

VICTORIAN

LANDCARE

WINTER 2022 Issue 84

& CATCHMENT MANAGEMENT



ONLINE LANDCARE

Tips for navigating online grants

Landcare podcasts take off

Listening for growling grass frogs



Victorian
Landcare
Program



Victorian Landcare and Catchment Management

WINTER 2022 ISSUE 84

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An Australasian bittern in reeds preparing to produce its signature boom.

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Editorial Committee

John Robinson DELWP, Angela Snowdon Landcare Australia, Barry Kennedy Melbourne Water and Carrie Tiffany Editor.

Editorial contributions

Carrie Tiffany Email: editor@viclandcare@gmail.com

Cover photograph

A growling grass frog (*Litoria raniformis*) at Rockbank North by Daniel Gilmore.



From the Minister

Over the past couple of years, it was wonderful to see the Landcare and environmental volunteer community turn to technology to find innovative ways of connecting to and communicating with others to continue their important work.

The stories in this issue highlight how Landcare and environmental volunteer groups and networks have used online tools to publicise, plan, communicate and report on their projects.

The East Gippsland CMA developed a series of virtual topsoil field days to meet the continuing need of its community for increased knowledge and discussion about best practices to improve soil health. The farmer-presenters were supported in taking participants on a virtual tour of their properties using videos, maps, photographs and live online discussion.

You can also read about how the Strath Creek Landcare Group created a podcast featuring the diverse voices of its members. Making a documentary when face-to-face interviews were restricted and outdoor gatherings were regulated due to

COVID-19 posed many challenges, but the podcast created an important account of the Landcare group and its small rural community.

Another great article is about how BirdLife Australia volunteers spent more than 10,000 hours listening to audio of wetlands, participating in a research project to confirm the presence or absence of Australasian Bitterns at different wetlands.

The stories in this issue help demonstrate the resilience, adaptability and innovation of Victoria's Landcare and environmental volunteer groups and networks. The online tools they use both engage their local communities and help us understand and improve our natural environment.

In the meantime, the Victorian Government is doing its part to care for our natural environment and biodiversity.

In the 2022-23 State Budget we have committed nearly \$190 million that will go towards protecting the environment, upgrading and establishing new parks, looking after our coastlines and coastal

parks, protecting the state's forests and supporting workers, helping Victorians enjoy the great outdoors and preserving our precious biodiversity. This brings our investment to support our precious biodiversity to over \$560 million since coming to government in 2014.

The Victorian Government is also continuing to support Landcare groups and environmental volunteers and has opened the 2022 Victorian Landcare Grants and the 2022 Victorian Junior Landcare and Biodiversity Grants.

This funding will assist our hard-working volunteers, community groups and youth to continue caring for our local natural environment.

The Hon. Lily D'Ambrosio

Minister for Energy
Minister for Environment and Climate Action
Minister for Solar Homes

2022 Victorian Landcare Grants

The Victorian Government has provided \$3.35 million funding for the 2022 Victorian Landcare Grants for Landcare and environmental volunteer groups/networks to undertake on-ground works, education, and capacity building projects that protect, enhance, and restore our land and natural environment.

Project Grants: up to \$20,000 for on-ground works, education, and capacity building projects

Support Grants: up to \$500 to help with group administration and running costs

Eligibility: Victorian Landcare and environmental volunteer groups/networks, Friends of groups, Conservation Management Networks, Coastcare groups, and Aboriginal groups and organisations working on Country.

Applications close: Tuesday 26 July 2022 at 5pm

More information: <https://www.environment.vic.gov.au/grants/victorian-landcare-grants>

2022 Victorian Junior Landcare and Biodiversity Grants

The Victorian Government has provided \$450,000 funding for the 2022 Victorian Junior Landcare and Biodiversity Grants.

Project funding: grants of up to \$5000 are available for projects for young Victorians to participate in biodiversity-focused, hands-on projects or environmental learning activities.

Eligibility: schools, childcare centres, kindergartens, Scouts, Girl Guides, youth groups, and Junior Landcare groups in Victoria can apply for the grants.

Applications close: Tuesday 9 August 2022 at 3pm

More information: <https://juniorlandcare.org.au/grant/2022-victorian-junior-landcare-and-biodiversity-grants>



A year in the life of Strath Creek Landcare Group captured via podcast

By Fiona Gruber

Hopbush, tree violet, river red gum; there are 300 pots on the back of a trailer alongside bundles of stakes, piles of tree guards, spades, and mallets. A light drizzle is falling. It's an early morning late in June 2021 and a dozen volunteers are milling about and shouting greetings at the season's first planting of the Strath Creek Landcare Group (SCLG).



Strath Creek Landcare Group member and radio journalist Fiona Gruber recording the podcast.

What could be more ordinary than a Landcare planting session? Plantings are one of the core activities in any Landcare year, but this hasn't been a normal year. The pandemic has been raging for 18 months. Mortality rates are low across Australia, but life has changed in ways both large and small.

It's why I'm alternating between knocking in tree stakes and using audio equipment to record the opinions of some of the rugged-up individuals on this chilly winter morning.

Recording during a planting

Noreen Foster, a farmer and one of the longest-standing members of SCLG, has strong views on many topics. As I wave a microphone in her face and ask her about tree guards, she pauses a moment before replying.

"A tree guard," Noreen says, "seems to invite a wombat to either dig it up or shit all over it."

Another voice chimes in from the background. "Always controversial!" says Terry Hubbard. Terry is one of the SCLG stalwarts and a former chair of the National Landcare Network.

Many of the planting crew have been members for years. Others, like farmer Selen Rifat, joined recently. I'd been a member for several years, alongside my husband Mark Williams, but we'd only recently moved to live in Strath Creek full time. Before the first COVID-19 lockdown we worked in Melbourne during the week. For me, that work involved working as a journalist and radio producer and making features for ABC Radio National.

SCLG was founded in 1996 and has grown from nine individuals to more than 60 families. Our members are passionate environmentalists who believe in sustainable agriculture. Gatherings are noisy, happy, and informative, with plenty of good wine and food, and lots of

support for fellow members and the wider community.

We had discussed the idea of creating a history of the group in podcast form, but other projects were more pressing. COVID-19 suddenly provided a focus. Here was a global event, of a size and shape as yet unknown, and rather threatening. And here was a small rural environmental group composed of farmers, landholders, and nature lovers, trying to go about its everyday activities.

We decided to jump in and look at a year in the life of the group, against the background of the pandemic. The finished podcast runs from spring 2020 to spring 2021 and is called 'Plant a tree to grow a community; the story of Strath Creek Landcare Group and our year in COVID.'

Grant helps to fund podcast

In July 2020, we'd formed a small committee that met over Zoom including President Susan King, Vice President Sue Martin, and Laurie Macmillan (since deceased), who, with her partner David Wakefield (since deceased) came up with the idea of a podcast.

Susan King suggested applying for a grant from Murrindindi Shire Council. We were very pleased to receive this grant as I could receive a fee for making the podcast and we could pay the composers and performers who featured. It also meant we could produce a booklet to accompany the audio documentary.

The next task was to identify who to interview and which events to focus on. The interviews were recorded on a professional recorder, with an external condenser microphone for optimal quality. I was able to use ABC editing software, but there are many editing options on the market, including free downloads.

Some potential voices were keeping their distance so didn't feature, and not everyone who volunteered made

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The reality of any documentary is that much more is recorded than can be used.

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Members of the Strath Creek Landcare Group planting alongside King Parrot Creek.

it into the final podcast. The reality of any documentary is that much more is recorded than can be used. COVID-19 restrictions were also challenging, with face-to-face interviews in gales and voices muffled by masks. Gatherings were strictly regulated and many of our usual Landcare activities – barbecues, platypus and rakali counts, and fencing sessions – had to be postponed.

As we went in and out of lockdown during 2020 and 2021, it seemed the rhythms of life would never resume their pre-COVID-19 tempo. However, just after the first well received broadcast of the 35-minute podcast to the Strath Creek Landcare Group, the COVID-19 landscape changed again; high vaccination rates and the less severe Omicron variant saw an end to lockdowns and contact tracing and checking in.

Creating an archive for future listeners

It's these changes and the effect they have had on ordinary lives that make recording them so important. Government and medical archives will remain, as will media coverage of the bigger stories, but quieter voices, especially rural ones, tend to get lost.

Alongside COVID-19, all of us are facing climate change, species loss, and the ever-present threat of floods and fires. The years 2020–2021 have been hard ones for all communities, including ours.

The Strath Creek Landcare Group lost four members, one to COVID-19, another to cancer and two to suicide.

In years to come we hope people will listen to our podcast and read the accompanying booklet as archival documents. Some of us will be long gone and the pandemic will be a distant event. But this time, and these voices, and this fine organisation have been captured. And in a small way, that's important.



Farmer Selen Rifat is one of the new members who feature on the podcast.

This article was written by Fiona Gruber with assistance from fellow SCLG members Susan King and Sue Martin. The podcast and booklet are available at www.strathcreeklandcare.wordpress.com for further information email susan_king1@icloud.com.

