

# SUSTAIN-A-BULLETIN

## FITZGERALD BIOSPHERE GROUP

### That’s a wrap: Recapping five years of Regional Land Partnerships

Since 2018, FBG has been working alongside South Coast NRM to deliver projects geared at improving the status of priority listed threatened species (EPBC), protecting and improving threatened ecological communities (TEC), and increasing the capacity of farms to adapt to a changing climate (Climate Action). Over five years, FBG has contributed to these endeavours by delivering the following on-ground outputs:

- 36km of fencing, protecting 356ha of marginal lands susceptible to climate change, Kwongkan TEC, and mallee fowl and chuditch habitat.
- 54ha of revegetation focused on planting climate-resilient groundcover, creating and restoring habitats for mallee fowl and chuditch, and connecting Kwongkan corridors.
- 95ha of weed control, including the removal of Victorian Tea Tree from Bremer Bay, and spraying of weeds around mallee fowl and chuditch habitat to prevent and decrease disturbance.
- Pest control over an area of 2410+ ha, eliminating approximately 1048 foxes and 46 cats.

9 events covering topics such as climate preparedness, deep water drains, saltland pastures, and controlling pest animals.

As we approach the final weeks of the RLP program, we wish to express our gratitude to the local landholders who played a critical role in enabling us to achieve these outcomes. Without their cooperation, delivering the above outputs would not have been possible. FBG recognises and appreciates this contribution and looks forward to working together to achieve further positive NRM outcomes going forward.

As of now, are eagerly awaiting communications from the Federal Government regarding a tender submitted by South Coast NRM and partners for the continuation of this program. We will keep you updated on any developments regarding RLP’s future.

This project was supported through funding from South Coast NRM and the Australian Federal Government’s National Landcare Programme.



Left: Climate-resilient groundcover, *Tedera*, established in Needilup

Middle: Participants gathered at a saltland pasture workshop

Right: Biodiverse revegetation and new fencing on a salt-affected site connected to the Fitzgerald River corridor

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# From the EO's desk

Well despite a promising start to the seeding season, rainfall is looking more elusive for 2023, with DPIRD's three month forecast indicating a less than 35 per cent chance of exceeding median rainfall for the South West Land Division.

This start to the season may mean that there are variable growth stages across paddocks with mixed germination potentially an issue depending on soil types. In terms of fertility, nitrogen levels are also likely to have taken a hit on the back of recent seasons.

In recent months, South Coast NRM has been working with its regional partners, such as FBG, to put together 5 proposals for the next iteration of the Federal Government's Landcare program. With the Fitz-Stirling identified by the Government as a "Priority Place" in terms of threatened ecological communities, we are hopeful that we are well placed for funding to protect this special part of the world which we envisage taking the form of relevant and useful on-ground works.

We have also been busy with our current projects, notably wrapping up the existing Regional Land Partnerships program, continuing on-ground works as part of the State NRM Salinity Project and getting stuck into the GGA-led WaterSmart Dams project. Read on for more details.

Since our last edition, we have had some staffing changes. Firstly, we said farewell to some long servicing and highly valued friends, Tash Brown, our finance guru for more than 12 years, and Jess Brown who has been a great contributor over even more years than that, notably compiling the Sustain-a-Bulletin, as well as coordinating the annual Fitzy Fox Shoot and Cat Sterilisation Clinic. Thank you to both Tash and Jess for all your years of contribution, you will be missed in the FBG office!

Jess Bailey also stepped back from her previous admin role, but is not going far in the short term. With great excitement, Jess is organising the third Dancing in the Dirt gala event which will be held on 23<sup>rd</sup> March 2023. Follow the Dancing in the Dirt page on Instagram for early details!

And finally, we welcome Amy Schulz who we are thrilled to announce has taken on the combined role of finance, communications and admin, while also juggling farm commitments with her partner Brad Shelton at Gairdner. Amy joins us from Williams with some excellent ag credentials, most recently working in her family farming business, and prior to that working with Farmers Edge as a Precision Technology Specialist.

Amy will be on deck Tuesdays-Thursday or can be reached at [finance@fbg.org.au](mailto:finance@fbg.org.au)

## South West WA Drought Hub Update

The Future Drought Fund's annual Science to Practice Forum is taking place from 6 to 8 June 2023.

This is a free online forum which brings together farmers, researchers, government, industry and the community to explore innovative tools and practices to help Australian farmers and regions to prepare for future climate variability.

## Rabbits

We have had a few enquiries about rabbit control in recent weeks, with numbers likely increasing (as with other feral animals, such as foxes, cats and mice) on the back of recent good seasons. If you have noticed a build up of numbers, DPIRD recommends that best practice rabbit control consists of an integrated program of biological control followed by traditional control techniques (as applicable) conducted over multiple neighbouring properties.

At best, biological control (rabbit haemorrhagic disease virus – RHDV or 'calicivirus' and the myxoma virus) may remove up to 40% of rabbits from a susceptible population.

*\*Follow up traditional control to remove survivors is essential for successful rabbit control\**

If you'd like some more information around rabbit control or RHDV, please get in touch for more resources.

## 1080 Baiting Workshop

In conjunction with our colleagues at North Stirlings Pallinup Natural Resources (NSPNR), we are looking to host a 1080 Baiting Accreditation Workshop in Jerramungup on 25<sup>th</sup> July 2023.

This DPIRD-led training day will aim to equip landholders with tools to then apply for their own 1080 baits.

Stay tuned for more information to come.

Australian Government  
Department of Agriculture,  
Fisheries and Forestry

Future  
Drought  
Fund

**The Future Drought Fund's  
Science to Practice Forum  
is on again**

6 – 8 June 2023

Register now to hear great stories about  
innovations in drought resilience.

Scan the QR code to register or visit  
[S2P-Forum.eventbrite.com](https://www.eventbrite.com/S2P-Forum)

## Updates and insights from FBG's salinity project

Ongoing bore monitoring indicates that water tables are still rising across the Jerramungup district. Approximately 70% of piezometers included in our monitoring program are exhibiting an upward trend. Most have risen by 1-2 metres since being drilled (between 1990 and 2008), while a significant portion has risen by more than 2 metres. Several piezometers appear stable – particularly those situated in sandier soils, in perennial pastures, or along tree lines.

