wheels on both sides of the Arboretum entrance gate were fabulous as was the wonderful Tulip Walk. The few unseasonably warm days in August gave the vegetables and flowers in the garden a sudden growth spurt. However, the bitterly cold days that followed left no doubt that winter was not over and that more cold weather was to be expected. Nasturtiums that had survived the past two winters were severely frosted this year. Nevertheless, the garden has been topped up with excellent new compost and mulched with sugar cane and so is in great shape for whatever weather is coming.

In the garden climbing snow peas are starting to scale the posts and set flowers; the sweet peas are thickening out and also starting to climb; strawberries have been flowering all winter; the cornflowers are budding; the borage flowers are attracting many bees (and visitors) and hoverflies swarm to the continuously flowering alyssum. Winter brassicas are filling out and the ornamental kales are glorious! Iceland poppies are beginning to show their beautiful pops of coloured blooms and pansies have been reliably flowering since planted at the beginning of winter.

One of the many questions visitors ask is why vegetables and flowers are grown together and there are many good and practical reasons for doing so.

The beauty in combining vegetables and flowers together with their myriad forms, colours and textures cannot be overstated and the overall effect can be a joyful and uplifting experience. For example, take the masses of cascading frothy white flowers of alyssum, the sky blue flowers of borage, the intense dark green foliage of Tuscan kale, the deep maroon/purple foliage of scarlet kale, the graduated shades of pinks and purples of ornamental kales together with the bright pops of colour of pansies, poppies and cornflowers and the result is a visual feast for the eyes! Adding to this visual delight are the varied forms and shades of green and grey foliage, including those of the majestic globe artichokes. A winter garden can be just as colourful as one in any other season.
The intermingling of plants, with their scents and fragrances serve as a natural pest control to confuse or even deter pests making it harder for them to find their favourite plants. This is particularly the case when strongly scented calendulas and marigolds are grown, either interspersed or along borders.

Anyone who has watched or listened to a gardening program will no doubt have heard about 'companion planting' which is when particular plants are grown in close proximity to benefit each other. Gardeners over the centuries have been closely observing which plants grow best together and this acquired traditional knowledge is passed down through the generations, the classic example being to grow basil with tomatoes. However, personal experimentation can sometimes produce happy surprises and unexpected results!

Planning is now underway for cropping summer vegetables, herbs and flowers. The varieties of tomato, eggplant, pumpkin, gourd, beans, capsicum and chilli are being considered as well as herbs such as basil and parsley and flowers such as nasturtiums, marigolds and sunflowers. Also the very popular and decorative red Malabar or Ceylon spinach is grown in the garden each year. Last year the size of the tomato, Mortgage Lifter (see photo below) amazed visitors and it is hoped to achieve a similar, if not better result this year. Equally successful were the delightful Jack Be Little mini pumpkins which will be grown again from seed collected last year. Useful local information about what to sow and plant each month can be obtained from the Canberra Organic Growers Society Inc. website.

This year a bumper harvest is expected in the Discovery Kitchen Garden and all produce will be processed into delicious items for sale at our successful market stalls.

If you are a Friend and would like to help with harvesting and/or cooking produce contact Colette Mackay, Harvest Team Leader at colette@arboretumcanberra.org.au. Also, keep an eye on the Arboretum website for dates and times of future market stalls. Happy gardening!

Photos and article by Ange McNeill
EPSDD Executive Director Mr Walker told *The Canberra Times* the government was aiming to get the concept finalised in the next financial year and implement the trial in 2020.

"We're going to work with health providers to encourage and get them to 'prescribe' a walk in the park or an activity with a ranger."

"We're working through the next six months to fine tune what practitioners call the dose rate."

Mr Walker said they also would still need to determine how GPs would assess their patients were getting their prescribed "dose".

It would also need to be assessed whether park rangers had the resources. And Mr Walker said it could return positive health outcomes for Canberrans but also help them create a deeper connection with their natural environment.

"At that very rudimentary level of walking in a park, you have some connection to place, you have some connections, some reason for wanting to keep that area," Mr Walker said.

The Australian Medical Association's ACT president Dr Antonio Di Dio said it was an "awesome" idea and much less intrusive on people than time at the gym or with a personal trainer.

*The Canberra Times* June 4 2019

Some time next year, your doctor just might order you outdoors to spend time with an ACT park ranger, under a program the government is looking to trial in 2020.

"Green scripts" could be a new way to treat heart disease, high blood pressure, obesity and mental health issues, with the Environment, Planning and Sustainable Development Directorate (EPSDD) working with a number of stakeholders to develop a nature prescriptions program.