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In years to come we hope people will listen to our podcast and read the accompanying booklet as archival documents.

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Ivan Carter (blue shirt) from Connecting Country filming during the Djaara bird walk.

Connecting Country extends its community with online

Connecting Country is a community not-for-profit group that operates at a landscape scale to increase, enhance, and restore biodiversity across the Mount Alexander Shire region of Central Victoria. Connecting Country has been operating for 15 years. Its four main action areas are supporting Landcare, restoring landscapes, engaging community, and monitoring biodiversity.

The Mount Alexander Shire region has around 30 active Landcare and environmental volunteer groups. Connecting Country supports these groups through a dedicated Landcare facilitator, made possible with funding through the Victorian Government Victorian Landcare Facilitator Program.

With so many active Landcare and environmental volunteer groups in our region, the Landcare facilitator helps to provide events, resources, and opportunities for them to connect with Connecting Country, and come together with other Landcarers to learn new skills, share experiences, exchange ideas and coordinate their efforts. Much of this interaction is supported through online tools such as Connecting Country's website, blog, e-news, online presentations and social media.

COVID-19 restrictions had a major impact on our capacity to deliver on-ground projects, especially our traditional in-person

workshops and events. We adapted to these challenges by expanding our use of various online tools. It was a steep learning curve. The results have been successful in many unexpected ways, extending our reach both locally and much further afield.

Live-streaming a bushland bird walk

When COVID-19 restrictions were easing in late 2021, Connecting Country partnered with Djaara (Dja Dja Wurrung Clans Aboriginal Corporation – a Traditional Owner entity in Central Victoria) to facilitate two events funded by Djaara. These events aimed to engage the general community with Dja Dja Wurrung culture, history, and environmental management, as well as enjoy a bird walk in local bushland co-managed by Djaara.

Along with Djaara representatives, we invited bird enthusiasts from BirdLife Castlemaine to help guide participants through local native bushland and discuss the bird life as we walked. For safety and logistical reasons, we limited each walk to

30 participants. The events proved popular and were over-subscribed so we decided to live-stream them online via Facebook to reach a wider audience.

In addition to the 60 in-person participants, the live-stream reached a further 600 viewers, with people as far as Hobart and Adelaide enjoying the event. Feedback revealed people who could not attend in-person due to health or mobility issues also appreciated the opportunity to participate.

The Djaara bird walks were a great learning experience. We better understood the effort involved in managing the camera and microphone to capture the day – and gained awareness of the perspective of the online participants. Delivering a live-streamed event such as a walk meant there were passages of silence when the presenters were not talking, although this could also be a positive for some online participants as it's a chance to take a break.



Harley Douglas from Djaara speaks with the audience at the Djaara woodland bird walk.

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In addition to the 60 in-person participants, the live-stream reached a further 600 viewers, with people as far as Hobart and Adelaide enjoying the event.

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Landcare events

By Hadley Cole

We also wondered if our focus on the cameras and microphone impacted on the experience of the people attending the walk in-person.

The online element created additional work with preparation and planning, as well as training of staff and volunteers to make sure everything went smoothly on the day. Although we were delighted with the success of the events, there was some trial and error before we felt comfortable using the technology. We built on lessons from our previous online events.

Online improving dams event popular

Our first online event in 2020 saw local naturalist Geoff Park and ecologist Chris Tzaros team up to speak about the trickier birds to identify in the Mount Alexander Shire region. This attracted 450 viewers from across Australia and even overseas. This event taught us the importance of investing in quality microphones, as well as allowing plenty of time for testing the equipment.

In 2021, an entirely online event was organised to engage landholders in improving their dams to supply clean water and provide habitat for native plants and animals. The healthy dams workshop was filmed at a local landholder's property, and was popular. It taught us about recording

in windy locations and the value of good equipment.

Tips for running online events

- Invest in quality technology such as microphones, a gimbal and a spare battery for your phone when using it to film in the field.
- If you have more than one presenter in the field, give each presenter a microphone. Wireless microphones that connect to the recording device are preferable.
- Do a practice run with presenters to ensure smooth transitions between screens with hosts and presenters.
- Check you have good smart phone reception at all locations where you will be filming.
- When hosting presentations online from various locations, ensure that all presenters have reliable internet connections.

COVID-19 restrictions encouraged Connecting Country to embrace online tools for engaging our community. They have given us the opportunity to reach a much wider audience and to share our vision of the Mount Alexander Shire region as a beautiful, productive, healthy and diverse landscape. It's been worth the effort.

Hadley Cole is the Connecting Country Mount Alexander Region Landcare Facilitator. For more information go to www.connectingcountry.org.au or email hadley@connectingcountry.org.au



Djaara bird walk participants walking through Kalimna Park in Castlemaine.

ClimateWatch trails help land managers monitor ecosystem change over time

By Luke Richards and Tanaya Joshi

Climate change and biodiversity loss are affecting nature's rhythms and patterns. Making decisions about how to best manage ecosystems requires timely and up to date scientific information. Earthwatch Australia has developed ClimateWatch – the first continental scale phenology (the study of seasonal and cyclic natural phenomena) program in the southern hemisphere. The program revolves around the free ClimateWatch app.

Using citizen sourced photography verified by scientists, the ClimateWatch app has tracked changes in the behaviours of Australian plants and animals since 2009. This user-friendly app acts as a powerful tool to educate and empower the public to become stewards of their local environment.

Land managers can use the app to create a ClimateWatch walking trail in their park or reserve. This helps to fill data gaps, develop plans, and educate the public on the importance of each species within the ecosystem balance.

Photographs help record change over time

Earthwatch has collaborated with the Cumberland Land Conservancy in Western Sydney to develop three ClimateWatch trails. By hosting guided walks along these trails, the Conservancy can educate the community about the value of high conservation value bushlands that act as refuges for critically endangered species. As participants take photographs of the flora and fauna, they feed back to the app and add more data on species behaviour and change over time.

According to phenologist and researcher Dr Lynda Chambers, repeated observations of plant and animal phenology provide important indicators of global change.

"The data becomes particularly scientifically valuable when the same individuals are regularly observed at the same locations over time. Understanding species phenology not only helps us to understand the impacts of climate change. It can also help in management decisions, such as identifying potentially vulnerable native species and allows for time-related prioritisation of the removal of invasive species," Lynda said.

Spotlighting high conservation value areas

Trails can play an important role in directing the efforts of citizens, community groups, councils and government authorities to high conservation value areas. The Lilly Pilly Link Walk near Tidal River in Wilsons Promontory guides visitors to observe silver wattle, white bellied sea eagles and sweet bursaria. As well as enjoying the walk visitors can add their photographs of the trail to the app and participate in the future conservation of the area.

William Playne from Parks Victoria said the trail was an opportunity for citizen scientists.

"Visitors to the area can contribute to monitoring change in a meaningful and positive way," William said.

There are currently 30 ClimateWatch trails in Victoria, and 85 nationally. ClimateWatch intends to increase the numbers of trails to the hundreds across the many unique landscapes of Australia.

With support from the Victorian Government's Volunteering Innovation Fund, ClimateWatchers can now search the trails within their state, the species they can expect to find, and the path that lays ahead of them on their smart phones.



Sweet bursaria flowering on the Lilly Pilly Link Walk.

Trails in urban areas

Beyond the science, trails can have a positive impact on the community. Immersive experiences in nature are an important part of healthy and happy neighbourhoods. The ClimateWatch trails provide a unique, action-oriented opportunity to discover and deepen relationships with nature.

Jane Griffin from the Royal Botanic Gardens Victoria (RBGV) hosts regular community walks at the Melbourne gardens using ClimateWatch trails. According to Jane, children as young as five master the app quickly.

"They become totally engaged, recording current growth phases in real time. Participants are fascinated and concerned about being able to record tangible climate change within their lifetimes, but they love knowing observations recorded will help shape Australia's scientific response to climate change," Jane said.

Jane's network of volunteers at the RBGV use the app to educate and empower teachers and students on school field trips, and increase the awareness of biodiversity with community groups, even those from urban environments.

The ClimateWatch app was developed by Earthwatch Australia with the University of Melbourne and the Bureau of Meteorology.

To search for trails, go to www.climatewatch.org.au/trails.

Tanaya Joshi is Impact and Communications Officer, and Luke Richards is ClimateWatch Program Coordinator at Earthwatch Australia. For more information email lrichards@earthwatch.org.au.



ClimateWatch Program Coordinator Luke Richards talks to community groups at Parks Victoria's Haining Farm, Yarra Valley, at the launch of their ClimateWatch trail in 2021.



Corner Inlet Landcare Group have been early adopters of the membership portal.

Managing memberships online

By Sally O'Neill

Landcare groups across West Gippsland can now spend less time on managing members and administrations and more time on working towards environmental outcomes thanks to the newly released Landcare membership portal.

The portal was developed during the recent lockdowns and went live in February 2022. It is available free of charge for all Landcare groups and networks in West Gippsland and is attracting enquiries from other groups across Victoria.

