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Newsletter of the Whitehorse Community Indigenous Plant Project Inc.

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Observe the colours in our parks, gardens and on the coast as we move from early

winter and enter deep winter. It may make you feel cold thinking about it.



This edition of the newsletter raises the profile of fungi to some extent through a selection of illustrations. Whilst some might think of fungi as flora, 'the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN) in August 2021 called for the recognition of fungi as one of three kingdoms of life, and critical to protecting and restoring Earth. They ask that the phrase animals and plants be replaced by animals, fungi, and plants, and fauna and flora by fauna, flora, and funga'.

VicFlora does not include fungi. The herbarium does collect and classify them, Enjoy them when they are above ground while you can.

There is also a summary of the seed handling training day run in May and further commentary and links to others who handle seeds, or address issues of provenance. Other items of interest were submitted to us.

And as usual we have a round up of activities and events at some of our bushland parks.

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Nursery report

Winter is around the corner and time to rug up. However, our volunteers don't seem to mind. Given that COVID-19 is still with us, plenty of fresh air is so beneficial.

Welcome to new volunteers, Christine, Denise and Anne, and welcome back Dianne who took no time in getting back into the garden which fronts Fulton Rd. This area is so useful when showing customers how our plants demonstrate a modified bushland setting in an urban garden setting.

Autumn seed sowing is all but completed while preparation of a few cuttings continues. Another heat bed is planned which should enable limited plants to be grown over the colder months and therefore build up stocks for spring.

However, even though it is a little late in the season, we are again propagating more **Banksia spinulosa**, a very popular and sought-after species.



Old cones are placed on a metal tray in an oven (recommended 120-130° for an hour) until the



follicles begin to open. The seeds which are usually black with a brown papery wing, are carefully extracted and sown.

Detailed information is available online including "The Propagation of Banksia – Australian Native Plants Society".

Pictured: Heating cones in a portable oven, carefully sowing seed, and Dennis selecting material for cuttings.

Although we have extensive records on techniques of how to grow what and when

there is always something new to learn. Along with preparation of growing media, many ideas came from the very successful Workshop conducted by David Sparks from Sustainable Gardening Australia, on Friday 13 May (a report will be found separately in this Newsletter). Electronic recording of all this data is ongoing.

Customers are delighted with the development of new signage placed strategically on each species group, which incorporates connection to the Bungalook Website. In an instant, out comes the phone and quickly clicks into our species list, description, photos and more. Thanks to Mark for his expertise.

While orders for our Whitehorse Advisory Committees working in our beautiful bushland parks, have been assembled ready for winter working bees, steady customer sales is pleasing. The availability of EFTOS is welcome by both the customer and our administration.



Other welcome outlets are an information and give away (council sponsored) at Whitehorse Monthly Sunday Market Days and the forthcoming National Tree Day at the end of July. A community planting day conducted by council at the end of July, this is another avenue where *our* local plants enhance one of our local parks.

Off to Yarran Dheran. Linda assists Mart with an order

Thank you all for your contribution over the past three months

Production February 804 March 796 April 623 Hours February 241.25 March 227.75 April 226.25

Margaret Witherspoon

Volunteer training day 13 May 2022

Sustainable Gardening Australia- Seeds and propagation.

www.sgaonline.org.au

Blackburn Lake Sanctuary visitor centre

Presenter: David Sparks

Welcome by: Teresa Day Learning and Training Manager SGA.



18 members and friends of Bungalook Nursery attended the training session presented by David Sparkes from SGA on seed collection, handling, storage, treatment and propagation. Lively discussion and questioning ensured and a lot learnt. The session raised many questions and was a prompt to think about, appreciate and potentially do things differently.

The session covered the following subjects.

Seed biology:

The session commenced with a brief outline of seed biology, seed types and their dispersal methods. This then led to understanding plant groups i.e. monocotyledon and dicotyledon and other characteristic through reference to:

• Themeda which have multiple horns when ripe and seeds are ready for harvest,

- Rytidosperma (Wallaby grass) having feathery seeds with a hard case that may be difficult to germinate,
- *Stipa,* with spear like seeds which are quite plump looking. Plumpness is important and may have to be checked with a microscope,
- Chrysocephalum, has seeds attached to a parachute, i.e. seeds are grains like rice and not the fluff,
- Acacia seeds are black, will drop to the ground from where ants take them underground to eat the nutritious arils,
- Banksia follicles will open on hot days. There is a woody separator and 2 seeds within each.
- Pelargonium australe is wind pollinated,
- Acaena nova seeds are in a sticky burr,
- *Dianella* seeds have a gel around them and some are difficult to germinate especially the coastal variety. Drying them, then rubbing off the coating, may cause damage. It is better to soak them in a soap slurry overnight, then dry,
- Solanum has a fruit-like coating too, and needs to be soaked overnight.

