North Central Chat

Keeping you up to date with all the Landcare and Waterwatch news



March 2023

A message from the Regional Landcare Coordinator

Hi everyone

This past month has been a wonderful treat, as I have finalised the 2021 Victorian Landcare Grant reporting through to the Victorian Landcare Program team at Department of Energy, Environment and Climate Action (DEECA). While collating the data and reading through the incredible achievements of Landcare groups and networks, it never ceases to amaze me what's delivered for the environment and communities. Taking into account the significant issues due to wet conditions and flooding during the 2021 project delivery year, I'm pleased to report 12 groups managed to complete their projects.

Achievements include:

- 9 km fencing
- 265 ha revegetation
- 38,897 ha of land treated for weeds

A flurry of engagement activity was also reported with 551 people participating in 32 field days, workshops and training opportunities hosted by local Landcare groups. Overall, 615 people contributed 5,357 hours of volunteer time to deliver project works valued at more than \$214,000.

Landcare grant reporting demonstrates the variety of project works groups undertake, the localised priorities volunteers are working on, and the scale and sophistication of partnerships between Landcare, schools, Traditional Owners, researchers, contractors and land managers. It's great to provide our funders with the numbers, but what's even better is including the photos, stories and media articles that really tell the story about the value of Landcare and the people and partnerships that make it work... 35 years and counting.

That leads me nicely into congratulating our pals over in Waterwatch- who are celebrating 30 years this month! Read all about their celebration event on March 24 that will showcase the value and impact of the water quality



St Arnaud Secondary students planting buloke seedlings along Slaty Creek as part of 'Project Windharp' delivered by the Buloke Northern Grampians Landcare Network. The origin of the project name comes from the sound made when a breeze passes through the trees light foliage.

monitoring program - the cornerstone of Waterwatch across Victoria since 1993.

The Victorian Landcare Team met for two days on February 16 and 17 in Melbourne. Highlights from the meeting included a presentation on the pilot 'Caring for Landcarers' mentoring program, which was very successful. We also heard updates from the DEECA Landcare team aboutsteps being taken to review the current Victorian Landcare Program in order to renew and improve the program into the future.

Sadly, we farewell East Gippsland RLC Carolyn Cameron from our state-wide team as she embarks on a new adventure at East Gippsland Water and Richard Dalkin from North East CMA, who moves from RLC across into a Riparian Project Officer role. It's been a joy working with you both.

Enjoy the read

Tess Grieves

Regional Landcare Coordinator North Central CMA

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News...

Fish superhighway works take some big steps

Taylors Weir fishway is an important habitat connectivity project that provides access to Gunbower Creek for native fish populations in Ghow Swamp.

Work is set to begin on one of the final stages of a fish superhighway in north central Victoria, connecting more than 1,000 kilometres of waterways.

The Gunbower and lower Loddon Fish Passage Works project is building eight new fishways and upgrading three to connect 530km of open Murray River to 560km of local waterways.

Over the years, fishways have been built on the Little Murray River, lower Loddon River and Box Creek, and recently two new fishways on Gunbower Creek at Cohuna and Koondrook.

Work will begin later this month on the construction of a fishway on the Taylor's Creek Weir, just north of Ghow (Kow) Swamp, near the junction of the Torrumbarry Irrigation Area Number One Channel

Studies of fish accumulation downstream of Taylors Weir indicate that providing passage for small to large native fish at Taylors Weir could restore spawning and migration cycles for important ecological and recreational species.

Construction of the fishway is a significant success for the North Central CMA's Native Fish Recovery Plan – Gunbower and lower Loddon. Construction works started in late February and will conclude towards the end of 2023.



Construction is being undertaken in partnership with Goulburn Murray Water and with ongoing involvement from Yorta Yorta Nation, Traditional Owners of the site.

The works are co-funded by the Victorian Government, Building Works Capital Stimulus Package 2020 – Waterway Environmental Works component, and Commonwealth Government through the Commonwealth Environmental Activities Framework.



Holistic Planned Grazing workshop recap

Article by Loddon Plains Landcare Network Regen Ag Officer, Danny Pettingill

Last month, Loddon Plains Future Farmers Group hosted renowned Holistic Management educator, Brian Wehlburg, from Inside Outside Management for a three-day Holistic Planned Grazing workshop intensive.