Kathleen Brack, Regional Landcare Program Officer with West Gippsland CMA, led the development process. According to Kathleen the main benefit of the portal is efficiency.

"Previously Landcare groups managed their memberships in many different ways, ranging from Excel spreadsheets, renewal reminders in the post and receiving annual fees in an ad-hoc manner throughout the year. The online solution allows Landcare group executives to manage group memberships, collect annual fees automatically into their bank account and generate automatic reminders for annual renewal.

"It also allows Landcare members across West Gippsland the flexibility to join their local Landcare group, pay annual fees and

change any contact or other details directly at a time that suits them," Kathleen said.

The portal has the ability to accept credit card, manual cheque and cash payments. Group treasurers can easily see the number of financial members they have in real time.

West Gippsland has five committed and active Landcare networks working across the large region.

"The idea was agreed upon by the five West Gippsland Landcare networks who wanted a portal that was easy to use, safe, secure, accessible to both groups and networks, and helpful for insurance reporting and communication," Kathleen said.

West Gippsland CMA managed the project, running a tender process for the development of the portal. A local Gippsland software designer completed the job.

Sally O'Neill is Communications Lead at the West Gippsland CMA. For further information email Kathleen Brack at rlc@wgcm.vic.gov.au



Tash Marty-Cripps (left) and Kathleen Brack from West Gippsland CMA demonstrate how the portal can be accessed anywhere at any time.

The CMA achieved another milestone recently with its Gippslandscapes podcast celebrating 50 episodes. Launched in 2019, the podcast features the many colourful characters and incredible achievements of Landcare across the region. More stories are planned for future episodes.

All 50 Gippslandscapes podcasts are at www.wgcm.vic.gov.au/gippslandscapes

The portal is at www.landcare.wgcm.vic.gov.au/



Karen O'Keefe using the VBA Go mobile app in the field at Mt Rothwell Biodiversity Centre.

Recording a golden discovery on the volcanic plains

On a warm summer day in 2021, Karen O'Keefe was out walking on her Rokewood property when she noticed a moth flying erratically, zigzagging a few feet off the ground. The moth landed on a thicket. She noticed its bronze-brown forewings and her heart leapt. Could it be a golden sun moth?

Rokewood is in the Victorian Volcanic Plains (VVP) bioregion of south-west Victoria, one of Australia's richest biodiversity hotspots. As Regional Agriculture Landcare Facilitator with the Corangamite CMA, Karen travels across the volcanic plains helping primary producers to manage their land sustainably.

Karen sent her photographs of the moth to several colleagues, who confirmed it was indeed a golden sun moth. Once common across the native grasslands and grassy woodlands of south-eastern Australia, intensive agricultural practices and urban development have greatly reduced the moth's habitat and impacted on breeding cycles. Females are unable to travel between isolated grassland patches to breed, and adult males will not fly more than 100 metres from suitable habitat. The moth is listed as vulnerable in Victoria.

Like many moths and butterflies golden sun moths are dimorphic, meaning that males

and females have distinctive markings. Karen soon realised her paddocks, with remnant patches of native wallaby grass (*Rytidosperma* sp.) and spear grass (*Austrostipa* sp.), were home to an entire population of golden sun moths. She observed females with golden-splashed backs crawling on the ground among the grass and bronze-brown males actively flying around in search of females.

Karen knew how important it was to capture and officially record sightings of threatened species, in order to increase our knowledge and understanding of species.

"This is a crucial step to ensure habitat is protected into the future, and that appropriate considerations can be made if significant land use changes are proposed to occur at the site. It is also fun finding and recording new populations of species not previously recorded at a site," Karen said.

Sightings uploaded to Victorian Biodiversity Atlas

Still buzzing from the excitement of her discovery, Karen opened the VBA Go app on her phone and uploaded her sightings to the Victorian Biodiversity Atlas (VBA). The VBA is the foundational dataset for Victoria's native species. It provides a comprehensive spatial record of the distribution, abundance and conservation status of wildlife across the state.

Data from the VBA feeds into DELWP's biodiversity decision support tools including NatureKit and Strategic Management Prospects (SMP), which are utilised within government and across the conservation sector for planning, monitoring and reporting of on-ground actions for biodiversity conservation.

There are currently 10 million species records in the VBA, with some records dating from the 1800s when botanist Ferdinand Von Mueller established the National Herbarium of Victoria.



A female golden sun moth on Karen O'Keefe's property at Rokewood.

The Victorian Biodiversity Atlas is the foundational dataset for Victoria's native species.

By Sarah Martin

The VBA is an invaluable dataset for showing where wildlife is now and how it has changed over time.

Biodiversity data public and online

Anyone can use the VBA. All data published is also in NatureKit which allows users to easily search for, and map species, and check for threatened species in their area. Recording confirmed species sightings in the VBA is vital for helping to monitor the impact of on-ground actions, to improve decision making and to measure progress towards the ambitious targets of the state's *Protecting Victoria's Environment – Biodiversity 2037 plan*.

Every record counts for conservation, and adding your species sightings to the VBA is a practical step we can all take to support investment, regulation and management decisions that protect Victoria's environment.

What makes good quality biodiversity data?

According to Mel Hardie from the VBA team at DELWP, every record entered in the VBA goes through a quality assurance process to check that the information is complete and meets data standards.

"Species specialists then individually verify the species identification, based on location and methodology and other supplementary information. We need



A male golden sun moth.

high-quality data for our decision support tools such as SMP. All sightings help to improve our collective knowledge of species in Victoria.

"We are particularly interested in species sightings from regional surveys, carried out over several years, and where there are known data gaps. For example, we have very good data on bird populations, but not as much data on invertebrates in farming regions," Mel said.

Mel encourages Landcare groups that have species surveys and sightings they want to upload to the VBA to get in touch with the team who will be happy to assist.

For more information about VBA and to download the VBA Go mobile app visit www.environment.vic.gov.au (biodiversity/Victorian Biodiversity Atlas)

Sarah Martin is a Project Officer for the Protecting Victoria's Environment – Biodiversity 2037 plan at DELWP. For more information contact the VBA team at vba.help@delwp.vic.gov.au

Field days on golden sun moth habitat

Native grasslands once covered 2.3 million hectares of the VVP. Since colonisation the grasslands have been extensively cleared for agriculture and less than one per cent remains.

The Corangamite CMA's Grassy Eucalypt Woodlands Stewardship Program (supported by the Australian Government's National Landcare Program) partners with community groups, including the Geelong Landcare Network, to support landholders in conserving VVP habitat. Several field days were held during spring 2021 and more are planned for 2022.

For more information contact jess.lill@ccma.vic.gov.au

How to navigate online grants

By Tess Grieves

Applying for funding is challenging and time consuming. It is also one of the most important administrative activities that groups and networks do. Without grant funding many of the Landcare projects that are improving the health of our environment and our communities just wouldn't go ahead.



Krista England (left) from North Central CMA and Mount Alexander Shire region's Intrepid Landcare Coordinator Asha Bannon work together on an online grant application.

I've had experience on both sides of the grant fence – as a grant applicant and as an assessor. I've read hundreds of applications and trawled through countless sets of guidelines, eligibility criteria and assessment guidance notes in order to promote grant opportunities to Landcare groups, farmers and other environmental volunteers.

Let me share with you some of the wisdom, challenges and repeat offences I've seen over the years, which I hope increases your groups chances of success with your next grant submission. I'll be referring to the notion of a project here, but it may be that you're seeking funding for an idea, a plan, an initiative, a program or a trial.

Check you are in the right stream

When you come across a grant round, or perhaps you've been approached by invitation, read the summary information, the opening paragraphs of the funding guidelines and the objectives section very carefully. Ask yourself if your project really aligns to the objectives of this funding stream. If the wording is confusing, there

is a lot of jargon and unfamiliar acronyms, or it makes you question if the project fits into the objectives of the funding body, you may already have the answer.

It's important to go carefully through the details. Each time a grant opportunity closes funding bodies are swamped with applications from ineligible organisations, for ineligible activities, with unrealistic budgets and timeframes. I can only encourage you to head straight to the eligibility criteria and assessment questions section. Funding bodies aim to be clear, targeted and transparent about what their funding can go towards and who is eligible to receive it.

Don't swim alone

Before you even begin a first draft, pick up the phone and speak with the grant manager. Talking through your project, its alignment to the funding, the budget and delivery timeframes with the person managing the process can be incredibly helpful. It will either spur you into action to begin drafting the application or save you a lot of time and hassle. There are no silly questions.

“

Ask yourself if your project really aligns to the objectives of this funding stream.

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The Loddon Plains Landcare Network's mapping workshop was supported by a Victorian Landcare Grant.



A creekside revegetation project undertaken by the Ullina Landcare Group in 2020 was funded through a successful Regional Riparian Action Grant.