Seed ripeness

How to determine seed ripeness led to discussion on what makes a seed ripe, what colour to look for and how to remove seeds. Understanding woody capsules, seeing the valves, and understanding fruits is the key. For example:

- Colour change e.g. grasses, green to white, look carefully as many may not have grains of seed,
- Ease of removal, eg. spear grass will twist in your hand with humidity and the heat of your hand.
- For woody capsules, look for valves, especially in *Eucalyptus* species. Collect the capsules as soon as a cross is seen, even if the capsule is still green,
- Xerochrysum tear whole seed off,
- Bossiea a bag can be placed around them as they will pop quickly, e.g. tea bags.
- Keep an eye on the weather one hot afternoon and seeds will quickly disperse.

Seed treatment

Germination success requires some trial and error. Many seeds pass through the gut of an animal, hence replicating this process may be beneficial e.g by treatment with Gibberilic acid,

The importance of keeping records of gemination success was emphasized. Reference was made to sources of information e.g. <u>Trees for life</u>, <u>Greening Australia</u> and <u>Growing Australian Native Plants from Seed by Murray Ralph</u>.

Treatment may include:

- Hot water, newly boiled which cracks the seed coat e.g., Pomaderris. Seeds usually only need 10 secs followed by dipping into cold water,
- Smoke water binds to the seed coat and breaks it down, but embryo remains viable. For example, *Themeda* is always sown on the day of collection and with smoke water treatment, the germination rate is very high. After seven days wait for six months.
- Cold treatment, e.g. Bursaria needs refrigeration.
- Others will require treatment overnight
- Depth of sowing can vary depending on seed size and the time of year. Temperature and duration are both factors.
- Daisies store for six months to one year after which the germination rate will drop off. Viability can be extended with storage at a low temp and low humidity e.g. fridge

Seed storage

There was discussion on storing:

- At a reduced temperature (4°C) and humidity
- In jars with magnesium type powder to help stop insect attack
- In foil packages if heat sealed and
- That paper bags are not recommended as subject to insect and mouse attack

Time of the year to sow seeds

In general:

- 90% germination rate when seeds sown in week 37
- Grasses will germinate in winter
- Daisies germinate well in April and May especially if it is a hot day

Failure to thrive when pricking out?

We were advised that when pricking out seedlings use a stick to tease the roots up and out of the seed raising mix and at the same time with the other hand, hold onto the top of the plant leaves to avoid bruising the stem. If the stem is bruised, the seedling will not thrive

Workshop session.

The second part of the training session followed the generous provision of refreshments by Blackburn Lakes Sanctuary. Good discussion was held on the potting medium and seed mix used at Bungalook Nursery and the benefits or downsides of the ingredients. Attendees proceeded to pull apart seed heads to understand where seeds are held, what is seed and what is not.

Linda Buxton – Mark Anderson

Creswick Seedbank – Seeding Victoria



A guided tour of the <u>Seeding Victoria</u> facility at Creswick was made recently by a volunteer. This article outlines key points of interest.

Seeding Victoria manages a network of seedbanks to provide provenance based seed with good genetics, supplying seed for revegetation projects throughout Central, South West and North west Victoria. They are a community not for profit.

They collect through a group of volunteers and others approximately 1600 kg of seed each year covering some 300 species. A small quantity of seed is sourced from nursery stock. Seed, mainly goes to government entities often for direct seeding, and some to nurseries. Seed are mainly from Acacias, Eucalypts and Grasses. Some of the seed collectors sell on assignment through the seedbank. The value of seed in in the hundreds of dollars per kilo.

Seed cleaning is achieved through the use of a combination of hand sieves, mechanical sieves and custom made blowers. The drying of Blue gum pods was observed.

Treatment of seed varies. In some instances, seed is subjected to boiling water for 1 % minutes, then into cold water, followed by smoke water before drying. Storage is in plastic bags held in airtight containers. These are held in a cool room running at 3-5 °C, and humidity at less than 70%.

Seed dormancy is carefully monitored, for example with daisies it may be three to six months but it varies dependent on the species. In some instances, seed will not survive beyond the dormancy period yet for others it can be years.

Pest control treatment must be applied before storage because the cool store will not kill those pests. Control may be by exposing seed to the sun, the application of naphthalene for a short period, treatment with para- dichlorobenzene, or diatomaceous earth.

Germination tests are made in petri dishes filled with vermiculite overlaid with moist tissue paper. The dishes are exposure to equal hours of light and dark and a constant temperature of 15°C.

The seedbank generally takes the position that genetic diversity can lead to a greater chance of survival of a species. For example, if disease takes some plants, greater genetic diversity may lead to the survival of others attacked by the same disease., There is however recognition of the complexities of provenance. Useful information was gained on resources relevant to the whole subject of provenance.