The workshop took participants through the concepts of Holistic Management, originally developed by Allan Savoury, and how these concepts and methods can be integrated into farming practices, utilising grazing animals to manage their farm holistically to improve profitability, biodiversity, time management, year-round pasture and vegetation cover, maintain animal performance, and improve landscape resilience.

Initial sessions were focused on learning about farming ecosystems f and how to use livestock as a tool for positive change for improving soils, managing and healing erosion and reduce the impact of drought.

The three-day workshop covered understanding ecosystem processes of water cycle, mineral cycle, solar energy flow and biodiversity; key insights into adopting a holistic approach to farm management - holism, landscape brittleness and managing time in relation to

grazing and carrying capacity; using livestock to create a positive landscape impact.



The final two days were largely focused on grazing methods including managing for animal nutrition, drought and resilience, reducing stress, measuring available feed and annual pasture budgeting.

By far, the most popular session for participants was the final day of the workshop, where participants were encouraged to put their new knowledge into action by utilising these principles to develop their own Holistic Management Grazing Chart,. They planned an annual Planned Grazing approach including calculating pasture recovery periods for maximum vegetation cover, developing appropriate paddock rotations and developing a greater understanding of estimating carrying capacity across a farm.



With this new knowledge, LPFFG and workshop participants will continue to hone these methods with a series of on-farm trials being developed and monitored over the coming months.

If you would like to know more about the group, or join in its activities, please contact Regenerative Agriculture Officer Danny Pettingill at lpln.regen@gmail.com or join the Loddon Plains Future Farming Regenerative Ag group on Facebook. Loddon Plains Future Farming

Regenerative Agriculture activities are supported by the North Central CMA through funding by the Australian Government.

Leading the way

On February 23, North Central CMA welcomed our 2023-24 School Based Aboriginal Trainees (SBATs), at Me-Mandook Galk, Chewton.

This year we have more than 10 students placed in natural resource management, administration fields and the Victorian Police Force.

We were formally Welcomed to Country with a special ceremony from Uncle Rick Nelson, Dja Dja Wurrung Elder and Uncle Ron Murray, Wamba Wemba Elder.

Andrew Travis, Dja Dja Wurrung Traditional Owner then welcomed the SBATs through dance.

After the ceremony and storytelling, the SBATs went off into groups for cultural immersive activities.



Nalderun is taking the lead in coordinating this year's cohort of year 11 students, and we are excited to be working with the students, alongside Parks Victoria DEECA Loddon Mallee, Coliban Water and CVGT Employment.



Help shape the catchment's future

The North Central Catchment Management Authority (CMA) is putting the call out for a community member from the region's west to be part of a key committee and help shape the future of the organisation.

The CMA is looking or a new member of its Strategic Direction Committee, a sub-committee of the Board that influences, and has input into, a range of important strategies and the delivery of the North Central Regional Catchment Strategy (RCS).

The RCS is the overarching strategy for all involved in managing land, water, and biodiversity. It sets a vision for integrated management across the region, identifies priorities and targets, providing a framework to coordinate effort.

The Strategic Directions committee also supports the development of the CMA's Climate Change Action Plan, North Central River Health Strategy 2005, North Central Floodplain Management Strategy 2018-28, and Business Development Strategy.

North Central CMA Board member Richard Carter said the committee plays an important role in shaping the CMA's response to natural resource management across the whole region.

"We're looking for a community member who has an interest in wanting to see the environmental assets of the region improved and can think broadly and strategically," he said.

"They don't have to be an expert or have a big list of qualifications. They just need to care and want to contribute to the way their region is managed.

"We'd love someone from the region who will build on the diversity of views around the table and there is always room for First Nations representation."

If you are interested please call Rachel Murphy on 5448 7124 or email info@nccma.vic.gov.au for more information about the position and how to apply.

Applications close March 28, 2023

The North Central CMA embraces diversity and inclusion, so please express your interest if you are a person with a disability, Aboriginal and/or Torres Strait islander, culturally and linguistically diverse, or LGBTIQ+.





2022 Birds in Backyards Surveys - what did we see?

Dr Holly Parsons, Urban Bird Program Manager, BirdLife Australia

A tremendous thank you to all the people who got out there and submitted a Birds in Backyards survey in 2022.