As we continue to prepare for this year's saltland revegetation sites, we've also been revisiting last year's sites. Results have been mixed– with waterlogging in winter/spring 2022 and an extremely dry summer creating a challenging environment for revegetation success. Survival is quite low in some areas – particularly those in saltier areas or on slopes where moving

water wiped plants out. At other sites, results are encouraging where seedlings appear to be thriving despite harsh conditions. Hopefully their tough start to life results in extra resilience! Seed collection has wrapped up for 2023's sites, and site preparation is underway. Now we wait for optimal planting conditions and the arrival of our seedlings! A combination of direct seeding and seedlings will be employed at these sites.

Are you considering your own saltland remediation work? The Gillamii Centre, alongside DPIRD, recently officially launched the Saltland Genie Web App. The web app gives users access to EC calculators, solutions explorers, a plant spacing calculator, an economics calculator, and SALTdeck to assist with IDing indicator species. To give the Genie a whirl and explore what could work on your property, scan the QR code below and be sure to leave some feedback!



*Left and middle: Successful seedling establishment (eucalypts, melaleucas, acacias, saltbush) at two saltland revegetation sites in Jacup and Gairdner.*

*Right: Saltland Genie QR code*



natural resource  
management program



## Diving into WaterSmart Dams: Strategies for water security on show in our shire

WaterSmart Dams is a collaborative project between GGA, DPIRD, UWA, and grower groups Compass Agricultural Alliance (Darkan), Southern Dirt (Kojonup), Merredin and Districts Farm Improvement Group and Fitzgerald Biosphere Group. The project aims to address the challenges of improving on-farm water security. To achieve this, we have been working towards implementing a series of demonstration sites across the shire, each focusing on different methods of improving dam efficiency. We are just entering this exciting new phase of the project, with three demonstrations well underway. By combining the expertise of various organisations, professionals, and farmers, we hope to demonstrate and assess viable and effective solutions that can be easily replicated by local landholders.

### **Increasing Catchment Run-Off using Second Hand CBH Tarps**

The Jacup Community Dam is a demonstration site lead by DWER, in collaboration with Mark Lester, DPIRD, GGA, UWA, and FBG. This dam's catchment has been lined with second-hand CBH tarps to improve run-off and maximise water capture. A tipping gauge and logger system has been instrumented at the site to closely monitor the efficacy of this liner in capitalising on even the most minimal rainfall events. Water quality testing is also underway to assess any potential issues with microplastics from the tarp, and the longevity of the tarp will be assessed throughout and beyond the life of the project. Results will be on their way soon...stay tuned!

*(Continued Page 4)*

## Maximizing Efficiency and Reducing Evaporation with a Dam Enlargement and Daisy Dam Cover

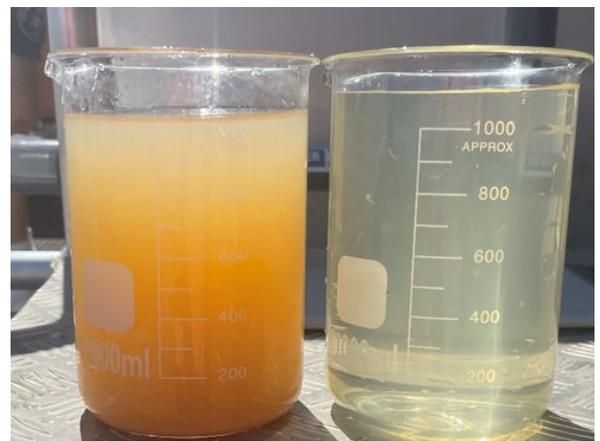
Progress is being made at the Gairdner demonstration site with the expansion of a critical dam on Alex & Marni Jones' property. This expansion offers an opportunity to both test and refine existing dam design tools, and inform evolving design tools; enhancing our understanding of how dams can be optimised for water conservation. The new and improved dam will soon be equipped with a Daisy Dam cover. A rigorous monitoring program will be implemented here, allowing us to assess the cover's performance in reducing evaporation rates, and evaluate the cost-effectiveness of this.

## Improving Water Quality with a Dam Filtration System

Our third demonstration site



will aim to improve water quality for the primary purpose of optimising spray efficiency. A suitable filtration system could also provide an alternative source of potable water. A ceramic filter system has been trialed at the site, with initial results suggesting that up to 40,000l/day could be converted, and charcoal/UV filters added to create potable water. A particulate distribution test calculated the % of microns in the dam <math><0.01</math> (the limit of the filter's capability), which indicated the % of particulates that could be removed from the dam; 70-80% in this case. We are eagerly anticipating further investigations so that we can continue to pursue practical solutions for enhancing water quality. *Want to know more? Check out the resources available on GGA's website here, sign up as a project follower, or follow along on socials for regular updates on demonstration site findings, field walks, and*



Left: The tipping gauge and logger set up at the Jacup site

Middle: Measuring the Jones' dam

Right (Top to Bottom): The CBH tarp installed on the Jacup catchment

Checking out how the filtration system works

A comparison of the dam water before and after being pumped through a ceramic filtration system

### WaterSmart Dams Project

Socials/Site/Follow

Twitter Tags

@GGA\_WA  
@DPIRD broadacre  
@HydroFire60  
@NikCallow  
@DeptAgNews

Project Webpage

Project Hashtag

#smartdams  
#FutureDroughtFund  
#drought  
#AusGov  
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Follower List

more.



# Late sowing seeding trial summary

In 2022, Dave Turner played host to a late seeding trial coordinated by Stirlings to Coast Farmers. Another location at Green Range hosted the other site in the Albany Port Zone (Albany PZ)

The project aimed to examine the viability and productivity of late winter and early spring seeding of cereal varieties in the Southern region of Western Australia. The trial aimed to assess which varieties are most suitable to being seeded later in the season as a mitigation strategy to water logging. This Project was developed in response to waterlogging events. In the Albany PZ in 2021 and Esperance PZ in 2021 and 2022, large areas of crops remained unplanted well into August and September due to the highly waterlogged soils making the paddocks untrafficable.

The trials at Green Range and Needilup both successfully established crops across all three times of seeding (TOS). The wet weather conditions preceding each TOS meant that each seeding of each TOS was at field capacity.

