



WICCNews

WICC Newsletter December 2023 - January 2024



Birak

First summer dry and hot, burning time
Season of the Young



WICC has been actively managing weeds at Eungedup before we even took on the property. Local agronomist, Andrew Storrie, voluntarily mapped Eungedup's weeds allowing us to establish a baseline map and set our priorities. Arum Lilly and blackberry were at the top of that list. We are very conscious of herbicide use near our precious waterways and we are reluctant to bring in heavy machinery to slash. A low impact alternative we have been trialling is goats. We have been working with Lorna Macdonald of 'Just Browsing' and her team of lovely (and hungry) goats to control blackberry and other weeds. WICC volunteers have been checking the goats daily, topping up their water, checking their fence and getting cuddles. While the goats do not eradicate the weeds it does mean we can use much less herbicide after the goats do their bit. We will be getting Just Browsing back to Eungedup in January to control blackberry on the other side of the wetland where we plan to establish a wetland centre.

AGM Update

A message from our Chair - Greg Souness

2023 has been an extremely successful year at WICC.

With overwhelming support from the community we managed to raise the funds to purchase Eungedup Wetlands. I believe this is testament to the confidence that the community puts in WICC.

I am also proud to say that although half of our 10 member board has to stand down at our AGMs, they all wanted to come back. We had one change of the guard, welcoming Dr May Carter to our board. May has an outstanding background in environmental and social scientists, along with sports and recreation. Her expertise will be highly valued as we develop a management plan and educational programs for Eungedup Wetlands.

The year ahead is looking to be equally exciting. In January we will be launching a cracker of a black cockatoo conservation program, extending our dung beetle program and looking to pilot a bio refinery which makes biochar from our waste. I am pleased to have taken on the Chairperson position for one more year. I welcome Paula Deegan as Deputy Chair, Eddy Buckovic as Treasurer and May Carter as Secretary.

I would like to thank Kylie Cook for her time as Secretary to the WICC Board.

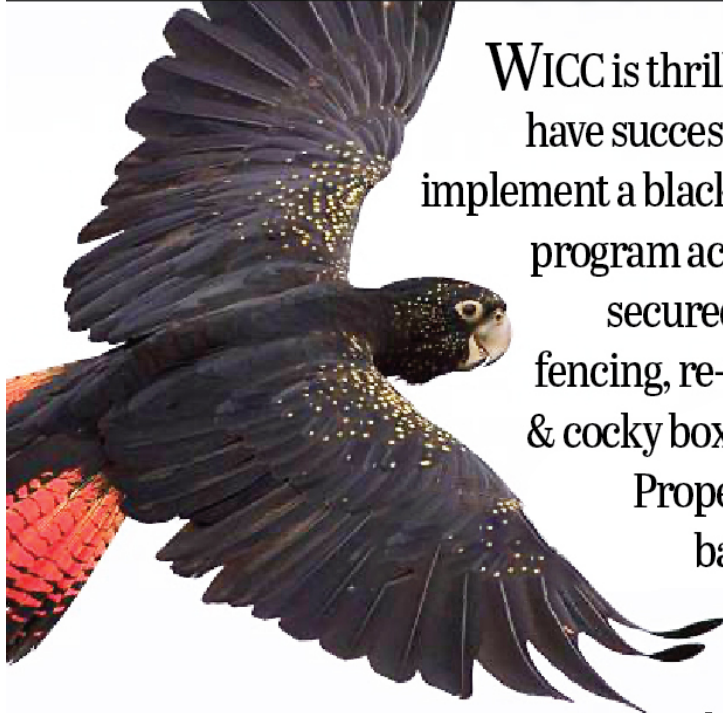
I wish you all a merry and safe holiday season and a great 2024!



