

ISSUE 2, MAY 2022

SUSTAIN-A-BULLETIN

FITZGERALD BIOSPHERE GROUP



Salinity Forum Wrap-Up

A collaboration between Fitzgerald Biosphere Group, The Gillamii Centre, North Stirlings Palinup Natural Resources, and the Department of Primary Industry and Regional Development. Supported by funding from the Western Australian Government's State NRM Program and South Coast Natural Resource Management, through the Australian Federal Government's National Landcare Program.

A Salinity Forum was held on March 25 at the Needilup Pavilion, to tackle salinity management in the Jerramungup and Gnowangerup Shires. The aim of the day was to disseminate information and practical advice to local farmers, with the help of departmental specialists and experienced Cranbrook farmer, Ian Walsh. Over the course of the morning, a number of presentations were given by DPIRD staff. Ian Foster provided important context for the salinity problems facing us by presenting insightful information about the past, current, and future climate of the region. This led into John Simons' talk on groundwater trends in our area, highlighting that water tables are continuing to rise across the area, despite the overall declines in rainfall discussed by Ian.

Continue on page 2.

INSIDE THIS ISSUE:

- Salinity forum Wrap-Up
- Update from the EO's desk
- Increasing Groundcover to build resilient soils—Project Update
- Trials of locally relevant summer crops for waterlogged soils—Project Update
- Revegetation plans for Short Beach Foreshore
- Faba beans gaining traction on the south coast
- Rabobank Update
- Save the Date for our Spring field day and more upcoming events



Continued from page 1.

Following this, Ron Master and Dave Turner explored potential options for addressing salinity on Dave's property, which was preceded by a day at Dave's farm. Discussing what would occur in an 'ideal' scenario, versus what would be practical, affordable, and feasible for Dave was an interesting exercise. Ron went on to explain identifying different zones of salinity, and which management systems work best on each. We then received a breakdown of saltland economics from John Paul Collins, which sparked many interesting conversations and questions around the viability of different saltland management approaches.

Following lunch, Ian Walsh talked through his own experiences of addressing salinity on his property in Cranbrook. An inspiring talk for many in attendance, it's always wonderful to hear from Ian and to realise how saltland can be turned from a problem into an asset. Freya Spencer followed Ian, running us through the Saltland Genie web app, which was developed by The Gillamii Centre in collaboration with DPIRD. An incredibly useful tool for anyone needing guidance on saltland management, the Genie can assist with planting densities, species selection, system selection, and plenty more.

The remainder of the day was dedicated to allowing farmers to ask all their questions and put pen to paper to plan works for salt affected sites on their own property. Ron Master, Justin Laycock, Ian Walsh, John Simons, and Freya Spencer were all able to offer valuable advice to everyone in attendance.

The FBG are incredibly grateful to everyone who was generous enough to travel to Needilup to present on the day. Special mention to Justin Hardy, Ron Master, Stevi Filipowski, and Freya Spencer, who put a lot of time and effort into the planning process. Delicious food was available all day thanks to Anita Martin, and we had access to a great venue in the Needilup Pavilion, thanks to the Needilup Progress association. The Pub Borden made an extremely generous donation to provide us with a couple of drinks to wrap up the day on a relaxing note. Thank you to all those who attended, your support is always appreciated, and we hope the day provided you with some useful information!

For anyone who'd like more information on our salinity project, a copy of the presentations from the day, or a site visit from any of the DPIRD specialists, please get in touch with Carrie on 0459454713.



Left: Ian Walsh speaking about his own experiences with salinity management.

Right: Farmers seeking advice from departmental specialists and mapping out problem areas on their own farms



Department of Primary Industries and Regional Development



F B G
FITZGERALD
BIOSPHERE GROUP



natural resource management program



From the EO's desk

In the first edition of Sustain-a-bulletin, I would like to take the opportunity to thank FBG staff and Board members in their assistance in a very smooth handover – particular recognition must go to Leonie McMahon who I continue to rely on for her insights and expertise.

