

BARRABOOL HILLS LANDCARE

Barrabool Hills Landcare Group Newsletter. June 2022.



Natural assets on a farm: the role of paddock trees.

Why are scattered paddock trees important for farm productivity?

Article courtesy of www.sustainablefarms.org.au Photo credit: Dave Smith.

Scattered paddock trees are a familiar feature across rural Australia. These trees are important for maintaining agricultural productivity and are critically important for the conservation of wildlife. Many of these trees are being lost due to old age, stress and fire, but there are ways to protect and restore paddock trees.

Many paddock trees were the oldest, largest trees in the landscape at the time of clearing, so they can be hundreds of years old. We are rapidly losing these iconic trees due to old age, stress from agricultural production, fire, and a lack of

continuous replacement. If current trends continue, it is possible that in as little as 40 years all scattered paddock trees across most of the south-eastern agricultural region will be gone.

By keeping scattered paddock trees in good condition, and ensuring that trees are recruited to replace lost trees, we can retain this valuable resource for the next generation of landholders as well as help to conserve our native wildlife.

Why are scattered trees important for farm productivity?

... (continued on page 2)

WHATS ON IN 2022

JULY
REMINDER Membership renewal - July 1

AUGUST
BHLG AGM
Wednesday, August 10

SEPTEMBER
Barrabool Hills Landcare bus trip to visit past projects.
Saturday, September 10. Details to be advised.

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Why are scattered paddock trees important for farm productivity?

Scattered paddock trees are valuable assets that boost farm productivity and profitability.

The most recognised and well-understood value of trees on farms is providing shade and shelter from wind for livestock. Shade and shelter are necessary to reduce the heat and cold stress experienced by livestock. This allows livestock to dedicate less energy to self-maintenance, which can result in improved farm productivity.

Energy expended by livestock to maintain a regular body temperature diverts valuable energy away from desired production gains, such as live weight gain, milk production or wool growth.

- Dairy cows have been shown to produce 17% more milk in paddocks with trees that provide shelter.

- Less energy is required to maintain optimal body temperature in livestock, which can improve weight gain and lower livestock nutrient requirements. For example, sheltered off-shears wethers require approximately one third the amount of supplementary feed to maintain bodyweight compared to those that have no shelter.

Other benefits of large old trees

Production gains from shelter provided by paddock trees is not limited to livestock. Benefits to other parts of your farm include:

Improving soil structure and quality as wind and water erosion is reduced. Soil fertility also improves as leaf litter and animal droppings decompose, returning nutrients to the soil.

Salinity management as trees can



Above and below: Stock regularly crowd together under paddock trees, taking advantage of shade and shelter. Photo credit: Suzannah Macbeth.



reduce waterlogging and dryland salinity problems.

Scattered paddock trees have been shown to increase water infiltration in soils, helping retain moisture in the landscape.

Increased pasture growth and reduced desiccation in hot, dry periods, due to the shelter provided by paddock trees.

Paddock trees are associated with an increase in the abundance and diversity of insect pollinators and natural pest control agents. Native bats, lizards, and birds will prey on common farm pests, and many of these species use scattered paddock trees for roosting and foraging. The presence of these animals on farms can significantly reduce the number of insect pests.

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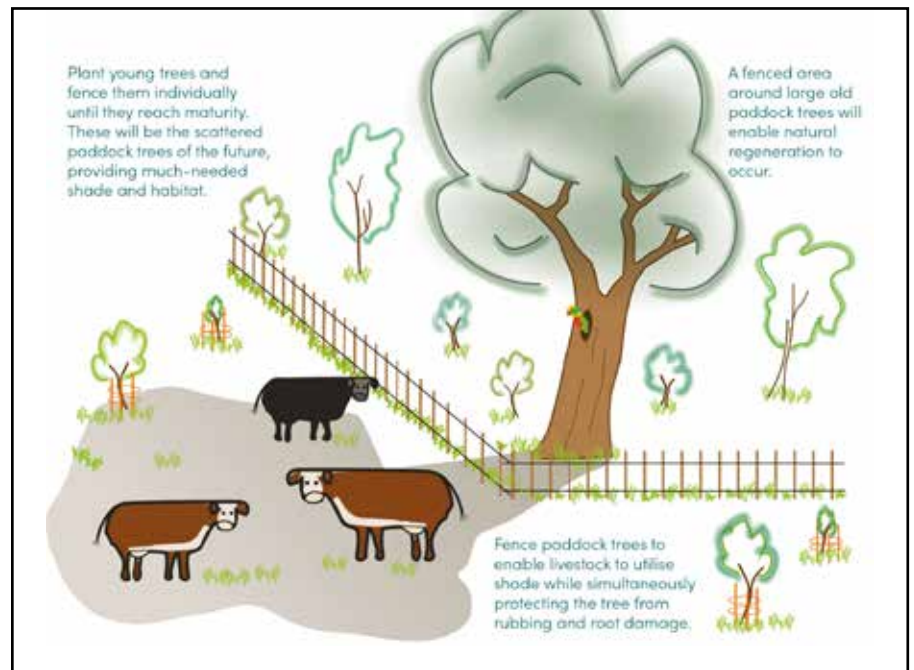
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Ways to protect and restore scattered paddock trees.