New Grants

Cookies for Cockies

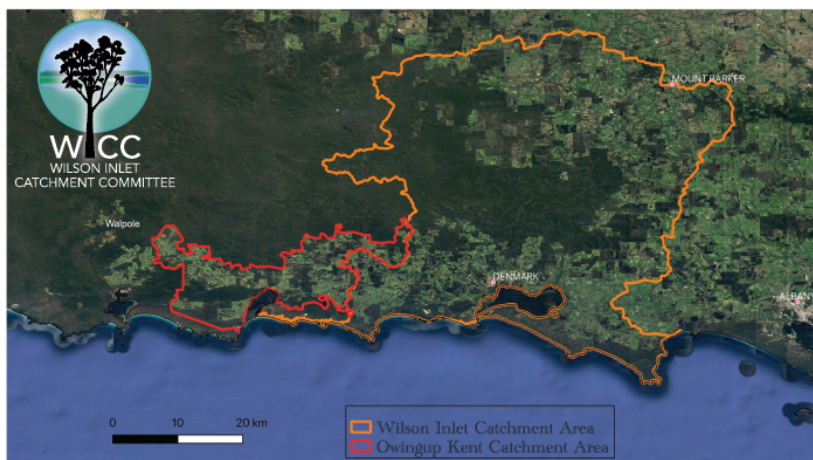
By protecting our remnant vegetation & infilling with cockatoo foraging species we can help them out.



WICC is thrilled to announce that we have successfully secured a grant to implement a black cockatoo conservation program across our patch. We have secured funding for vegetation fencing, re-vegetation, monitoring, & cocky boxes (where appropriate).

Properties will be prioritised based on their suitability, assessed by ecologists with expertise in cockatoo conservation. This

program will actively involve our local schools, farmers & the community & is scheduled to be delivered from 2024 to 2026.



Landholders wishing to participate can still express your interest by visiting 'whats on' at: wicc.org.au by clicking the link.

Black cockatoos are likely to be extinct in our lifetime without landscape scale intervention. They have suffered a death by a 1000 cuts. Land clearing has cost them their nesting hollows and foraging flora. Shooting and road trains have also taken their toll. Where our elders speak of times

when flocks would be in the hundreds, we now often just see twos and threes.

WICC is proud to be receiving \$304,000 from the State NRM Office to deliver a black cockatoo conservation program from Nornalup in the West, Porogorups in the North and West Cape Howe in the East. We are in discussion with another body to put forward similar funding to increase the impact of our program. We will be partnering with Birdlife, local ecologists, farmers, schools, Men's Shed and renowned ornithologist, Simon Cherriman to ensure we bring our whole community along for the journey.

WICC has been running an expression of interest (EOI) from landholders in our patch seeking landholders who would like to participate since early 2023. This was in anticipation of a successful grant application. If you live in our area you still have time to submit your EOI [HERE](#) (insert link). We have already received over 80 EOIs to date, largely from farmers (also known as cockies) wanting to step up and make a difference for our cockies. Ecologists with expertise in cockatoo conservation will prioritise the EOIs based on a variety of factors (e.g. water sources, vegetation community, existing nesting and roosting, etc.) High priority properties will be offered remnant vegetation fencing, cockatoo flora revegetation (or infilling) and even a nest box made by our local Men's Shed. The boxes will be installed by Ecological Tree Services to ensure the health and suitability of each tree. Each nest box will be monitored 2 - 3 times per year under the supervision of BirdLife WA. All seed for the program will be sourced locally working with a couple of our Aboriginal ranger teams.

In addition, environmentalist, ecologist, author and educator, Simon Cherriman (google him!), will be visiting our local schools to teach cockatoo conservation with our kids. He will build nest boxes with our students and install them in each of our primary schools. The students will pick cockatoo seed with our revegetation officer, propagate and plant in each school so our primary schools all have a cockatoo refuge. This is aimed at not only resourcing our next generation of cockatoo custodians, but also in the hope that they will work on their parents to carry out cockatoo conservation on their own properties.

Farmer in focus





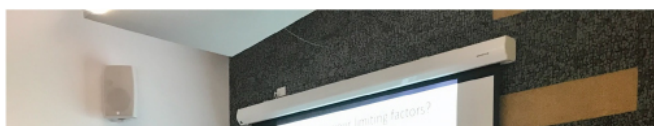
Mark demonstrates making your own seed treatments.

Agroecologist Mark Tupman returned to Denmark for another action-packed workshop with local farmers in November. Mark pointed out: “We all know that good soils grow healthy plants, but without plants and their microbial and animal associates, soil would be little more than weathered rock particles.” Starting with the basics of life, the group delved into topics including different life forms, what’s happening in the rhizosphere, improving soil structure, using animals for grazing and pest control and of course, optimising pasture plant growth.

“Variety is the spice of life,” Mark says, “It is well established that plant diversity is a characteristic of robust and resilient living systems.” Different plant types host different microbial populations, so it makes sense that having a range of plants growing promotes a great diversity of microbes. It is our challenge as land managers to maintain this diversity – maintaining edible species and avoiding the trend towards the hardy, less nutritious weedy species that we all love to hate.

