

WICCNews

WICC Newsletter February/March 2024



Bunuru

Second summer February - March
Season of adolescence - hottest part of the year



WICC
WILSON INLET
CATCHMENT COMMITTEE



Simon Cherriman finishes installing Cockatoo nesting box at Mt. Barker Community College.

In this edition we cover:

- Community for Cockies program
- Nutrient Efficiency
- Polyphagous shot hole borer
- Inlet update
- Rainfall Update

- Agrifutures Evoke Ag 2024 conference

Community for Cockies



WICC is carrying out a landscape scale program to conserve our three black cockatoos. With our catchment area 60% cleared for agriculture many decades ago, our cockatoos have sadly lost many of their natural nesting hollows and food sources.

As part of our program we are installing 44 nesting boxes in strategic locations across our patch. We are also planting out 20 hectares of cockatoo flora and constructing 20 kms of fencing to protect priority remnant vegetation. Sadly, this will not be enough. We must ensure that our next generation of cockatoo custodians has the passion and capacity to build upon these efforts.

To plant that seed, we were fortunate to attract Simon Cherriman, author, educator, environmentalist and all around great guy, to visit four of our local schools. Simon's passion for cockatoos was infectious. After learning about cockatoos the students were able to build nest boxes with Simon using recycled materials. Simon then climbed a select tree on each of the school grounds and installed a nest box to the delight of the students. Later this year students will pick seed with WICC so they can propagate cockatoo flora which we will help them plant out below their nest boxes. This will be used alongside some creative interpretation signage so that each school has a cockatoo sanctuary. Current and future generations of students will have this as an example of what they can do on their own properties to help prevent the extinction of our beloved black cockatoos.

If you are in a position to financially contribute to this program then it would be most welcome. We have had over 90 expressions of interest from landholders willing to give up a portion of their land to cockatoo conservation. Unfortunately we are only funded for 40 of these properties. You can make a tax deductible donation to WICC's Wilson Inlet Public Fund by following the link below....

DONATE





Nutrient Efficiency



Farmers carrying out phosphorus buffering index experiments with DPIRD

When our trees were first cleared and we planted pasture for our stock, farmers soon discovered

that our soils were low in a range of nutrients, especially phosphorus. As a result, farmers applied large amounts of phosphorus to our soils and a tradition ensued, the 'bag to the acre'. Several decades of following this tradition has more than corrected the phosphorus deficiency to the point that the phosphorus was leaching into our waterways. The bag to the acre approach also missed other essential nutrients which limited pasture growth and affected stock health. We have come along way since then.

Soil testing each paddock every few years and comparing the results against the nutrient requirements for pastures (which have been derived from numerous trials) allows farmers to target their pasture needs and minimise spending money on nutrients which are not currently required (often this is phosphorous).

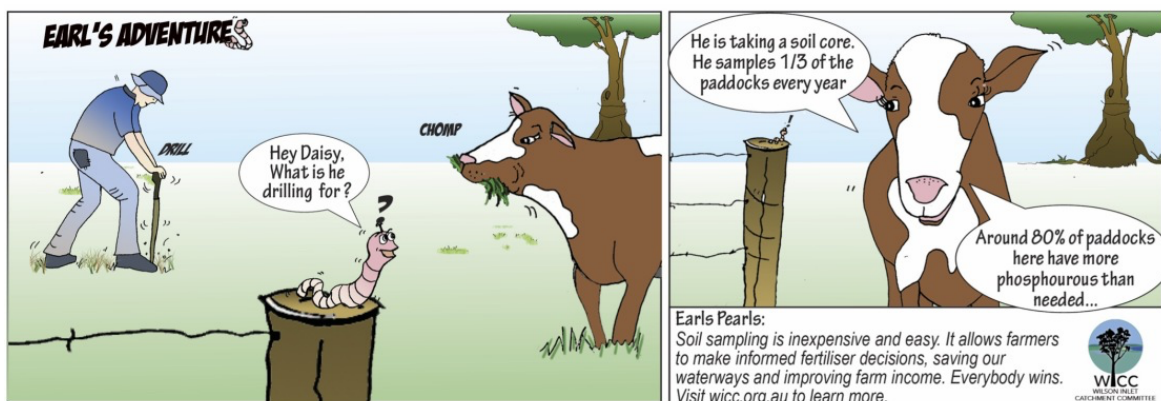
As part of the Owingup Kent Growers Group (OKGG), members were offered free soil testing and interpretation. The Department of Primary Industries and Regional Development (DPIRD) and WICC trained OKGG farmers how to take soil samples and loaned them the necessary equipment in December.