This year 7,108 surveys were submitted, iwth a whopping 404 species observed! There was really some great data sent in and no doubt a lot of birders had a lot of fun.

Unsurprisingly, surveys were mostly submitted from our urban centres, and there was a strong coastal bias. Excitedly though, we also received surveys from more far-flung places than last year – from the very north of Australia, remote locations through the mainland through to our amazing surveyors working hard in Tasmania. We even have surveys coming in from Norfolk Island, where a fantastic birdwatcher has been keeping track of the birds in her patch. This keen birdwatcher recorded an exciting mix of birds including the common, like blackbirds, through to endemics like Norfolk Island gerygones, and even a range of seabirds like blackwinged petrels and sooty terns.

Common birds

Of course, our urban bird communities have again been dominated by those that you would expect - with the top 10 list reading like a who's who of successful urban birds (shown here with their reporting rate - i.e., how often they appear in a survey):

- 1. Australian magpie 44.9%
- 2. Rainbow lorikeet 41.1%
- 3. Magpie-lark 35.7%
- 4. Noisy miner 33.6%
- 5. Sulphur-crested cockatoo 27.2%
- 6. Spotted dove (introduced) 26.1%
- 7. Crested pigeon 24.2%
- 8. Willie gagtail 22.4%
- 9. Common myna (introduced) 21.9%

10. Galah - 21.7%

What got you excited?

Birdwatchers recorded:

- The march of the Australian brush-turkey continuing with gardeners in the south of Sydney and Illawarra documenting their presence for the first time.
- Brown honeyeaters and singing honeyeaters getting into a tussle in a garden in Karakin in WA over some garden resources.
- Noisy miners mobbing a grey goshawk near Newcastle in NSW.
- Forest red-tailed black-cockatoos feeding on Jarrah nuts on the outskirts of Perth.
- A brush cuckoo chick being fed by white-throated honeyeaters in Mareeba in North Qld.
- Daily visits of brown thornbills and silvereyes to a garden in Marion Bay in Tasmania.

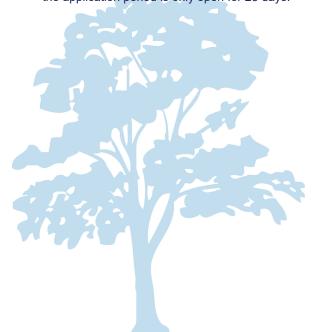
And many many more stories - thank you for sharing them!

You can get involved in 2023. Join us and send in a Birds in Backyards survey to add your garden to the amazing network of gardens who are monitoring and protecting our Australian urban birds. You can read up about how you can get involved on our survey instructions page

Get on Board

Department of Energy, Environment and Climate Action (DEECA) public application period opens soon (around 27 Feb) for people interested in joining (North Central) Catchment Management Authority Boards.

Keep an eye on our social media for more information as the application period is only open for 28 days.





Communities Caring for Catchments



Celebrating 30 Years of North Central Waterwatch

I am excited to be celebrating the *30-year anniversary* of Waterwatch with you this month.

From humble beginnings as a small water quality monitoring program in 1993 to a statewide community engagement program for Victorian waterways with a sister program for estuaries, Waterwatch has come a long way in its 30 years of monitoring.

This is an opportunity to thank all current and past volunteers, coordinators, and anyone who has enjoyed being part of the program. 30 years is an incredible achievement, and it wouldn't be possible without incredible people working hard for the environment.

The March 24 celebration will be a great opportunity to get-together and share stories after a tough couple of years for community programs and to hear what others are doing in our region and across the state. We will also be presenting years of Service Awards.

Friday March 24

4.00p.m. arrival for 4.30pm Welcome to Country

St Anne's Winery, Big Hill

North Central Waterwatch volunteers have until March 10 to register their spot via Eventbrite:

https://www.eventbrite.com.au/e/celebrating-30years-of-north-central-waterwatch-tickets-548238735817

North Central Waterwatch volunteers will have first preference of tickets. Any remaining tickets will be offered to our Waterwatch community from across the state.

Statewide Awards Ceremony - 30 Years of Waterway Citizen Science

In conjunction with the North Central celebration, WaterWatch Victoria will be hosting an event from 2pm-4pm at the same venue.

