

Upper Hopkins Land Management Group Newsletter



Autumn 2020

Inside this issue:

Autumn Photo Board
Soil Discussion Group
Bug News
Glorious Grasslands
Keith Little
Improving Soil
Management (Soil
CRC)
Australasian Bittern
Pete Forster, OAM
Rabbits in the Landscape
Waterway Twinning
Thirsty Birds
Water Monitoring Results

Diary Dates

Dung Beetles Field Day—
Cashmore 26 Mar. register
online: [https://
dungbeetle-
fieldday.eventbrite.com.au](https://dungbeetle-fieldday.eventbrite.com.au)

SWIFFT online seminar:
“Biodiversity after bushfire” 26
Mar. <https://www.swift.net.au/>

Wildlife on Farms—Maroona,
5.30pm 31 March.

PPS Soil Biology workshop—
AgVic, Ararat. 1pm, 1 April.

Ararat Landcare Group—St
Andrews Church Hall, Ararat.
Next meeting 7pm, Monday 13
Apr.

**GHCMA Celebrating Women
on Farms—**Bornes Hill. 22 Apr

ANZAC Day ceremony—
Maroona Rec Reserve, 10am, 24
Apr (contact [Irene Gellie](mailto:irene.gellie@gmail.com))

Welcome to the Autumn 2020 edition of the UHLMG newsletter

Editor: Ayesha Burdett

Quick updates

Funding opportunity: The 2020 Our Catchments, Our Communities Leadership Development Grants provide funding of up to \$10,000 for professional development. More information: <https://www.water.vic.gov.au/grants/ococ2020>.

~~The Lake Bolac Eel Festival (Kuyang Lapakira) is happening soon. Be sure to get your tickets now: <https://events.humanitix.com.au/lake-bolac-eel-festival-2020>. The Environmental Forum starts at 11am, with a series of talks discussing ecology of the lake, recent history, and cultural knowledge. POSTPONED DUE TO COVID-19 EMERGENCY~~

Wildlife on Farms: Join renowned mammal expert, Peter Homan, to learn about who is sharing your farm and how you can provide habitat options. We will start the evening with a BBQ and presentation, then head down the paddock to look at a few animals. This is a family-friendly event during the school holidays (31 March). To RSVP, contact [Ayesha Burdett](mailto:ayesha.burdett@gmail.com).

Weed solutions: Don't forget! UHLMG currently has a small amount of 50:50 funding available for gorse projects—contact Celia Tucker on 5354 6277. The UHLMG spray unit is available for members to use—contact Bruce McKay on 0417 512 189.

Climate webinars: Agriculture Victoria is running a free lunchtime climate webinar series in 2020. Participants will hear from a broad range of expert speakers from Agriculture Victoria, Bureau of Meteorology (BoM), CSIRO and other agencies. Register online at <http://agriculture.vic.gov.au/agriculture/weather-and-climate/climate-webinars>.

Save the Date: Women on Farms Glenelg Hopkins CMA will be hosting a special luncheon on International Women's Day at Walker Swamp (Bornes Hill). Mark your diaries for the 22nd April and watch for details.

NEW WEBSITE:

<https://upperhopkins.org.au/>

I encourage you all to go and take a look at the new website! We have rearranged and revised some of the content to make this website a great resource for everyone. We are still working on moving to an online system to renew your membership. There will be more details in the coming months.

As part of the process of updating the website with a new look and feel, it was suggested that we could also update our logo. The Upper Hopkins LMG committee met recently and voted to accept the new logo (above). Let me know what you think.

In the last newsletter, I said that we would be moving to a new, digital newsletter. It turns out that the process of updating and renovating the website has taken a bit longer than predicted so I'm not quite ready to shift to the new digital format yet. I understand that several of our members do prefer the printed version and I'll work out the best way to print the digital newsletter so that you can continue receiving it in your mailbox.

Finally, I have noticed that several of the group emails that I have sent to members have “bounced” back to me. Please be sure to add my email address to your contact list to ensure that you are receiving Landcare updates and news about events in the region.

- Ayesha

UPPER HOPKINS LAND MANAGEMENT GROUP

UpperHopkins.org.au

www.facebook.com/UHLMG



Please help us to cut costs and reduce our impact on the environment.