With some promising falls to get the seeding season started, we hope that the crops have been going in relatively unhindered by mice and other seasonal challenges, and that all our members catch the rain in mid May to bring those crops up.

If mice are an issue on your place, a reminder to register their presence at feralscan.org.au/mousealert or on the app which can be downloaded at your app store. This website also provides some management recommendations and data provided will help to develop coordinated control programs in problem years.

FBG has been very busy in recent months with quite a few new projects coming online, as well as a State NRM grant application being lodged to extend our salinity program beyond 2023. Should this be successful, we will be focussing remediation efforts on key catchments within the area and working with small groups of farmers to align both landscape and farm outcomes around this insidious issue.

Project update

FBG has been busy on a number of fronts with lots of different projects underway or about to launch.

WaterSmart Dams planning is well in truly underway in conjunction with the Grower Group Alliance, UWA and DPIRD. This exciting project will be addressing farmer needs for water security and will be shaped by the requirements and interests of growers in our area. Approaches may be analysing dam performance, including evaporation, looking at best practice dam set up, including roaded catchments, improving run-off from catchments by applying polymers, floating covers to reduce evaporation, etc. Please get in touch if you have a particular area of interest you would like to explore.

Project contacts: Maddy Wylie or Carrie Taylor



We have been carrying out surveys exploring the issue of Falling Numbers on the South Coast in a GRDC project being led by Stirlings to Coast Farmers and DPIRD. Surveying will wrap up in the next week – if you have not been contacted by us or Stirlings to Coast and would like to contribute to the survey, please feel free to get in touch.

Project contact: Maddy Wylie



FBG is partaking in a Future drought Fund Drought Resilient Landscapes paddock contributing a demonstration paddock. We are looking at how to better capture water, particularly during summer rainfall events by looking at the issue from a whole of landscape approach. Stay tuned for more details.

Project contact: Jolene Daniel

Led by CSIRO, FBG is taking part in another Future Drought Fund Drought Resilient Soils and Landscapes project which will focus on profitable native shrub and legume systems across southern Australia. This is a national project which aims to demonstrate best practice establishment, complementarity and productivity. Aside from 3 sites in WA in medium to low rainfall areas, there will also be 3 sites in NSW across a range of climate zones. More details to come as this project rolls out.

Project contact: Maddy Wylie or Jolene Daniel

As part of a SmartFarms grant, FBG is looking at running an intra-state tour in late July/early August to Cranbrook to look at salinity management programs undertaken there over many years, detouring along the way to locations of interest, possibly via South Stirlings and some of the sub surface drainage trials being undertaken down there. We are open to suggestion and invite your input!

Contact: Carrie Taylor

The annual Spring Field Day is fast approaching and this year will be held in Needilup area in early September, date and day to be confirmed. If you have any suggestions, let us know!

Contact: Maddy Wylie

Maddy Wylie– Ph: 0421 645 410

Carrie Taylor– Ph: 0459 454 713

Jolene Daniel– Ph: 0439 353 069



Increasing Groundcover to build resilient soils

Project Update

Summer Crop multi-species update.

Better late than never?! The summer groundcover sites have all come home stronger than what they started, thanks to some handy March rain. Ideally the rain would have come a bit earlier to maximise production and grazing but we can still see the potential these multi-species fodder crops have. Both the Needilup and Gairdner site have produced good sized turnips and radish (see in photos below).

Benefits to soil of turnip and radish tuber:

- **Improve compacted soil:** once tubers breakdown they create channels, improving infiltration and surface drainage and in turn improve depth of root growth of subsequent

crops and access to subsoil moisture (similar to deep ripping) resulting in greater resilience under drought conditions.