The environmental conditions at Green Range resulted in ideal growing conditions across all three times of sowing, where the mild finish allowed grain fill to continue into December without heat stress. In contrast the trial site at Needilup was sown into waterlogged conditions during time of sowing 1.

The grain yields at Needilup were lower than those at Green Range across all TOS. This was largely due to the combination of waterlogging conditions at seeding for TOS 1 and TOS 2 coupled with the significantly warmer finish to the season, compared to Green Range. This warm finish triggered grain set before adequate levels of biomass could be produced to drive yield. The resulting yield differential between each TOS was minimal compared to Green Range, with only a 0-5% yield reduction in TOS 2 and a 15-25% yield reduction in TOS 3 (figure 5).

The trial sites at Green Range and Needilup demonstrated the adaptability of cropping systems within the southern regions of WA. The ability to produce a viable and profitable crop with extremely late seeding dates, is critical to combating extreme water logging events, similar to those experienced in 2021. This trial demonstrated that variety selection is critical when seeding late. With such a small growing window it is critical to choose a crop type that will produce a lot of biomasses in a short period of time, as the expanding day length will rapidly push the crop through its development stages. It is natural to assume that barley would be the crop of choice for a late seeded crop, given that it has shown an ability to adjust to an extremely season length. However, the trial site at Green Range showed wheat performed equally as well in the first TOS. Then proceeded to out yield the barley. This was likely due to the wheats genetics not allowing it to rapidly progress to maturity, which allowed the crops to accumulate more biomass, which ultimately drove grain set.

Crop type	TOS Yield	% of TOS 1 Yield	% of TOS 1 Yield
Green Range Barley	4.74	69.6%	46.5%
Green Range Wheat	5.22	72.7%	55.7%
Needilup Barley	2.67	99.04	81.85%
Needilup Wheat	2.87	96.3%	74.85%

Figure 5: The table shows percentage of TOS 1 yield achieved, in the subsequent seeding dates for Green Range and Needilup

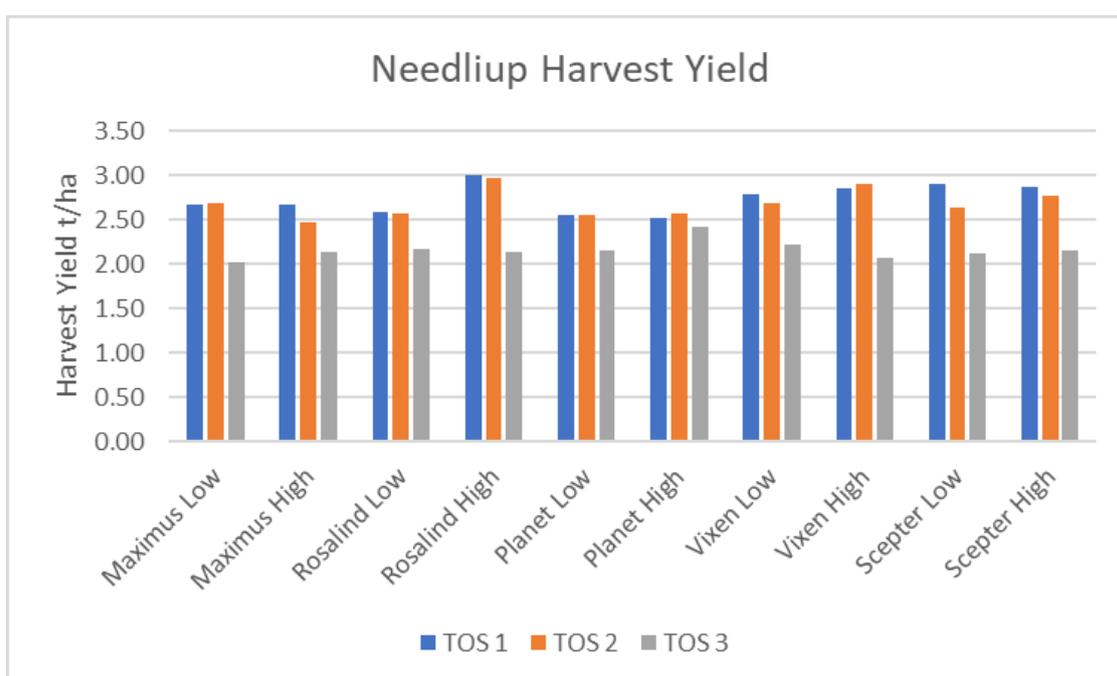


Figure 3: Needilup Crop Yields x TOS X Input Package



Early in March, I was fortunate enough to find myself captivated by *Banksia speciosa* in flower. To my surprise, I caught a glimpse of a small critter crawling over them within a few metres of me, burying its head into the confluence that was gradually unfolding with the season. In memory of Dame Edna (RIP Barry Humphries), I wanted to talk a little bit about Honey... 'Possums!'



These photos were taken from within the Fitzgerald River National Park, most of which is within the Core zone of the Fitzgerald Biosphere, a designation of the United Nations Education Scientific and Cultural Organization (UNESCO) Man and Biosphere (MAB) Program. This recognition is based on the area's national and international significance for great biological richness, species endemism and high level of threats, which combined make it part of the internationally recognised Southwest Australian Biodiversity Hotspot. To qualify as a biodiversity hotspot, an area must meet two strict criteria: 1. Contain at least 1,500 species of vascular plants found nowhere else on Earth (known as "endemic" species). 2. Have lost at least 70 percent of its primary native vegetation.