In February, OKGG members were provided a tailored presentation from DPIRD soil scientists explaining each participants soil test results. Farmers were provided tables which showed which paddocks were deficient and in excess of vital nutrients. Attendees were treated to a range of demonstrations about soil chemistry, reviewed key concepts regarding soil nutrition, pH and variations among soil types and used DPIRD's online nutrient calculator to pinpoint ideal fertiliser blends for their own paddocks.

Farmers finished with workshop with a clear action plan on what fertilisers would address limiting factors for their individual soils – paddock by paddock – and how to maximise their pasture profits in future.

At the same time, these targeted results and fertiliser action plans allow farmers to avoid applying what isn't needed, preventing excess phosphorous runoff causing harm to our precious waterways, while saving money on unnecessary products that would not increase production any further, where levels are already high enough.

OKGG is funded in part by the Western Australian Government's State Natural Resource Management Program. Visit wicc.org.au or contact Benita Cattalini; okgg@wicc.org.au for more information.



Cartoon by Claudia Simpson

Polyphagous shot hole borer



Tree affected by shothole borer



Polyphagous shot hole borer

We're about to see some 180 trees cut down in Hyde Park in Mt Lawley as a result of the polyphagous shot hole borer (PSHB – *Euwallacea fornicatus*). PSHB is native to Southeast Asia. It kills trees by tunnelling into trunks, stem and branches. PSHB has a symbiotic relationship with a *Fusarium* fungus, farming it inside the tree as a food source for the beetle and its larvae. In susceptible trees, the fungus kills vascular tissue causing Fusarium dieback and tree death. The size of a sesame seed, this borer kills mature trees in 2 yrs and has spread quickly: from first being detected in East Fremantle in Aug 2021,

it's now spread to 80 suburbs across 25 local governments and is killing trees in Kings Park and Perth Zoo, as well as Hyde Park.

It affects over 400 species of trees, including WA natives. There's currently no effective treatment, with containment and removal of infested trees being the only strategy. The quarantine area is still contained to the Perth metro area (including Rottnest Island) but bark, potted plants, firewood, tree prunings, logs, plant cuttings, mulch, timber, wood and wood chips as small as 2-2.5cm can act as a host and spread it, and awareness seems horrifyingly low.

We desperately want to keep this borer out of our region. We can all do our bit. Some actions are listed below, with more information available at <https://www.agric.wa.gov.au/borer>

- Raise awareness: the more people that know about it, the more there are looking out for it, reporting it, and changing their behaviour and doing their bit to stop it spreading beyond the quarantine area (and within in)
- Don't move bark, potted plants, firewood, tree prunings, logs, plant cuttings, mulch, timber, wood or wood chips out of the quarantine area - these can act as a host and spread the borer.
- Clean machinery used to handle green waste before leaving the quarantine area. Infographic here: <https://www.agric.wa.gov.au/sites/gateway/files/PSHB%20DL%20infographic.pdf>
- Monitor trees for signs of the borer. Tiny holes, sawdust, discoloration on trunk and report to the Department of Primary Industries and Regional Development (DPIRD) or on the My Pest Guide Reporter App available here <https://www.agric.wa.gov.au/apps/mypestguide-reporter>

Inlet Update



Wilson Inlet, photo courtesy DWER.

For the last few weeks, it has seemed that the channel through the sandbar would close any day. Dr Elke Reichwaldt from The Department of Water and Environmental Regulation said that the sandbar officially closed on Wednesday, 21 February 2024. The sandbar is defined as closed when there is no longer an exchange of water between the inlet and the ocean at low tide. The closure happened after the 39°C day when the water level in the inlet dropped by about a centimeter and at the same time the low tide was very low. This was enough to interrupt the connection between the inlet and the ocean.

For the next few weeks, the water will keep flowing into the inlet at higher tides, so Prawn Rock channel might maintain its clear, blue water during these times.

Because the channel has been small since the end of last year, there has been little exchange between the water in the inlet's main basins and the ocean for a while. "We have still seen some ocean water inflow to just east of Poddy Shot for the last few months, but the saltwater did not intrude any further. And, as normal for this time of the year when the size of the channel is so small, we have seen a slight increase in total nutrient concentration," says Elke.