The statewide event will revolve around the Outstanding Service Awards ceremony and the citizen scientists that receive them, while the dinner will be more focused on North Central Waterwatch achievements.

Invitees to the statewide event will include VIPs (DEECA and hopefully the Minister for Water), all EstuaryWatch and Waterwatch coordinators from across Victoria, the statewide team and all Outstanding Service Award recipients.

Please note that individual award recipients are allowed to bring a companion to the event, while any groups receiving the award can send 1-2 representatives. Any remaining places to the Statewide awards ceremony will be open ticket for all active citizen scientists.

The statewide team is currently working through a process to fund travel expenses for Outstanding Service Award recipients. More details to come.

Call for content – Waterwatch photos and stories

To celebrate our dedicated volunteers and the great work you all do, we'd like to reflect on what has been achieved over 30 years of the North Central Waterwatch program.

If you have any stories, photos or observations from your site from your time in Waterwatch we'd love to hear from you. Sharing these stories helps us learn from each other and they also inspire others to become more involved in environmental issues in their area. We'd also love it if a

few of you would be willing to share your reflections at the event on March 24.

Waterwatch Volunteer Survey

The Citizen Science team is keen to better understand the impact our program has on our volunteers' knowledge, skills and attitudes, as well as the impact on health and wellbeing.

This information helps us demonstrate the value of the program to our investors and attract funding to maintain and improve the program.

All volunteers who participated in North Central Waterwatch during 2022 are strongly encouraged to complete this 10-minute online survey to help improve Waterwatch and to ensure its ongoing success.

All survey participants will go in the draw to win a prize that will be, drawn at the 30-year celebration.

https://survey.alchemer.com/s3/7222230/2023-North-Central-Waterwatch-Volunteer-Survey

The survey is currently open and will close on Sunday March 19.

Women in Conservation Breakfast 2023

Bush Heritage Australia and Trust for Nature (Victoria) will again be holding the Women in Conservation Breakfast to coincide with International Women's Day.

This year's breakfast will be a hybrid event held on **Friday 3 March 2023** hosted by award winning environmental campaigner, Tanya Ha. https://www.bushheritage.org.au/women-in-conservation-breakfast

Tickets to the in-person breakfast in Melbourne have already sold out, however our friends at Environment Volunteering Loddon Mallee have offered to pay for virtual tickets (valued at \$25) for any of our volunteers who would like to attend. Please let me know if any of the ladies among you would like a virtual ticket and I will pass on your details.

Equipment refills

The start of a new year is a good time as any to check your monitoring kits and let us know if you need any refills or replacements. Also check to see if any chemicals in your kit are out of date.

Please let me know ASAP if you need any equipment, buffer solution/chemicals or safety gear send out to you.

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Brady testing and demonstrating the Pesticide Watch methodology to Waterwatch volunteers on Birches Creek, November 2022.

Pesticide Watch

Our team is working with Brady Hamilton from Deakin University who is progressing his research into pesticides in Australian waterways.

Several of you have already registered your interest in helping to collect samples from your monitoring sites this year, however we can accommodate a handful more across the North Central CMA region. As part of the project, Brady will be collecting monthly water samples from April to September and analysing these for a host of nasties back in the lab. If you are keen on being involved, please contact either myself or Brady directly at https://www.facebook.com/PesticideWatchDeakin.

What a big year 2023 is shaping up to be for North Central Waterwatch and Citizen Science!

Tania MacLeod

Citizen Science Coordinator North Central CMA

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We're off and racing for another year

Schools ready to learn about their catchment through citizen-science

The River Detectives program continues to fill a valuable niche for schools across the state. Eighty-eight schools have registered this year in the five delivery zones; North Central CMA, Wimmera CMA, North East CMA and Corangamite CMA regions along with the Melbourne Water area.

Teachers value the opportunity for students to utilise *real* data from their *local* community, engage in *meaningful* inquiry work, *connect* with their community and *advocate* for local waterways.

In the North Central CMA region we will be supporting 30 proactive schools; primary and secondary of all sizes, student sustainability teams, home-schooling providers and innovative lunchtime clubs!