Nominate to receive your next newsletter **via email** (with color photos) rather than on paper (black & white).
Simply send an email to: ayesha.burdett@gmail.com



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 photo board

Wayne Suffield



Wayne Suffield

Wayne Suffield



Wayne Suffield



Wayne Suffield



Wayne Suffield

Many thanks to Wayne Suffield for this collection of spectacular photos. Clockwise from top left:
-Australian Hobby with dragonfly at Green Hill Lake.
-Yellow-billed Spoonbill above Warrayatkin Swamp.
-Peregrine Falcon above Dobie (Upper Hopkins).
-White-necked Herons in a seasonal wetland off Burnett Road.
-Echidna at a waterhole in Ararat Regional Hills.
-Hoary-headed Grebe feeding a dragonfly to its chick at Alexandra Gardens.

Perennial Pasture Systems: Soils Discussion Group



By **Rob Shea, Project Manager, Perennial Pasture Systems**

The Perennial Pasture Systems (PPS) farmer group has its part way through a series of six workshops which form the PPS Soils Discussion Group project. The workshops are funded through the MLA healthy soils program.

Dr Nathan Robinson from Federation University conducted the first session titled “what’s underneath” looking at soil types and structure. Nathan grew up at Moyston, so he was able to add his local knowledge when addressing a fairly complex topic.

Dr Belinda Hackney travelled from central NSW to Elmhurst for the second session which focused on soil constraints to legume production. As it was a spring session group members brought clover samples for nodulation inspection; all now have a greater insight into effective clover production.

The first session for this year was held at Joel Joel on February 19th when Lisa Miller from Southern Farming Systems (SFS) discussed soil pH and the effective use of lime. Around 25 members are attending each session and are gaining valuable high level soil management information.

Three sessions are still to be held and a soil biology workshop will be conducted by Dr Helen Hayden from Agriculture Victoria on Wednesday April 1st, at Agriculture Victoria 233 – 239 Barkly St Ararat). The session starts at 1.00 pm, and smoko will be provided.

A soil test interpretation session with Lisa Warn will happen in

winter and it will be combined with the launch of the PPS soil test digitalisation project which is being done in conjunction with Federation University. It is being funded through a Wimmera CMA Landcare grant.

The final workshop will be in early 2021 which will review the learnings from the project and assist group members to set up their soil health management plans.

The project is a great opportunity for PPS members to get integrated soil information to improve their knowledge and management skills.

For further information on the PPS group; contact Project Manager Rob Shea 0438 521357 yadin@netconnect.com.au



PPS February Healthy Soils session with Lisa Miller from Southern Farming Systems Photo: Debbie Shea

Bug News: A wet summer – what does this mean for pests?

By **Dr. Paul Horne, IPM Technologies P/L**

Unlike most parts of Australia, southern Victoria has had rain from spring through summer. This is likely to alter pest conditions for some species in Autumn.

The good news is that pests that live below the ground, like red-headed cockchafer, are likely to have suffered higher than usual mortality, simply by drowning. If the small beetle larvae that hatch in spring encounter water-logged soil, then many will not survive. However, black-headed cockchafer that were in the egg stage over summer do not usually hatch until around April. So, there is still likely to be survival and appearance of black-headed cockchafer this year.

Slugs could be much more important pests this season, even in paddocks where pest pressure was low last year. This is because in a normal, dry summer the pest slugs shut down (aestivate) and wait until there is moisture again. So, this might mean from mid-November to March there is no slug activity. Slugs shut down like this because of lack of moisture, not high temperatures.

If moisture is present then slugs are continuous breeders, and so between November 2019 and March 2020 there will have been at least one and possibly two generations of slugs

produced that we do not normally see. Slugs are hermaphrodites, meaning that each individual can produce eggs and they produce a lot of eggs. Species such as *Deroceras reticulatum* (grey field slug) could produce between 100 and 1,000 eggs per individual. This means that if you had 1 slug per square metre last year then you could have hundreds per square metre this autumn!

Assess the risk of slug damage now; don't wait until the crop is sown and damage is being done. Place some tiles or sacks into the paddocks (especially those to be sown to canola) and check on the level of activity. A guide to identifying slugs is available at https://grdc.com.au/data/assets/pdf_file/0034/198916/grdcbpsslug.pdf

Or if you have any particular questions, then please contact Paul Horne (0419 891 575/ paul@ipmtechnologies.com.au).



