

Upper Hopkins Land Management Group Newsletter



Autumn 2019

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Diary Dates

- Charles Massy at Dunkeld—Seminar** Monday 29th April 4pm;
- Workshop** Tuesday 30th April 9.30am
- VLG 2019_20** grant applications open from 29th April to 7th June
- Ararat Landcare Group**—St Andrews Church Hall, Ararat. Next meeting Monday 6th May
- GHCMA Environmental Awards** Presentation night 7th May
- Serrated Tussock workshop**—Bacchus Marsh. 25th May (P4)
- South West Landcare Gathering**—Beaufort. 12th June
- SWIFFT teleconference**—"People for Nature" 25th July (P5)

Welcome to the Autumn 2019 edition of the UHLMG newsletter
 Editor: Una Allender

Local Landcare Snippets

Charles Massy to lead a Regenerative Agriculture Seminar at Dunkeld.

Well known Merino breeder, wool producer and author Charles Massy, will be speaking at Dunkeld on Monday, 29 April at 4pm. Hosted by the Upper Hopkins Land Management Group, Charles will be discussing his most recent book 'Call of the Reed Warbler', and sharing his insights into Regenerative Agriculture and the future of Australian farming. This is a great opportunity for farmers to explore new opportunities to better adapt their farm and farm business to a changing climate. The seminar will be followed by a buffet meal to encourage more discussion and networking. Cost is \$22(incl GST). **Booking is essential by April 22nd** for catering purposes. TryBooking <https://www.trybooking.com/BBNOD>



Charles will also lead a workshop on Tuesday morning April 30th. This workshop has booked out but there are plenty of spaces available for the Monday afternoon seminar.

All enquiries to Una Allender, UHLMG uallender@bigpond.com or 0419 891 920 or Lisa McIntyre, Panyyabyr Landcare Group advancel@bigpond.com or 0428 749 235

This event is supported by Glenelg Hopkins CMA through funding from the Australian Government's National Landcare Program.



The Victorian Landcare Grant program for 2019_20 opens on April 29th with applications due by June 7th. Members are encouraged to contact Una to discuss any projects they may be considering and which may be suitable for support from a Landcare grant. I would like to hear about any proposed projects by Friday 17th May so we have time to prepare a sound application.

Landmate now has two crews operating out of Ararat. This gives the opportunity to complete even more work around the community. Landmate can provide labour at "No Cost" on any project where a grant has been handed down through DELWP, ie Vic Landcare grants or CMA grants, whether it be fencing, tree planting, woody weed removal or pest eradication. Landmate crews can assist with other projects but a fee will be charged. Anyone wanting to use Landmate can contact Una Allender 0419 891 920 or Landmate Supervisor Andrew Marx on 0437 565 852 or andrew.marx@justice.vic.gov.au. More information can be found at landmate.vic.gov.au

www.uhlmg.com.au www.facebook.com/UHLMG 

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The Upper Hopkins Land Management Group is grateful to the Glenelg Hopkins CMA and the Victorian Government DELWP & DEDJTR for their support of group activities and the production of this newsletter.



Autumn Woodland Bird Monitoring

By David Nichols, Glenelg Hopkins CMA

On Sunday the 14th of April, the Upper Hopkins Land Management Group conducted their autumn round of Woodland Bird Monitoring. This completes five years of bird monitoring across these 3 sites. The sites being a remnant bushland site in the Ararat Hills Regional Reserve, a farm land remnant bush site on Burrumbeep Road and a farmland revegetation site on Wills Hill Road.

Conditions were excellent for birding and a good number of attendees were rewarded with good numbers of birds at each site. 29 species were recorded in the three x 20 minute surveys across the morning. With the high summer temperatures gone, several species were again present that have not been calling for several months. Both Rufous and Golden Whistlers were recorded. Despite some 'scepticism' by some about the call identification skills of the author of this article, a Scarlet Robin thought to be heard at the first 2 sites, was finally seen at the Wills Hill site!!

Another pleasing record, was that of the White-browed Babbler. This bird was recorded at the Wills Hill Rd site and goes to prove the vital importance of farmer revegetation efforts. These efforts result in providing habitat for declining species of Woodland Birds, as well as other animals. This sighting is at the southern extent of the Babbler's range. The Babbler was recorded here 4 years ago, and this is the first recording in our twice yearly surveys since.