When we can, schools have been aligned with priority CMA projects enabling them to participate in additional extras. Seven schools along the Bendigo Creek will enjoy cultural experiences with Dja Dja Wurrung Traditional Owners during 2023 and four schools aligned with our RiverScan Native Fish Recovery Project, will have the unique opportunity to undertake eDNA testing for the Critically Endangered flat-headed galaxia fish species.

We are also excited that all 30 schools will receive training and equipment to participate in Pesticide Watch, contribute data to Deakin University's study and learn about the impact pesticides can have on our waterways.

We have an exciting program lined up for 2023, kicking off this month with our introductory workshops where we'll be out and about in the region building the skills and confidence of teachers to implement the program.

Schools love to collaborate with their community and have input from passionate volunteers so if you care for your local environment, enjoy citizen-science and wish to help grow those attitudes in our future environmental leaders, reach out to a River Detectives school near you or get in touch with me to see what's possible.

Nicole Howie

River Detectives Project Officer

North Central CMA Phone: 0413 974 074

Email: nicole.howie@nccma.vic.gov.au

Bendigo Creek Citizen Science project

Golden Square Primary School

Camp Hill Primary School

Kalianna School - Pathways program

Weeroona College Bendigo

White Hills Primary School

Epsom Primary School

Huntly Primary School

RiverScan Native Fish Recovery project

St Joseph's Primary School Kerang

Koondrook Primary School

Murrabit Group School

Lake Boga Primary School

Kerang Christian College

A Healthy Coliban Catchment project

Malmsbury Primary School

General River Detectives schools

Daylesford Dharma School

Merry Gatherings home-schooler program, Newbridge

St Francis of the Fields PS Strathfieldsaye

Lockwood South Primary School

Victory Christian College Bendigo

Taradale Primary School

Bridgewater Primary School

Marist College Bendigo

East Loddon P-12 College

Goornong Primary School

Kyneton Primary School

Langley Primary So	chool
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Woodend Primary School - Carlsruhe Annexe

Castlemaine Steiner School and Kindergarten

Chewton Primary School

Redesdale Mia Mia Primary School

Donald High School

2023 regional River Detectives schools



Water Storages Update

Region	Water Storage	% full at Feb 15, 2023	% full at Feb 15, 2022
Murray Storages	Dartmouth Dam	98.20	92.75
	Hume Dam	97.62	97.69
	Third Lake	N/A	N/A
	Reedy/Middle Lk	94.56	97.09

	Kangaroo Lake	93.17	92.05
	Kow Swamp	76.61	88.59
	Lake Boga	88.66	86.51
	Lake Charm	91.31	94.80
Loddon Storages	Cairn Curran Res	96.11	64.14
	Tullaroop Res	96.83	71.89
	Laanecoorie Res	62.25	43.75
Bullarook Storages	Newlyn Res	87.32	88.17
	Hepburns Lagoon	78.60	79.46
Goulburn Storages	Lake Eildon	97.94	84.34
	Waranga Basin	81.52	64.84
Campaspe	Lake Eppalock	95.66	52.38
Coliban	Upper Coliban Res	98.6	94.6
Water Storages	Lauriston Res	92.4	94.1
	Malmsbury Res	60.5	49

https://www.g-mwater.com.au/water-operations/storage-levels

https://coliban.com.au/water-storage-data-and-information

Upcoming Events and Special Days

March	
Schools Clean Up Day	March 3
Clean up Australia Day	March 5
International Women's Day	March 8
Parks Week	March 4-12
National Groundwater Awareness Week	March 4-12
International Day of Forests	March 21
World Water Day	March 22
Earth Hour Schools Day	March 24
Earth Hour	March 25

Sustainable Ag Snippet...

Soil pits on the Plains

The Digging Deeper for Soil Health project is all about getting to know your soils better.

The Lockington Landcare group was host to a recent event at Bruce McCahon's property at Terrick Terrick, where farmers were able to learn more about soil. Three soil pits were dug in three different paddocks with each pit displaying different soil characteristics.

Bruce and Dan Dullard, who share farm these paddocks, spoke about the recent floods and how the flood water impacted some paddocks longer than others. They also talked about the recent paddock history describing the pasture and cropping phases.