There is no single cause of the demise of scattered paddock trees. Contributing factors include increased stress caused by agricultural practices (e.g. spray drift, stock camps and stubble burns), changes in hydrology, drought, insect attack, clearing, and natural death due to old age.

As these veteran trees vanish from the landscape, there are no trees to replace them. Regrowth – a source of future paddock trees – has been suppressed over the last century by livestock grazing, clearing, fire and other land management activities.

But the good news is, there are many actions farmers can take to turn this situation around. The key is to arrest the decline of existing trees and ensure there is a succession plan of younger trees. These solutions will vary across different landscapes and for different production systems.



Above: Diagram showing fencing of paddock trees and the planting of new ones.

Credit: www.sustainablefarms.org.au



Article supported by:

Healthy farms
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Moorabool Koala Count

Reprinted from the Brisbane Ranges Landcare Newsletter

Moorabool Koala Count needs your help!

The Moorabool Koala Count was a partnership project with the Moorabool Catchment Landcare Group, the CSIRO and Wadawurrung Traditional Owners.

CSIRO provided training, helped with a number of transect monitoring surveys and performed 30ha of thermal drone surveys just north of Gordon. In addition a number of citizen scientists checked their

local area and recorded sightings of koalas. For example, in our local area we found 9 different koalas near Staughton Vale Rd and Anakie Gorge.

The MCLG has stayed in touch with the CSIRO and are looking to expand the program throughout the catchment area and are looking for partners to continue surveys.

What this would involve is receiving training on how to perform transect surveys and record information correctly, and being able to perform a survey twice a year.

The survey itself is only a 500m or so walk with a partner and recording information as you go. The survey area does not need to

contain Koalas, information about where Koalas are notis just as valuable to have. It can be on public land, or your own backyard, every bit of information is valuable.

It would be great to check some areas where we have been planting trees. Contact Bart on 0401 925 886 if you are interested or have any queries.



Mycorrhizal fungi.

By Stephen Murphy. Sustainable Biorich Landscapes.

This week after the soaking rains, you may have noticed mushrooms and toadstools popping up in the grassy areas where you live.

Did you also notice that the grass around these fruiting fungi is greener and 20% taller than the grass nearby?

The longer grass around the fungi suggests that both the grass and the fungi are benefiting from growing together. This is a good example of a positive plant - fungi association.

About 90% of indigenous plant species have a positive association with fungi. This means that both the plant and the fungi contribute nutrients to their partner, enabling them both to survive and thrive. Studies have shown that it's not unusual for several hundred species of fungi to occur in just a few hectares of remnant woodland or damp forest areas. In a Western Australian study, 500 different species of fungi were identified in small patches of remnant bush.

Bettongs, Potoroos and fungi.

In a healthy forest or woodland system, these beneficial fungi are spread by the scratching and digging of marsupial fauna like Bettongs and Potoroos, which eat the 'fruit' of fungi and spread the fungal spores in their droppings.

It has been shown that forests and woodlands are healthier and more diverse where these small fungi eating marsupials still survive.

Fungi are important to the health of the majority of Australian plants.