The inflorescences of banksias are generally referred to as spikes or a spike-like structure which consists of fused racemes of paired flowers and referred to as a confluence

To paint the picture, the Fitzgerald River National Park has an area that accounts for 0.13% of the state and around 20% of its known flora (Wooller and Wooller n.d.). Sandy, infertile soils combined with a lengthy geological and climatically stable environment have allowed for vast amounts of evolution. These evolutionary processes have resulted in plants and animals adapting to cope in an environment with limited nutrients and water. The Honey possum, *Tarsipes rostratus*, also known by its Noongar name Ngool-boon-gor, was formerly taxonomically classified along with other Australian possums however it was not until the mid-1970s that the true extent of its uniqueness became apparent. Recent DNA tests have placed this little guy in a genus all of its own - possum it is not, however a marsupial and part of the plant feeding group that includes possums in it, it is. (Encyclopedia.com)



Upon closer investigation, this animal is well suited to its environment. Weighing in between 7 – 10 g small bodies allow for ease of movement and have been compared to the weight of an AAA battery. With hind legs for jumping, hands with pads for adhesion and fingers with nails opposed to claws it makes fine work of grasping limbs and flowers whilst optimising a prehensile (grasps onto things) tail as a counter-balance, a safety line and a fifth limb (Encyclopedia.com). Once there, retrieval of nectar is aided by a long snout and an even longer tongue with brush-like bristles that help soak up nectar and collect pollen. The fur is coarse and greyish brown, with a long dark stripe the length of its back. The honey possum's eyes are large, suitable for low light conditions and situated so that they face both forward and upward for predator detection. (Continued page 7)



Occurring in the South western corner of Australia, captures of honey possums have been most frequent in areas that are richest in plants from the Proteaceae family (genera Adenanthos, Banksia, Grevillea, Hakea, Isopogon), whose members happen to produce great volumes of nectar. This nectar (not honey) in combination with pollen makes up the diet of a Ngoolboongor and it needs to rely on this *all year round*. A tiny mammal of limited mobility, one especially unable to bite, is only likely to originate and persist in an environment where reliable supplies of nectar are available throughout the year (Wooller & Wooller, n.d.), the heathlands of the South West making it the only habitat that could sustain populations of the world's only truly nectivorous (nectar-eating) marsupial.

Although not an endangered species, the honey possum's habitat has been drastically reduced since European occupation of Australia and populations of this critter have become locally extinct in places like the wheatbelt (Bradshaw & Bradshaw, 2012). Additional threats to habitat loss through incorrect fire regimes and Phytophthora Dieback, an introduced plant disease caused by the microscopic water-mould *Phytophthora cinnamomic*, also add pressure to isolated populations.



Phytophthora Dieback spreads through the movement of soil and ground water, as well as uphill through root-to-root contact. Common ways that humans spread the disease include, through driving vehicles on bush roads, walking, and stock movement. The disease risk is much higher for all of these activities in wet conditions when soil is moist and sticks to vehicles and equipment.

Over 40% of native WA plant species are susceptible to Phytophthora Dieback and as climate and soils in this part of the state are optimal for the survival and spread of this pathogen, Phytophthora dieback is causing significant damage in the Southwest Ecoregion. Many of these susceptible plant species are only found in the Southwest of Australia, a place where

this marsupial is also *only* found to exist now and needs this floral diversity and in turn nectar flow, to survive. A more extensive list of susceptible plants is available [www.dwg.org.au](http://www.dwg.org.au). Many other plants, although not susceptible, can act as a host for the pathogen. This enables it to persist indefinitely in an area once it has been introduced.

So as I was admiring this adorable unique marsupial within old, resilient Kwongan heath, the thought crossed my mind as to how long it took to create this picture in front of me, how special this part of the world is and what is at stake if we don't take the steps to care for it.

Some basic things that we can implement to protect this incredible species and its habitat from Phytophthora Dieback are:

Be clean in the Green - always enter natural areas with clean vehicles, boots, and equipment. Use boot cleaning stations where available.

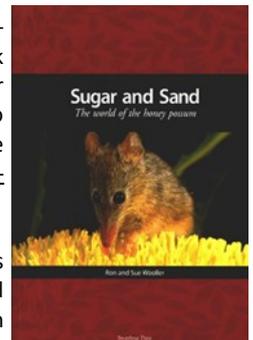
Stay on tracks and trails

Always follow signage and keep out of closed off areas

Avoid muddy activities such as four-wheel-driving in wet conditions

For more information about Phytophthora Dieback and how to take precautions to reduce spread head to <https://dieback.net.au/>

Information was learnt and some information extracted from an incredible book 'Sugar and Sand' by Ron and Sue Wooller (highly recommend). If you would like to purchase it, get in touch with Friend of the Fitzgerald Rover National Park at [admin@fitzgeraldfriends.org.au](mailto:admin@fitzgeraldfriends.org.au)



Written by Annie Leitch, Communications and Extensions Coordinator for the Fitzgerald Biosphere Community Collective, a position made possible by Major Contributor Lotterywest.



References and resources:

Wooller, R. and Wooller, S. (n.d.) Sugar and Sand, the world of the honey possum. Swanbrae Press.

Bradshaw D and Bradshaw F. (2012) The physiology of the honey possum, *Tarsipes rostratus*, a small marsupial with a suite of highly specialised characters: a review. J Comp Physiol B. 182(4):469-89.

<https://www.encyclopedia.com/environment/encyclopedias-almanacs-transcripts-and-maps/honey-possums-tarsipedida>

<https://www.dbca.wa.gov.au/parks-and-wildlife-service/threat-management/plant-diseases/phytophthora-dieback>

<https://www.dceew.gov.au/sites/default/files/documents/kwongan-ec-info-guide-faweb.pdf>

<https://www.bushheritage.org.au/species/honey-possum>

<https://www.dceew.gov.au/sites/default/files/documents/kwongan-ec-info-guide-faweb.pdf>

# 2023 FITZY FOX SHOOT WRAP-UP



## And that's a wrap.

In this year's Fitzy Fox Shoot we had 11 teams enter between Jerramungup and Bremer Bay, culling a total of 256 foxes, 11 cats and 132 rabbits.

A massive effort from all who took part which resulted in some great eradication numbers for the feral animal population within the Jerramungup Shire.

Conditions for the night were considered favourable with very little moon light, no fog and only a slight chill in the air that was easily fixed with a warm jacket, gloves and a beanie.

By 6am Saturday morning all teams had rolled into the tally count locations ready for a hot coffee, cooked breakfast and to find out who would be our winners for 2023.



[WWW.FBG.ORG.AU](http://WWW.FBG.ORG.AU)



## Jerramungup Shoot

Eight teams entered

**Total foxes – 223. Total cats – 6. Total rabbits – 84.**

### 1st Place- Fox Tamperers (224 points)

40 foxes and 24 rabbits

Wade Brown, Jeremy Nelson, Ashley Nelson, Deon Trevaskis & Thomas Hicks.