This giant green slantface (grasshopper) was spotted in crop stubble recently—great camouflage! Photo: Ayesha Burdett

Glorious Grasslands Tour

Aggie Stevenson, Glenelg Hopkins CMA

The National Landcare Program is currently funding the Victorian Volcanic Plains Recovery Project (VVP Project), a large 5-year project in our region. As part of this project, the GHCMA delivers the Linear Reserves Project, in partnership with DELWP, Corangamite CMA, CFA and various public land managers. The aim of the Linear Reserves Project (LRP) is to encourage and help facilitate the continuation of roadside burning in high priority areas and provide funding and support for follow-up weed control in these areas. We work closely with different groups of land managers, and focus on utilities, and the needs of users, managers, and adjoining landholders.

Each year, we host a grassland bus trip for anyone who is interested in native grasslands that are common on roadsides across the VVP. In November last year, a group of 50 people came from far and wide to tour some of the best remaining grasslands around Caramut, Chatsworth, Wickliffe, Willaura and Dunkeld. The tour was led by Dr John Morgan from La Trobe University, a passionate plant ecologist.

The theme for the day was “threatened species”. Every site we visited was a near-pristine example of the critically endangered Natural Temperate Grassland of the VVP



Hoary sunray (Leucochrysum albicans) and John Morgan getting up close and personal with the grasslands. Photos: Ben Zeeman and Aggie Stevenson.

ecological community. To the delight of everyone, we found numerous threatened species at each of the four sites - a real treat.

Stop one had a small population of the beautiful Small Milkwort (*Compesperma polygaloides*), yam Daisy (*Microseris scapigera*) and one lonely little Button Wrinklewort (*Rutidosia leptorhynchoides*).

The second stop is famous for being home to one of only ten populations of Button Wrinklewort; a number of listed orchid species also occur on this site.

The third site near Willaura had Hairy Tails (*Ptilotus erubescens*) and Hoary Sunray (*Leucochrysum albicans*) - two very rare species - and our final site near Dunkeld had a very rare one for roadsides, the Clover Glycine (*Glycine latrobeana*). John’s excitement at finding these rare plants infected everyone! There were many other orchids and daisies which were past their prime, but still very special to see.

We have the amazing local CFA brigades to thank for the ongoing management of these sites. It is because of them that the grasslands are still here and in such good condition. Native grasslands require regular burning to maintain an open structure, which allows the wildflowers to thrive.

Additionally, the width of these roadsides often dictated their historic use. Wide, three-chain road reserves were the original stock routes that drovers used to move stock down to the ports: in European times, these roadside grasslands have evolved with intermittent heavy grazing followed by rest periods.

Sharing information with the local community about the importance and rarity of these precious roadsides, and other native grassland remnants, is a high priority for the CMA and DELWP. For further information about the project, contact Aggie Stevenson on 5571 2526 or a.stevenson@ghcma.vic.gov.au.

Wetland Fact Sheets Now Available!

Did you know Glenelg Hopkins CMA now has a range of fact sheets explaining why the natural wetlands of our region - which account for 44% of all wetlands in Victoria - are so particularly special and worth valuing?

Launched as part of World Wetland Day activities on Sunday 2 February, six new fact sheets about wetlands have been developed as part of the Hopkins Wetland Restoration Project to help clarify what wetlands are, their importance, how to protect them and to provide simple information to landholders about wetlands.

- [#1 Wetlands: Why they are important](#)
- [#2 Wetlands: Your legal responsibilities](#)
- [#3 Wetlands: Protecting your wetland](#)
- [#4 Wetlands: Seasonal Herbaceous Wetlands](#)
- [#5 Wetlands: Agriculture and the environment](#)
- [#6 Wetlands: Saline and freshwater](#)

These fact sheets are now available online at www.ghcma.vic.gov.au under *Fact Sheets and Resources* on the Glenelg Hopkins CMA website. For printed copies, please contact Glenelg Hopkins CMA on 5571 2526.

Landcare volunteer Keith Little

By Margaret Burbidge, Ararat Landcare

Long-term community volunteer and former Ararat Landcare Group president Keith Little has put down his mattock. Mr Little, 89, has retired from Ararat Landcare Group following 18 years of service.

The former Ararat Citizen of the Year was the Landcare group's first president – and remained in the position for nine years – when it formed in 2000.

Past president Jim Stringer said Mr Little had greatly contributed in his role and membership with the group.

“The group has accomplished some amazing work, in particular the removal of the difficult and very prickly weed Gorse, also known as Furze, a weed of national significance,” he said.