Tips for writing the best application

- Be project ready. Don't wait for a particular funding stream before your group documents its ideas for projects, starts to record indicative quantities for materials, and forms the relationships necessary for project success.
- Write as though no one else knows what your project is about. Ensure you link to strategies, action plans, best practice and relevant research.
- Grants are increasingly only available through online applications. Computer literacy is a necessary skill. Draft the project offline first. Use a cloud-based document sharing system that will ensure the document is saved and can be viewed, reviewed, edited and commented on by other group members.
- If an online grant system doesn't allow you to view the whole application form, ask for a PDF from the grant manager.
- Create a realistic, itemised and conservative budget. Check if quotes are needed and factor the time to obtain quotes into the application period.
- Check what permission you require for your project. Landholder signatures or in-principle letters of support from land managers may be needed. Touch base with everyone involved and advise them of the timeframes. Permission (in principle) is not a green light. Contacting the farmers and public land managers again once you are funded is essential.

- Funding bodies often ask for in-kind contributions. Don't sell yourselves short. The volunteer hours and other contributions to a project are valuable and often influence whether a grant application is successful.
- The time between application, assessment, notification and funding contracts can be weeks or even months. Factor this into the delivery timeframes for your project so you're not caught short, especially for seasonal activities.

Tips for project management, recording and acquittal

- If your application is successful read the notification letter and associated documentation carefully. Some grant programs encourage recipients to undertake promotion and publicity around the grant announcement, while others can require ministerial involvement or a corporate launch before things get started.
- Remind the people committed to the project of their roles, responsibilities and obligations. A shared calendar of action, working backwards from the reporting deadline, can help people visualise what needs to happen and when.
- Record what's happened and where, as you go. If knowledge of your grant progress is only held by one member it creates a burden on other volunteers if they are incapacitated and can't see the project through. There is risk to the group's reputation if things come unstuck at reporting time.

Funding bodies aim to be clear, targeted and transparent about what their funding can go towards and who is eligible to receive it.

- Acquittal and final reporting can feel like more work once the project is complete, but it is also an opportunity to tell the story of the project. Prepare for this part of the process and embrace it. It's also an opportunity for the group to celebrate what has been achieved.
- Grant managers love clear, factual and timely reports. If allowed, include photographs, promotional material, flyers, social media posts and other attachments that showcase your work.
- We know things don't always go to plan, especially given Landcare projects are working with nature. If a project takes an unexpected turn, or gets offtrack, call the grants manager and work it through. It's not ideal to use your reporting template to surprise the funding body with news that aspects of a project were not delivered.

Landcare work is vital and valuable. The funding we have available to do the work isn't always able to stretch as far as we need it to. The simple truth is that many good projects don't get funded, however grant managers have many connections and can often push unfunded projects towards other opportunities, so spending time preparing a great submission is rarely a waste of time.

Tess Grieves is Regional Landcare Coordinator for the North Central CMA. For more information email tess.grieves@nccma.vic.gov.au



Local residents taking part in the Frog Census at Karkarook Park, Moorabbin, in March 2022.

Citizen scientists record endangered

It's a humid summer evening at the edge of the Merri Creek on Wurundjeri Country. The sun descends across the volcanic plains and the black crickets begin their nightly chirping chorus. When darkness falls the night sky is scattered with luminous stars. You stand quietly, listening for the deep, gruff call of the endangered growling grass frogs, affectionately known as growlers.

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Growlers were once widespread across Victoria. They have become less common since 1990 due to habitat loss and fragmentation and a deadly fungal disease, chytridiomycosis.

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Gone Growling is a citizen science program led by the Arthur Rylah Institute for Environmental Research (ARI) in partnership with Melbourne Water and DELWP's Melbourne Strategic Assessment Program. Gone Growling builds on 20 years of research, led by ecologists Geoff Heard and Peter Robertson, to further our understanding of growling grass frogs in the northern urban growth corridors of Melbourne.

Growlers are a bright to olive-green with a warty back. The distinctive call of the male is heard during both the day and night during warm conditions between September and March. The frogs prefer wetlands with dense submerged vegetation

for protecting tadpoles, rock piles to find shelter, warm, unshaded water and floating plants where males can call from and safely bask during the day, with adjacent open grassy areas for foraging.

Habitat loss for an urban frog

Growlers were once widespread across Victoria. They have become less common since 1990 due to habitat loss and fragmentation and a deadly fungal disease, chytridiomycosis. They were listed as endangered in Victoria in 2002.

Growlers have been surveyed every five years at study sites in Melbourne's northern waterways to track population trends. This year, a team of ecologists led by Geoff Heard and Peter Robertson,



The new wetland at Rockbank North is now home to 15 young growling grass frogs.

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The Frog Census records and scientific survey results are being collated into an online interactive map that will help us to better understand how growlers are faring as urban development continues.

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growling grass frogs

By Christina Renowden

have been repeating these surveys in collaboration with ARI. Over spring and summer 2021-22, citizen scientists have also been adding to our knowledge of growlers by using their smartphones to record calls in local waterways.

The recordings are captured with the Melbourne Water Frog Census app. The app allows volunteers to collect data, which informs Melbourne Water on how we can better manage frog populations and raise awareness of waterway health issues. A frog ecologist listens to every recording submitted through the app and notifies volunteers if they have recorded a growler or other frog species.

Citizen science data informs study

Gone Growling kicked off its first season when Melbourne was experiencing COVID-19 restrictions. Despite this, 340 people downloaded the Frog Census app during spring 2021 and recorded growlers from 15 locations across Greater Melbourne, with nine records in the Merri Creek and Moonee Ponds Creek catchments.

These important records help to inform the scientific surveys undertaken by ARI and the survey team. Over spring and

summer of 2021-22, 179 sites were surveyed across the northern fringes of Melbourne. Growlers were recorded at 36 of those sites, or 20 per cent. These records demonstrate a significant decline of growlers since the first surveys were done in this area 20 years ago.

Increasing urbanisation leading to further loss, degradation, and fragmentation of remaining habitat are to blame. Compounding this is the cooler and wetter conditions associated with two consecutive La Nina years. This has led to higher water flows in creeks. Growlers prefer slow-flowing water and pools for breeding. The cooler, wetter conditions can also exacerbate chytridiomycosis.

The Frog Census records and scientific survey results are being collated into an online interactive map that will help us to better understand how growlers are faring as urban development continues.

New homes for growlers

With the aim of protecting biodiversity during urban development for the long term, DELWP's Melbourne Strategic Assessment program is creating 90 purpose-built wetlands in growling grass frog conservation areas along waterways

in Melbourne's four main urban growth corridors over the next 20 years.

Residents who live close to these wetlands as they are built in the coming years are encouraged to join the Gone Growling project. This will help scientists understand if the wetlands are working and providing much needed habitat for the species.

Construction of the first wetland began in 2019 at Rockbank North to the west of Melbourne. By spring 2020, growlers were found in the new wetland, most likely moving in from nearby Kororoit Creek. They have now bred at the site with 15 young frogs recorded so far.

To sign up to Gone Growling visit www.melbournewater.com.au and search for Frog Census. Christina Renowden is the Victoria Nature Festival Coordinator and Citizen Science Advocate for ARI at DELWP. For more information email christina.renowden@delwp.vic.gov.au

With thanks to Daniel Gilmore for permission to use his images taken at Rockbank North.

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The online learning resources have been developed to inspire awe, encourage action to protect our environment and to keep people entertained.

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Amber Conran completing the biodiversity bingo activity.

Remote learning resources help children engage with nature

By Naomi Wells

One of the silver linings of the 2020 and 2021 COVID-19 lockdowns was that it reminded many of us of the importance of our local environment.

People had to stay close to home and were keen to spend as much time in nature as possible. Schools were closed and families were looking for educational activities they could do together.

Bellarine Catchment Network (BCN) saw this as an opportunity to reach out and provide some creative and innovative resources for engaging with nature. BCN is made up of representatives from catchment and coastal organisations, including Landcare groups, on the Bellarine Peninsula and Geelong region. The resources they have produced are available for everyone right across Australia.

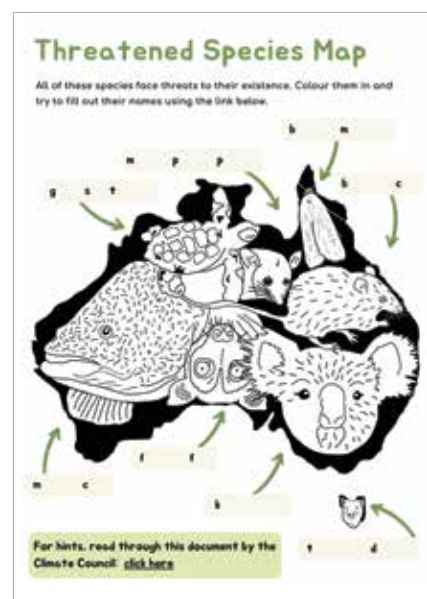
The online learning resources have been developed to inspire awe, encourage action to protect our environment and to keep people entertained. The simple, self-directed learning packs are aimed at children aged between 9 and 13. They involve cutting, pasting, drawing, and hands on learning both in the house and outside in nature.