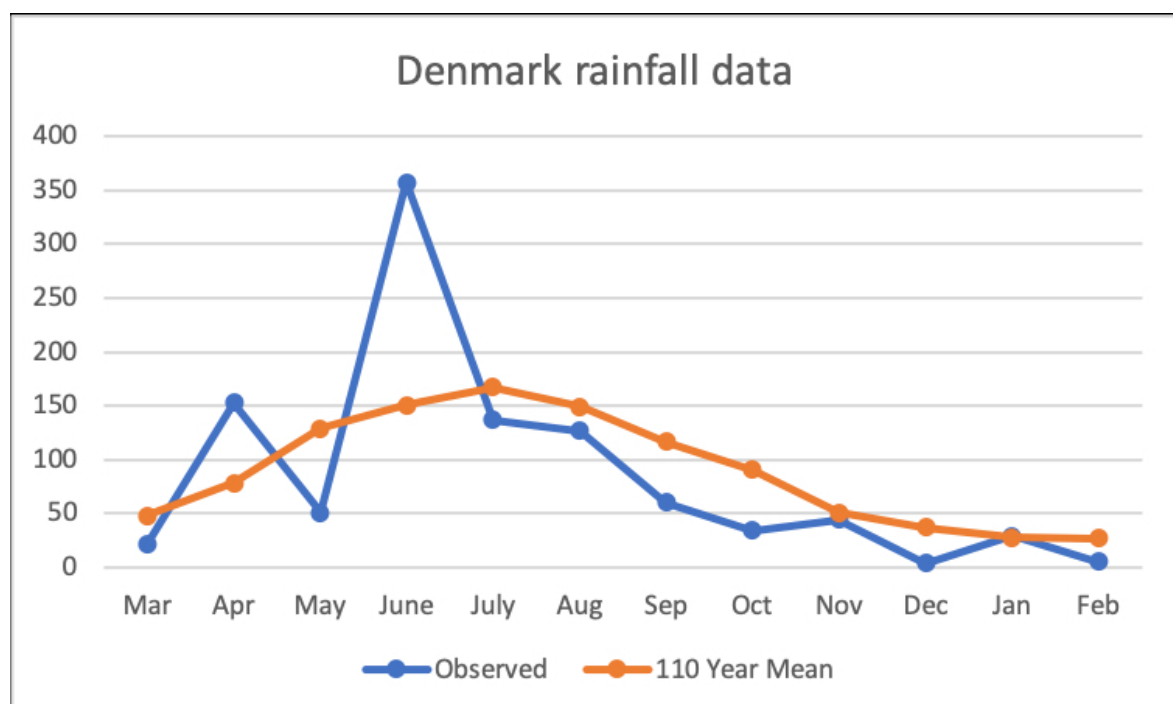
For further information, visit the Healthy Estuaries WA website where you can see the current inlet water level and read recently updated information about the health of local rivers. More about the inlet: <https://estuaries.dwer.wa.gov.au/estuary/wilson-inlet/>