- **Improve nutrition in top soil:** they are excellent N, P and K scavengers, accumulating nutrients in and around their tuber which then breaks down and is available in the root zone for subsequent crops
- **Ground cover! Reduce soil and erosion and run off:** with adequate rainfall, they grow rapidly and provide canopy closure in 3 weeks, intercepting rain drops minimizing surface impact and protecting soil and biology from wind, extreme heat and evaporation.
- **Sheep love to eat tubers (and leaves):** great food source for sheep especially in times of feed gap.

Jolene Daniel



Needilup site on the 3rd of May

Left: Purple top radish plant in multi-species mix, Middle: Tuber of tillage radish, Right: Needilup multi-species mix.



Gairdner site grazed on the 28th March

Left: Gairdner purple top turnip, Right: Gairdner sunflowers and turnip.



Trials of locally relevant summer crops for waterlogged soils

The trial sites have struggled with no rain until 23ml in March. Most strips have come to life with some just germinating. The most outstanding site to date is the hybrid Pearler Pennisetum grass. Known to be drought tolerant once established, its resilience was tested at this site. Whilst the sorghum plants started dying from lack of moisture the Pearler stayed green and then grew rapidly after the rain. It has no prussic acid issues and can be grazed early and can provide excellent quality feed. Worth looking at for future summer cropping opportunities. The Ebony Cow Pea did well in tough conditions and worth looking at adding to a summer crop mix for the bonus of fixing nitrogen over summer and increasing protein of fodder.

Jolene Daniel

Top: Lake Cairlocup Pearler Pennisetum April 27th
Bottom: Ebony Cow Pea April 27th



RUMINANT NUTRITION GRAZING WORKSHOP

WHAT WE WILL COVER

- Know what feed to offer your stock
- Fundamentals of nutrition based on 50yrs on-ground experience
- Understand and construct your own Stock Feed Curve
- Understand key indicators to look for to test your success
- Know when and how to supplement or substitute feed
- Create an action plan for healthier, happier more profitable animals

Tuesday
28TH
June 2022

8am- 5pm
Jerramungup CRC

Morning tea, lunch and afternoon tea will be included.

\$150 per person

**TO REGISTER: [HTTPS://WWW.RCSGLOBALLEARNING.COM/](https://www.rcsgloballearning.com/)
[/RUMNUT-JERRAMUNGUP-2022](https://www.rcsgloballearning.com/rumnut-jerramungup-2022)**

For more information contact Jolene Daniel - 0439 353 069



GIVE A DAM(N) ABOUT WATER SECURITY?

As part of our exciting new GGA led project, we want to hear from you if you're interested in (or already attempting):

- Renovating existing dams
- Building new dams
- Implementing evaporation suppression and runoff technologies



South-West WA
Drought Resilience Adoption
and Innovation Hub



F B G
FITZGERALD
BIOSPHERE GROUP

DPIRD site visits

available for

salinity management planning

Including advice on hydrological and geological drivers, drainage, species selection, grazing management, carbon opportunities, and more!

Contact Carrie for more information
0459 454 713

Revegetation plans for Short Beach Foreshore

Next time you visit Short Beach take a moment to check out the fenced off foredunes between the carpark and the beach. Not so long ago the whole area was blanketed with rose pelargonium, which was very effectively smothering a lot of native species. The plant is conspicuous by its absence in some areas now thanks to the frequent efforts of Short Beach residents from our Bremer Bay Weed Action Group who have been regularly weeding the same site for almost two years. Regular weeders have gotten into the rhythm of starting from the same end each time and pulling out regrowth in previously weeded areas before moving on into unweeded areas. When the group first started, part of the job was carting the weeds away. Now the weeds are left on-site to break down and protect the fragile sand dunes. Our most recent busy bee was in April. We took advantage of recent rains to loosen the roots a bit, making the pulling a bit easier than in December. This winter we will be doing some revegetation on the most consistently weeded areas, using brush mulching and seedlings.

Left: Part of the Short Beach weeding site which has been weeded successfully for almost two years. Right: The most recent busy bee in April.



