



CHUM CREEK LANDCARE NEWSLETTER

No. 21, Summer, 2019-20



Chum Creek has a problem



Photos on previous page: Chum Creek in January, 2020 after heavy rain (top); Yumbunga dam (middle left) and a slumped footpath beside Chum Creek Rd. with the eroded material dropping directly into Chum Creek (middle right); 4WD track crossing of Mick Creek, a major tributary of Chum Creek (Mick Creek flows over the road at high flows) (bottom left); bare eroded slopes near Toolangi draining down to Mick Creek (bottom right). Chum Creek water turbidity near Yumbunga dam was measured as greater than 300 NTU for at least a week in January, 2020 (drinking water should be less than 5 NTU).

President's Report

The bushfires that raged through most Australian states this summer were horrific and devastating in terms of the property, loss of life, wildlife and habitat. Over one billion animals and birds have been estimated to have been lost which is almost incomprehensible. The real impact of these fires will continue to be felt often in many unanticipated ways. Many of you have already generously donated to help people and wildlife recover. We discussed what the Northern Yarra Landcare might do in terms of helping the recovery process. Having experienced the horror of Black Saturday, members felt that down the road more help will be needed once the initial burst of fundraising has slowed and that would be a good time to be involved. Your experiences will give good insight into the kind of assistance that will be needed. We must not forget that over 30 people in the shire lost homes last year in the Bunyip Fires and that there still may be need for some assistance there. As well, the fire season is not over yet and this is a reminder to keep doing work that will make your property less vulnerable and have your fire plans ready to activate should the need arise.

We were happy to learn that our previous Landcare Facilitator, Rob Fallon, will be our facilitator once again. We thank our previous facilitator, Anne Fitzpatrick for all her good work on behalf of our network. We were also pleased to learn we had received a grant from Tony Smith's office of \$15,400 which will allow us to continue our weed action work. The new program will include other weeds than blackberries. If you have weed problems on your property please let us know and Rob can visit and discuss what can be done and funding that can be available. Rob has quite a few interesting activities planned for the year, particularly a workshop on how soils can be improved to assist in carbon capture. There will be a lot of debate about how best to protect ourselves from fire and hopefully Landcare can be a credible source of information about best practices.

Chum Creek Landcare news

Do you have the weed – wandering Trad? See the featured weed below

Chum Creek Landcare wants to help CSIRO determine the optimum time to release a fungus which kills this weed and we are looking for properties where Wandering Trad is present and whose owners would be willing to use biological control via a fungus. If you can help us, please let us know by email at - chumcklandcare@gmail.com

Featured Weeds – Wandering Trad and Queen Anne's Lace

Wandering trad (*Tradescantia fluminensis*)

Trad is a rapidly growing, scrambling, long-lived herbaceous plant with soft, succulent, trailing or creeping stems that root at nodes to form large clumps. Stems can be up to 4 m long. It often grows as a groundcover and forms a dense mat of vegetation. It is native to south-eastern Brazil, Argentina and Uruguay. It is now widely naturalised in southern and eastern Australia.

Habitat

A weed of forests, forest margins, urban bushland, open woodlands, riparian vegetation, roadsides, ditches, waste areas, disturbed sites and gardens. It prefers damp and shaded areas in temperate and sub-tropical regions, but will also grow in more open habitats and in tropical regions.



Distinguishing Features

- a somewhat fleshy long-lived herbaceous plant with trailing stems that produce roots at their joints.
- its shiny leaves have dark green upper surfaces and often slightly purplish undersides. Leaves can be up to 7cm long.
- these leaves are alternately arranged along the stems and have sheathed bases.



its white flowers (about 2 cm across) are borne in small clusters near the tips of the branches and have three pointed petals (7-10 mm long). Flowering occurs mainly during spring and summer.

Reproduction and Dispersal

This plant only reproduces vegetatively in Australia, by producing roots at the joints (i.e. nodes) of stems that come into contact with the soil. Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil.



Environmental Impact

Trad is a significant environmental weed in Victoria and New South Wales, an environmental weed in South Australia, Queensland and Tasmania, and a potential environmental weed in Western Australia and the ACT. It is listed as an environmental weed in the Yarra Ranges shire.

Trad forms a thick blanket of leaves that excludes light from native ground cover and smothers low growing native plants and seedlings. It prevents native plant regeneration and dramatically reduces biodiversity. It is often the cause of skin irritations (dermatitis) in dogs.

