

## Welcome to the September 2020 edition of The Landcarer

Hello and Welcome to the September 2020 edition of The Landcarer.

It has been another difficult couple of months with Stage 4 restrictions limiting much of what we can do as a group, however, we can still do things on our own properties if we can get the necessary materials. Our list of events has again been pushed back and possible that we will need to start using online activities.

The great news is that our request for additional people has resulted in three new members of the committee that gives us a strong committee with a broad range of passions and interests. Jules Vines has taken up the role as Secretary, Lou Thomas will take up the role of Treasurer when she returns from an extended trip north and Cathy Saint has re-joined the committee. Our committee has been meeting regularly on Zoom which has worked pretty well most of the time.

We will be trialling an online discussion on Sunday 20th September about weeds. This is intended to provide different ideas on identification of local weeds found in pasture and conservation areas, methods and treatment, provide an opportunity for people to get their mystery weeds identified. The workshop will open at 9:00am for people to sort out technical difficulties. A short presentation will commence at 9:30am with plenty of time for questions and discussion. A link to the Zoom meeting will be posted to our Facebook group or you can email me or any committee member to get it.

The Port Philip and Westernport Catchment Management Authority is engaging a team of workers to do environmental and agricultural work on public and private land. You can request assistance by filling in an expression of interest at: <https://www.ppwcm.vic.gov.au/what-we-do/work-crews/>

Strong winds following good rain have recently impacted the Dandenongs and Yarra Valley with loss of life, property damage, closed roads and extended power outages caused by trees blowing over. Many of these trees will never be replaced and the power companies are likely to react by increasing the devastation they cause. There are several things we can do to arrest a massive decline in canopy and habitat. One is to lobby politicians and power companies to put powerlines underground, another is to revegetate with climate change in mind. Planting trees away from roadsides, buildings and powerlines.

We hope you enjoy your reading and look forward to seeing you in the paddocks in the not too distant future. Cheers.

**Ron Sawyer**  
**President – Macclesfield Landcare Group**  
**0408 129 671**

# Are weeds in pastures as bad as we think?

Part 2 - by Chris Alenson

In the last edition of The Landcarer we discussed whether we might have been a bit harsh in our judgement on weeds that occur in our pastures and indicated that many weeds not only perform vital soil fertility aspects but also have nutritional benefits for our livestock.

We need to perhaps journey back in time to see how our Macclesfield soils have developed and why their management is critical in ensuring that beneficial pasture species prosper alongside some weed species that we might tolerate in small quantities.



Degraded pasture with bracken fern, heath and broad-leaved weeds encroaching on the developed pasture, a sure sign of declining soil fertility

Macclesfield soils have been derived from Silurian/ Devonian sedimentary sediments laid down under the sea about 420 million years ago. This was followed by uplift and weathering as the soil profiles we recognise today developed through the growth and decomposition of a wide range of plant species giving us the biologically active topsoil horizon.

Unfortunately, due to the geochemistry of the sedimentary geology, these soils are poor in almost all essential plant nutrients. Further weathering and leaching of nutrients resulted in acid soils (usually around 4.5-5.5). Our topsoil depth ranges from 50mm-100mm meaning there is not much biologically active soil for plant roots to seek their nourishment.

Have you ever dug into your soil to see how productive the root systems are and how deep they penetrate?

It is this degraded soil where we have planted highly bred pastures (rye, fescue, cocksfoot, clovers, etc) that have only been successful when the soil has been amended with appropriate plant nutrients. When managed well these soils will grow reasonable pastures, but if not poorer pasture species and weeds tend to dominate. The first indication of a declining pasture is the encroachment of species such as broad leaf weeds, pioneer wattles, bracken fern and even eucalypt species meaning that the soil balance has been tipped towards what nature wants to re-establish in this ecological niche.

Plantain, high in minerals and proteins, a medicinal herb of value

Source: Wikimedia commons, [Harry Rose](#) from South West Rocks, Australia



It is interesting to note that many Macclesfield pastures have sweet vernal and often bent grass as the dominant grass species. These are some of the less nutritious pasture species. The weed species that we talked about in the previous newsletter are a result of nature's plant succession based on the ecological niches that assist their growth. A bare soil will attract weed species such as flat weed, dock and thistles and will occupy this space in an attempt to heal the bare ground and through their death and decomposition (cycling) prepare it for the next more nutritious species. So wherever possible avoid overgrazing and a bare earth policy.