Rebecca Mitchell from Agriculture Victoria was the soil expert on the day and she enthusiastically leapt into each pit describing the soil characteristics with ease. One thing she mentioned was the amount of sub-soil moisture and you could see the optimism on the farmers faces for the coming cropping season.



Rebecca Mitchell in the soil pit identifying soil horizons

The farmers were keen to understand what was happening under the soil and there were plenty of question. . Rebecca referred to the North Central CMA's Soil Health Guide and went through some of the

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activities with the farmers. There was no shortage of farmers willing to get their hands dirty and have a go at some of the activities. The pH test was the first activity with Rebecca taking soil samples from different horizons for the farmers to test. The topsoil was good with a pH around 6.5 but the pH increased in the sub-soils. Rebecca said this was typical for soils in the region.



Participants conducting pH test

The slaking test was conducted on soils from different horizons. Slaking is a term used when soil aggregates break down after wetting. The tests highlighted that the sub-soils were prone to slaking and dispersion. Rebecca said this could be a concern if the paddocks were cultivated but with proper management and minimal tillage at sowing the soil would hold its structure.

Soil texture tests were completed at each soil pit. This is where the farmers got their hands dirty. This test involves wetting up a piece of soil in your hands and provides an indication of the type of soil such as clay, sandy clay or clay loam. At the end of the day the farmers had a better understanding of the soils in the district and hopefully learnt some new skills they can apply on their own properties. If you would like to know more about the project or would like to have a soil pit workshop in your area, please get in touch.

Darren Bain

Regional Agriculture Landcare Facilitator

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Victorian Flood Recovery Package



The Victorian Government is supporting primary producers, small businesses and not for profit organisations across Victoria affected by the devastating floods and storms which commenced in October 2022 to get back in business, with a package of support to help kickstart their relief and recovery effort.

This support is also available to primary producers impacted by the hailstorms late in 2022.

The Victorian Primary Producer Flood Recovery Grant of up to \$75,000 is available to support clean-up, relief and recovery efforts. This grant replaces the \$10,000 Primary Producer Flood Clean-Up and Relief Grants announced 21 October 2022. Applications close 30 April 2023 at 4pm.

The Victorian Rural Landholder Grant of up to \$25,000 is available to help rural landholders who have an eligible smaller-scale primary production enterprise with cleanup, relief and recovery efforts. If you do not meet the eligibility for the \$75,000 Flood Recovery Grant, but operate a smaller-scale primary production enterprise, you may be eligible for this grant. Applications close 30 April 2023 at 4pm.

The Victorian Primary Producer Flood Recovery Transport Support Program is available to help pay for the transport of emergency fodder or stock drinking water, and moving stock to agistment, sale or slaughter. This program provides a subsidy of up to \$15,000 paid at 50 per cent of the total costs. Applications close 30 April 2023 at 4pm.

Primary producers, small businesses and not for profit organisations whose properties have been directly impacted or who have suffered a significant loss of income as a direct result of the 2022 Victorian floods and storms are eligible to apply for a Victorian Primary Producer Flood Recovery Concessional Loan of up to \$250,000 to restore or replace damaged assets, and meet general expenses incurred while the clean-up is underway. Applications close 30 April 2023 at 4pm.

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Rural Finance administers this program which is jointly funded by the Commonwealth and Victorian Governments through Disaster Recovery Funding Arrangements.

Contact Rural Finance: Please contact our office on 1800 260 425 if you have any questions.

Contact your local Rural Financial Counsellor: The Rural Financial Counselling Service offers free and independent financial information, options, decision making support and referral services to farmers and small, related rural businesses who are in, or at risk of, financial hardship. A rural financial counsellor can assist farmers to understand, and apply for, government support. Call 1300 771 741.

Other Flood Recovery Support

Agriculture Victoria: A range of information and resources are available for flood and storm-affected primary producers, visit <u>agriculture.vic.gov.au/floods</u>.

Flood Recovery Hotline: Victorians affected by the floods and storms can call <u>1800 560 760</u> for help with navigating support and mental health and wellbeing. Press 9 for an interpreter. The recovery hotline is open from 8 am to 6 pm Monday to Friday, and 10am to 6pm on weekends. For more information visit <u>vic.gov.au/2022-flood-recovery.</u>

Courses & Resources...