Control

Trying to remove this weed is tricky because the stem breaks so easily at the nodes. All parts of the plant must be removed as it can easily put down new roots from any fragment.

- Hand remove using a knife, taking care to remove all parts of the plant.
- Rake and roll the Trad towards you into coils which are easy to pick up and remove.
- Trad is easily composted, or treated by putting it into or under black plastic and leaving it in a sunny place to bake for approximately six weeks, or feed to chooks.
- Large patches of dense Trad that are away from water and have no native plants can be treated with herbicide.

Staged control is preferable to widespread rapid control because Trad can act as a filter for stormwater runoff and as a buffer to other weeds. It is recommended to treat small areas and check what native plant or weed regeneration occurs in response to the removal of Trad.

Biological Control and Chum Creek Landcare

The recent release of a fungal pathogen from Brazil, as a biological control (biocontrol) agent for wandering trad in native forests of New Zealand presents a promising prospect for implementing a similar management solution in Australia. A biocontrol solution would be especially beneficial for ecologically sensitive riparian areas where the use of herbicides is unviable.

The fungus *Kordyana brasiliensis* was discovered on wandering trad during surveys in Brazil, as part of exploratory research that underpinned the biocontrol program for this weed in New Zealand. The fungus causes extensive necrosis on leaves, which progressively leads to leaf senescence and an overall reduction in the foliage of wandering trad. Under optimal conditions the fungus can complete its life cycle within 2-3 weeks.

Testing of the fungus performed in Brazil demonstrated it would not pose a risk to non-target plant species present in New Zealand. Based on these results, *K. brasiliensis* was approved for release in New Zealand. It was first released in early 2018 and successfully established.

Research performed by CSIRO initially focused on assessing the risk that the fungus *K. brasiliensis* may pose to non-target native and ornamental plants closely-related to wandering trad that are present in Australia. Tests were undertaken in a quarantine facility in Australia. Results obtained in these tests further demonstrated that *K. brasiliensis* is highly host specific towards wandering trad. All Australian populations of wandering trad tested were attacked by the fungus. Non-target plant species tested developed no symptoms or a limited number of small flecks on some leaves – an indication of resistance to infection by the fungus.

The fungus has been released onto Trad populations in Victoria but has not always been successful in reducing them so CSIRO is interested in testing the release of the fungus under different season and climatic conditions. Chum Creek Landcare has offered to assist CSIRO and is currently looking for possible release sites.

Further information about the fungus and the CSIRO research is available at <https://research.csiro.au/wandering-trad/>

More information about Wandering Trad is available at -

https://www.cardinia.vic.gov.au/directory_record/3775/wandering_trad

https://keyserver.lucidcentral.org/weeds/data/media/Html/tradescantia_fluminensis.htm

<https://weedsbluemountains.org.au/weeds/trad/>

Queen Anne's Lace (*Daucus carota*)

This herbaceous plant is native to Europe, south-western Asia, western China and northern Africa but is now naturalised in south-eastern Queensland, eastern New South Wales, Victoria, Tasmania, south-eastern South Australia and south-western Western Australia). It is currently flowering prolifically along sections of Chum Creek Rd.



It is the wild form of the cultivated vegetable carrot and is regarded as an environmental weed in Victoria, Western Australia and some parts of New South Wales. Though it is primarily a weed of roadsides, disturbed sites and agricultural areas, it can spread into disturbed natural communities and can also occasionally invade less disturbed native vegetation. Look how it is spreading from Chum Creek roadside into adjacent properties.



It is a herbaceous, somewhat variable biennial plant that grows up to 100 cm tall, and is roughly hairy, with a stiff, solid stem. The leaves are finely divided and lacy (like carrot leaves), and overall triangular in shape. The plant has flowers in summer which are small and dull white, clustered in flat, dense umbels.

The umbels are at the ends of stems and approximately 8-10 cm wide. They may be pink in bud and may have a reddish or purple flower in the centre of the umbel. As the seeds develop, the umbel curls up at the edges, becomes more congested, and develops a concave surface. The fruits are oval and flattened, with hooked spines. The fruit is small, dry and bumpy with protective hairs surrounding it. The dried umbels detach from the plant, becoming tumbleweeds. It thrives best in sun to partial shade. Seeds persist in the soil for 2-5 years

Queen Anne's lace contains some toxic chemicals but the amount of toxin overall is small, though it has been known to cause a slight intoxication to grazing large mammals, like cattle and horses, when ingested. Skin contact with the foliage of Queen Anne's lace, especially wet foliage, can cause skin irritation. Contact with the cell sap of Queen Anne's lace can cause skin irritation and blistering.