Modelled on existing programs in the USA and New Zealand the proposed program would be a partnership between health providers and environmental professionals, where health practitioners in Canberra prescribe patients time outdoors with an ACT park ranger.

In the United States, the Golden Gate National Parks Conservancy in San Francisco had been running its similar "Park Rx" program for 10 years.

And in case you are not yet fully convinced ...

According to a book from the Netherlands *The Green City Guidelines, Techniques for a Healthy Liveable City* (Michelle de Roo & Niek Roozen, Zwaan Printmedia, 2011) large-leaved deciduous trees are top of the list for absorbing ozone, gaseous pollutants such as nitrous oxide and sulphur dioxide from industry as well as particulate matter covering ash, pollen and smoke.

Greenlife Industry Australia is now commissioning its own research on this matter with the aim of identifying absorption rates and filtering capabilities of native trees in the Australian climate.

In large leafed trees such as Gingko biloba (pictured), Zelkova, Cercis, Cotinus and Canadian Maples pollutants are absorbed by the stomata of leaves (the outer skin layer).

The larger the leaf surface, the greater its ability to filter out nasties such as carbon dioxide, ozone and nitrous oxide which is linked to nitric oxide and the production of greenhouse gases.

Particulate matter such as that found in smoke and ash is captured on leaves too. In a process called impaction, and with the assistance of wind and water, the captured pollutants travel to the ground as fallen leaves where they are either washed away as run-off or fixed into the soil via decomposition.

Conifer species such as Picea and Pinus are very effective here as their needles permanently cover the tree as well as densely surround the tree all year round.
Some time ago the Friends set up an Instagram account as a means of highlighting through photographs the natural beauty of our Arboretum. It allows members to keep tabs on the seasonal changes in the forests and gardens, the bonsai, the kitchen garden and other activities of interest without having to be there. It may also provide a prompt to come and visit to see something in flower that would otherwise be missed.

The Instagram account name is friendsofnacanberra and you can find it by using Google or another search engine. Once you have found the website you can view the pictures, read the comments and, if you already have your own Instagram account, ‘Like’ or ‘Comment’ on the picture(s).

If you have an Instagram account you can ‘Follow’ friendsofnacanberra to automatically get the latest pics or if you don’t have an account, you can bookmark the website and visit from time to time to see pictorially what is happening at the Arboretum.

The Instagram posts will also appear on the Friends Facebook page and on the Twitter account – so you could also follow what is occurring from those social media channels if you prefer.

Let your family and friends know also that they can keep an eye on the Arboretum from their phone or computer.

We intend to Follow selected Instagram accounts that have botanical or nature-based themes that may be of interest to Friends. For example, we currently follow Zealandia. Their website describes Zealandia as …

… the world’s first fully-fenced urban ecosanctuary, with an extraordinary 500-year vision to restore a Wellington valley’s forest and freshwater ecosystems as closely as possible to their pre-human state. The 225-hectare ecosanctuary is a ground-breaking conservation project that has reintroduced over 20 species of native wildlife back into the area, some of which were previously absent from mainland New Zealand for over 100 years.

There are some fantastic images of native NZ birds and their website is also very informative and inspiring.

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**Wattle Day**

**September 1**

National Wattle Day has been officially celebrated since 1992 across Australia on 1 September.

Before then, Australians in different States and the territories celebrated their own wattle day on different days in July, August and September whenever the wattles were at their blooming best locally.

Wattles have long had special meanings for Australians and in 1988 the Golden Wattle (Acacia pycnantha) was officially gazetted as Australia’s national floral emblem.

Members of the Wattle Day Association celebrated Wattle Day at the National Arboretum, with sprigs of wattle for visitors and a display of items from the Bungendore Woodwork Gallery crafted from Blackwood.

Fiona Eaton, Dawn Waterhouse, Florence Fahy and Suzette Searle from the Wattle Day association
**TREES IN FOCUS**

**Quillaja saponaria**
Soap bark tree Forest 94

Forest 94 is one of our most recently planted forests, with the Soap barks only being planted in 2017. They are interesting trees, and being evergreen provide a welcome splash of green during winter for the Southern end of the Arboretum.