The resources cover a range of environmental issues including biodiversity, climate change, wetlands, litter, water, threatened species, feral animals, and waste reduction. Each resource contains around 10 activities that encourage critical thinking, creativity, and observation skills or are simply fun.

The BCN team used the free web-based graphic design tool Canva to create these resources.

Canva is user friendly and includes hundreds of free templates, graphics, images, and fonts. BCN also added specific images, such as a wetland species page with an image of the growling grass frog.

The resources were well received within the wider Geelong community and, when shared to international Facebook groups including the 'exploring nature with children curriculum ideas' group, were downloaded by schools and parents in Mexico, New York and the Middle East.



The resources contain links for further research and learning.

The most popular resource was on climate change. Comments received suggested there are very few entertaining and empowering resources for children on this often scary and confronting topic.

The resources are available at www.environmentbellarine.org.au

Naomi Wells is Communications and Community Engagement Coordinator at Bellarine Catchment Network. For more information email naomi@bcn.org.au

Tackling weeds online

By Kate Blood

Go to the online edition of the magazine at www.landcarevic.org.au for more information and fully searchable links.

Back in 1988 when I started my career as a fresh-faced weed technician my tools of trade included a bright yellow copy of Leon Costermans' *Native Trees and Shrubs of South-Eastern Australia*, and a prized shiny new copy of *An Illustrated Botanical Guide to the Weeds of Australia*, by Auld and Medd.

It wasn't long before I had filled a bookcase with every plant and weed book I could find. I spent many evenings huddled in front of my oil heater at Yarram looking at the illustrations in the books and trying to identify the photographs of weeds I had taken with my film camera.

Thirty plus years later and here we are in the digital era with cameras on mobile devices that fit into our pockets and access to a world of knowledge as close as the nearest mobile tower.

There are a variety of online tools that can be used to publicise, plan, communicate and report on weed projects. They are also useful for learning about weeds, an integral part of any planning process, and they provide easy ways of sharing information to help others.

Useful apps and websites

For plant identification go to your app store and search for iNaturalist and PlantSnap. Look out for a new weed identification app

called WeedScan that is currently being developed and will be released in 2023.

When searching for weeds in your computer browser include invasive in the search terms and look for reputable links like government agencies, authorities, universities and Landcare groups. Links can change or disappear so download essential information for further reference. Make sure information about chemical use and legislation is current.

For general links to weed information, images and often management details, search for Weeds Australia and the Atlas of Living Australia. The lucid key to environmental weeds of Australia has fact sheets on over 1000 species.

Environment Victoria has an advisory list, manual of templates, tips, tools and a newsletter on environmental weeds in Victoria. Agriculture Victoria hosts Victoria's weed spotter training and newsletter. Agriculture Victoria is also where you'll find the weeds declared noxious in Victoria under the Catchment and Land Protection Act, 1994.

Vicflora hosts the flora of Victoria, a comprehensive and current guide to the wild plants of Victoria including weeds. There are plant profiles, identification tools, images and illustrations. This site is curated by the National Herbarium of Victoria, Royal Botanic Gardens Melbourne.

The herbarium has an identification and information service (fees may apply). Herbarium specimens and records are viewable through Australia's Virtual Herbarium.

Social media

Social media is a great place to explore and share weed information. When needing help in the field a post to Facebook or Twitter can result in an expert identification. Try search terms and hashtags such as #InvasiveSpecies #EarlyInvaderWeeds #InvasivePlants #weeds #WeedID #PlantID.



Identifying environmental weeds in the field using iNaturalist.

You can connect with the Weed Society of Victoria Inc. and the Early Invader Weeds Victoria Group on Facebook.

YouTube has great content on weed treatment techniques. Look for the Australian Association of Bush Regenerators.

There is an enormous amount of material online that can help you plan and carry out your weed control projects. The online world has also been great for connecting people working in the same field.

Kate Blood is Program Manager – Weed Management at DELWP. This article was written with assistance from Kate's colleagues Bianca Gold and Bec James. For more information call the DELWP Customer Service Centre on 136 186 and follow Kate on social media @weedyk8



When this invasive blind cactus (*Opuntia puberula*) was discovered at Great Western it wasn't clear what species of cacti it was. A Facebook post yielded several confident identifications from experienced weed practitioners and botanists within an hour.

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iNaturalist is an effective way for communities to provide records of species in their local area.

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A regionally threatened common penciled blue butterfly (Candalides absimilis) at Buchan Munji in the Buchan Caves region, Krautungalung Country.



Volunteer Kirsten Boehm, an aspiring lepidopterist, looks over the project methods at the Mallacoota training day on Bidawal Country in 2021.

Using mobile applications to save

The threats facing Australia's flora and fauna are increasingly complex and require a suite of innovative solutions. After the 2019–20 Black Summer bushfires swept through 24 million hectares of Australia, it was clear that any conservation work done in these areas would need to centre on the communities at the heart of the disaster – which is where mobile applications (apps) come in.

iNaturalist sorts projects by region, taxa and user demographic

Using a Landcare Led Bushfire Recovery Grant we used iNaturalist, an online social network for sharing biodiversity information, and Epicollect5, a free web and mobile application for simple data collection, to create a toolkit for conservationists, researchers and citizen scientists.

iNaturalist is an effective way for communities to provide records of species in their local area. Mallacoota locals have been using it to record flora and fauna before and after bushfires. Users can join projects in their region, select their taxa of interest or their own demographic. I've enjoyed being part of the LGBTQ+ Naturalists project and I recommend

joining this project if you are part of the LGBTQIA+ community.

Creating a project on iNaturalist is simple. Our project collected butterfly records from across East Gippsland. Whenever a butterfly was recorded in the area it was attached to our project. We could discuss exciting findings with the user who uploaded the record, as well as letting interested people know how the project was tracking.

Real time data analysis

Epicollect5 was built and developed by Oxford University for researchers to collect and collate data in the field. Anyone can create a project and build a data collection form on the university website, and then use their mobile device to collect the data.

The form builder is user friendly, and the data output is easy to feed into an analysis software or to share with the communities you are working with. There's a nifty map function in the online site so you can see how many surveys you have done, or how many nest boxes you have installed/checked, or how many frogs you have seen. The possibilities are endless.

Multiple people can use your Epicollect5 data collection form at one time. This makes simultaneous fieldwork effortless. Data is immediately uploaded to the project database so project managers can see where data is being collected in real time and who is collecting. There is no delay in being able to analyse and interpret data.



Using mobiles in the field at the Den of Nargun on Brayakaulung Country.

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The shift away from paper data collection to apps can be daunting. When you put so much time into fieldwork you need to be able to trust your collection method.

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species

By Em Dale

Similar apps for taxa specific surveys are now emerging across Australia. The Butterflies Australia app developed by the Australian National University allows butterfly enthusiasts to do their own independent surveys and contribute to a national butterfly database. The app has an incredible field guide.

An app that replaces paper forms

The TSC has also been testing the ProofSafe app on our western Victoria projects with support from the Parks Victoria Innovation fund. ProofSafe is an app for mobile phones or tablets. It provides forms for entering tree data in the field, records locations by GPS and stores images and notes.

The TSC is aiming to replace all of its internal paper forms with forms on ProofSafe to manage event and volunteer sign up, information collation, asset management, scheduling for staff rosters, field trips and data collection.

Having all of our forms in one place for staff and volunteers to access freely will encourage more staff autonomy. We can easily replicate the forms for emerging projects.

The shift away from paper data collection to apps can be daunting. When you put so much time into fieldwork you need to be able to trust your collection method.

I encourage all new users to give these apps a go. They have made our project on threatened butterfly communities after the bushfires possible, and it was all the richer because of the contribution from the community. The first landscape-scale butterfly survey in Far East Gippsland for more than 30 years was completed one user and one record at a time.

Em Dale (they/them) is a Threatened Species Ecologist with the Threatened Species Conservancy with more than 10 year's experience in conservation ecology and threatened species management. For more information email em.dale@tsconservancy.org

The work in this piece was undertaken on Gunaikurnai (Krauatungalung, Brabalung and Brayakaulung), Jaitmathand, Dhudoroa, Ngarigo, Bidawal and Wotjal Country.



Using mobiles in the field at Croajingolong National Park on Bidawal Country.

Virtual field days a win for soil health in East Gippsland

By Carolyn Cameron and Tayla Cassidy



Maps, videos and photographs were a feature of the virtual Topsoils field days.

Before COVID-19, participants in the East Gippsland CMA Topsoils project were visiting the redgum plains, forested foothills, picturesque high country and the unique far east of the region. They were out in paddocks taking in the sounds, sights and smells. Demonstration sites were an opportunity to closely examine and touch soils and to discuss them with other participants.

Topsoils began as a five-year project in 2013. Due to its success, it was extended until 2023. The project aims to support change towards best management practices in soil health. The project's success is linked to farmer focus groups and demonstration sites. It is delivered through field days and workshops that create a practical shared learning environment.