We will hopefully continue our surveys next spring. Thanks to all those that attended and to Deidre Andrews from Birdlife Australia – Horsham branch, for her assistance.

May is the month for Red-tailed Black Cockatoo, Swift Parrot and Regent Honeyeater survey opportunities in South west Victoria. Information for these opportunities can be found at the following web sites.

Red-tailed Black Cockatoo, redtail@birdlife.org.au

Swift Parrot and Regent Honeyeater, <http://birdlife.org.au/projects/woodland-birds-for-biodiversity>



Clockwise from top R: Some of the birds recorded during the monitoring session. Golden Whistler, Scarlet Robin, Spotted Pardalote. (Photos: Francesca Suffield—taken at various locations) Some of the monitoring team at the Burrumbeep Road site. (Photo: Dave Nichols)

Cropping wetlands... it's not worth the cost

By Tania Parker, Glenelg Hopkins CMA

With farmers preparing to implement their winter cropping program, Glenelg Hopkins CMA is reminding landholders that it could cost more than they anticipate if they sow into wetland areas. The extended dry seasonal conditions this year mean many wetland areas or boggy paddocks are now dry, and there is a temptation to sow crops into these areas. However the cost to farmers could be far greater than the yield lost once they turn wet again.

Traditionally 'boggy areas' of paddocks are often wetlands that are naturally wet or dry as seasonal conditions change. With the extended dry conditions this year, those areas are currently dry, but they will



return to their waterlogged and inundated wetland state in winter and spring. These areas are particularly important to the region as naturally occurring wetlands. The temptation to plough and sow crop or pasture in them in dry years, like this one, can not only end up irreparably damaging these wetlands, but there can be significant financial fines imposed for damaging these protected areas. Wetlands are protected under State and Federal Government laws and farmers could potentially face significant fines if wetland areas are drained or destroyed.

With appropriately managed grazing, these areas have capacity to recover into their natural state as wetlands that have immense diversity and provide homes to a range of native birds, including the iconic Brolga, which can be beneficial to the entire farming operation. The costs to crop and get a financial return at harvest from these areas is also questionable. The cost of machinery, seed, fertilizer and labour, as well as the soil being ill-suited for cropping due to its high clay content, are all good reasons to crop around these areas on your farm.

The Glenelg Hopkins region has more than 5,400 wetlands covering 73,000 ha or three percent of the region's area. This equates to 14 percent of Victoria's total wetland area and 44 percent of the State's total number of wetlands. Grazing is feasible within a fenced wetland area – farmers are just asked not to crop them.

Glenelg Hopkins CMA can assist landholders with decision making and funding options to crop around wet areas and manage them as part of the farm business, including applying for funds to undertake fencing for grazing management. The Hopkins Wetlands project is part of the Victorian Government's \$222 million investment to improve the health of waterways and catchments and will be completed in December 2020. There is also the opportunity for farmers to investigate funding options through other nationally funded programs, and in the future, carbon credits. For additional information, contact Glenelg Hopkins CMA on (03) 5571 2526.

Landcare Victoria Inc Forum at Halls Gap

By Una Allender, Facilitator, UHLMG

The Biannual LVI forum held at Norval during March provided an opportunity to hear from several innovative landowners in the Wimmera and Glenelg Hopkins CMA areas. Saturday morning was taken up with presentations from farmers with diverse enterprises—grazing, cropping, olives, vineyard who are all trying to farm sustainably for the benefit of future generations.

The Saturday afternoon bus tour visited the Tullyvallen fenced reserve where Jack and Jo Tucker explained their aim to preserve some of our native fauna for future generations. The tour also visited Peter and Christine Forsters's extensive revegetation project on the Bullock Hills and learnt about the Jallukar Landcare group's grassland seed production program.

In contrast to the broad acre farms a visit to Ant's Quamby Farm in Halls Gap showed off this small intensive mixed farm with cattle, sheep, pigs, poultry, prolifically yielding fruit and nut trees, & vegetables including a commercial crop of garlic.