Originating from Southern Africa, rose pelargonium is a major weed in Banksia woodlands and coastal heathlands in Western Australia. It's very common to see it on the foreshores of beaches around Bremer. To control it successfully by pulling you need to ensure you get all of the root system because it can regrow from stems and roots parts left in the ground.

Congratulations and huge thanks to the Short Beach crew for their efforts. The FBG is providing support to the Bremer Bay Weed Action Group through funding as part of the Western Australian Government's State Natural Resource Management Program. We thank them for their support. As part of this same project, we have been providing information at community market days about management of environmental weeds that are a serious problem in our area, such as bridal creeper, Victorian (Coastal) tea tree and boxthorn.

If you want to know about management of local environmental weeds or you are interested in being part of our weeding busy bees please get in touch at bremeprojects@fb.org.au or by calling 0438 678492
Leonie McMahon



natural resource management program



Visit <https://southcoastnrm.com.au/artwork-competition> or scan the QR code for more details and how to get involved.

There are various categories for children and adults, conditions apply.



Hard copies of colouring in pages are available from South Coast NRM offices:

Albany - 88 Stead Road, Centennial Park
Esperance - 4/113 Dempster Street

and from Albany Library.

Submissions close **5pm Sunday 29th May 2022**

artwork credit: jane thompson



This project is supported by South Coast NRM, through funding from the Australian Government's National Landcare Program.

Faba beans gaining traction on the south coast

Emma Pearse², Carla Milazzo¹, Sarah Belli² and King Yin Lui¹ Research Scientists, ¹Department of Primary Industries and Regional Development (DPIRD) ²previously at DPIRD

Interest in producing faba beans has increased in recent years among south coast grain growers seeking an alternate break crop to canola in a cereal dominant farming system. We believe the term 'failure beans', coined in the late 2000s, is no longer appropriate with the availability of new varieties with improved disease resistance, greater adoption of soil amelioration practices, and better legume agronomy. In order to shake this reputation, we have compiled the publication, 'Growing faba beans on the south coast of Western Australia' that includes tips on establishment, inoculation, weed control, disease management, harvesting and much more. This document was produced through the Regional Research Agronomy project, a GRDC and DPIRD joint investment. Included in the document are fifteen case studies from growers across the south coast region (Albany and Esperance port zones) of WA. These case studies capture various soil types and rainfall zones, and highlight different ways that faba beans fit into our farming systems. The ability for growers to learn from other growers can be limited by time and geography. We hope that by having these case studies in one place others can find common ground. The publication is available for electronic download at <https://www.agric.wa.gov.au/grains-research-development/regional-research-agronomy-project> on the DPIRD website and limited hardcopies available at your local DPIRD office. We believe faba beans are a good fit for growers who are looking for a legume that:

- fits into 100% cropping and mixed farming systems
- has a higher yield potential than other pulses

- fixes nitrogen for itself and subsequent crops
- can be sown early, dry, and to depth to chase moisture
- tolerates waterlogging better than other grain legumes
- offers robust genetics with improved disease resistance or improved tolerance to imidazolinone (IMI) and other herbicides
- is a break crop for root lesion nematode (RLN; *Pratylenchus neglectus*)
- can be sown and harvested using existing machinery and equipment used for cereals.

While the 2020 season was drier than average on the south coast, faba bean crops in our case studies averaged almost 2 t/ha. The main variety was PBA Samira and most crops were dry sown in April. Challenges in the season included pressure from cowpea aphid due to early drought stress, high weed pressure due to late germination (dry start), waterlogging in the high rainfall areas and hot, strong winds impacting pod set and causing necking.

We would like to take this opportunity to thank the growers involved in the case studies and for their time and expertise, as well as Mark Seymour for his knowledge and guidance. For more information please contact Vanessa Stewart (vanessa.stewart@dpiird.wa.gov.au) or Megan Abrahams (megan.abrahams@dprid.wa.gov.au).