“It’s native to Western Europe and Africa and like many other plants it was brought to Australia by early European migrants. But it took hold, particularly in Victoria.

“It was out of control in the areas around Hadland and Walker streets, but with work from Keith and others in Ararat Landcare, it only requires regular maintenance of the small new plants in that area now.” Mr Little was also recognised in the naming of the Keith Little Bridge

Keith Little. Photo: Margaret Burbidge.

that spans Cemetery Creek for walkers and cyclists using the Cemetery Creek track in Ararat’s north.

Mr Stringer said Mr Little and other Landcare members built the bridge to span over the creek from an engineered flat pack. Enquiries from potential new Ararat Landcare Group members are always welcome; John Mawson on 5352 2685 for information.

Building Technical Capacity for Improved Soil Management

The Soil CRC is working with the Department of Agriculture and Water Resources (DAWR) to deliver a project under the National Landcare Program’s



(NLP) Smart Farms Program “Building technical capacity for improved soil management”. The project will build the technical capacity of NRM agencies, Landcare and grower groups to deliver soil health information to farmers. It will leverage the significant skills, expertise and collaborative partnerships within the Soil CRC to build the soil health technical capacity of groups across Australia.

As your Landcare Facilitator, I’ll be participating in the Community of Practice South to learn about delivering soil health information to landholders in the Upper Hopkins region. Later in March, I’ll be participating in a training workshop to learn about soil health, soil biology and current research into understanding soil. I would appreciate any comments and feedback on your needs for improving soil health.

Lake Bolac Eel Festival
2020
20th March 5-10pm Art Auction
21st March 10am - 1pm

This Year's Theme
"The Lake as Home"

Neil Murray & Band
Stephen Digram
Kavisha Mazzella
Phil and Taddy Edgeley
Jim Williams, Gypsy Smash
Charlotte Harwood

Art Auction
Environmental Forum
Workshops
Children's Activities
Craft & Produce Market
Buskers Stage
Indigenous Culture & Dancing

www.eelfestival.org.au • (03) 5350 2204 • b.y.o. festival chair • camping available

Ararat Rural City
Glenelg Hopkins
Australian Government Regional Arts Fund
REGIONAL ARTS VICTORIA
Geoff and Helen Handbury Foundation
Central Gippsland LLEN engage, innovate, inspire.

Bitterns project boundary now includes Upper Hopkins!

Thanks to Australasian bittern sightings coming in from wetlands as far inland as Dunkeld and Ararat, Glenelg Hopkins CMA has been able to extend the Bittern Recovery project boundary from the coastal zone to the whole of the catchment.

To celebrate, we have re-opened the expressions of interest to bring back Bittern habitat on private land to include every corner of our catchment! Funding is now available for management and restoration of wetlands, floodplains or creeks with dense stands of reeds or tall rushes.

Works can include:

- fencing off wetlands or sections of reedbeds
- reducing or removing stock grazing on wetland areas
- weed removal and pest animal control
- restoring drained wetlands

Our field staff will assess the habitat on your property and develop a management plan that will benefit Bitterns.

We would also like to hear from you if you have seen or heard a Bittern. This helps us learn more about the Bittern population and their use of the landscape.

What is a Bittern?



A shy waterbird, with brown mottled feathers that blends in with the reeds where they live. Easier to hear their booming call than to see. They are large birds: 70 cm tall with a wingspan of over 1 meter.

They are listed as critically endangered: their total population is thought to be around 2000 individuals.

Peter Forster OAM

Pete Forster has been an integral part of the Upper Hopkins landscape and has been rewarded for his significant achievements for service to conservation and the environment with a Medal of the Order of Australia.

Pete was Secretary/Treasurer of Upper Hopkins Land Management Group (1992-2012) and a founding member and Secretary to the Ararat Landcare Group. He served the interests of the local Landcare community with many organisations, including the Victorian Gorse Taskforce, the Environmental Sustainability Reference Group, DELWP Biodiversity and FFG Act Review Stakeholder Reference Group, and the Environmental Sustainability Advisory Group (Ararat), as well as myriad other organisations throughout the state.

His vision and support continues to benefit our community every day in the physical changes that he has made to the landscape.

After stepping down from his roles in the Upper Hopkins and Ararat groups, Pete has now “retired” to Anglesea where he continues his work for the environment with ANGAIR - Anglesea, Aireys Inlet Society for the Protection of Flora and Fauna.