Jo and Jack Tucker with LVI forum participants at the "Tullyvallen" wildlife enclosure. *Photo: U. Allender*

Professor Tim Reeves, now Professor in Residence at Dookie College, gave an excellent after dinner presentation on the future of agriculture and food in the Anthropocene Age. Global food security is an enormous challenge for the world with a "perfect storm" of less land for agriculture, less water, more people, a change of preferred diet and the multiplier effect of climate change. He listed five grand challenges:

1. Loss and degradation of natural resources
2. Adaptation to climate change
3. Inefficient use of Nitrogen with a need to do more with legumes
4. Food waste—32% by weight of food is lost or wasted globally with the western world having lost respect for food
5. Benign neglect and erosion of rural communities with 70% of the world population urbanised by 2050.

Prof. Reeves went on to discuss how we can do better, looking at the changes from ley farming, to intensive and continuous cropping, and now trying for "Sustainable Intensification" - doing more with less while looking after the environment, with soil health a critical factor. There is a need for greater diversity in crop and pasture varieties, cropping programs, more legumes and more trees and shrubs for shade and shelter.

Prof Reeves ended his talk with the thought "Landcare is so great because it leads from the ground up".

Controlling gorse at Middle Creek

In March, Agriculture Victoria staff will commence inspections for gorse – a weed with a significant impact on agricultural productivity and the environment – in a new project area east of Buangor to Raglan. Eighty-seven properties covering approximately 7000 hectares in the area will be inspected and where required, notices will be served on landowners to control gorse.

The upcoming control project in the Buangor and Raglan areas will complement the work of the Upper Hopkins Land Management Group that has been working with the community to control gorse since 2007.

Agriculture Victoria Biosecurity Officer, Brian Howlett, said the weed is a concern in all landscapes, especially along waterways and its control requires a community effort.

“Landowners have a legal responsibility to manage pest plants and animals on their property to ensure they do not adversely affect agricultural production on neighbouring farms or impact on the natural environment,” Mr Howlett said.

Areas along the Hopkins River, and its tributaries, have benefited thanks to years of significant gorse control works coordinated by the Upper Hopkins Land Management Group, with support from the Glenelg Hopkins Catchment Management Authority and the Victorian Gorse Taskforce.

Since 2012, Agriculture Victoria has inspected 182 regional properties covering approximately 20,000 hectares as part of an ongoing gorse control program that supports sustained community-led action in the Ararat Rural City Council area.

Where landowners fail to comply with a notice to control gorse, they face potential fines under *The Catchment and Land Protection Act (CaLP) 1994*.

For more information about pest plant management visit the Agriculture Victoria website – www.agriculture.vic.gov.au or call the Customer Service Centre on 136 186

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Upper Hopkins Land Management Group has a small amount of funding available to members to assist with gorse control. Please contact Treasurer Celia Tucker on 0409 138 581 if you would like to access this funding

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Serrated Tussock hitches a ride

By Ivan Carter VSTWP

The Victorian Serrated Tussock Working Party (VSTWP) advises landowners to ensure fodder and hay purchased is free of noxious weeds, and in particular, serrated tussock (*Nassella trichotoma*). The previous year has seen perfect conditions for this weed of national significance to seed prolifically, resulting in many paddocks being infested prior to baling for fodder. Drier conditions also result in more fodder being transported around the state and interstate.

Whilst it can be difficult to inspect all fodder purchased for noxious weeds, VSTWP Executive Officer Doug May suggests that “landowners should attempt to purchase stock-feed from reputable outlets that can verify the absence of declared noxious weeds and from areas outside of the serrated tussock core infestations around the fringes of northern and western Melbourne”. “Landowners are often unaware of the grassy weed in their paddocks, especially during a decent spring like the one we just had and may bale paddocks unaware of the viable seeds in the fodder” noted Mr May.

The VSTWP recommends that landowners set aside a designated feed-out area, which allows the landowner to monitor this area regularly for the germination of weeds particularly after periods of rain. Landowners should keep an eye out for Serrated Tussock or any new or unusual plants in these feed-out areas and undertake control measures early before they flower and set seed.

The VSTWP “advocates that best practice management is to control and treat mature serrated tussock plants prior to flowering and seeding each season with a registered herbicide, manual removal or cultivation”.

Long standing member and current chairperson of the VSTWP, John Burgess, stated “the most cost-effective form of serrated tussock control is preventing the introduction and spread of the weed by sourcing weed free fodder and practising good vehicle and machinery hygiene”

Serrated tussock is an introduced invasive plant from South America that has the potential to rapidly decrease the biodiversity of native grasslands and seriously reduce the agricultural capacity of properties.