Important disclaimer

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Copyright © State of Western Australia (Department of Primary Industries and Regional Development) 2021



Department of
Primary Industries and
Regional Development



FBG Staff

Maddy Wylie – Executive Officer

E: eo@fbg.org.au
M: 0428 351 127

Natasha Brown - Finance Officer

E: natasha@fbg.org.au
M: 0488 034 623

Jess Brown - Communications Officer/ Administrative Support

E: communications@fbg.org.au / admin@fbg.org.au
M: 0428 995 508

Jess Bailey - Administration Assistant

Currently on extended leave

Carrie Taylor - NRM Project Coordinator

E: nrmprojects@fbg.org.au
M: 0459 454 713

Jolene Daniel - Groundcover Project Coordinator

E: projectofficer@fbg.org.au
M: 0439 353 069

Leonie McMahon – Bremer Projects Division Manager

E: bremerprojects@fbg.org.au
M: 0438 678 492

FBG Board

David Turner
Chairperson

Kyran Brooks
Vice Chairperson

Mick Lester
Secretary

Craig Hall
Treasurer

Laura Wishart

Rex Parsons
Shire of Jerramungup
Representative

FBG Advisory Committee

Changes to the Advisory Committee were flagged in late 2021 following development of our Operational Plan 2019-22 and our decision to focus on Salinity. Membership of the Advisory Committee will be confirmed in coming months following discussion with current and potential members.



High global prices, regardless of Russia

Global grains and oilseeds markets exploded following Russia's invasion of Ukraine. In the initial two weeks, Rabobank's senior commodities analyst Cheryl Kalisch Gordon said the CBOT wheat lifted 79 per cent.

"With some of the risks of the crisis digested, at least for now, CBOT wheat has moved back just below 1,100USc/bu (as at 15/3/22), but is still 40 per cent above pre-crisis trading and 100 per cent above the five-year average," Dr Kalisch Gordon said.

"Other major grains and oilseeds have followed to varying degrees and the outlook is for this elevated, and particularly volatile, pricing to remain at least until June," she said.

"For pricing in the second half of the year, we're watching three main factors: Ukraine's new crop supply, who trades with Russia and whether La Nina loses its grip on 'the Americas'.

"Most Ukrainian wheat and canola are winter varieties, about to emerge post-dormancy. However, Ukraine's spring wheat, barley, corn and sunflower planting window starts now. With high input costs and widespread uncertainty, whether these crops will be planted is unclear. And whether crops – spring or winter – are harvested, is also uncertain."

Dr Kalish Gordon said failure to plant Ukrainian spring crops would put a 60 million-tonne hole in the 2022/23 global grain supply, and that could rise to almost 90 million tonnes if both winter and spring crops cannot be harvested.

"While it's unlikely that no Ukrainian spring crops will be planted, or that none will be harvested, the longer the conflict continues, the lower new crop supply we can expect. This supply uncertainty will keep risk priced into markets towards, and into, the second half of 2022," she said.

"For Russia – with no conflict-related impediments to planting or harvesting and ready availability of key inputs – new crop supply is not the concern, but rather if it will be available on world markets and who will buy it.

"Russian wheat is finding its way to the MENA (Middle East and North Africa) region and – with prices so high, the rouble so devalued and food security a troubling concern across that region – we know some supply will continue to make its way there in some way."

Dr Kalish Gordon said the big question is whether China will take sizable volumes from Russia – something it could easily accommodate, notwithstanding freight challenges. "This would be at the expense of imports from Australia, the US and South America and would take pressure out of global grains markets in the second half of 2022."

Dr Kalish Gordon also noted there is the still-active La Nina. "While indicators show it has passed its peak, and all except one global model shows a dissipation of the La Nina climate pattern by this July, dry conditions are reducing crop prospects in Argentina, parts of Brazil and across southern USA. If La Nina loosens its grip, we could see some pressure taken out of markets in the second half of the year, but, if not, more upward pricing pressure."