In wetlands, floodplains, creeks and estuaries, with dense tall vegetation and at least 30 cm of water, reeds, bulrush, sedges and rushes provide good cover for Bitterns. They will feed on fish, frogs, yabbies, insects and lizards along the edges.

To register your interest, contact Jacinta Hendriks or Lachlan Farrington at Glenelg Hopkins CMA on 5571 2526 or ghcma@ghcma.vic.gov.au

Expressions of interest close Friday 3 April 2020.

More information on the incentive program for landholders is available at www.ghcma.vic.gov.au and on our [Bittern Recovery Facebook](#) page.

This project is supported by Glenelg Hopkins CMA, through funding from the Australian Government’s National Landcare Program.

WILDLIFE on FARMS

Learn from mammal expert, Peter Homan, about the native animals that can be found in our farm habitats. This is your chance to ask questions and get a close look at bats and other local fauna.

5.30pm, Tuesday 31 March
“Tullyvallyn” 751 Andrews Lane, Maroona

RSVP: ayesha.burdett@gmail.com 0429 021 500

Please BYO: BBQ food, salad & drinks
Provided: Dessert, tea & coffee

Rabbits in Sensitive Landscapes

By Victorian Rabbit Action Network

The Victorian Rabbit Action Network (VRAN) hosted a Cultural Awareness Workshop on 21-22 October 2019 to have a conversation about Culture. The workshop aimed to build partnerships and raise awareness of Aboriginal heritage. The north west of Victoria is a truly unique part of Australia, in terms of the number of globally significant ancient Aboriginal burial sites, however sites have been significantly damaged by rabbits.

Convened at Ned's Corner, a Trust for Nature Property located in the Mallee, the VRAN committee and mentors met with Traditional Owners First Peoples of Millewa – Mallee, Parks Victoria, Aboriginal Victoria, Department of Environment, Land, Water and Planning, Agriculture Victoria, Mallee Catchment Management Authority, Mildura City Council and friends of VRAN to learn more about Aboriginal Cultural Heritage in Victoria.

The workshop included presentations on 'a landscape without rabbits', 'working with the Aboriginal Heritage Act 2006' and 'Landcare and Aboriginal Inclusion'.

A field trip incorporated a Welcome to Country, cultural walk and smoking ceremony hosted by First Peoples of Millewa – Mallee. Parks Victoria also shared their approaches used to protect Aboriginal Ancestral Remains and Trust for Nature showcased how fragile Mallee landscapes can be transformed without rabbits.

Kaye Rodden is a farmer and Landcare member from



VRAN workshop participants learn about managing rabbits in a sensitive landscape. Photo supplied.

The Victorian Rabbit Action Network has a useful website with some great resources: <https://rabbitaction.com/further-resources/>.

The Agriculture Victoria website has some information about managing rabbits in *rural* and *urban* environments: <http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds>.

If you would like to know more or have some ideas about how our Landcare group can tackle rabbits, contact me: Ayesha.Burdett@gmail.com.

Barrabool Hills, near Geelong, and a member of the VRAN committee. "Rabbit management is extraordinarily complex, and it requires lots of players, lots of community engagement and lots of partnerships," Kaye said.

Damien Jackson is one of the local Parks Victoria staff working to protect the area's cultural heritage, and partnering with VRAN to share his knowledge about how rabbit management can be done in sensitive landscapes.

"I think there's going to be a lot of support behind VRAN, as it's bringing everyone together," Damien said. "It's not just Aboriginal people's issue, it's not my issue, it's not our team's issue. It's everyone's issue – it's the government, it's the landowners, it's everyone".

VRAN would like to thank all our partners for attending including: First People of Millewa Mallee, Parks Victoria, Aboriginal Victoria, Agriculture Victoria, DELWP, Trust for Nature, Mallee CMA, Uncle Dave Wandin and Mildura Rural City Council.

Do you have a question in relation to rabbit management and working in sensitive landscapes? Contact Heidi Kleinert, VRAN Executive Officer: heidi.kleinert@agriculture.vic.gov.au.

To learn more about Aboriginal Cultural Heritage Information visit <http://www.aboriginalvictoria.vic.gov.au>.

Waterway Twinning Program

I was recently invited to join the Waterway Management Twinning Program. This is a structured mentoring program, focusing on improving the on-ground delivery of current Victorian riparian restoration projects. I have been partnered with Deidre Murphy, the Regional Citizen Science Project Officer for the Corangamite Catchment Management Authority, with the aim of developing a citizen science program to monitor water health in our region.