The genus *Quillaja*, which has only three species, all from South America, was first described by the Chilean-born Jesuit, Juan Ignacio Molina in the 1770s. He named the genus *Quillaja* from the Chilean name for the tree *Quillae*. Until recently, soap bark was considered to be a member of the rose family (Rosaceae), but, because of numerous characteristics atypical for that family (clawed petals, two types of stamens, lobed ovary, and winged seeds), it is now classified in its own family: Quillajaceae. The species name comes from the Latin *saponarius*, meaning soapy. It is also often referred to as the Chilean soapbark.

**GENERAL CHARACTERISTICS**

The soap bark is a small to medium sized evergreen tree, 10 – 18 metres in height with a spread up to 10 metres. It has thick dark-coloured bark and the glossy, dark-green, leathery leaves are worth a careful look. At first glance they appear to have toothed margins; upon closer inspection, the “teeth” are actually small, water-secreting pores. These pores, called hydathodes, are usually found on non-woody plants growing in wet places. Their function in soapbark leaves is not well understood, but they might exude a nectar that attracts beneficial insects.

In early summer, cream-coloured flowers with yellow stamens produce abundant (supposedly non-allergenic) pollen.

Inconspicuous, leathery, pinwheel-shaped fruits appear in autumn and linger into winter, eventually splitting open to release tiny winged seeds. The soap bark has an expected lifespan of less than fifty years.

**HABITAT**

This tree is native to central Chile where it grows in dry poor soils at elevations up to 2000m, often growing alongside *Jubaea chilensis*, the wine palms in Forest 24.

It grows naturally in a cooler, moister climate than Canberra and is described as having good frost and drought tolerance, with its deep root system supportive of long-term survival in dry conditions. Mature examples can be seen in Westbourne Woods and the ANU.
USES: Soap and Medicine

Soapbark is famous for the medicinal and commercial use of its inner bark, an abundant source of saponins—a group of bitter-tasting, organic compounds that produce a soap-like foam when shaken in water. The inner bark (sometimes sold as Bois de Panama) is dried, powdered, and used as an emulsifier and foaming agent in cosmetics, shampoos, whipping cream, beer, soft drinks, and even fire extinguishers. Soapbark saponins are supposedly poisonous when consumed at concentrations greater than the minuscule amount added to most commercial products.

References:

ACT Territory and Municipal services Design Standards for Urban Infrastructure: urban landscape projects in Canberra.

https://www.pacifichorticulture.org/articles/striving-for-diversity-quillaja-saponaria/

World Bonsai Masters at the National Arboretum Canberra

Regional bonsai enthusiasts have had an unparalleled opportunity to work with Master Kunio Kobayashi from Japan, regarded as one of the best bonsai artists in the world and Ryan Neil from the United States.

Jimmy (foreground), Ian and Michael working on their bonsai, with Sam our assistant curator watching over them.

Robin and Brian working on their Juniper tree under the guidance of Master Kunio Kobayashi.
2020 Calendar

The 2020 calendar is available now at the Curatoreum or online at the Friends’ website shop. The sale of the calendars helps the Friends support the development of the NAC through projects such as the Dairy Farmers Hill garden and zig zag garden 19 as well as sponsoring public activities such as the Bee series and Snake Awareness workshops.
How to join the Friends

Visit arboretumcanberra.org.au to join online or to find out more about the benefits of being a member

OR

Email your details to: contact@arboretumcanberra.org.au and pay by funds transfer or cheque

OR

Complete the Application Form and mail it to:
The Secretary, Friends of the National Arboretum Canberra, PO Box 48, Campbell, ACT 2612, and pay by funds transfer or cheque.

☐ Bank details for funds transfer:
Westpac, Fehie Plaza, Canberra, ACT: BSB 032 719, Account: 375379 – please include surname in description.

☐ Cheques payable to: Friends of the National Arboretum Canberra Inc.

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* Please see website for details

Membership Application Form

Membership type: .................................................................

Title: .......... First name: .............................................

Last name: .................................................................

OR

Club/Association/Business name: ............................................

Address: .................................................................

.................................................. State: .............. P/code: ...........

Email address for newsletter and updates:

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Phone: .............. Mobile: .............................................

Number of parking passes: .............................................

Total amount payable (include membership/s and parking pass amounts): $ ...........................................

Signature: .................................................................

Date: .................................................................

Parking Pass 1 year

☐ Friends’ Annual $27.50 per vehicle (2018)

☐ Parking Pass $28 per vehicle (2019)

For a parking pass, please include your vehicle’s registration number: .............................................

Note: An Individual Member is entitled to apply for one Parking Pass at the Friends’ discounted rate and a Household Member is entitled to apply for two Parking Passes at the Friends’ discounted rate.