The Topsoils project is supported by East Gippsland CMA through funding from the Australian Government and is delivered through a partnership involving the East Gippsland Landcare Network, Far East Victoria Landcare, Snowy River Interstate Landcare Committee, Agriculture Victoria,

and Southern Farming Systems, with support from the Regional Agriculture Landcare Facilitator.

When COVID-19 caused restrictions on gatherings the Topsoils partners had to rethink how they could convert an outdoor project to an indoor one while maintaining the positive benefits of the events – increasing knowledge, sharing ideas and allowing discussion of best practices.

According to Natalie Jenkins from Southern Farming Systems taking the field days online was the obvious solution.

"People still needed the workshops, skills and advice our speakers were giving.

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Hosting the events online meant that Landcare would be able to continue its work in the new COVID-19 world

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A traditional Topsoils field day held at Reedy Flat in February 2022.



Restoring soil health after bushfire was one of the issues discussed at the Clifton Creek virtual Topsoils field day in February 2022.

"Hosting the events online meant that Landcare would be able to continue its work in the new COVID-19 world," Natalie said.

Virtual field day is more than a webinar

The Topsoils partners were faced with the challenge of bringing their events online without losing farmer involvement in the program. They needed to do more than host a webinar or information session. They wanted to engage as much as possible with the members of the farmer focus groups and use real-life on-farm examples.

The first online events were delivered in October 2021. Five farmers located at Mount Taylor, Clifton Creek, Bengworden, Marlo Plains and Bendoc, opened their farms and businesses for all to see – virtually.

Instead of standing in a paddock, each farmer provided a virtual tour of their property; they used maps, photos, and videos to give a visual perspective and highlight the soil health issue that they were addressing. They described their business operations and revealed the limiting factors they faced. The sessions then switched to the expert presenter, who provided the advice for soil improvements specific to the property. The sessions were interactive, with all participants able to ask questions of the farmer and the presenter.

Each field day ran for 90 minutes online, but a lot of work was put in by the farmers beforehand. Each farmer was provided with technical advice and given tips on presenting online. The support and facilitation provided by the Topsoil partners was essential for success.

Some farmers are screen averse

The Topsoils partners recognised that while farmers are comfortable in their paddocks talking about their farms and soils, this was not always the case when talking to a computer screen. The commitment, flexibility and willingness of the farmers to learn the new technology was a credit to them.

According to Penny Gray from the Far East Victoria Landcare Network, the accessibility of the sessions saw an increase in attendance.

"People no longer had to travel for hours to get to a farmer's property on the other side of the region," Penny said.

The Topsoils partners also noted the benefit of being able to record the session, which means the knowledge can be saved and used again. It also opened the opportunity to engage guest presenters from all over the world.

Topsoils will continue to be delivered with a mix of online and face-to-face events as the project progresses. We have learnt that we can adapt our projects and make progress despite the major obstacle of a pandemic.

Carolyn Cameron is Regional Landcare Coordinator and Tayla Cassidy is Bushfire Engagement and Monitoring Officer at East Gippsland CMA. For more information email ccameron@egcma.com.au

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Instead of standing in a paddock, each farmer provided a virtual tour of their property; they used maps, photos, and videos to give a visual perspective and highlight the soil health issue that they were addressing.

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As with all modern professionals, landholders now have many opportunities to use electronic devices and programs to obtain accurate speedy data and deliver it via an app.

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Landholders in the Gecko CLaN Network favour personal connection over online events and services. This field day at Strathbogie was an opportunity to meet and discuss a soil test plot established in collaboration with Goulburn Broken CMA.

Do landholders really want to be online?

By Brigitte Brocklesby

Gecko CLaN is a community Landcare network that supports 19 Landcare groups stretching from Yarrawonga on the Murray to the Strathbogie Ranges and Nagambie in the Goulburn Valley.

Our network staff work in a large office that houses Victorian Government land management and emergency service organisations. As I sit writing this in March 2022, only eight out of the 80 desks are occupied as staff are still working from home. Days are spent in online meetings, sending emails, and sharing documents on the cloud.

As with all modern professionals, landholders now have many opportunities to use electronic devices and programs to obtain accurate speedy data and deliver it via an app. They can share information using the internet, attend meetings, purchase products with a couple of clicks of the mouse and even check their dams with a drone.

But what do landholders think about the increasing move to online services? I asked some of our Gecko CLaN members this question. The consensus is that they would prefer to meet their neighbours for a cup of tea, walk a fence line or chat about dung beetle breeding programs in the paddock.

Doug James from the Warby Ranges Landcare Group finds online meetings lack spontaneity.

“They are disengaging, and they are hard work. Put simply, there’s nothing like eyeballing people, because that’s how humans work,” Doug said.

Service providers and agencies often assume that all Australians have speedy internet services and are proficient with updating their software. Doug’s morning routine involves turning on his new computer and then making a cup of tea as he waits for his internet to connect. He is often awake at 4am trying to pay bills due to the failure or slow speed of his internet.

In my experience people who work on the land are observant, thoughtful, practical, professional, and resilient – a product of their environment. They often love a laugh and are generally excellent storytellers. As a Landcare network it is also our responsibility to listen. The message is clear. Our members are asking to reconnect in person. They want more events on farm where the learning and communication happens in the paddock not behind a computer.

Currently Gecko CLaN’s promotion, publicity, planning and communication is by email, on our website and very recently on our Facebook page. Otherwise, word of mouth prevails. We hope to continue with workshops in paddocks, events in the local CFA shed, reading books, advertising in the local newspaper, posters in the shops, letter box drops and good old-fashioned phone calls.

Landcare works through doing and seeing: that plant is growing well, that dam has eroded further this week, that lamb has been alone all morning. It’s the same with people and communities. Physical observation helps us to assess energy levels. Without eye contact, touch and body language, people become lonely. How do we know how they are really feeling and if they are coping?

Brigitte Brocklesby is a Landcare Facilitator with Gecko CLaN. Her position is funded through the 2021-24 Victorian Landcare Facilitator Program. For more information email landcare1@iinet.net.au

Meet your online virtual extension officer

By Nicole Garfi

If you have ever had weeds or pest animals on your property, you'll probably understand the value of a good extension officer. This service can be worth its weight in gold if you're not familiar with what's infesting your property and how to control it.

However, extension officers are not always available, and some landholders can be left a little lost on what to do and where to go to find the right information for their own situation.

For these reasons three of Victoria's pest management groups – the Victorian Gorse Taskforce, the Victorian Rabbit Action Network, and the Victorian Serrated Tussock Working Party, got together to develop a virtual extension officer, or VEO. The groups realised that technology was an underutilised tool in assisting landholders to deal with pests on their land. Added to this, landholders are often time poor and are becoming increasingly familiar with using online technology.

The aim was to develop a fast and effective online tool to build the capability and knowledge of landholders battling gorse, rabbits, and serrated tussock.

The VEO replicates an in-person visit from an extension officer. In-person

visits would usually include going to the affected area of the property, identifying the species, assessing the size of the infestation, determining the landholders control preference, then providing suitable advice based on these factors considering efficiency and cost. The VEO offers landholders this experience in four clicks of a mouse.

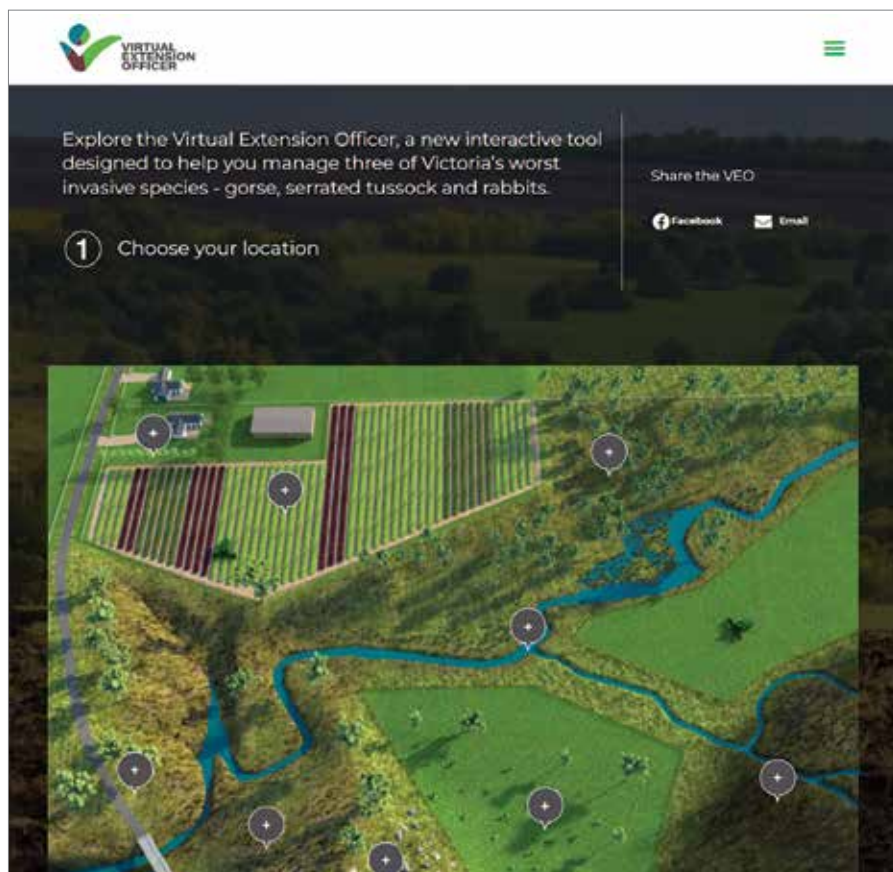
Landholders begin by accessing the VEO website where they are greeted by an eye-catching virtual map. The map is interactive with the ability to zoom in and pan across the landscape to explore each of the nine different land types that can be selected. The land types are the most common areas you would expect the three pest species to occur. Three further simple steps help to refine the search, so it most accurately represents the landholders situation. The VEO then offers the most suitable methods of control based on the landholder's selection.