#### Mineral composition of some pasture grasses and weeds

Species	Total Crude protein (expressed as g/kg of dry matter)
perennial ryegrass	232
white clover	270
chicory	307
plantain	283
dock	305
dandelion	287

**Adapted from Source:** *Mineral composition and nutritive value of some common pasture weeds*  
K.C. HARRINGTON<sup>1</sup>, A. THATCHER<sup>2</sup> and P.D. KEMP

Although as indicated many of these species do have nutritional value to livestock and will be preferentially grazed, we would prefer them to not make up much more than about 15-20% of a one metre square pasture sample. At these levels they will still attract natural biological pest controls such as lacewings, ladybirds and ground beetles that will eat aphids and other pests.

To ensure that these weed species do not completely take over our pastures soil fertility must be optimised. This means pH adjustment and the addition of essential elements based on a comprehensive soil analysis. Most Macclesfield soils because of their silty loam characteristics tend to be quite compacted so non-inverting soil aeration may be warranted.

### **Do your own assessment**

Dig a square 300 x 300mm hole to a depth of 50mm and fill it with water. If the water sits in the hole for more than 4 minutes then compaction is evident and soil aeration may be required.

So, let us remember the species occupying our pastures are there as a result of the inherent fertility that we manage. Although we do recognise that a number of weeds (chicory, plantain, dock, etc) as previously discussed do add value to our pasture composition we must recognise that adjusting the fertility of our soils is the only way to ensure that the high value species do make-up the bulk of our pastures. Once good pastures are established stock management is essential to ensure that rotational strategies allow sufficient leaf area, so they can quickly bounce back and optimum growth can occur.

### **Reference**

*Voisin, A.S. 1988, Grass Productivity, Island Press*

*Harrington, K.C., Thatcher A. and Kemp, P.D. 2006, Mineral composition and nutritive value of some common pasture weeds, New Zealand Plant Protection 59:261-265 (2006)*

# Beyond Yellingbo during COVID 19

Article courtesy of:  
Gaye Gadsden – Project Officer

## The effects of the pandemic....

### ....On engagement

We are now working with 77 properties in an area from Emerald and Monbulk north through Macclesfield and Silvan, up to Yellingbo. A further 44 properties were recruited to undertake habitat restoration works, across the expanded project area in 2019/20. Only 2 of these 44 new properties have been engaged since March.

Landholders from 26 properties responded to the mail out to advertise the Deer Forum held last October and introduce this project. 45% (20 properties) of the 44 new landholders were either these respondents or attendees of the Deer Forum. A very worthwhile event, ably 'MC'd' by Ron Sawyer.

A further 27% (12 properties) were introduced to me by Project partner groups, participating neighbours or Melbourne Water, Parks Victoria and Yarra Ranges Council staff.

Being introduced to landholders by someone they already know remains a very successful way of engaging people in the Project. Generally, people are asked if it is okay for their phone number to be passed on to me and then I give them a call. If you can help by seeking this permission from landholders you know, it would be hugely beneficial, particularly during this time.



Doorknocking early in the year engaged 5 out of the 5 properties we visited, but this method is no longer available to us.

One of four banners made for the Project has been up on Macclesfield Road for around 8 weeks. Our regular visitor to the house yard, "Mr Wobbily" is the poster boy.

### ...Increased virtual engagement

In April, I set up a Beyond Yellingbo WhatsApp group and some 40 landholders have joined. There has been a steady stream of communication and images of wildlife people are seeing, fungi, tips on fauna cameras, controlling rodents, collecting seed, rainfall, finding homes for wombats to be released to, all sorts of topics. If you are a local landholder and not already part of it, download the WhatsApp App on your phone and let me know so I can add you to the group. You can contact me via the [info@helmetedhoneyeater.org.au](mailto:info@helmetedhoneyeater.org.au) email address.

*In June, Port Phillip and Westernport Catchment Management Authority made a 35 minute video.*

*I was one of 3 contributors, along with Melanie Birtchnell (Friends of the Helmeted Honeyeater) and Dan Harley (Zoos Victoria).*

*The video is now available to watch at:*

<https://youtu.be/Qb4OJQ0zDW0>



Mel and Dan provide a wonderful background on our 2 critically endangered species - why they are critically endangered, their habitat requirements and the role of both public and private land habitat restoration in their recovery. I speak about what actions landholders are already taking to restore habitat in our 'Beyond Yellingbo' project. I hope you find it both informative and entertaining.

### ....On works

Contractors have been able to continue working on properties throughout the last financial year.

Habitat improvements made in 2019/20 were; weed control across 118 hectares (ha) on 38 properties, pest animal control across 496ha on 27 properties, 1.6ha of revegetation on 3 properties and 1.7 kilometres (km) of fencing protecting 20.7ha of habitat. 275 deer have been culled in the past 18 months to end of June, 2020 through our programs and Parks Victoria professional culling.