Eucalyptus globulus subsp. bicostata, commonly known as the southern blue gum, eurabbie, blue gum or Victorian blue gum. Pods drying and seed (black specs).

Photos and text: M Anderson

Feature life form - for the season

Our Feature Life form for autumn and early winter - Fungi

The fungi below from the Ada Tree area and Creswick have not been identified by the author. Interestingly approximately 40% of the Australian fungi have not been formally identified. Refer to the training session schedule for Yarran Dheran on 10th June.







Photos: M Anderson.

Beyond Flora and Fauna

It's no secret that Earth's biodiversity is at risk. According to the <u>International Union for the Conservation of Nature</u>, 26% of all mammals, 14% of birds and 41% of amphibians are <u>currently threatened worldwide</u>, mainly due to human impacts such as climate change and development.

Other forms of life are also under pressure, but they are harder to count and assess. And then there are fungi

Beyond flora and fauna: Why it's time to include fungi in global conservation goals.

Trees in relation to carbon removal from the atmosphere

The Science show with Robyn Williams.

Mark Adams says restoring acacia woodlands over vast areas would be a good way to benefit from acacia's innate ability in absorbing carbon from the atmosphere.

https://www.abc.net.au/radionational/programs/scienceshow/acacia---another-climate-solution-in-easy-reach/13546794

A transcript is available at the site.

Genetic rescue – Arthur Rylah Institute seminar

Arthur Rylah Institute runs a series of seminars.

A recent seminar is very relevant to the question of provenance and genetic diversity. Whilst the first part relates to birds, and second to fish, the principles are the same for other life forms. Genetic Rescue seminar with Dr Sasha Pavlova and Dr Zeb Tonkin. The recording is now available and can be found below.

https://www.youtube.com/watch?v=e x2KSyNCiU

A reference made in the talk is to

A Practical Guide for Genetic Management of Fragmented Animal and Plant Populations https://oxford.universitypressscholarship.com/view/10.1093/oso/9780198783411.001.0001/oso-9780198783411

Cootamundra Walk Music in the Park

In 1978 neighbours near Cootamundra Walk became concerned with the possible destruction of one of the last remnants of bushland north of Whitehorse Rd.

For more than 20 years dozens of volunteers, weeded, mulched, planted, lobbied, held many working bees to save the park and more!



In 2003 it was decided to the committee would show its appreciation with some form of entertainment, while at the same time encourage new community members to become more involved with the maintenance and care of the park, whether it be on a regular basis or merely a casual sense of belonging.

Some young students from Blackburn High School practised for many hours during their January school holidays for our first presentation. Such was the success, that Music in the Park has become an institution.



Held on the Friday evening following the Labor Day weekend, we have had one or two stormy evenings and a couple of Total Fire Bans, but warm evenings with delightful music presented by local musicians and bands has been a great success with families gathering under the trees, kids dancing around, and an Easter egg hunt always popular.

It is our way of engaging with our neighbours in a casual friendly manner.



Margaret Witherspoon https://cootamundrawalk.wordpress.com/

Blackburn Creeklands



Wedge-tailed Eagle over the Creeklands (with Raven escort for size comparison)

The Creekies are very pleased to report visits by two high level visitors in the last couple of months. In March, they had a visit from a Wedge-tailed Eagle which was followed by a possibly longer stay by a Powerful Owl in April. Both were photographed *in situ* and the eagle is a first in the Creekies' bird sighting records which go back to the 1970s.

Despite their "linear park" being quite narrow in parts following Kooyongkoot/Gardiners Creek, having aerial apex predators visiting is very encouraging. One explanation is that compatible vegetation in neighbouring private property effectively adds depth to the park resulting in a more functional level of habitat.

The Bungalook Nursery is a major supplier of the revegetation planting in the park conducted by volunteers and also by park neighbours in their surrounding "Corridor" - which both broadens the park and links it to other wild areas like the Blackburn Lake Sanctuary.

In other news, the Creekies conducted their first Community Working Bee for 2022 on May 15 – the first for about twelve months (due to Covid impacts). The day was a great success. These events, as well as regular Thursday morning working bees, are gradually improving their bushland habitat with plants sourced entirely from the indigenous nurseries.

John McMahon

<u>BlackburnCreeklands@gmail.com</u> or visit: https://blackburncreeklands.wordpress.com/

Blackburn Lake Sanctuary

On a beautiful sunny day on Sunday 22nd May, over 90 people came together at Blackburn Lake Sanctuary to celebrate the start of Reconciliation Week. Just one of many events all over Melbourne, held to show support to First Nations People and their culture, to learn more about the Uluru Statement of the Heart and plant a Sea of over 200 hands. Remembering the 70,000 hands that were planted 23 years ago, in Canberra.

The theme this year is Be Brave & Make a Change.