Mark shared some results of his field trials of various multispecies mixes, showing that mixes incorporating field peas had great success in reducing the need for fertilisers, and answered many burning questions from the crowd. He gave a suggested recipe for a make-your-own multispecies mix involving 9 plant species from 6 families.

Mark pointed out that in our Mediterranean climate, it’s easier to sow cover crops in autumn when there’s (hopefully!) reliable rainfall on the way. For cover crops, weed management at establishment is just as important as for other crops. Weed management strategies include dry seeding before autumn weeds germinate (with the break-of-season rain), or weed control once weeds have germinated (shallow cultivation, or herbicide application).





After lunch, the group travelled to Eddy Buckovic's farm for a session of mixing your own liquid fertilisers to boost plant growth. Eddy plans to foliar spray the mixes onto his avocado trees, but the mixes can also be stored for pasture application in autumn. According to one participant – "this was the best workshop I've ever been to!"

This workshop was funded by Soil Wise. Soil Wise is funded by the National Landcare Program Smart Farms Small Grants – an Australian Government initiative. It is supported by Healthy Estuaries WA – a State Government program.

For those who missed the workshop, check out the links below.

Videos:

Developing Fertile & Functional Biological Systems with Mark Tupman:

<https://youtu.be/svb2UgsHk68>

Cost Effective DIY Farm Microbial Cultures with Mark Tupman:

https://www.youtube.com/watch?v=o_TDIxW9wdM&t=10s

Developing Fertile & Functional Biological Systems with Mark Tupman:

Podcast: Priming Your Seeds for Success with Mark Tupman:

<https://lowerblackwood.libsyn.com/talkin-biostimulants-with-mark-tupman>

The Soil Quality: 10 Plant Nutrition ebook published by SoilsWest is **available now** for free through Apple Books, along with **the first nine publications in the Soil Quality series**.



Fishing at Eungedup

Finally filling the aquatic knowledge gaps. By Tim Gamblin

Despite frequent vertebrate fauna surveys in Eungedup Wetland over the last year, there has always been a notable knowledge gap. Fish. We know a lot about the birds, mammals, frogs and reptiles – though there could always be a few surprises. But what about the aquatic environment, especially fish? Wading around in the wetland causes clouds of sediment to plume and this turbidity has always made it difficult to see fish. However, from time to time I glanced at what I thought were ‘gambos’, eastern gambusia or mosquitofish. Unfortunately, I was correct as these are an invasive species. But there had to be a few native fish, surely! This was answered in late November when researchers from Murdoch Uni’s Freshwater Fish group visited the wetland. The Murdoch team were already in the region working on their ongoing project assessing the aquatic fauna of fire waterpoints in the Warren region, and kindly offered to set traps at Eungedup for a night. It’s another dot on a map for them and increases their knowledge of the region. We also had local ecologist and Traditional Custodian Liaison Coordinator Mel Howe and Minang Elder Mark Colbung who was keen to get onto country and watch the netting methods.





Local elder Mark Colbung, Murdoch University Freshwater Fish Group scientists Mitchell Haywood, Dr Stephen Beatty, Dr Mark Allen and Biodiversity Officer for WICC Tim Gamblin - happy with their catch at Eungedup Wetland. Image: Mel Howe.

The fish group explained that the south-west of Western Australia has the highest proportion of endemic freshwater fishes in the continent, with over 80% found nowhere else. There are only 11 native species of freshwater fishes from the south-west. The afore mentioned invasive fish species, the eastern gambusia, was introduced into Western Australia in the 1930's – 40's. This was done to control mozzies but unfortunately the gambusia was no better at that job than the local native fish and now impacts natives by competing for food and attacking their fins. The silver lining is that they are likely (hopefully) a food source for fish eating water birds, the rakali and turtles at Eungedup.



The most invasive fish species in Australia and also found in Eungedup Wetland . Image Gunther Schmida.



Dr Mark Allen and Mitchell Haywood setting (top) and retrieving (bottom) a fyke net at Eungedup Wetland . Image Tim Campbell

The traps used are known as fyke nets (note: licenses/permits are required for their use). Versions of these traps have been used for centuries around the world and consist of a series of connected funnel nets in a long 'sock' with wings that extend out from the entrance. The nets sit on the bottom and protrude above the water surface so that there is breathing space should a turtle or rakali (water rat) be trapped. Fish passively swim in rather than being scooped. As such it's possible not all species will be caught but likely the majority and it's a quick and efficient method. When the results of our eDNA water sampling arrive we may pick up other species that didn't enter the traps.