### 2nd Place– Rabbit Proof Renegades (190 points)

27 foxes, 2 cats and 35 rabbits

Jarrold Smith, Clint Pocock, Aaron Moesker, Josh Moesker, Clint Plug & Wakelin Plug.

### 3rd Place (Draw)–

#### Lead Spreaders West (127 points)

25 foxes and 2 rabbits

Malcolm Turner, David Turner, Michael Liddiard, Jacob Johnson & David Neild.

#### Verminators (127 Points)

17 foxes, 4 cats and 2 rabbits

James Lyall, James Trethowan & Gareth Korpel.

**Most kms travelled – Fox Tamperers (282 kms)**

**Biggest fox– Least We Tried (7 kgs) Rudolf Le Grange.**

**Biggest cat– Verminators (4.5kgs) James Trethowan.**

## Bremer Bay Shoot

Three teams entered

**Total foxes – 33. Total cats – 5. Total rabbits – 48.**

### 1st Place– Night Riders (141 points)

11 foxes, 4 cats and 46 rabbits

Wayne Manley, Kade Ford, Mark Ford & Mark Day.

### 2nd Place– Just Missed (76 points)

13 foxes, 1 cat and 1 rabbit

Alex Tapscott & Brent Crowley.

### 3rd Place– Wedley’s Warriors (46 points)

9 foxes and 1 rabbit

Owen Thomas, Ants Thomas, Wes Thomas, Steve Turner & Howie Morrison .

**Most Kms travelled– Night Riders (324kms)**

**Biggest fox– Wedley’s Warriors**

**Thankyou to all who participated to this very worth while event. Every Fox Counts!**

**Another big thank you to all of our amazing sponsors who make this event possible.**

Year	Foxes	Cats	Rabbits
2023	256	11	132
2022	161	6	95
2021	190	4	186
2016-20	155	12	162
Running Tally	1369	58	913



Thank you to our 2023 Fitzy Fox Shoot Sponsors



SW WA Hub

FREE EVENT

# Science to Practice Forum Workshop - Manjimup Thurs 8 June

Manjimup DPIRD  
Research Institute

28527 South West Hwy

1pm - 5pm

BBQ sundowner to finish



Learn how to put climate  
and drought resilience  
research into practice

- Tools for drought resilient dams
- How to use agtech to improve farm decision making
- Improve irrigation management
- Digital tools to improve yield

Contact: Jennifer Riseley - 0438 984 292  
or [marketing@southernforestsfood.com](mailto:marketing@southernforestsfood.com)



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GROWER  
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South-West WA  
Drought Resilience Adoption  
and Innovation Hub

This activity is hosted by the SW WA Hub, through funding from the Australian Government's Future Drought Fund



Manjimup Node Lead



Bunbury Node Lead

# SPEAKER SCHEDULE



## WATERSMART DAMS - MAKING DAMS WORK AGAIN - DPIRD, UWA

Tools to reduce evaporation and increase runoff. Have your say on the WETapp, a tool to help farmers with future planning decisions.



## AGTECH DECODED: ANALYSE THE ROLE OF TECHNOLOGY IN ON-FARM DECISION MAKING - STIRLINGS TO COAST

How farmers can use data to solve real world problems, lessons from Liebe group and Stirlings to Coast Farmers.

## BIODEGRADABLE MULCH TECHNOLOGY - DPIRD AND CSIRO

CSIRO-developed biodegradable mulch polymer to reduce weed pressure, water use and chemical use.

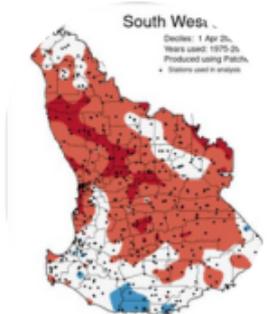


## PERENNIAL GRASSES AND PASTURES - BARENBRUG AND DPIRD

Field walk to demonstrate perennial pasture trial for dry shoulder season and legume pastures for alternate nitrogen sources.

## MODERN SOIL MOISTURE MONITORING TO IMPROVE IRRIGATION MANAGEMENT - DPIRD

Save time and wages with soil moisture monitoring technology, integrated with agronomy advice. Applications from Pemberton to Carnarvon.



## ON-FARM WATER DEMAND FOR SW WA - FOOD AGILITY CRC AND CURTIN UNIVERSITY

Putting real-time water usage data into the hands of farmers. How much crop do you produce per drop?

## EXPERT PANEL ON AGTECH AND APPLICATIONS TO INCREASE PRODUCTIVITY

Hear from Dr Julia Easton, Phil Honey and Frank D'Emden on how to make agtech work for you.

[REGISTER VIA EVENTBRITE](#)



This activity is hosted by the SW WA Hub, through funding from the Australian Government's Future Drought Fund



Manjimup Node Lead



Bunbury Node Lead

## Drought Hub Update – Albany Node

Stirlings to Coast Farmers, as a 'Drought Hub Node', provides guidance to the 'Future Drought Fund' supported SW WA Drought Resilience Adoption and Innovation Hub on drought & climate resilience issues for the Albany and Great Southern Region.

### STIRLINGS TO COAST FARMERS SUCCESSFUL IN OBTAINING FDF EXTENSION AND ADOPTION GRANT.

Stirlings to Coast Farmers were 1 of 18 groups nationally to be successful in obtaining funding under the recent Future Drought Fund's Extension and Adoption Grants. The funded SCF project is based on the adoption & extension of digital weather and soil moisture monitoring technologies to drive climate-resilient farming practices in the South-West Agricultural region of Western Australia. Keep an eye out for further information and opportunities as the project gets underway.

To read more about the projects across Australia, please visit <https://www.agriculture.gov.au/agriculture-land/farm-food-drought/drought/future-drought-fund/extension-adoption-drought-resilience-farming-practices-grants>

### WATER SMART DAMS – MAKING DAMS WORK AGAIN

The two-year project aims to develop knowledge and water planning tools for farmers who need their dams to work in all years and be able to make water investment decisions with confidence. The project involves a collaboration between the Grower Group Alliance (through the SW WA Drought Resilience Adoption and Innovation Hub), DPIRD and UWA, as well as four grower groups, including Southern DIRT and Fitzgerald Biosphere Group in our region. Demonstration sites will investigate solutions including renovating existing dams, building new dams, and implementing evaporation suppression and runoff technologies.