We had our first group workshop in Warrnambool (25-27 Feb), one week before I headed out to conduct EC water monitoring. Deidre has a wealth of knowledge about current programs that are being used across the state in collaboration with schools. Citizen science programs like this have two great benefits:

1. Educational outcomes for students and teachers involved in the programs, encouraging stewardship in the region;
2. Large datasets with good quality data that can be used for monitoring and management of our river health.

The Upper Hopkins has a great dataset from years of monitoring EC across the region. I look forward to discovering more ways that this historical data can be shared and used by everyone.

More information: <https://www.twinningiswinning.com.au/>



Thirsty Birds

David Nichols

Each season presents different opportunities for excellent birdwatching in our region. Whether it be watching Scarlet and Flame Robins on farms in winter, watching northern migrants arrive in springtime or the summer treat of staking out a good bird bath, water trough or farm dam on a warm evening.

In the recent hot weather I spent two consecutive evenings staking out a dam at Victoria Point. A couple of weeks prior, I had stuck in some nice fallen redgum branches to serve as useful perches for visiting 'thirsty birds', as per the crimson rosellas on the branch in the photo.

The birdwatching was excellent in terms of sheer numbers and species represented. In less than an hour on both occasions there were more than 80 birds, representing more than 20 species that visited the dam in very close proximity to me. This made for some good viewing and photography opportunities.

On reflection, some of the more interesting aspects of these bird watching opportunities are as follows:

You get to see lots of species mixing together at close quarters. In one instance, I observed Tawny-crowned, Yellow-faced and New Holland Honeyeaters sharing a branch with Eastern Spinebill and Little Wattlebird.

Because of this, I got a different perspective of the relative sizes of species. For example, when a New Holland Honeyeater was standing next to a White-naped Honeyeater then the New Hollands actually looked to be twice the size of the White-naped Honeyeater.

The other interesting aspect was the colour of some birds in the late afternoon sun. There were some colouring I had not previously noticed or appreciated. See the photo of the Brown-headed Honeyeater with the White-naped Honeyeater. Until now, I had not noticed the yellow around the eyes of the Brown-headed Honeyeater.

I am looking forward to more warm evenings by the dam.

Crimson Rosellas (top), New Holland Honeyeaters, White-naped Honeyeater and Red-browed Finch (middle), and Brown-headed and White-naped honeyeaters (bottom).

Photos: Dave Nichols



Thanks to everyone who visited us at the Willaura Health Care Outdoor Market, including Una who came out of retirement for a couple of hours to join the fun. It was great to catch up with friends and chat about all of the different aspects of Landcare.

Ararat School Farm wetlands rejuvenation project

Ararat Secondary College recently received funding from Agriculture Victoria through the Weeds and Rabbits Project (<https://weedsandrabbits.com/>). VCAL students will work with Ararat Landcare Group (ALG) members and other professionals to rejuvenate the wetlands located at the school farm, including removing weeds, re-fencing the boundary, and monitoring water quality. Several ALG members recently met with students at the site to discuss weed control and revegetation, and brainstorm some ideas for managing the wetland area. It was a productive conversation and everyone is excited about moving into the next steps of the project. This collaboration is an important opportunity for the students to engage meaningfully with professionals and experts, building confidence and providing practical experience into the planning and implementation of invasive species management.



Meanderings and reflections

Water levels continued to be low throughout the region. The autumn break has not yet arrived, and several sites remain dry from the summer. Other sections of the rivers and creeks are slow-flowing or stagnant. This highlights the importance of groundwater springs feeding the rivers and maintaining some water in the system during low rainfall periods, even if it is salty.

The Hopkins River was a series of large pools: this pool is upstream of an old bluestone ford under the Western Highway near Dobie Road, east of Ararat. Photo: Ayesha Burdett



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 μ S/cm), lactating ewes and weaners (6,000 EC μ S/cm), dry sheep (9,300 EC μ S/cm), horses (6,200 EC μ S/cm), Pigs (3,100 EC μ S/cm), poultry 3,100 EC μ S/cm).