To read an engaging story about two Eastern Bettongs, Spit and Yirn. Learn about how they live and their fight for survival, go to: <https://www.recreatingthecountry.com.au/eastern-bettong.html>

Mycorrhizal fungi importantly supplement the nutrient needs of



Above: A sketch of two Eastern Bettongs, Bettongia gaimardi, foraging for fungi.

woodland plants. In return, they receive carbohydrates that the plants photosynthesize as well as water. Species ranging from orchids to eucalypts benefit/need from this association with fungi.

I did get excited when I saw the enticing fairy-rings of mushrooms growing on roadside verges, but sadly it seems that good mushrooms are hard to find these days. On closer inspection, they turned out to be the 'toxic to humans yellow-strainers.' Though it seems that the various exotic grasses growing with them don't find them toxic and benefit from having them up close and cuddly.

To read more of Stephen's articles on plants and ecology go to; <https://www.recreatingthecountry.com.au/easy-blog-finder.html>

Also, check out his recently released natural history fantasy novel 'Seeds the Chronicle' which is free online this year. Kaye Rodden said;

Steve, this is epic. I am speechless and enthralled. Such a wonderful weaving of experience and history into this tapestry.



Message from the President.

By Jim Seager.

Welcome to Winter 2022.

The new growing season has finally kicked off with some welcome rain and I am sure you are looking forward to planting crops, pasture and trees this season.

Weeds seem to have also had a great start so get them under control while they are small.

Our small grants program is available to members to help fund small revegetation and protection projects, so check out the website for details. Happy to consider other landcare project ideas, please contact us through our website or ring me on 0409935700.

Heading into the spring we will be running a bus tour of past landcare projects in the region to inform and inspire landcarers to keep up the great work. Planned for Saturday September 10th 2022

A big thank you to our newsletter editor, Leah Carr and those who contribute articles. We will continue to distribute some printed editions of the newsletter with the assistance of Surf Coast Council and Geelong City Council but a digital copy of the newsletter will always be available on our website.

Thank you to Trevor and Christa Jones for hosting our recent executive meeting. We have finally

resumed face to face meetings so hopefully we will be able to plan more group events soon.

Now is the time to renew your membership details for next year.

Please provide updated contact details so we can update you with the latest information and encourage new landholders to join. We look forward to your new or ongoing contributions.

barraboolhillslandcare.org.au

What Bird Is that?

By Tim Harte.

The bird in the April BHLG newsletter was a Laughing Kookaburra (*Dacelo novaeguineae*).

Kookaburra's are known for their fantastic cackling call and the name Kookaburra is derived from guuguubarra, a loanword from the First Nations Wiradjuri language, which phonetically imitates the laughing call of the species.

This issue's well camouflaged mystery birds were spotted impersonating branches in a Red Ironbark tree.

Incredibly the range of these birds spans almost all habitat types across the continent of Australia with the exception of treeless desert and dense rainforest habitats.

Email us with your 'what bird is this?' answer, the first person to answer correctly will have their name published in the next newsletter.





BARRABOOL HILLS LANDCARE GROUP NEW MEMBERSHIP FORM

Membership Subscription is \$15.00 per family per year. Renewal is due on 1 July.

NAME _____

POSTAL ADDRESS _____

PHYSICAL ADDRESS (if different to above)

MOBILE PHONE _____ (useful for SMS alerts)

EMAIL _____
(essential for forwarding of newsletter, minutes of Group meetings etc)

ANNUAL SUBSCRIPTION: ____ I yr \$15.00

Number of people covered by this membership ____



PAYMENT METHODS:

Options for payment are in the following order of preference:

EITHER

1/ Order & pay via our website: <https://barraboolhillslandcare.org.au/shop/>

Payment options are bank transfer, credit card or PayPal.

OR

2/ Mailing your cheque & completed paper form to
1270 Barrabool Road, Gnarwarre VIC 3221

Note: Unfortunately we **cannot accept cash** payments

More water need in our rivers if platypus are to survive!

Friends of the Barwon with funding from the Tucker Foundation, Bendigo Bank, Barwon Water, Surf Coast Shire, Geelong Landcare Network, and supported by Upper Barwon Landcare, Golden Plains Shire, City of Greater Geelong and EnviroDNA, meant that the gaps in the current data set for platypus in the region, between the Upper Barwon catchment and Moorabool system, were filled to ensure the largest continuous data set in the state.