For further information, please visit www.serratedtussock.com, or email info@serratedtussock.com.



TOWARDS BETTER MANAGEMENT OF SERRATED TUSSOCK: COMMUNITY ENGAGEMENT PRINCIPLES AND PRACTICES

Free Workshop

Saturday 25th May 2019 (9am – 4pm) Bacchus Marsh Public Hall Lunch, morning tea and afternoon tea provided

Do you manage or are interested in commencing a serrated tussock control program? Are you keen to develop your community engagement knowledge and practice towards better management of serrated tussock?

If your answer is yes to both questions, you are warmly invited to apply for this free workshop, hosted by the Victorian Serrated Tussock Working Party. Fifteen places are available.

Applications are welcomed from community members, volunteers and professionals involved in serrated tussock management, whether it be through a community or farming group, Landcare, government agency, Catchment Management Authority, or any other organisation with land management responsibilities.

PPS - MLA Pasture Update

By Rob Shea, Coordinator, PPS

Over sixty farmers, agribusiness and research people attended the Perennial Pasture Systems (PPS) farmer group and the Grassland Society of Southern Australia (GSSA) MLA Pasture Update in Stawell on April 1st.

Attendees received important information on stock management and other topics. Consultant Lisa Miller presented details of the new MLA Feedbase Adoption Projects, before Steve Cotton from Dynamic Ag discussed the issues surrounding stock health in dry seasonal conditions. Steve put forward several scenarios on supplementary feeding, pointing out that correct feeding regimes have positive outcomes for both animal health and farm profitability.

Simon Grant from the Victoria Police; Stock Theft & Rural Crime Unit gave an insightful presentation on rural crime and the police response to such issues. Attendees are now better informed on farm security and crime reporting issues.

The update finished with a panel session on fertiliser strategies after a dry year. A top line of panellists, Andrew Speirs—Meridian Ag, Lisa Miller—SFS and Shane Dellavedova—Dellavedova Fertilisers, facilitated by PPS member, Charlie de Fegely, answered many complex questions relating to this year's fertiliser plans and other issues of soil fertility.

PPS President, Tony Roberts, summed up proceedings by saying "it was again very positive for PPS and the Grassland Society to work together to bring the MLA Pasture Update to Stawell and provide information vital to have farms prepared for the autumn break; which is, hopefully, not too far away".

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FarmHer Project

This project aims to celebrate rural women, by promoting their contribution to life on the farm and in small rural communities and addressing some of the barriers that prevent rural women from achieving their aspirations. The FarmHer Project has now collected stories from over 50 rural women in the Grampians Pyrenees region. Local photographer Dominique Sparks has been engaged to create a photographic record of the project. Their stories will be shared through a range of media and events with the aim of encouraging and empowering other rural women.

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L: Bill Weatherly at the Mt Sturgeon SPA explaining the Banksia project to forum visitors (Photo: U. Allender)

Bug News—April 2019

By Dr Paul Horne, IPM Technologies

Slugs: Will they be a problem this season?

It has been a long, hot and dry summer so you might think that slug problems will be non-existent. My suggestion is that you should still be concerned, and I will try to explain why.

The worst problems with slugs happen when there are wet summers and that certainly is not the case this season. So, slug problems will not be horrendous, but they will still be present. Slugs will not have increased in numbers over the summer but basically the adults that shut down at the end of last spring will emerge when moisture again becomes available.

There are two particularly damaging species – *Deroceras reticulatum* (grey field slug) and *Milax gagates* (black keeled slug). They have very different life-cycles and so the coming weather will determine how much of a problem each species causes.

Deroceras reticulatum will become active as soon as there is moisture, and so expect it to be active very soon. If you sow seed and bait immediately then you should deal with this species. However, *Milax gagates* will not become active until the soil profile is wet and so may not appear for several weeks yet. When it does, it could cause significant damage.

So, my suggestion is to split baitings: one early and one late to deal with the two species. Whether you use a more expensive rain-fast bait or not you still need to consider the relative risk from the two species. Monitoring with tiles or sacks can help you know what is going on.

When you bait, use a rate appropriate to the level of risk. This year it should be safe to use a low baiting rate unless you know there is a high-level problem in a particular paddock.