This plant is adaptable to a variety of soil conditions and prefers sun to partial shade. Queen Anne's lace also prefers well-draining, neutral to alkaline soil.

Control:

Controlling Queen Anne's lace is difficult because of its long, sturdy taproot, and because it has so many effective ways of reproducing itself far and wide. Queen Anne's lace is a biennial plant that produces leaves and rosettes the first year, then blooms and sets seed the second year. Although the plant dies after setting seed, it ensures that many seeds are left behind for the coming year. In fact, one plant can produce up to 40,000 seeds in bristled cones that stick to clothing or animal fur. Thus, the plant is readily transferred from place to place.

Hand-pull plants before they flower and set seed. Try not to leave small pieces of root in the soil. However, the roots will eventually die if the tops are continually removed. Mow or prune Queen Anne's lace before it flowers and sets seeds. No flowers means no seeds. Till or dig the soil regularly to prevent young sprouts from taking

roots. Don't attempt to burn Queen Anne's lace. Burning just encourages seeds to sprout. Use herbicides only when other means of control are ineffective.

Spraying a non-selective herbicide, such as glyphosate, would kill all plants but do nothing about existing seeds on and in the soil. And this leads to a reason not to cultivate as doing so would bring new seeds near, or to, the surface where they would sprout happily. Recommended herbicides for control of Queen Anne's lace, such as triclopyr and 2,4-D, are generally more toxic than glyphosate, so should be avoided if possible.

Maintenance

It may take several years to exhaust the plant's food supply. Continue cutting new growth before seed is set.

More information is available at –

<https://bie.ala.org.au/species/http://id.biodiversity.org.au/node/apni/2893559>

https://en.wikipedia.org/wiki/Daucus_carota

http://www.herbiguide.com.au/Descriptions/hg_Carrot.htm

Information of note

Living with fire - Landscaping for bushfire

CFA Vegetation Manager Owen Gooding and renowned landscape architect Andrew Laidlaw presented a fascinating evening which illustrated how clever garden design, plant placement and plant selection can all play an important role when managing your property for bushfire. The pair were then joined by local permaculture guru Graeme George for an informative Q&A session.

Key points included:

- Creating defensible space (Depending on where you live, the 10/30 rule and the 10/50 rule might apply.)
- Removing flammable objects from around the house
- Breaking up fuel continuity (Maintaining paths and lawn between garden beds)
- Carefully selecting, locating and maintain trees
- A well designed fire-wise garden can be both functional and look great

For further information and access to the CFA "*Landscaping for Bushfire*" guide and online plant selection key, go to; <https://www.cfa.vic.gov.au/plan-prepare/landscaping>

Grafting Workshop - presented by Andy Britton - Sattva Nursery, through Western Port Catchment Landcare Network

Last month I attended a Grafting workshop held at the Buln Buln Recreation Reserve.

The morning started with Andy (from Sattva Nursery) telling us a little about the different types of Grafting methods that are used to attach scions to rootstock. He continued his very informative presentation with examples and then proceeded to encourage the 20 or so participants to have a go at preparing our own grafts. We mainly used the cleft grafting method.

Max and Toni Myers kindly donated the apple tree scions from their farm which included some Old World varieties.

An enjoyable day of learning and creating.

Susi Sheaffe (CCLG Treasurer)

Activities of interest

Stagwatching this summer – help collect data on our increasingly endangered arboreal possums, organized by Sera Blair, through the Victorian National Parks Association

Great Forest Guardians

2020 Summer Stagwatching Volunteer Information

Explore Victoria's amazing Mountain Ash forests of the Central Highlands. NatureWatch volunteers will learn about the ecology of the Central Highlands forests, their 10 years of recovery from the Black Saturday bushfires and their future within the Great Forest National Park. Events will be led by forest ecologists working with Professor David Lindenmayer from the Australian National University's Fenner School of Environment and Society as part of their long-term research into possums and gliders of the Central Highlands.

What is a stagwatch?

Stags are old trees that provide essential tree-hollows for native possums and gliders who emerge each night to forage. Stagwatching involves sitting or lying on the forest floor, looking up to the silhouette of the stag tree against the night's sky to watch for emerging animals. Training is provided so you can identify if you are seeing a greater glider preen on a top branch before gracefully gliding between trees or a Mountain Brushtail Possum lumbering down the trunk. You may get lucky and experience critically endangered Leadbeater's Possums springing from their tree hollow into neighbouring wattle tree canopy, seeking tree saps and insects for a night-time feast.