The sampling across 38 different sites in the Barwon, Leigh and Moorabool rivers involved over 60 enthusiastic community members

In a recent webinar to the community, environmental scientist Josh Griffiths explained that the results varied quite significantly in each of the three waterways sampled.

The sites sampled in the Leigh and Moorabool rivers showed a much higher and consistent population of platypus when compared with

the Barwon River samples from Winchelsea to Geelong. Josh attributed these differences primarily to habitat suitability and river flow rates. Adding that “the base flow rates in both the Leigh and Moorabool rivers are much more consistent than those in the Barwon, which in recent years has even “ceased to flow” along a number of reaches during summer. Platypus need consistent water flow to be able to move freely up and down rivers and creeks in order to breed and thrive.”

Josh said “over the past 50 years only 50-60 sightings of platypus had been recorded in this region, so historically we have had very limited data. The Leigh River in particular has had no real historical platypus sightings previously recorded, so this project has really filled a gap we now have the biggest data set over a region in the state.”

The information gathered by the community has really highlighted the plight of this endangered

animal in our region. Areas with poor habitat distinguished by bank erosion, sparse vegetation, minimal burrowing sites, no instream or channel complexity (no bends, limited variation of depth or pools and no logs, snags or rocks present) were consistent with the absence of platypus.

Where the platypus were detected, was consistent with parts of the river which had been fenced off from grazing animals, revegetated with indigenous vegetation including trees and shrubs, had good instream habitat.

Chair of The Friends of the Barwon, Dr Kaye Roddens said “This project has highlighted the importance of water security in our rivers. The Barwon, Leigh and Moorabool Rivers are all severely stressed and we need to work together as a whole to repair and protect these amazing living assets in our region. Investment into improving the health of the Barwon system as a whole is crucial for all species relying on it to survive.”

If you would like a copy of the survey report please contact glplatypus@gmail.com

Victorian Gorse Taskforce Community Grants open.

By Geelong Landcare Network (GLN)

Eligible Small Grant projects can attract up to \$5,000 in funding.

Timeline

The 2022 – 2023 Small Community Grants are now open and have been extended to June 24, 2022.

If gorse is a problem on your land or across your local area, the VGT encourages you to connect with your local community and apply now.

Eligibility

• Grants are available to community groups e.g. Landcare or Friends of

Groups. Private landholders groups of two or more may also apply.

• Funding is available for gorse control on private land only.

• Projects must promote and carry out gorse control that aligns with the Gorse National Best Practice Manual.

• Incentives to participating individual properties should be capped at \$1,000 per property ownership.



• Participating landholders must sign a 3-year voluntary work agreement that commits them to maintaining all necessary follow-up gorse control at their expense.

For more details:

<https://vicgorsetaskforce.com.au/community-projects/community-grants/>

BECOME A MEMBER.

Join our vibrant Barrabool Hills Landcare community and help support our projects and events? Only \$15 annually per family.

Go to our website for all the details on how to join www.barraboolhillslandcare.org.au or email us at barraboolhillslandcare@gmail.com

CONTRIBUTIONS TO OUR NEWSLETTER.

Contributions to the newsletter are most welcome. Let your fellow community and members know what is happening in the Barrabool Hills.

Send articles and photos to barraboolhillslandcare@gmail.com, deadline for next issue is 16/07/22.

Members are able to advertise their Barrabool Hills business in the newsletter @ \$30 per issue (space allowing). Ads. are approximately 50 mm x 70 mm, and will be printed provided there is space.

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Instagram: [barraboolhillslandcaregroup](https://www.instagram.com/barraboolhillslandcaregroup)

Website: barraboolhillslandcare.org.au

Special thanks goes to the Leigh family for distributing the newsletter.

Become a member of BHLG! Join, renew or update your membership now.

Annual memberships are due in July each year. Group memberships are just \$15 per year. See page 6.

If you provide updated details including emails, you will get the latest information on upcoming events, such as community planting days & catchment bus tours. You will also be eligible for our small grants program and be able to access our equipment to

help with vital projects including tree planting, weed and pest control. Additionally there are often larger regional projects which you can benefit from for weed control and re-vegetation. Our members have a broad range of experience and may be able to provide advice

on weed identification and control, preparation for tree planting and indigenous plant lists.

To join, renew or update information:
www.barraboolhillslandcare.org.au
or email us at
barraboolhillslandcare@gmail.com