If you have particular questions then please contact me on 0419 891 575

Bring Back the Banksias

A large crowd attended the recent Friends of the Forgotten Woodlands (FOFW) Banksia forum in the iconic Mt Sturgeon Woolshed at Dunkeld. Banksia marginate (Silver Banksia) was widespread in Victoria before European settlement but now only a few remnants are left, with small fragmented populations. Several nurseries are now propagating them from using stock from a wide climatic range.

Dr Adam Miller, Deakin University, gave a presentation on his work on Banksia genetics. He emphasised the importance of Seed production areas (SPAs) in overcoming seed shortages while reducing pressure on the wild population. FOFW is working to build genetic diversity and resilience and enable adaptation to climate change.

SPAs like the one at Mt Sturgeon have been set up to build up plant numbers from a broad genetic base enabling a supply of "climate ready" seed. Here each plant is protected by a kangaroo proof guard and records are kept of location of seed source with 60% local, 30% regional and 10% from a distant, "future climate matched" source.

More information can be found at www.friendsoftheforgottenwoodlands.org.au

Autumn Book Reviews

“Mallee Roots” by Bill Hampel

By Una Allender

Bill Hampel's latest book looks back to his childhood growing up in the Mallee during and after World War Two and was inspired by a series of short talks Bill gave on the ABC's Bush Telegraph. His family started out on a small farm before moving into Walpeup where his father was the postmaster.

Bill reflects on a rural upbringing where conditions were tough with few amenities—not even mains electricity until Bill turned fifteen. There was a real sense of community, sharing and looking after each other. Sport was important and in this pre-TV era the community joined together to create their own entertainment. This book will bring back memories for many older readers and be a real eye-opener for anyone under 40.



Bill has had a life-long interest in nature, particularly birds.

He was a keen collector of bird's eggs as a boy, when this was seen as an acceptable “nature study” activity, but these days laments the decline in the number of birds in his lifetime. Here is a brief excerpt from the book:

“Most of the vegetation surrounding the town was the stunted Mallee. It was a vegetation type that extended from south-west NSW, across north-western Victoria and into South Australia. While remarkably ignorant of its different varieties, I loved the flourishing bird life associated with it. For me, they were a source of delight, surprise and anticipation and a contradictory mixture of the material and the aesthetic. On one hand collecting birds' eggs; on the other marvelling at the richness of colour, sound and flight behaviour almost on our doorstep. I could readily name forty species. Deep into the scrub, a mournful chorus of rising and falling screeches told me of the presence of an extended family of Jays (or White-winged Choughs). Black with white wing tips, they flapped noisily in unison away from their solid round mud nest. On their departure, the scrub gave over to the subtle twitter of Blue Wrens (Superb Fairy Wren) hopping joyfully about; excited chatter of Willy Wagtails, tails in perpetual motion like metronomes; Galahs raucously emerging from a hollow to settle high in the trees”

Bill's previous book “Against the Grain” (2015) looked at fourteen farmers who are dealing with climate change.

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“Kangaroo Grassland to Geelong Botanic Gardens and Eastern Park” by Ian Rogers

By Tania Parker

A stunning collection of images and factual stories – many previously unknown and unrecorded – feature in a new 400+ page hardcover book on the Geelong Botanic Gardens.

Ian Rogers' remarkable book, 'Kangaroo Grassland to Geelong Botanic Gardens and Eastern Park', takes readers on a pictorial journey through time. Starting with the designation of the

park area in 1851, the book showcases early images of the park and the amazing growth and expansion of the Geelong Botanic Gardens to the present day. As the fourth oldest botanic gardens in Australia, the Geelong Botanic Gardens is an impressive space that boasts a world-renowned plant collection.

Mr Rogers lived and worked in the gardens as a City of Geelong and then City of Greater Geelong employee for 30 years. He's also a former Director of the Geelong Botanic Gardens and has been a long-time advocate for this notable green space east of Central Geelong.