Almost \$165,000 worth of on ground works were implemented; \$140,000 funded by the Department of Environment, Land, Water and Planning (DELWP) and \$21,000 by Melbourne Water.

### ....On you

Hope you are all getting some way through the endless list of jobs around the property and staying safe, warm and sane.

Gaye Gadsden

# Grasslands – Biodiversity of South-Eastern Australia App - FREE

Article courtesy of:

Nicholas (Nick) Williams, Associate Professor, Urban Ecology and Urban Horticulture, School of Ecosystem and Forest Sciences, Faculty of Science, The University of Melbourne

and

Steve Derrick, Editor, FriendsNET

Australia's native grasslands are some of our most critically endangered ecosystems, home to many endangered fauna and flora species. A new, free comprehensive field guide app for iPhone and iPad, [Grasslands: Biodiversity of south-eastern Australia](#), introduces users to, and aims to build an appreciation of, the unique biodiversity of south-eastern Australia's temperate native grasslands.

[Grasslands](#) includes:

- Information on 8 endangered grassland communities of south-eastern Australia, including 2 grassy wetland communities
- Over 500 flora descriptions with images
- Over 200 fauna descriptions with images and selected bird and frog calls
- Distribution maps from the Atlas of Living Australia
- Details of 25 easily accessible grassland sites to visit, representative of grassland communities in Victoria, New South Wales, ACT, South Australia and Tasmania – with more grasslands planned for inclusion in future app releases
- Grassland site descriptions include species lists linking back to the field guide, allowing users to explore their local grasslands and identify species present
- Interactive maps of grassland sites, communities and their bioregions.



[Grasslands: Biodiversity of south-eastern Australia](#) is a collaboration between the University of Melbourne team that published [Land of sweeping plains: Managing and restoring the native grasslands of south-eastern Australia](#) and Ecolinc, a Department of Education and Training Specialist Science Centre focussing on environmental science curriculum programs for P–12 students and teachers. [Grasslands](#) would not have been possible without generous funding provided by the Myer Foundation and the dedication of the many individuals who donated time, expertise and photos over the many years it has taken to develop.



**Note: For users of Android devices** - you can access the Grasslands content on your devices directly from the Ecolinc website – <https://grasslands.ecolinc.vic.edu.au/>.

# New video series on Regenerative Agriculture for farmers

Article courtesy of:

Peter Ronalds, Sustainable Agriculture Manager, Western Port Catchment Landcare Network

Have you heard people talking about regenerative agriculture, and wondered exactly what it is, and whether it could work on your farm?

A series of eight short videos on the key principles of regenerative agriculture have just been released by three local Landcare networks (Bass Coast, South Gippsland and Western Port Catchment) and the Mornington Peninsula Shire Council.



Hosted by soil scientist Declan McDonald, the videos explain what regenerative agriculture is and how the principles can be applied on all farm types and landscapes within the Western Port Catchment, including beef, dairy, sheep, chickens, horticulture and vineyards.

Topics covered include: introducing regenerative agriculture, minimising soil disturbance, maximising crop diversity, keeping soil covered,

maintaining living roots systems year round, integrating livestock and trees and how farmers can transition to regenerative agriculture.

The videos can be accessed at <https://tinyurl.com/regenagriculture> or on the partner websites.

“If you’re curious but don’t know where to start, the videos are a great introduction to the key principles of regenerative agriculture, and how they might apply to your farm” says Declan.

Check out the videos to see some local on-farm examples of how you can regenerate your soils for improved plant and animal health and productivity.

Declan says, “Farmers who have tried regenerative agricultural practices say that working with nature has led to a more robust, resilient farming system, and they have higher levels of wellbeing and satisfaction”.

Why not join the conversation and check them out today? For more information contact Peter Ronalds from Western Port Catchment Landcare Network at [peter@wpcln.org.au](mailto:peter@wpcln.org.au).

The videos were produced as part of the Smart Farming in Western Port project. This project is supported by the Port Phillip and Westernport Catchment Management Authority through funding from the Australian Government’s National Landcare Program.



## We want to hear from you

Your feedback, ideas for grants or events, and articles for this newsletter are very welcome.

Send items for publication to [MacclesfieldLandcare@gmail.com](mailto:MacclesfieldLandcare@gmail.com) or contact any Committee member:

Ron Sawyer (President)	0408 129 671	Chris Alenson (a/h)	(03) 5968 3040
Cath Ellingworth	0417 953 311	Mirren Alenson (Memberships)	(03) 5968 3040
Jules Vines (Secretary)	0429 650 571	Lou Thomas (Treasurer)	0402 686 080
Greg Callaghan (Editor)	0427 217 247	Cathy Saint	0407 039 921

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