These three factors have the potential to materially alter the trajectory of grains and oilseeds prices later this year said Dr Kalisch Gordon. "But even before Russia invaded Ukraine, COVID-related supply chain challenges, crop failures, additional demand and low stocks had grain markets trading in ranges not often encountered. So, whatever happens with Ukraine's next crop, China's buying and La Nina in the 'Americas', we expect global grain prices to trade at least 45 per cent above the five-year average in the second half of 2022," she said.

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

Cheryl Kalisch Gordon



Ravensthorpe
Wildflower Show

12 - 24 September 2022

For more information please visit their website

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

Or scan this QR code.



WATCH THIS SPACE FBG SPRING FIELD DAY

EARLY SEPTEMBER, 2022

Date to be confirmed

NEEDILUP AREA

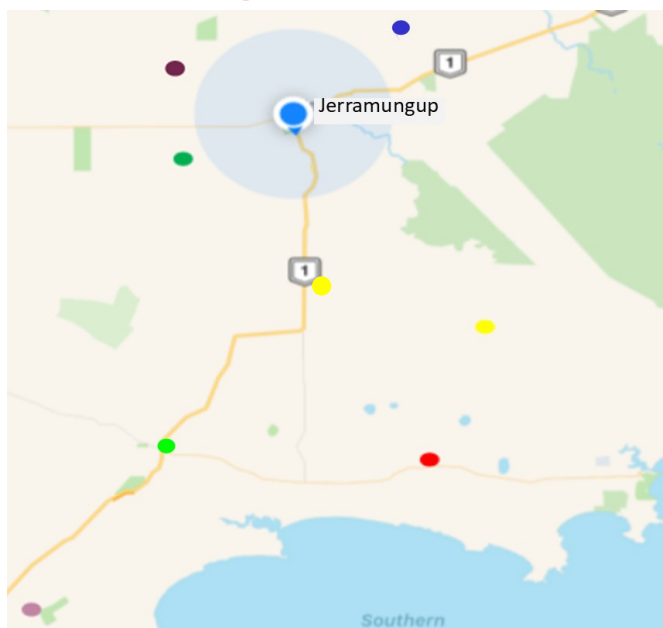
MORE DETAILS TO COME

FREE FOR MEMBERS,

\$30 FOR NON-MEMBERS



Jerramungup district rainfall



| Location | | Jan | Feb | Mar | Apr | Total YTD |
|--------------|---|------|------|------|------|-----------|
| Jerramungup | ● | 11.6 | 9.8 | 46.2 | 66.8 | 134.4 |
| Needilup Nth | ● | 3.5 | 4.0 | 38.0 | 21.0 | 66.5 |
| Needilup Sth | ● | 14.0 | 0.0 | 32.5 | 57.5 | 113.5 |
| Jacup | ● | 5.0 | 13.0 | 58.0 | 45.0 | 121.0 |
| Bremer Rd | ● | 12.5 | 14.5 | 39.5 | 92.5 | 159.0 |
| Gairdner | ● | 19.8 | 12.6 | 44.8 | 56.9 | 134.1 |
| Boxwood | ● | 16.0 | 7.2 | 32.6 | 84.2 | 140.0 |
| Mettler | ● | 14.3 | 7.7 | 57.2 | 84.0 | 163.2 |

UPCOMING EVENTS

- Ruminant Nutrition Grazing Workshop– 28th June 2022
- Spring Field Day– September 2022
- Ravensthorpe Wildflower Show– 12-24th September

CHANGES TO FBG OFFICE PHONE NUMBER

We will shortly be disconnecting our landline (08 98351127) and replacing it with an office mobile.

Please update your contact details for us as follows

FBG OFFICE MOBILE:
0499 346 233



Contact FBG for more details ph. 0499 346 233

Email: admin@fbg.org.au

Visit our website to view this issue of the Sustain– a– Bulletin (Scan this QR code to take you directly to the online version)

or visit www.fbg.org.au