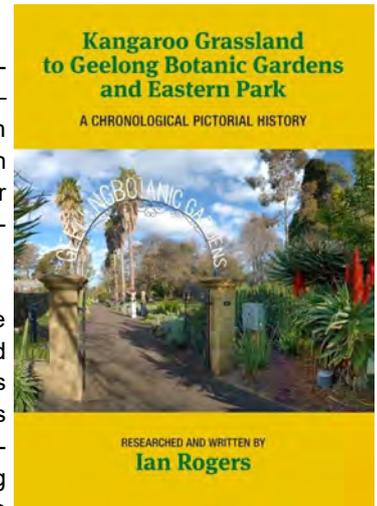
This beautiful book is an amazing contribution to Geelong's history, giving us a deep insight into how the Geelong Botanic Gardens has grown and evolved over time. It will become a significant resource and reference for future generations and is a fine example of a community contribution towards Geelong's clever and creative vision. Whether you're a green thumb, historian, proud citizen, or simply a lover of the Geelong Botanic Gardens, this clever and creative book will create lasting impressions.

“I developed this book to not just describe what once was, but to use a large collection of photographs, images and maps to tell the tale and take readers on a pictorial journey. I hope readers will enjoy seeing the evolution of our world-famed Botanic Gardens from the original aspirational vision, to the modern green space overlooking Corio Bay we have today.” (Ian Rogers)

This book is self-published and available for sale from the author. Please contact Ian Rogers on 0439 412 734 for more information or to purchase a copy.

(Note: Tania is Ian Roger's daughter and if anyone is interested, she has a box of books at Hamilton which people can collect to save on postage.)

The photo (L) from Ian Roger's book shows the Geelong Botanic Gardens Conservatory and Aviary in 1868



Autumn photo board



Clockwise from above:
 Ararat Landcare stall at the recent Ararat Garden show with members LtoR: Russell Pearce, Jenny Pearce, Jim Stringer and Carmel Stringer
 A pair of bush rats and to their left, a pair of Bandicoots captured on a remote camera at Tullyvallen by Jack Tucker.
 Bin Fairies at Queenscliff Music Festival and the Green Team at WOMAD (Adelaide) - minimising landfill.
 Terry Hubbard (L) president of Landcare Victoria with Professor Timothy Reeves at the LVI Landcare Forum.

LtoR Heidi Rees, Kelly Gellie, Trevor Perry & Kerrin Gellie, are members of the Maroona Recreation Reserve Committee which was successful in obtaining funding from the Maroona Windfarm Community Fund for a new switchboard and new outside lighting. They will also receive funding for new carpet over two years. Heidi will use a small grant to install nest boxes in old trees around Maroona. Lake Buninjon will benefit from 2019 Windfarm funding. *Photos:U.Allender, J.Tucker*



Meanderings and reflections



Unsurprisingly all the waterways were dry or very low—as low—as I have seen them. Once again the importance of water holes for the survival of native fauna during dry periods was evident. Such low water levels have also revealed the amount of rubbish finding its way into our waterways, much of it dumped under bridges.

Greenhill Lake looking low but pleasant on the south side (L) but a different story on the very dry north end (R). *Photo: U. Allender*



Water results : Upper Hopkins River, Upper Fiery Creek and Upper Mt Emu Creek catchments

EC levels for livestock water supplies. Value given in brackets for each type of livestock is the EC level at which production decline begins: Beef cattle (6,200 EC $\mu\text{S/cm}$), lactating ewes and weaners (6,000 EC $\mu\text{S/cm}$), dry sheep (9,300 EC $\mu\text{S/cm}$), horses (6,200 EC $\mu\text{S/cm}$), Pigs (3,100 EC $\mu\text{S/cm}$), poultry 3,100 EC $\mu\text{S/cm}$).