All of the control methods recommended by the VEO align with best practice management. Demonstration videos are also available to enhance the user's knowledge and experience.

The VEO was launched in December 2021 and early reports indicate it will be a highly useful tool for landholders. Reception from some councils impacted by the three pest species has also been positive. Many council officers reported that they would forward the VEO link to the increasing influx of new property owners moving out from the city who may be unfamiliar with the current best practice options for pest management.

Funding for the VEO was provided by the Australian Government in collaboration with Agriculture Victoria. To access the tool go to www.virtualextensionofficer.com.au

Nicole Garfi is Biosecurity Leader for the Victorian Gorse Taskforce at Agriculture Victoria. For more information email the Victorian Gorse Taskforce at info@vicgorsetaskforce.com.au



A screen shot from the virtual extension officer online tool.

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The aim was to develop a fast and effective online tool to build the capability and knowledge of landholders battling gorse, rabbits, and serrated tussock.

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An Australasian bittern in flight over a wetland.

Listening to the Australasian bittern

By Bradley Clarke-Wood

Australasian bitterns were once widespread across the reedy wetlands of south-eastern Australia, but the degradation and loss of its habitat through development, farming, and the damming of watercourses has caused steep population declines.

These notoriously secretive birds are masters of camouflage. Despite being relatively tall they manage to keep a low profile in wetlands with their brown streaked plumage helping them to blend in.

A resident population of Australasian bittern on the coast of the Glenelg Hopkins catchment and inland around Gariwerd Aboriginal cultural landscape, are the focus of an ambitious monitoring scheme, which forms an essential part of the Australasian Bittern Recovery Project.

Many partners are involved in the recovery project which includes monitoring, critical baseline data collection, hydrological restoration of drained wetlands, improving privately-owned bittern habitat through weed and pest control, and creating greater structural diversity in dense stands of reeds through Aboriginal fire management practices.

Acoustic monitoring at local wetlands

In September 2020, BirdLife Australia trialled a stewardship program across the catchment with volunteers recruited to

deploy and maintain an acoustic monitor at their local wetland. The Glenelg-Hopkins Soundscape Project is supported by the Victorian Government through the Volunteering Innovation Fund, and by the Glenelg Hopkins CMA through funding from the Australian Government.

We recruited a team of 10 volunteers who committed to monitoring Lake Burrumbeet, Bryans Swamp, Portland Aluminium Smelter, Judiths Swamp near Naringal, and a Trust for Nature wetland near Portland West.

Volunteers were provided with a low-cost, low-power recording unit that recorded up to five hours of acoustic data each day. They diligently replaced batteries and harvested data over the bittern booming period from September to March 2020 when the birds were establishing territory and attracting mates. During this time Melbourne was in the midst of the world's longest COVID-19 lockdown so volunteers were able to undertake critical work in the field while the bittern recovery team was restricted to the city.

The recording units yielded more than 10,000 hours of recordings – a monumental amount of data, which created a significant processing challenge.

In April 2021, BirdLife Australia was successful in an application to the Victorian Government's Volunteering Innovation Fund. These funds allowed us to convert temporary sound logs to semi-permanent listening posts and to recruit a dedicated team of listeners from the large and diverse network of BirdLife Australia supporters across the country.

The volunteer listeners were trained to use the free online platform Arbimon to systematically work through the recordings and confirm the presence or absence of Australasian bittern. While this has produced critical insights into the Australasian bittern breeding season, it also allowed our listeners to form relationships to wetlands thousands of kilometres away. Listeners as far north as Brisbane were listening to bitterns on the south coast of Victoria.

According to volunteer listener Glen White, the boom of the Australasian bittern



An Australasian bittern in reeds preparing to produce its signature boom.

is very unmusical but she still found the experience hugely rewarding.

"Mine is a small part in the conservation efforts to support the species and I recognise the importance of involving non-professionals, such as everyday birders in assisting with the conservation work. And it is fun. I enjoy hearing the other birdcalls and I have learnt to identify a number of frog calls. I am quite certain I will know a bittern call next time I'm out in the swamps," Glen said.

Results will determine future management

The information emerging from this exercise is exciting. In total more than 150 hours of recordings containing an Australasian bittern boom have now been identified.

A preliminary assessment of this data suggests that Australasian bitterns are detected more frequently at dawn, given the still wind conditions. Booming peaks in November and diminishes steeply by the end of summer.

The data will help us focus our monitoring efforts so we can determine new bittern sites more efficiently and determine when to implement management interventions so they will have the least impact on breeding.

Our hardworking and committed teams of on-ground volunteers and listeners have been critical in helping us to develop a greater understanding of the bittern and we have no doubt they will be part of uncovering more insights in the future.



A listening post established by volunteers to monitor the unique soundscape of Long Swamp, near the mouth of the Glenelg River in Victoria.

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Volunteers were provided with a low-cost, low-power recording unit that recorded up to five hours of acoustic data each day.

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As well as Australasian bittern, the listeners have also identified at least 78 other species. Frog ecologists have requested the data on the endangered growling grass frog. Brolga are another favourite, always generating a buzz when they turn up in the recordings.

Bradley Clarke-Wood is Wetland Bird Program Coordinator for Birdlife Australia. For more information email bradley.clarke-wood@birdlife.org.au

More listeners needed

With so much audio data and so many potential species to identify, BirdLife Australia is calling for more volunteers to help decode the wetland recordings. The listening can be done at home on your own computer with an Internet connection. Full training is provided.

Volunteers are also needed to head out to key wetlands at dawn and dusk to conduct listening surveys and help us identify other sites. Training in conducting listening surveys will be provided.

Landcare news from across the State

Aboriginal Landcare Facilitator

DELWP is recruiting to fill the position of Aboriginal Landcare Facilitator after the departure of Jackson Chatfield. We thank Jackson for his dedication and commitment to engaging Landcare with Victoria's Traditional Owners and Aboriginal communities. We wish him all the best for the future.

For more information contact Julie Edwards on 0429 001 565.

Landcare Victoria Inc.

A new Landcare Plan for Victoria is underway to establish goals for the decades ahead. Consultation amongst the Landcare community is a top priority.

We are reviewing the Victorian Landcare Gateway website and will be providing a recommendation to DELWP based on feedback from the Landcare community.

We are also developing a knowledge and skills framework for professional Landcarers. This will provide a foundation to build a coordinated, needs-based delivery model to meet the training and development needs of professional Landcare staff.

For more information on LVI or to become a member visit www.lvi.org.au or (03) 9034 1940.

Corangamite

Elisia Dowling was farewelled from the role of Regional Landcare Coordinator in February. We thank Elisia for her work supporting Landcare in the region.

We recently launched the Our Catchments Our Communities Small Blocks Big Dreams program to support small landholders to make their blocks healthy and productive. The program is delivered in partnership with local Landcare groups and networks as they provide specialist knowledge for each landholder group.

Landholders are supported through a series of workshops to learn about weed control, soil management, pest control and native flora and fauna management. The first introductory sessions for owners of bush blocks and small producers kicked off in April and May.

For more information visit www.ccma.vic.gov.au (Get Involved/ Landcare) or contact Stephanie Rosestone on 0497 632 585.

East Gippsland

In late February the East Gippsland Regional Landcare Team attended a two-day training session on engagement design. We look forward to putting the ideas into action with the Landcare community.

The team met with the National Feral Fox and Cat Coordinator in March to discuss issues and activities relating to feral cats and foxes within East Gippsland. We are planning to hold some education events on feral animals.

Landcare groups and networks are busy delivering their 2021 Victorian Landcare Grants and planning for 2022 projects.

They are also finalising Landcare Australia Limited's Landcare Led Bushfire Recovery projects along with Biodiversity Bushfire Recovery Grants. We are all enjoying more face-to-face events now that they are possible.

For more information visit www.egcma.vic.gov.au (What we do/Landcare) or contact Carolyn Cameron on 0419 892 268.

Glenelg Hopkins

A number of the Landcare facilitators working in the region have been busy updating their skills and knowledge. A first-aid training course has equipped many of us with an important skill – especially when working with people of a diverse age range.