Meeting Times and Places

Please note: the meeting places vary between days so please check the locations and be prepared to leave the meeting point as soon as the team arrives. If you would like to get some take away dinner please get it before the meeting time. Both meeting points are close to lots of take away food options and public toilets. Look for the big white Hilux!



Conditions for cancellations:

Stagwatching will be cancelled if the conditions are deemed high risk to volunteer safety such as total fire ban days and where high winds or heavy rainfall is predicted.

Volunteers will be notified by text by 3pm on the stagwatch day to notify them if the event is cancelled.

The Plan:

- Everyone meet at the appropriate meeting place
- Chat about the ANU research, plan for the evening, safety briefing
- Carpool to stagwatching site.
- Stagwatch training provided on-site.
- Volunteers will be guided to their spot in the forest.
- Stagwatch for 1 hour over dusk (approximately 8:20pm).
- Return to vehicles after stagwatch, report and discuss results.
- Walking spotlight along the road for 30-60 minutes, as desired.
- Return to meeting points.

What to bring:

We recommend you bring a small day pack into the field with some field gear.

- Weather appropriate clothing:
 - Long pants, long sleeved shirt, warm layers of clothing
 - Waterproof jacket
 - Long socks (to tuck your pants into!).
 - Beanie or other hat, gloves if likely to be cold
 - Sturdy shoes or walking boots
- Head torch or hand torch
- Picnic dinner ready to eat
- Insect repellent
- A small foam mat, picnic blanket or camp chair to sit on in the forest
- Water, snacks
- Any essential medical supplies (Ventolin, epi-pen etc.)

What is provided?

- Training on possum and glider identification
- Tea and coffee after the stagwatch
- First Aid equipment

Volunteer Cancellation: If you need to cancel ahead of the field day please notify Sera on sera@vnpa.org.au or 9341 6510. If you have to cancel on the morning of the field day, please contact Sera on 0418 258 808.

Links to information about the research we are contributing to and the community-driven campaign for the Great Forest National Park.

Great Forest national park proposal: <https://www.greatforestnationalpark.com.au/>

Great Forest national park proposal video: <https://www.youtube.com/watch?v=Ls5yD1R9-OM&feature=youtu.be>

Friends of Leadbeater's possum website: <https://www.leadbeaters.org.au/>

Survival of Leadbeater's possum: <https://fennerschool.anu.edu.au/research/research-stories/survival-leadbeaters-possum>

About Professor David Lindenmayer: <https://fennerschool.anu.edu.au/research/research-stories/survival-leadbeaters-possum>

How possums and gliders use giant old mountain ash trees for survival (video): <https://www.youtube.com/watch?v=Wl5RD9H-7WE&feature=youtu.be>

Safety Notes:

Weather and fire danger conditions: In the event of very wet or windy weather or 'Severe', 'Extreme' or 'Code Red' fire danger conditions, the activity will be postponed.

Personal Car Use: It may be necessary to use volunteer cars to access sites. This may involve some driving on unsealed roads. Please see our policy on volunteer car use below.

Medical conditions: Please inform Sera if you have any medical conditions that may be relevant- allergies, anaphylaxis, asthma etc... (Information will be confidential). Volunteers must be able to walk at least 500m on hiking tracks with regular trip hazards.

Potential Risks: please read the **Stagwatch Risk Assessment** below to review potential risks on the day to prepare yourself.

VNPA Volunteer Insurance and Personal Car Use Policy

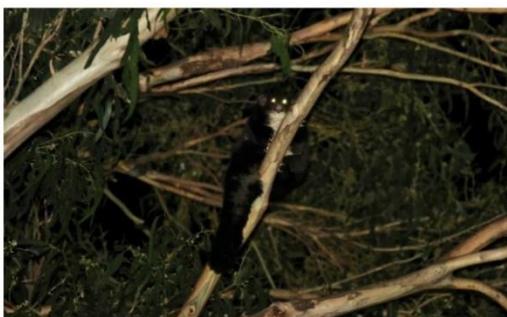
Public Liability Insurance: The VNPA has a public liability insurance policy. For details contact the VNPA office. Your participation in this training activity is as a 'volunteer'.