Stream	Road where site accessed	EC ($\mu\text{S/cm}$) April 2019	EC ($\mu\text{S/cm}$) Dec 2018	highest	lowest	average
Good Morning Bill Creek	Buninjon West Road	Puddle only	13740	39000	300	11672
Hopkins River	Bridge on Labrador Road	6450	7930	11200	370	6181
Hopkins River	Robertsons Bridge (Langi Logan Rd)	5300	6730	13000	950	4864
Hopkins River	Tatyoan Road (sth Kangaroo Pt Rd)	3880	6260	13800	780	4701
Hopkins River	Burrumbeep Boundary Road	8220	6260	11700	330	5398
Hopkins River	Jacksons Creek Road	9870	7510	12100	340	6277
Hopkins River	Warrak Road (Hopkins River Road)	Puddle only	9980	23280	490	9160
Hopkins River	Wickliffe - Glenelg Highway	13750	10250	19000	1590	11037
Hopkins River	Back Bolac Road	16680	10370	29600	1620	12307
Hopkins River	Delacombe Way (Edgarley Bridge)	13380	9560	17400	1790	10043
Hopkins River	Rossbridge (bridge)	13100	8820	13700	820	8390
Hopkins River	Old Geelong Road	Puddle only	10180	16300	1000	8619
Hopkins River	Dobie Road	Dry	No sample	15900	160	5944
Hopkins River	Bald Hill Road ford	Dry	10320	31800	3400	11497
Hopkins River	Helendoite Road	8290	8060	10800	390	5870
Challicum Creek	Porters Bridge Road	15100	10560	26680	145	11675
Fiery Creek	Porters Bridge Road	10390	7040	11930	550	5581
Fiery Creek	Mt William Rd (east Travellers Rest Rd)	Dry	3730	5950	500	2273
Fiery Creek	Gordons Bridge Road	8260	5410	17560	530	5293
Fiery Creek	Runway Swamp Road	8050	4590	14520	860	5108
Fiery Creek	Streatham Reserve	7060	6240	11600	770	4344
Fiery Creek	McCrows Rd/Nerrin Nerrin Estate Rd	11040	8760	13770	780	7717
Fiery Creek	Lake Bolac	11930	8720	22280	850	8285
Lake Bolac	Fishermens Pontoon	11340	8640	53000	1410	11477
Middle Creek	Willowtree Road	Dry	872	3700	100	439
Trawalla Creek	Back Waterloo Rd, bridge	No sample	6080	15300	400	2637

Stream	Road where site accessed	EC (µS/cm) April 2019	EC (µS/cm) Dec 2018	highest	lowest	average
Lake Buninjon	Maroona - Glenthompson Road	Dry	14000	104000	880	17313
Green Hill Lake	Western Highway entrance	4770	3480	28800	340	6940
Captains Creek	Tatyoan North Road	Dry	Dry	3500	100	506
Jacksons Creek	Coopers Road	Dry	10220	15900	770	8879
Tatyoan drainage line	Rockies Hill Road	Dry	13680	26200	360	15448
Three Mile Creek	Warrayatkin Road	Dry	Dry	22400	600	7738
Three Mile Creek	Warrak Road	Dry	Dry	13600	390	2549
Cemetery Creek	Warrak Road	Dry	400	9100	130	887
Billy Billy Creek	Buangor	8060	784	8060	200	671
Mt Emu Creek	Trawalla Bridge	Dry	5090	6400	440	1820
Mt Emu Creek	Streatham-Carngham Road	Dry	Dry	12200	130	2707
Mt Emu Creek	Mt Emu Settlement Road Bridge	7460	7390	11490	390	5250
Mt Emu Creek	Skipton pedestrian bridge	8240	6430	7900	440	4572

Clem Sturmfels DEDJTR Ararat - 5355 0535	Soil conservation, incentives and whole farm planning
Una Allender - 0419 891 920 uallender@bigpond.com	Facilitator - Upper Hopkins Land Management Group, Ararat Landcare Group
Glenelg Hopkins CMA — 5571 2526	Waterways, Wetlands, Works on Waterways Permits
Jack Tucker — 0427 547 636 or 5354 6277 Carole Mules - 0408 708 361 Celia Tucker — 0409 138 581 or 5354 6277	Chair, Upper Hopkins Land Management Group Secretary, Upper Hopkins Land Management Group Treasurer, Upper Hopkins Land Management Group
Deidre Andrews Ararat Rural City— 5355 0233	Ararat Rural City Council Waste and Sustainability Coordinator
Debbie Shea — 0418 205353	Glenelg Hopkins CMA Board; Facilitator, Girls & Grass Advisory Group, Perennial Pasture Systems
Adam Merrick — 0458 965 333 adammm@tfn.org.au	Trust for Nature - Conservation agreements, grants, biodiversity technical advice
Jileena Cole — 0428 341 869 beyondbolac@outlook.com	Facilitator—Beyond Bolac Catchment Action Group (BBCAG)

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Change of Address?

Please contact Una Allender to update your address on our mailing list or better still provide an email address

If undelivered please return to PO Box 109, Lake Bolac, 3351

Postage Paid



Blue-banded Native Bee (Photo: SWIFFT website)