Kojonup based grower group, Southern DIRT, recently installed their first dam cover as part of the project. We look forward to hearing how it reduces evaporation and impacts on water quality as results come to hand. Jerramungup based Fitzgerald Biosphere Group is also hosting demonstration sites for the

project. Visit Southern DIRT's and FBG's websites to keep up to date with their Water Smart Dams projects. [www.southerndirt.com.au](http://www.southerndirt.com.au) and [www.fbg.org.au](http://www.fbg.org.au)

### SCIENCE TO PRACTICE FORUM – BUILDING THE FOUNDATIONS OF DROUGHT RESILIENCE.

The Future Drought Fund's annual Science to Practice Forum, is on again, 6 – 8 June 2023. The forum brings together farmers, researchers, government, industry, and the community to explore innovative tools and practices helping our farmers and regions prepare for future drought.

Award-winning television journalist and presenter of ABC TV's Landline, Pip Courtney, is hosting this year's 3-day forum and will facilitate engaging discussions with keynote speakers, presenters, and panel members.

Each day focuses on a particular theme:

- Tuesday 6 June – Research and development
- Wednesday 7 June – Producers
- Thursday 8 June – Community and policy

The online forum is free to attend – register online at <https://www.eventbrite.com/e/2023-science-to-practice-forum-tickets-596424209867>

**Register for Manjimup workshop – hear from SCF's own Smart Farms Coordinator, Phil Honey.**

In support of this year's Science to Practice Forum, the SW WA Hub will host a face-to-face workshop at the Manjimup DPIRD Research Institute on June 8.

The event will showcase outcomes from projects supported by

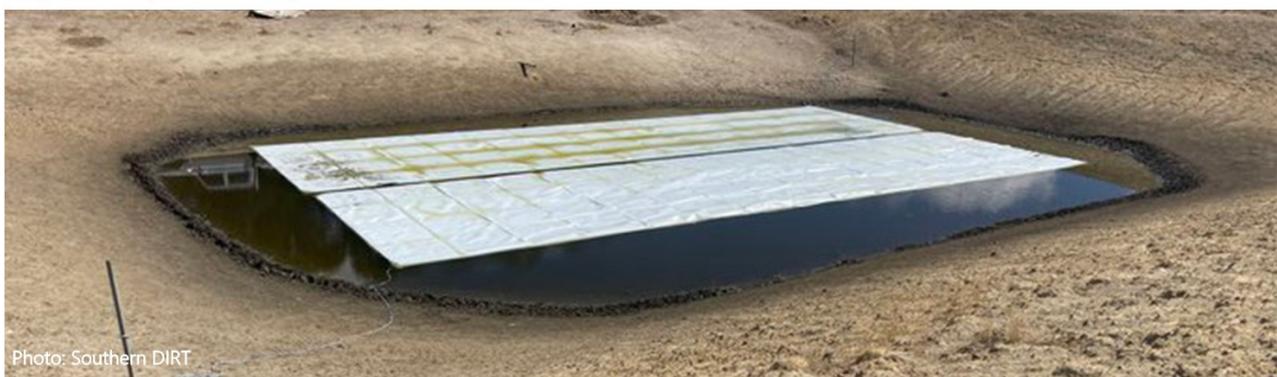


Photo: Southern DIRT



the FDF and how they can be put into practice on WA farms. SCF's own Phil Honey will be presenting and will also be part of an expert panel session on AgTech and applications to improve productivity.

Other topics include improving dam water retention and performance; combining CSIRO technology and weather data to improve on-farm decisions; analysing current monitoring technology to find the right fit for your farm; and digital tools to map and improve yield.

The event is supported by the SW WA Hub's Manjimup and Bunbury Regional Node Leads – the Southern Forests Food Council and the Southwest Catchments Council. It begins at 1pm, finishing at 5pm with a sundowner and beef and gravy roll to follow.

Register online at <https://www.eventbrite.com.au/e/sw-wa-hub-science-to-practice-forum-workshop-tickets-620513702187>

*To keep up to date with all that is happening with the South West WA Drought Resilience Adoption and Innovation Hub and anything climate resilience related, check out their web page and subscribe to their newsletter here - <https://www.gga.org.au/activity/drought-hub/>*

*If you are interested in knowing more and being involved in project development for improving climate resilience in our local area, give Kathi McDonald (Albany Regional Node) a call on 0408 418 531 or email [kathi.mcdonald@scfarmers.org.au](mailto:kathi.mcdonald@scfarmers.org.au) and check out the Albany Node webpage for further locally relevant information - <https://www.scfarmers.org.au/swwadroughthub-albany>.*



## FBG Project Information

### Current Projects

Regional Land Partnerships: EPBC, Climate Action, TEC (South Coast NRM / Australian Federal Government National Landcare Programme)

Regenerating Saline Land: A new approach to an old problem (Western Australian State Natural Resource Management Program)

WaterSmart Dams: Making dams work again (Australian Government's Future Drought Fund and Department of Primary Industries and Regional Development)

Drought-resilient landscapes with profitable native shrub and legume systems across southern Australia (Australian Government's Future Drought Fund)

### Pending Projects

Green Jobs: Environmental Revegetation and Rehabilitation Fund (Western Australian State Government) – EOI submitted

Beyond the Salt Struggle: Cultivating change with a catchment approach (Western Australian State Natural Resource Management Program) – Application submitted

Regional Land Partnerships 3 (Australian Federal Government National Landcare Programme / South Coast NRM) – Tender submitted

### Recent Project Application Outcomes

Scalable Salt Solutions (Australian Government's Future Drought Fund) – unsuccessful

# Shorebirds

With the passing of summer there are fewer shorebirds on the estuary at the moment, most noticeably, a pose of pelicans still holding the fort. Nonetheless, autumn has been a busy time for our shorebirds project.

## A Conservation Action Plan for the Wellstead Estuary

At the end of March we held a workshop in Bremer Bay to develop a Conservation Action Plan for the Wellstead Estuary. Used around the world, Conservation Action Plans (CAPs) are a way of identifying ecological values (targets), threats and actions to mitigate against them.

The targets we agreed to focus on are: the waterbody (which incorporates fish populations, aquatic fauna and water quality); riparian and fringing vegetation; beach habitat and near coastal dunes; local tributaries to the estuary; and the birdlife dependent on the estuary, riparian zone and tributaries.