The CMA hosted Graeme Lorimer from Biosphere to conduct wetland plant identification training. Five Landcare facilitators were trained in plant identification and biology in wetlands and stream channels.

After several years hiatus due to COVID-19 the Cavendish Red Gum Festival was held on 23 April 2022 on the banks of the Wannon River. The festival celebrated all that the red gum delivers to the environment and the community. The Mooralla and Pannyabyr Landcare groups set up an information stand to showcase their work.

For more information visit www.ghcma.vic.gov.au (Get Involved/Landcare) or contact Tony Lithgow on 0418 180 996.

Goulburn Broken

The CMA took the opportunity to reconnect with our Landcare community after the lifting of COVID-19 restrictions. More than 30 people from across our networks attended an event to talk about future projects and opportunities for collaboration.

The 2021 Victorian Landcare Grants projects are in full swing with more than 20 projects underway across the region. Winter and spring will be very busy with planting, workshops, and community capacity building events.

At the 2022 Cascade Connections event that was held in Wangaratta on 27–28 April Landcare facilitators from Corangamite, North Central, North East, and Goulburn Broken CMA regions came together to share and learn from each other.

We were saddened to hear of the recent death of the CMAs inaugural CEO, Bill O'Kane. Bill was a strong supporter of



From left, Jackson Cass from Moorabool Landcare Group, Xavier Meade from Barongarook Park, Cath Jenkins Chair of Corangamite CMA, Andy Gray from Central Otways Landcare Network, with Karen O'Keefe and Chelsey Agg from Corangamite CMA at the launch of Small Blocks Big Dreams.

community Landcare and made a massive contribution to establishing the partnerships model that we continue to deliver today.

For more information visit www.gbcm.vic.gov.au (The Region/Community natural resource management) or contact Tony Kubeil on 0408 597 213.

Mallee

January saw large areas of the Mallee receiving above average rainfall, with Mildura recording its wettest January day in 77 years, with 80.2 millimetres of rain. The January rainfall left many areas having an unusual start to the year with soil moisture available before the start of autumn. This, combined with the Mallee region recording the warmest ever average temperatures in Victoria over January and February, meant weed growth has been high.

Landcare groups are in full swing delivering great projects, funded through the 2021 Victorian Landcare Grants. Activities include pest plant and animal control, revegetation, community events, and species research on the Mildura Ogyris, an endangered butterfly under the *Victorian Flora and Fauna Guarantee Act 1988*.

For more information visit www.malleecma.vic.gov.au or contact Nelson Burand-Hicks on 0427 540 469.

North Central

The autumn months are superb in Central Victoria, but there's no time to stop and enjoy the crisp fresh air, as it's grant season. The 2022 Victorian Landcare Grants are underway, and we wish all the applicants in our region the most success with their submissions.

Landcare groups to the east of Bendigo have begun discussions with their new Landcare facilitator, Kristie Smith, who is providing guidance, support and communication expertise to this emerging network. Kristie is currently working from the North Central CMA.

Groups and networks are back in action, engaging new volunteers and hosting meetings, field days, stalls at the sustainability festival, and soil demonstrations.

The Mount Alexander Intrepid Landcare Group has published its annual calendar of activities. Highlights include a visit to Newstead Natives, a cultural awareness/

First Nations perspectives workshop, and linking in with local Landcare working bees.

For more information visit www.nccma.vic.gov.au (Get involved/Landcare) or contact Tess Grieves on 0438 357 874.

North East

The region had a lot to celebrate when the Healthy Rivers Program was announced recently. More than \$2.4 million was awarded to 14 of our Landcare groups and networks. The investment will help to protect riparian areas in the Murray Darling catchment and is a testament to the dedication of our Landcare members in protecting and enhancing biodiversity.

Higher than average rainfall over summer hasn't dampened the spirits of our Landcare community who are progressing their 2021 Victorian Landcare Grants projects.

For more information visit www.necma.vic.gov.au (Solutions & Resources/Landcare & community groups) or contact Richard Dalkin on 0409 683 467.

Port Phillip and Western Port

The CMA was officially integrated into Melbourne Water on 1 January 2022. This means Melbourne Water is now responsible for supporting the region's many Landcare groups and networks and environmental volunteer groups. All other CMA initiatives, including environmental and agricultural projects and the implementation of the Regional Catchment Strategy are also now hosted by Melbourne Water.

The Port Phillip and Western Port 2022 Victorian Landcare Grants will be administered by Melbourne Water and all Landcare administration and support, including regional forums and training, will continue to be coordinated by the Regional Landcare Coordinator.

Landcare staff and volunteers participated in the Victorian Aboriginal Community Controlled Health Organisation introduction to Aboriginal cultural safety training in April and May. Groups also took part in a grants writing workshop ahead of the 2022 Victorian Landcare Grants.

For more information contact Barry Kennedy on 0447 821 559 or email barry.kennedy@melbournewater.com.au

West Gippsland

The ball has slowly started rolling again for Landcare in the region, with groups and networks hosting workshops and farm walks. South Gippsland Landcare Network has been busy running various events on dung beetles, weed identification, and planning for revegetation projects. Local nurseries have received many plant orders, hopefully indicating a busy planting season ahead.

Landcare legend Belinda Brennan is moving on after 15 years working in the region. We thank Belinda for her unbounded passion and energy. Our groups and networks are more efficient, resilient and successful thanks to her hard work and dedication.

We were saddened to learn of the death of local dairy farmer David McAninly – a Landcare pioneer in the Yarram district. He worked tirelessly to help the environment and the community. His legacy will be felt in the district for many years.

For more information visit wgcm.vic.gov.au (Getting involved/Landcare) or contact Kathleen Brack on 0428 619 671.

Wimmera

Wimmera Landcare groups will be enjoying more community plant-outs this winter after a couple of interrupted years. It is great to see more activity, including junior Landcare tree planting, happening in the region again.

A number of local school groups have been working with Landcare groups to learn about nest boxes, wildlife monitoring with cameras, and environmental DNA.

Landcare facilitators are playing an important role in supporting groups to reconnect again. To help foster the next generation of volunteers and facilitators, Landcare and other natural resource management opportunities will be promoted at the 2022 Western Victorian Careers Expo in late June.

The Wimmera Landcare team continues to explore opportunities to strengthen relationships and coordination with Barengi Gadjin Land Council through regular partnership meetings and the sharing of information and ideas.

For more information visit wcma.vic.gov.au (Get involved/Landcare) or contact Joel Boyd on 0429 949 196.

An online decision support tool for nature conservation

By James Johnson

Victoria's biodiversity plan Protecting Victoria's Environment – Biodiversity 2037 advocates the use of advanced scientific tools to help tackle biodiversity decline.

Strategic Management Prospects (SMP) is a map-based decision support tool freely available on NatureKit, Victoria's online biodiversity mapping and data exploration service.

SMP can help with project planning by identifying the actions that will have the most benefit for biodiversity in any given local area across Victoria.

Planning and making better decisions for nature conservation benefits from using large data sets and considering the needs of thousands of flora and fauna species at the same time. We need to consider the impact of our actions on the future of all species, including those that are threatened, and to focus our efforts on the actions that improve long-term survival.

When considering biodiversity management actions at a specific location, SMP can show which species could benefit from certain actions, which threats to focus



Strategic Management Prospects is a map-based decision support tool that can assist with planning conservation projects.

on, and which actions do the most good for the most species.

SMP is regularly updated with advances in conservation knowledge and species records, including those added to the

Victorian Biodiversity Atlas (see page 10 in this magazine).

To get started with using SMP go to www.environment.vic.gov.au/biodiversity/natureprint or email nature.print@delwp.vic.gov.au

The *Victorian Landcare & Catchment Management* magazine is published three times per year by the Victorian Government's Department of Environment, Land, Water and Planning and distributed in partnership with Landcare Victoria Incorporated. The magazine aims to raise awareness of Landcare and natural resource management among Victorian farmers, landholders, the Victorian Landcare community and the wider community.



Mailing list enquiries and to receive your copy via email alert

Contact Landcare Victoria Incorporated
Phone: 9034 1940 Email: info@lvi.org.au

Read the magazine online

To access the *Victorian Landcare & Catchment Management* magazine online as web pages since the Spring 2016 issue (#67) go to www.landcarevic.org.au/landcare-magazine/
Back issues of the magazine since the Spring 1996 issue (#1) can be accessed online as pdfs.

Next issue

The next issue of the magazine, to be published in Spring 2022, will feature stories on Landcare – the next generation. We are interested in how Landcare and environmental volunteer groups and networks are attracting, involving and working with young people. We are also keen to hear from the next generation of Landcarers about how they see the movement as it grows and evolves.

Our readers are keen to learn about the successes of different approaches as well as what hasn't worked and the insights and reflections of your group or network along the way. The magazine fills up very quickly so please get in touch well before the contribution deadline.

Contributions to the Spring 2022 issue should be sent to the editor by Friday 19 August 2022.

Email: editorviclandcare@gmail.com