Prof Stephen Beatty, Dr Mark Allen and Mitchell Haywood set a fyke net at two locations that I earmarked for the occasion. These sites encompassed both north and south Eungedup water bodies with different depths and slightly different habitat. Both locations are also currently part of the water chemistry monitoring program.



Bluespot Goby (Pseudogobius olorum). Image
Mark Allen



Western Minnow (Galaxias occidentalis). Image
Mark Allen

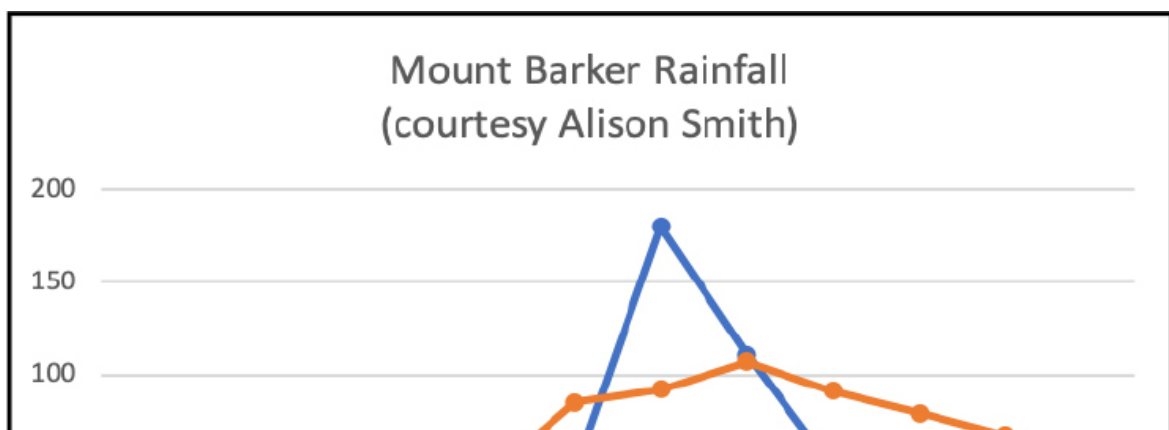
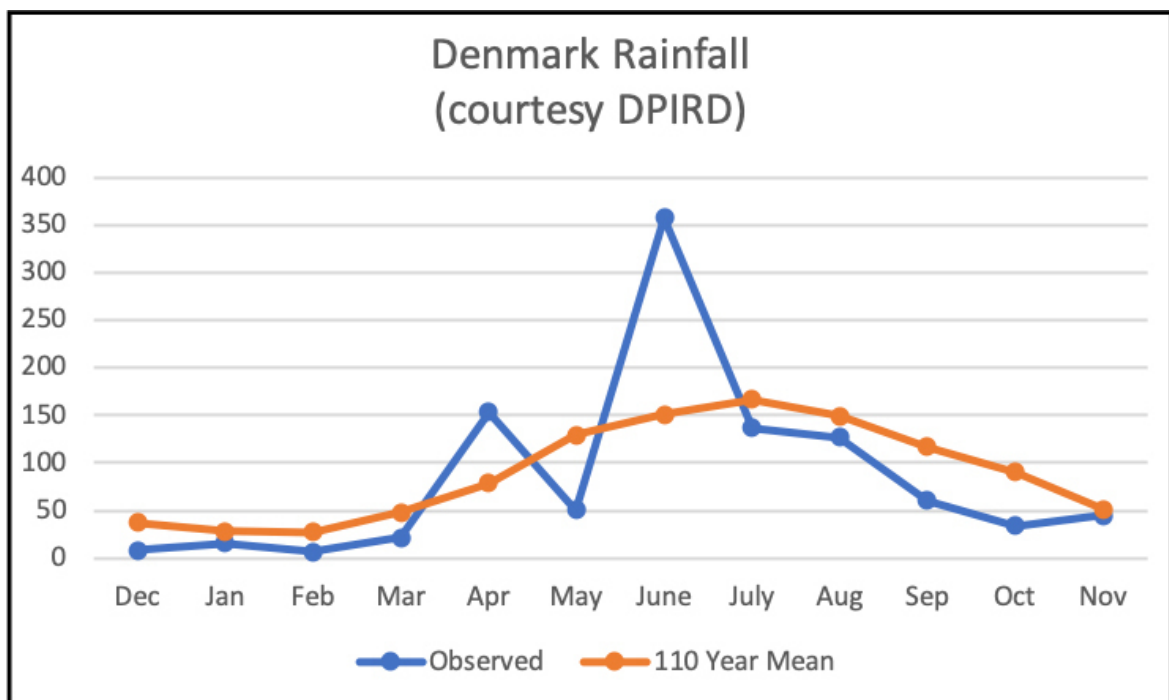
Also in the by-catch (less surprising but still very good to record) were handfuls of large tadpoles from both motorbike and pobblebunks – including a pair of frogs trying to produce more tadpoles. There were water beetles and many dragonfly larvae. Our first live *snake-necked turtle* (yaakin) at Eungedup was also caught. It was healthy and relaxed owing to the fyke net having breathing space above water. We've previously found turtle shells with teeth marks in them from fox predation but hopefully with our fox control program we'll be seeing live turtles more often. At some point in the future we'd like to get some greater clarity on the macro invertebrates in the system. Hopefully we'll trap again when the fish group next visits and we'll keep an eye on any changes in the aquatic fauna over time.