The Wellstead Estuary Management Plan, written by the Department of Environment in 2004, is the basis of the CAP. In June/July we will hold a follow-up workshop to finalise it. All are welcome to attend so keep an eye out for advertising or email me and I will add you to the mail out list.

Later in the year we will be holding workshops to learn how to use BirdLife's Bird Data App. This app can be used to register any bird sightings, anywhere. Later, we hope to hone monitoring skills specific to shorebird surveys. Everyone is welcome. To register your interest please contact me on [bremeprojects@fbg.org.au](mailto:bremeprojects@fbg.org.au)

## Look out for struggling Ospreys

The day of the CAP workshop, we found ourselves unexpectedly in possession of an Osprey in poor health. The bird was found by a crew member of Bremer builder, Jason Reside. Unfortunately, it had to be euthanised by Albany vets who could not halt its deteriorating condition, nor pinpoint a cause. The Ospreys of Bremer Bay have long held a fascination for many people, local, visitor and researcher alike. BirdLife Osprey researcher, Marcus Singor says he and other volunteers have had a few Ospreys with eye problems, though they don't know the cause. He describes this as a death sentence be-

cause they can't focus on the fish in the water and slowly starve. We don't know if this was the issue with the bird found in Bremer but should anyone observe an Osprey in poor condition, we'd be interested to hear about it.

## Flagged Pacific Gulls on our beaches?

Marcus also alerted us to be on the look-out for Pacific Gulls with leg flags. He said 21 were flagged in Esperance a while back and could easily have travelled to the Bremer side of the Fitzgerald River National Park. Birds sighted in Geraldton had flown 200 to 300 km from where they were flagged. He says the bands are quite easy to read (see picture) and if anyone sights a flagged bird and can record the numbers and letters on the leg band, he can provide details about when and where it was banded. Observations can be sent to [marcussingor@gmail.com](mailto:marcussingor@gmail.com)



## Turtles and shorebirds both fall prey to Ravens

The Raven, sharp-eyed and razer-sharp, is a predator that breeding shorebirds have to reckon with, as both eggs and chicks are potential prey. It turns out baby turtles, while still in their eggs, are a favourite prey too. A conversation with Albany-based Citizen Scientist, Atlanta Veld about the issue of predation by ravens on turtle eggs at Lake Seppings in Albany lead to another intriguing fact. It transpires that the near threatened snake-necked or long-necked turtle is the only endemic freshwater turtle species in the South West of the state and Atlanta is interested to hear of any turtle sightings in the swamps on our farmlands. Atlanta has partnered with the 1 Million Turtles program <https://1millionturtles.com/> to help record turtle sightings, protect nests from predation and monitor fox predation on turtle nests.

If you're interested Atlanta can be contacted on [atlantasgarden@aussieb.com.au](mailto:atlantasgarden@aussieb.com.au) or 0478 642 210.

*(Continued page 15)*



(Continued from page 9)

### **Banksia woodland is honey possum heaven**

Our stall at the Easter Markets in Bremer provided a great opportunity to hear about interesting bird sightings from near and far, but it's hard to go past a sighting, captured beautifully by patient photographer, Kathy Whiteside, of our tiniest marsupial, the honey possum. Kathy and her husband Derek watched this honey possum feed on nectar from a *Banksia speciosa* flower at East Mount Barren. Since honey possums are usually nocturnal, it was a rare and unexpected treat indeed.



Leonie McMahon

Bremer Projects Division

*This project is supported by funding from the Western Australian Government's State NRM Program.*



natural resource  
management program



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## Bremer Bay Trails Network

One of the highest priorities for the Bremer Bay Regional Trails Committee for some years has been an update and expansion of the Bremer Bay Regional Trails Masterplan. It is with great pleasure that we can now announce it done.

Over the course of the last year, landscape ecologist Nathan McQuoid developed and wrote the masterplan, consulting with the Trails Committee, the FBG, the Shire of Jerramungup and community in the process. Council adopted the masterplan in March this year, subject to a public comment period, which is now complete.

Recommendations for new trails include:

- Paperbark Park to Rock Cairn trail and boardwalk loop
- Point Henry Headland Trail, existing track conversion to shared-use trail and new sections
- Wellstead Estuary Bog-Arm trail, existing track conversion to shared use trail and new sections
- Bremer Beaches to Back Beach Marina loop trail.

### **The thank yous**

First and foremost, many thanks to Nathan McQuoid. Nathan's in-depth knowledge of the local landscape and his commitment to developing a world-class trail network that both showcases and protects our natural environment are invaluable assets to us and we appreciate you undertaking the work.

Thank you very much to the project steering committee which consisted of Noel Myers (Shire of Jerramungup), Mick Lance (Bremer Bay Regional Trails Committee), May Carter (Outdoors Great Southern), and myself for the FBG.

The Bremer Bay Regional Trails Committee was convened in 2007 and has been integral to the development of a trails network in Bremer. Thank you very much to members for your ongoing efforts and your input into this 2023 plan.

Thanks to everyone who completed surveys and provided feedback throughout the consultation process.

And finally, many thanks to the Building Better Regions Fund for supporting this project

Leonie McMahon



# A glimpse into the new wheat season – a global perspective

With northern hemisphere wheat heading into the important yield-determining month of May, attention is turning to how things are looking for Australia's major export market competitors, according to RaboResearch general manager Australia and New Zealand Stefan Vogel.

For the US, he said, this year's plantings saw wheat acreage increase by nine per cent to a seven-year high. But what would usually be a bearish price driver has been somewhat offset by weather issues.

"Winter wheat, by far the larger crop in the US, is in poor shape due to dryness while spring wheat plantings are battling a late start to spring," he said.

In Canada, the area of wheat planted is expected to increase slightly, Mr Vogel said, but a forecast return to average yields is expected to keep the crop size relatively unchanged year on year.

"And for the EU, the wheat crop is in good shape overall with, so far, no significant surprises expected compared with last year," he said, "while Argentina will only begin planting wheat in late May, still allowing time to recover from ongoing drought, and the core wheat-growing regions in the south have already received some much-needed rain."