Influence of nest box design on internal microclimate: Comparisons of plastic prototypes

Research Article in Austral Ecology. Authored by Michael N. Callan, Alexander Johnson, David M. Watson.

Hollow-dependent fauna are declining worldwide, due primarily to the widespread clearing of hollow-bearing trees. Artificial cavities such as timber and plywood boxes are commonly used to increase hollow availability, yet there is increasing evidence that they are poor facsimiles of natural cavities, characterized by lower insulative properties and a shorter field life.

We evaluated whether plastic materials could create a nest box with a stable thermal profile that more closely resembles the complex shapes and textures of natural tree hollows while containing fewer mechanical joins that represent potential failure points when installed. We developed three sets of prototype nest boxes comprising various combinations of plastic density (10%, 25% and 50%), insulation (single vs. double wall with or without sawdust between them), nesting chamber (with or without timber inserts) and bedding (with or without decomposed heartwood) and compared their thermal performance in a temperature-controlled laboratory to compare internal temperature and relative humidity.



We found double-walled plastic nest box with an internal timber-lined chamber was best able to buffer ambient temperature fluctuations, consistently recording internal



temperatures of 6+°C below maximum ambient temperature, maintaining high levels of relative humidity (76%–92%) when furnished with decomposed timber heartwood

This design also performed better during a simulated hot day; internal temperatures exhibiting twice the lag time of single-walled designs, noting that plastic density had little influence on internal conditions. While the recruitment and protection of hollow-bearing trees must be a priority, this work shows significant potential in improving the design and functionality of artificial hollows that are critical to the conservation of hollow-dependent species.

The full research article can be read online via: Influence of nest box design on internal microclimate:

Comparisons of plastic prototypes - Callan - Austral

Ecology - Wiley Online Library

Introducing DEECA

You will now be seeing the acronym DEECA, replacing what was DELWP.

The new Department of Energy, Environment and Climate Action, brings together the Energy, Water, Climate Action, Environment, Agriculture, Forestry and Resources portfolios.

DEECA has an exciting and ambitious agenda and we are looking forward to supporting the new department and continuing to strengthen existing and creating new relationships

Check out this short video to learn a bit more about DEECA: https://www.facebook.com/DEECAGrampians/videos/6644836928866703/



Events...



Hero Trees Photography with Alison Pouliot

Axe Creek Landcare Group is hosting a Hero Trees workshops.

In this workshop Dr Alison Pouliot shows us the photographic techniques to capture both the aesthetic and scientific qualities of trees.

Large old trees are also vital keystone structures in rural and urban landscapes. However, the value of these trees is often overlooked in planning such as road and fire management. Documenting trees visually is important both as a scientific record and in garnering interest in their conservation.

This highly interactive one-day workshop combines theoretical, critique, practical sessions, and a field trip to assist participants to improve both their technical and creative skills.

When: Saturday 11 March 2023 10am-3pm

Where: Sedgwick Hall

Cost: FREE

What to bring: Dress for a field trip outdoors

Register: via Eventbrite

Sustainable Soils Forum - What's next in **Ag**

Join the conversation to secure the future of soils in north central Victoria.

Hosted by North Central CMA, Sustainable Soils 2023 will explore new perspectives from farmers and industry leaders to grow the future of agriculture.

A jammed packed forum brings together experts, policy makers, farmers and industry to share, network, learn, and collaborate to take a deep dive into improving soil health and management.

Program highlights:

Conserving and improving the health of Australia's soils

 Honourable Penelope Wensley AC, National Soils Advocate

Exploring our Soils

Associate Professor Dr Peter Dahlhaus, Principal Research Fellow, CeRDI

Working together for impact - panel

- Jade Killoran, Central Vic Regen Farmers group
- Deane Belfield, Mt Alexander Regen Ag group
- Danny Pettingill, Loddon Plains Future Farming group
- Andrew Borg, Kara Kara Regen Ag group

Practices to boost productivity and resilience

Jessica Conlan, Farmer, Runnymede

When: Friday, 31 March 2023 9am- 4.30pm

Where: The Capital, 50 View Street, Bendigo Victoria,

3550

Cost: FREE

Register via: Eventbrite

Upcoming Regional Roundtables in Daylesford, Avoca and Donald

Are you interested in land, water and biodiversity management?