Snake-necked turtle or yaakin. Image Tim Gamblin

Rainfall Update





Our main climate driver, the Indian Ocean Dipole (IOD), remained positive over spring which the Bureau predicted would bring us reduced rainfall. The good news is the Bureau's prediction was accurate. The bad news is we experienced a 32% reduction in rainfall across WA as a whole for spring. Farmers have been reporting 20 - 40% less hay and silage yields across much of the catchment as a result. While the positive IOD typically returns to neutral at the end of spring it has persisted this year into December. It is anticipated to return to neutral in January although the Bureau is still predicting less than average rainfall from January to March. Hopefully we get an early break again this autumn.

Inlet Update



Around 50 community members attended the recent Wilson Inlet Estuary Forum to hear the latest on our inlet's health and the actions which are underway by The Department of Water and Environmental Regulation's (DWER) and WICC.

DWER's Dr Elke Reichwaldt said that while the inlet remains healthy, nutrient concentrations in the inlet are higher in the wetter period (winter and spring) when the rivers flow than in the drier seasons. This is a reminder how vital the work in the catchment is in keeping nutrients on farms and out of our waterways. The release of high levels of phosphate from the sediment when the inlet was open to the sea due to stratification indicates that the sediment is another source of phosphorus in addition to the catchment.

DWER's catchment modeller, Karl Hennig spoke on the catchment modelling work being undertaken by DWER to pinpoint priority areas for nutrient reduction efforts. These include Cuppup, Sleeman and Sunny Glenn sub catchments. WICC has had a focus on these sub catchments since 2016 and has worked with farmers to fence off and revegetate over 20 kilometres of on farm

waterways and carry out whole farm nutrient mapping so farmers can make evidenced based fertiliser decisions.

If you would like to learn more about the health of our sub catchments, DWER has put together some excellent publications

Nutrient Reports

Water Quality

DWER also carries out River Health Assessments under the Healthy Rivers program. A total of 13 river health sites have been assessed in the catchment since 2009. Learn about your local river here:

Wilson River

Explore the latest Wilson Inlet monitoring data here:

Monitoring Data

This project is a part of Healthy Estuaries WA, a State Government initiative that aims to improve the health of our South West estuaries.



Donate to support our initiatives

WICC needs your support to continue working on our initiatives.

Your generosity will support a range of programs.

Make a deductible donation to support our work. OR donate without any restriction. Link below

make a tax deductible donation via our website, scan QR code or through our campaign link below.



SCAN TO DONATE



Wetlands Initiative

WICC has raised funds to purchase & manage Eungedup Wetlands. Nestled between Denmark and Albany on the south coast of Western Australia, these remarkable wetlands provide a unique opportunity to preserve endangered wildlife.



Biodiversity Initiative

Work with landowners to restore and maintain the natural biodiversity in the catchment through invasive species controls, preservation of remnant native revegetation and weed control.



Waterways Initiative

We implement work programs in coastal waterways to further establish native vegetation, minimise erosion and strip nutrients.



Sustainable Agriculture Initiative

We source and distribute funds and expertise to assist landowners to implement environmentally sustainable practices that reduce nutrient loads in the catchment.

Donate today