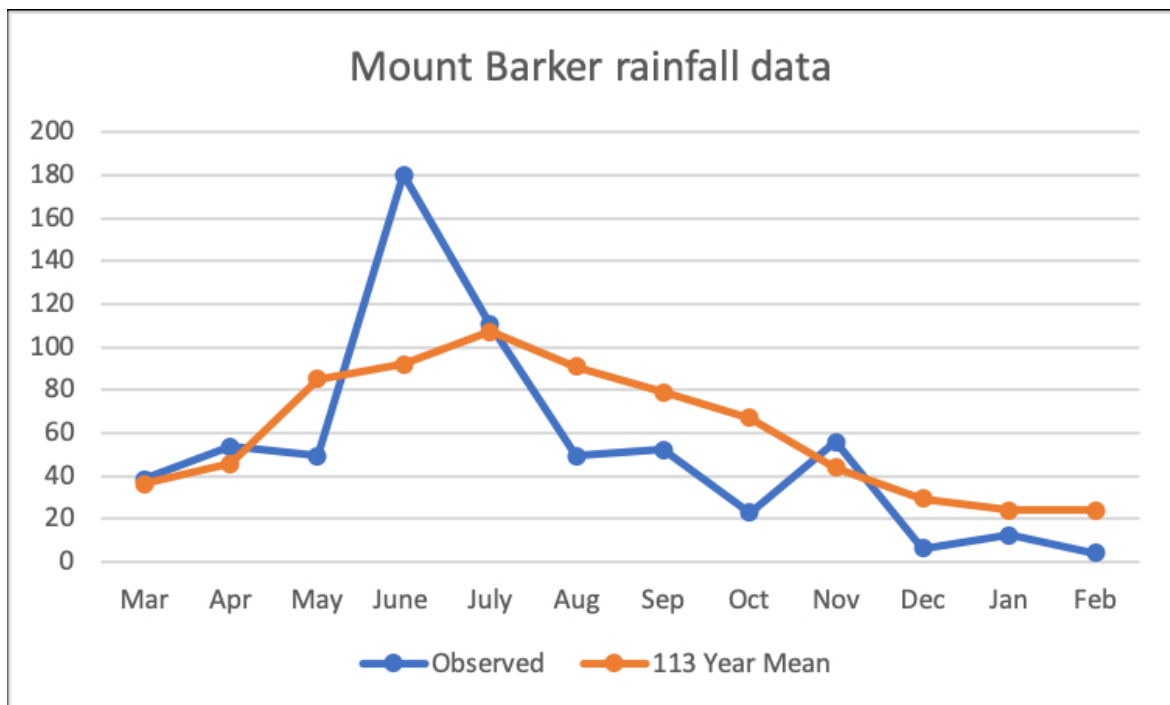
[Click here for the latest monitoring data](#)

[Latest Wilson Inlet level from old railway bridge](#)

Rainfall Update

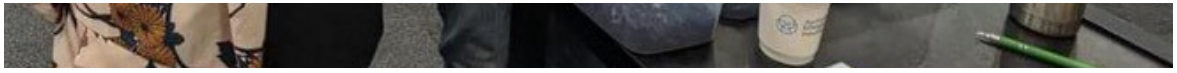
Strikingly similar to the summer of 2022/23, it was a very dry summer throughout the catchment, While Denmark still managed to get over a meter of rain in 2023, this was largely due to a very wet June. The Bureau is predicting our dry spell to continue until May. Hopefully we get another big break in May / June to recharge our dams and rivers.





Evoke Ag Conference





Minister Jacki Jarvis discussing biochar with Euan Beaumont of Energy Farmers Australia

Agri futures Evoke Ag 2024: A Glimpse into the Future of Landcare

Last month the the Agrifutures Evoke Ag 2024 conference brought together the brightest minds in agriculture. From farmers and researchers to investors and government officials, the event showcased current and emerging technologies poised to revolutionise the way we manage our land. But for farmers and landcare groups, the question remains: how can these advancements benefit their critical work?

1. Precision Agriculture Takes Flight:

Imagine drones equipped with sophisticated sensors, meticulously mapping your land, identifying problem areas, and even applying targeted treatments. This is the reality of precision agriculture, a game-changer for landcare. By collecting real-time data on factors like soil health, pest infestations, and water usage, landcare groups can optimize their efforts, focusing resources on areas that need them most. This not only leads to improved efficiency and cost-effectiveness but also minimizes environmental impact by reducing unnecessary chemical applications.

2. AI for Smarter Land Management:

Artificial intelligence (AI) is no longer science fiction. At Evoke Ag, we saw AI-powered platforms that analyze vast datasets, from satellite imagery to weather patterns, to predict potential threats like erosion or invasive species outbreaks. Landcare groups can leverage this technology to proactively identify areas at risk and implement preventive measures, saving valuable time, resources, and ultimately, the land itself.

3. Robotics Lending a Helping Hand:

The backbreaking work of land restoration can take a toll on volunteers and farmers alike. Enter the robots! These tireless machines are being developed to automate tasks like planting trees, removing weeds, and monitoring wildlife populations. While not a replacement for human involvement, robots can significantly reduce the physical strain on us mortals, allowing us to focus more on strategic planning.

4. Nature-Based Solutions Take Centre Stage:

Evoke Ag also highlighted the importance of harnessing nature's own power for landcare. Innovative solutions like biochar production and regenerative agriculture practices were showcased, demonstrating how we can work with nature, not against it, to improve soil health, biodiversity, and overall ecosystem resilience. Landcare groups can adopt these approaches to create sustainable, long-term solutions for land management.