Liability: Every person participating in a VNPA activity does so at their own risk in all respects and as such accepts full responsibility for his/her suitability, fitness and preparedness for the activity and for any injury to her/himself. The Association, its office bearers, organisers, leaders and helpers are absolved from any liability in respect of any injury, loss or damage suffered by the participant while engaged in any VNPA activity to the extent permitted by law.

VNPA Occupational Health and Safety Policy: OH&S involves shared responsibilities and a team approach. Everyone associated with the VNPA has a duty of care, which requires each person to be capable and responsible for their own health and safety as well as for the health and safety of others. So far as is practicable VNPA is committed to providing and maintaining a working environment that is safe and effectively eliminates or minimises the risks to the health and safety of staff, members, volunteers, contractors and visitors.

Use of personal vehicles for VNPA activities: Volunteers are advised that personal vehicles used for VNPA business/activities are not covered under the VNPA Public Liability or any other insurance. Volunteers should have as a minimum Third Party Motor Vehicle insurance or Full Comprehensive insurance when undertaking activities with the VNPA.

Volunteer personal accident insurance: All VNPA volunteers less than 80 years old are fully covered for personal accident injuries whilst undertaking authorised VNPA activities. Those 80 years old and over can contact the VNPA office for further information.





Trust for Nature and the Faunal Emblems project

Protecting Helmeted Honeyeater and Leadbeater's Possum on private land

Guest speakers

Ben Cullen: Regional Manager for Port Phillip and Westernport region

Andrew Kuhlmann: Conservation officer for South Central region

Cost

\$2 donation (refreshments supplied)

When

28th February 2020 | 7:30 – 9.00pm

Where

Toolangi Castella Community House
1715 Healesville – Kinglake Road, Toolangi

RSVP

Lynn Dean by Wednesday, 26th February - faunatoolangi3777@gmail.com or 0403 071 157



Trust for Nature

In 1972 Trust for Nature was established to protect significant habitat and areas of scenic or natural interest. Since then more than 1,400 conservation covenants have been secured, adding over 60,000 hectares to Victoria's protected area estate.

Faunal Emblems

Significant areas of private land in the Central Highlands contain prime habitat for Helmeted Honeyeater and Leadbeater's Possum. If more of these areas can be protected it will go a long way to help securing the future of these two iconic Victorian species.



Manningham Environment Seminars (Warrandyte) – The Tiny Flamboyance of the Peacock Spiders by Joseph Schubert Melbourne Museum Legacy Registration Officer, Entomology department.

Wednesday 5 February 2020, 7.30 pm to 9 pm

While the Australian peacock spiders are only the length of a grain of rice, they are some of the most charismatic and colourful spiders that the world has to offer. The males perform elaborate courtship displays, boasting their brilliant colours to impress females (hence the name 'peacock' spiders). At least 70 species have been discovered in the past 10 years, and there are likely still some which are yet to be discovered. Peacock spider scientist Joseph Schubert will discuss his research on this flamboyant group of native Australian spiders, outlining their fascinating biology and behaviour.



Field Trip: Saturday, 8 February, 10 am – 12 noon.

On the following Saturday, take a walk through a reserve with Joseph and learn about habitat requirements for insects and arachnids and macro invertebrate lifeforms. Discover the important role these lifeforms contribute to woodland and forest health. This field trip is in addition to The Tiny Flamboyance of the Peacock Spiders seminar, which you will need to attend prior. The meeting place for this will be revealed to you at the seminar.

Manningham Environment Seminars (Warrandyte) – Fungi4Land by Sapphire McMullen-Fischer, Fungi Ecologist

Wednesday 04 March 2020, 7.30 pm to 9.00 pm

Australian land managers are beginning to discover the important roles fungi play in healthy ecosystems. We know that healthy bushlands are resilient due to the myriad of interactions between our animals, fungi, plants and microbes. Hear from Sapphire some of the management steps you can take to help keep beneficial fungi working in bushland you manage.



Field trip: Fungi4land, Thursday 5 March 2020, 10 am – 12 noon.

On the following day, take a walk with Sapphire and discuss the management issues considered for maintaining healthy working fungi populations in an important conservation reserve. This field trip is in addition to the Fungi4land seminar, which you will need to attend prior. The meeting place will be revealed to you at the seminar.

Manningham Environment Seminars are conducted at River View Room, Grand Hotel, 110 Yarra St., Warrandyte.

For information: phone 03 9840 9326 or email csadmin@manningham.vic.gov.au