If so, come along to one of the North Central CMA Regional Roundtables where you can

- Hear about current projects in the area from the organisations involved.
- Discuss local environmental priorities and identify opportunities to work together in the future.

Tuesday 28 March @ Daylesford Neighbourhood Centre, 13 Camp St Daylesford – RSVP by Friday 24 March

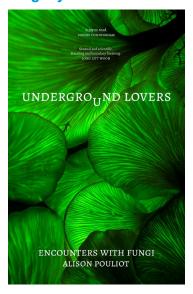
Wednesday 29 March @ Supper Room, Avoca Town Hall, 92 Rutherford St, Avoca – RSVP by Friday 24 March

Wednesday 5 April @ Donald Golf and Bowls Club, Woods St, Donald – RSVP by Friday 31 March

All Regional Roundtables are from 5.45pm - 8pm and supper is provided so please RSVP and advise of any dietary requirements via info@nccma.vic.gov.au or (03) 5448 7124.

Fungi Seminar and Book Launch

Underground Lovers – Encounters with fungi by Alison Pouliot.



Mid Loddon Landcare Network invite you to join the launch of Underground Lovers – Encounters with Fungi to hear some stories from Alison's adventures during the writing of this book. Also delight in a display of local fungi.

Then stay for supper and take part in an interactive discussion of the importance of fungi in ecosystem restoration.

Once overlooked, fungi are the exhilarating new poster organisms reconfiguring our understanding of the natural world and capturing the public imagination

Alison's new book Underground Lovers presents compelling questions and insights about fungi but is also an intimate celebration of their astonishing beauty and complexity. It melds science and personal reflection to explore overlooked themes, among them - fungi and fire, fungi and climate change, fungi and aesthetics, fungi in ecosystem restoration, and fungi and indigenous wisdom.

The book explores fungi through firsthand stories – from the Australian desert to Iceland's glaciers to America's Cascade Mountains – where we encounter glowing ghost fungi and the enigma of the lobster mushroom. We'll dwell with fugal allies and aliens, discover how fungi hold forests together, and why humans are deeply entwined with these unruly renegades of the sub-terrain.

When: Tuesday 18 April from 7pm

Where: Lockwood South & District Community Hall

Cost: Gold Coin Donation

RSVP: to Facilitator Judy Crocker (e) jcroc22@gmail.com or call 0428 506 525



The Healthy Landscapes program has the next three months of events planned across the Macedon Ranges, Hepburn and City of Greater Bendigo council areas.

Topics coming up include

- Farm walk: Promoting pollinators on your farm
- <u>Understanding and managing soil biology on your</u> farm
- Equiculture Workshop with Jane and Stuart Myers
- Fencing and Troughs field day
- Dung Beetle Field Days
- Sustainable Soils Forum
- Melbourne Water Support for Flood Impacted Farmers
- Jason's top paddock

<u>Join the programs e-news</u> to find our more and keep up to date with this Practical Regenerative Agricultural Communities program.



Sunday 5 March is Clean up Australia Day Letter drops, flyers and social media posts can be a really effective way to attract new people into your local environmental activities through a few hours spent at a 'Clean up Australia Day' event,.

Create a Clean up or Join a Clean up today!

Funding opportunities...



2023 Woolworths Junior Landcare Grants

Woolworths and Landcare Australia are once again inviting primary schools and early learning centres across the country to apply for a Woolworths Junior Landcare Grant.

With 1,000 grants on offer, this is a fantastic opportunity to set up a new environmental project or enhance an existing one. Previous grant recipients are welcome to apply if they have submitted a final report for their previous grant project.

The grants, of up to \$1,000 each, inspire children from across the country to get hands-on with the natural environment through projects that focus on sustainable food production, improving waste management practices and recycling, enhancing native habitats and deepening connections to First Nations perspectives.

If you're not sure where to start or are looking for resources to help you with your application, check out our Top 10 Woolworths Junior Landcare Grant Project Ideas. These project ideas link to our Junior Landcare Learning Centre education resources, which include step-by-step instructions, links to school curriculums and frameworks and educator notes.

If your school or early learning centre is ready to grow the next generation of environmental champions, we encourage you to apply for a **Woolworths Junior Landcare Grant** today.