The future of landcare is brimming with exciting possibilities. By embracing these emerging technologies and fostering collaboration across the agricultural sector, landcare groups can become even more effective stewards of our precious environment. As Evoke Ag 2024 has shown, innovation is not just about profit; it's about harnessing the power of technology to ensure a healthier, more sustainable future for generations to come.

Support WICC

Our collaboration between farmers, scientists, volunteers, graduates, students and community groups enables us to achieve amazing things.

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 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

Whats on?



Department of
Primary Industries and

Protect
Grow

7 March 2024

Round 3 of the Western Australian Carbon Farming and Land Restoration Program is now open!



[Click to find out more](#)

**Night
CALLING**



Denmark Bird Group Inc. Presents:
Saturday 6 April 9 - 12 NOON
SHIRE OF DENMARK RECEPTION ROOM
THEME: CITIZEN SCIENCE
SPEAKERS:
• **CITIZEN SCIENTISTS DEMONSTRATE THE**



Bird Talks 8

BENEFIT OF WILDLIFE FRIENDLY GARDENING

DR. BRONTE VAN HELDEN - UWA ALBANY

DENMARK CITIZEN SCIENCE

OPPORTUNITIES PANEL OF SPEAKERS - WICC, DEC, BA, DBG, FRIENDS OF MT HALLOWELL

MORNING TEA

SHOWING OF HIS NEW FILM

"NIGHT CALLING"

DR BOYD WYKES - MARGARET RIVER MASKED OWL RESEARCH & RODENTICIDE CAMPAIGN

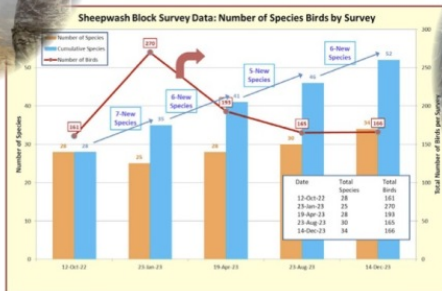


Citizen Science at Work



Mount Hallowell Bioblitz

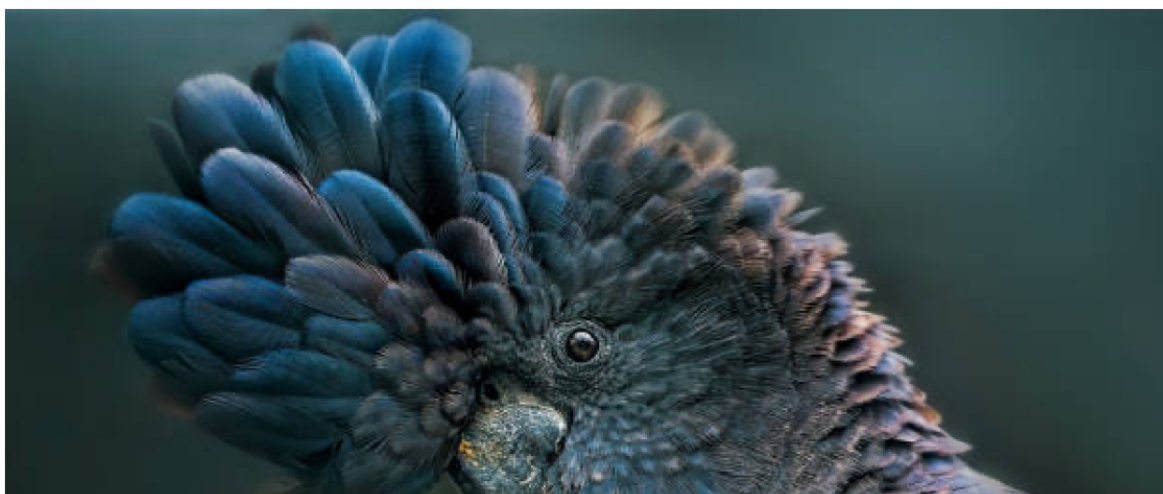
Cookies for Cockies



For more details see our website: denmarkbirdgroup.org

FREE EVENT. Tickets from: <https://www.trybooking.com/CPQET>

Design by Mark Hackleton





Great Cocky Count

Date Sunday, 14 April 2024

Time 5:15 pm - 6:45 pm

Locations South-western Western Australia

[Register HERE](#)