Stream	Road where site accessed	EC (μ S/cm) Mar 2020	EC (μ S/cm) Nov 2019	highest	lowest	average
Billy Billy Creek	Buangor	438	332	8060	200	986.1
Middle Creek	Willowtree Road	puddle only	509	3700	100	447.4
Tatyoan drainage line	Rockies Hill Road	23500	16660	28200	360	14647.2
Challicum Creek	Porters Bridge Road	15240	13050	26680	145	11171.3
Fiery Creek	Porters Bridge Road	10230	4010	11930	550	5430.2
Fiery Creek	Mt William Rd (east Travellers Rest Rd)	3300	2220	5950	500	2349.2
Fiery Creek	Gordons Bridge Road	7790	3130	17560	530	4965.1
Fiery Creek	Runway Swamp Road	6780	5950	14520	860	5089.2
Fiery Creek	Streatham Reserve	6770	5280	11600	770	4441.2
Fiery Creek	McCrows Rd/Nerrin Nerrin Estate Rd	12210	7230	13770	780	7571.1
Fiery Creek	Lake Bolac	11450	8710	22280	850	7962.6
Lake Bolac	Fishermens Pontoon	11190	8640	53000	1410	10509.7
Lake Buninjon	Maroona - Glenthompson Road	dry	13520	104000	880	16092.8
Good Morning Bill Creek	Buninjon West Road	33720	15960	39000	300	11521.2
Hopkins River	Bridge on Labrador Road	10270	7030	11200	337	6073.6
Hopkins River	Helendoite Road	10870	8150	10870	299	5823.4
Jacksons Creek	Coopers Road	puddle only	10410	15900	244	8546.2
Hopkins River	Robertsons Bridge (Langi Logan Rd)	8420	5970	13000	327	4777.5
Hopkins River	Tatyoan Road (sth Kangaroo Pt Rd)	dry	4370	13800	780	4631.6
Hopkins River	Burrumbeep Boundary Road	7480	6660	11700	330	5366.6
Hopkins River	Jacksons Creek Road	10690	9890	12100	340	6288.5
Hopkins River	Warrak Road (Hopkins River Road)	12450	11330	23280	490	9045.9
Three Mile Creek	Warrayatkin Road	dry	dry	22400	600	7854.7
Three Mile Creek	Warrak Road	dry	3900	13600	390	2513.4
Cemetery Creek	Warrak Road	dry	dry	9620	130	1014.9
Green Hill Lake	Western Highway entrance	3680	2240	28800	340	6243.0



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Stream	Road where site accessed	EC (µS/cm) Mar 2020	EC (µS/cm) Nov 2019	highest	lowest	average
Hopkins River	Old Geelong Road	15210	13600	16300	500	8453.8
Hopkins River	Dobie Road	6350	7530	15900	160	5798.9
Captains Creek	Tatyoan North Road	530	332	3500	100	497.7
Hopkins River	Wickliffe - Glenelg Highway	18060	8670	19000	1590	10651.1
Hopkins River	Back Bolac Road	18650	9860	29600	1620	11782.3
Hopkins River	Bald Hill Road ford	15660	10940	31800	1980	10765.8
Hopkins River	Delacombe Way (Edgarley Bridge)	13720	10290	17400	1790	9700.0
Hopkins River	Rossbridge (bridge)	14240	8780	14240	820	8253.9
Trawalla Creek	Back Waterloo Rd, bridge	2460	no data	15300	400	2652.0
Mt Emu Creek	Trawalla Bridge	1200	no data	6400	440	1939.0
Mt Emu Creek	Streatham-Carngham Road	3110	no data	12200	130	2785.9
Mt Emu Creek	Mt Emu Settlement Road Bridge	3240	no data	11490	390	4993.9
Mt Emu Creek	Skipton pedestrian bridge	3160	no data	8240	440	4496.3

Clem Sturmfels DEDJTR Ararat - 5355 0535	Soil conservation, incentives and whole farm planning
Ayesha Burdett - 0429 021 500 ayesha.burdett@gmail.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 Celia Tucker — 0409 138 581 or 5354 6277 Kelly Gellie — 0439 722 985	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
Rob Shea —0438 521 357 Debbie Shea — 0418 205353	Facilitator, Perennial Pasture Systems Facilitator, Girls & Grass Advisory Group, Perennial Pasture Systems
Adam Merrick — 0458 965 333 adamm@fnf.org.au	Trust for Nature - Conservation agreements, grants, biodiversity technical advice
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Change of Address?

Please contact Ayesha Burdett to update your address or provide an email address

If undelivered please return to 133 Burdett Lane, Wickliffe VIC 3379

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*Why did the turtle cross the road?
(Common snake-necked turtle)
Photo: Ayesha Burdett*