Sea of Hands for Reconciliation

Eastern Spinebill

During Sustainability Week the Sanctuary played host to various activities, including a bird walk led by Ian Moodie, Tony Slater and the incredible Sean Dooley (Birdlife Australia) who spoke about the birdlife in Whitehorse and the need for planting indigenous and the importance of our bushland corridors. During the walk, Sean was most impressed with the mass of Correas in the old picnic area, near Lake Road. It was full of Eastern Spinebills!!

Volunteers are beginning to return, and we look forward to planting again.

The Visitor Centre is now able to be open on a Sunday afternoon, and we are gathering volunteers willing to do roster duty between 2-4.30pm on a Sunday afternoon.

The Education program is now booking up fast, under the guidance of Tanveer Alvi and Jacquie Green and their band of volunteers.

Anne Payne



http://blackburnlakesanctuary.org/

Yarran Dheran





For information about Yarran Dheran or details about events, Visit theirwebsite <u>at https://yarrandherannaturereserve.wordpress.com/</u> or on Facebook at <u>https://www.facebook.com/YarranDheran</u>

What's happening at Yarran Dheran

Monthly Bird Surveys

Our bird survey of 17 May 24, 2022 identified 27 different species of birds, among them Eastern Rosellas, Tawny Frogmouths, Common Bronzewings, Golden Whistlers and a Black-faced Cuckooshrike.









A Bird Walk was led by Ian Moodie on 22 May 2022 and despite the grey skies which did not lift, all enjoyed themselves, we observed 25 species and we all learned from Ian and from each other





City Nature Challenge 2022

We hosted four events as part of the City Nature Challenge during April May, including:

30 April	City Nature Challenge/ iNaturalist bird walk
30 April	City Nature Challenge/ iNaturalist insect walk
1 May	City Nature Challenge/ iNaturalist flora walk
1 May	City Nature Challenge/ iNaturalist waterbugs

The events were designed to encourage individuals to photograph native flora and fauna and submit these to iNaturalist, firstly to increase their own understanding of and to seek ID for these, but with iNaturalist also providing a valuable resource for recording the diversity of wildlife not only within Whitehorse but also on a global basis; much wildlife not yet classified but with numbers either already extinct or rapidly diminishing. Despite the obvious challenges applying to taking photos of birds using a Smartphone, nevertheless we were able to take photographs of a number of species, including Superb Fairy -wrens and White-browed Scrub-wrens and participants in the Flora Walk also

found it to be valuable in helping to identify species. We had fun identifying insects and waterbugs in the third and fourth events (especially in being able to use our digital microscope to identify waterbugs) and we look forward to participating in the Great Southern Challenge in October which will be our springtime.

Upcoming events

Fabulous Fungi with Dr Sapphire McMullan-Fisher

This event is conducted by *City of Whitehorse Whitehorse, Trees and Urban Forest Education* and hosted at Yarran Dheran. Fungi are vital components of our ecosystems and habitat gardens. Don't miss this opportunity to learn about the diversity of fungi and to see some examples at this walk and talk scheduled for Friday 10 June 2022 at Yarran Dheran from 10.30 AM – 12.30 PM. Register at https://www.eventbrite.com.au/e/fabulous-fungi-tickets-

335056883157?utm_source=eventbrite&utm_medium=email&utm_content=follow_notification&utm_campaign=following_published_event&utm_term=Fabulous+Fungi&aff=ebemoffollowpublishem_ail_

Monthly Bird Surveys

These are conducted in Yarran Dheran on the third Tuesday of every month. Our enthusiastic and friendly participants reflect a wide range of skills. All are welcome.

Gay Gallagher

Junction Road Parkland Community Group

An inaugural meeting of interested community members, was held mid-May, to form the Junction Road Parkland Masterplan Action Group.

It is understood that the land will be part of the laydown whilst the North East Link work is carried out.

The group are keen to hear from interested residents who would like to have a say in how this area is developed once the land is no longer used for the NEL work. More details in the next newsletter. Anne Payne

Future event Advanced notice

Belinda Moody from Whitehorse City Council and Tony Slater will be conducting two walks along Wurundjeri Walk to look at various eucalypt species on Friday 1st July and Sunday 3rd July between 1pm and 3pm. The walk will commence at Bungalook Nursery. This event is not to be missed.

Next Committee Meeting:

Bungalook Nursery Newsletter September 2022 edition: 82

We are seeking articles for each edition of the newsletter. Please submit items for the next newsletter by 24 Aug 2022. Submit to wcipp@yahoo.com.au marked for the attention of the newsletter editors.

Bungalook Nursery Newsletter editors:

Mark Anderson and Christine Hallam

WCIPP Inc recognises the Wurundjeri people as the traditional custodians of the land on which the nursery is located.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the Nursery.