So, Mr Vogel said, with limited surprises in these key wheat-exporting regions, the difference to global supply and exports in 2023/24 will likely once again come from the Black Sea region and from Australia. "Both have exported very strong wheat volumes so far in 2023 and both are also looking to lower production in the coming cycle," he said.

Mr Vogel said Ukraine is expected to see another 10 to 20 per cent reduction in its wheat production and a 20 per cent cut in barley and corn.

And Ukrainian exports will continue to depend on two key factors.

One is the continuation of the Russia/Ukraine grain export deal allowing Ukraine to ship further wheat through its ports to the world market, he said. "This deal – which nowadays accounts for about 70 per cent of wheat volumes that leave Ukraine – is highly political with Russia ramping up pressure on the west to remove sanctions in order for it to renew the deal which is due to expire again in late May," he said.

The second factor, Mr Vogel said, is Ukraine's ability to transport grain by rail, road and river through neighbouring countries in the EU, where farmers have recently complained about too much Ukrainian grain on world markets hurting their prices. "Some EU member states halted trade, at least temporarily, but resolutions seem to be underway and the EU itself has considered those standalone decisions by countries, like Poland and Hungary, unacceptable in what is a common EU market."

Similarly important, according to Mr Vogel, will be Russia's wheat export volumes over the next 18 months.

"So far this year, Russia has shipped about twice as much wheat as the same time last year and is unlikely to slow much

in the remaining months of this season," he said. "Looking into 2023/24, Russian wheat production is unlikely to match the record seen last year, but, given remaining inventories, local consultants are estimating exports will be close to this season's record shipments. So this will remain a price concern."

Overall, Mr Vogel said, 2023/24 global wheat production is likely to fall close to the level seen two years ago rather than reaching last year's record. But exports might remain strong and competition from corn also needs to be considered.

"The US is expected to expand corn acreage by four per cent and, if yields recover to trend levels, this would mean a lot of additional feedgrain looking for markets," he said.

To find out more about other Rabobank research, contact Rabobank Albany on (08) 9844 5600 or subscribe to **RaboResearch Food & Agribusiness Australia & New Zealand** on your podcast app.



*RaboResearch General Manager Australia & New Zealand – Stefan Vogel*



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Enquiries: Jo Wisdom  
joanne.wisdom@gga.org.au

**APPLICATIONS**  
Closing 28th June, 2023

The objective of the 'Emerge Program' small grants round is to facilitate the development of ideas that will help WA farmers and the agri-food sector prosper in hotter and more variable climates and build greater resilience to more frequent seasonal droughts.

Our mission is to foster small cohorts of agricultural thinkers by helping them enter the innovation ecosystem.

The grant round includes support from experts at CSIRO and GGA to make the jump from producer to developer more accessible.

To apply head to the GGA's project page and fill out the application form  
<https://www.gga.org.au/activity/emerge-program-grants/>




**1080 Training with DPIRD**  
for fox and rabbit control

Tuesday 25 July 8-12pm Jerramungup CRC  
Wednesday 26 July 8-12pm Borden Pavilion  
Contact Amy 0419 111 469  
or [admin@fbg.org.au](mailto:admin@fbg.org.au)

natural resource management program

Save the Date

# FBG Spring Field Day

Day

Tuesday September 12  
2023



# DANCING IN THE DIRT



23 MARCH 2024

We are busy working on bringing you the 3rd Dancing in the Dirt Gala Ball. We will bring you more information over the coming months! But for now, save the date!!!

Dancing in the Dirt GALA BALL  
PRESENTED BY FITZGERALD BIODIVERSITY GROUP

Hopetoun  
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*"Into the Biosphere"*

Free for all ages. Register your spot: [hopetounwa.com/events/inat](http://hopetounwa.com/events/inat)  
Bus available from Ravensthorpe. Afternoon tea provided.

Welcoming Expert Guests  
Bo Janmaat & Loxley Fedec

**28TH MAY 3PM | HOPETOUN CRC**

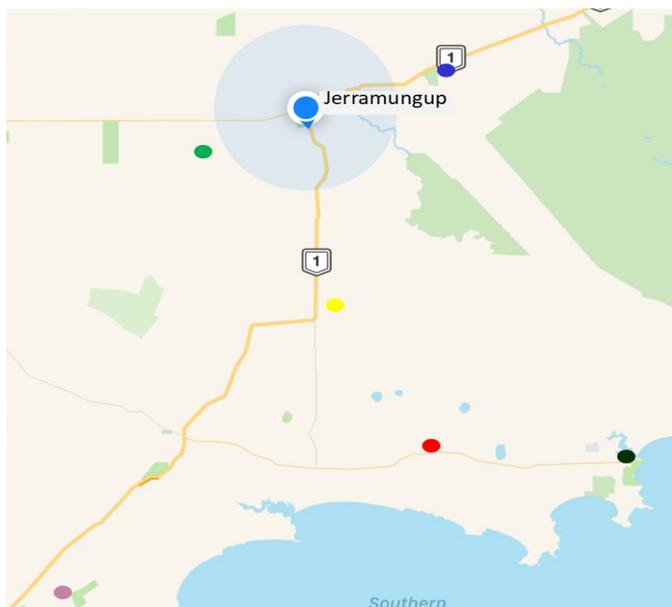
HOSTED BY FBG

*Ladies Day*

Wednesday 23rd Aug  
More information to come




## Jerramungup district rainfall



## UPCOMING EVENTS

Sunday 28th May  
iNaturalist Workshop and Field trip

Tues 25th July  
1080 pest control training

Wed 23rd August  
Ladies Day

Tues 12th September  
Spring Field Day

Sat 23rd March 2024  
Dancing in the Dirt

Location	22 Total	Total YTD 23	Jan	Feb	Mar	Apr
Jerramungup	430	59.0	4.0	3.8	22.4	28.8
Needilup Nth	393	37.5	2.0	0.0	13.0	22.5
Jacup	618	61.0	6.0	0.0	23.0	32.0
Bremer Rd	710	105.5	2.0	1.5	28.5	73.5
Gairdner	607	51.0	2.0	1.6	19.2	28.2
Boxwood (Chillinup)	506	51.1	1.4	1.6	21.3	26.8
Mettler	755	119.4	5.6	5.8	36.6	71.4

Contact FBG for more details ph. 0499 346 233

Email: [admin@fbg.org.au](mailto:admin@fbg.org.au)

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