

# MFMG NEWS

Winter Edition 2017

## UPCOMING EVENTS

July 4 Frances Crop Walk

August 6 – 11 MFMG Study  
Tour to Esperance WA

August 22 MFMG AGM and  
GRDC Updates at  
Bordertown

September 21 MFMG Keith  
Field Day

October 25 MFMG Conmurra  
Field Day

## MFMG UPDATE

MacKillop Farm Management Group welcomes Mary Timms to the team. Mary and her young family recently moved to the South East and she will undertake the contract role of finance coordinator. Mary brings with her a great deal of experience in financial management and previous work with a farming group. We have also recently advertised for an operations/project officer and look forward to informing you on who is appointed. We are working on rebuilding our staffing levels in order to better service our members and sponsors.

## EXTENSION CO-ORDINATOR & PROJECT MANAGEMENT REPORT

It seems like we just blink and are half way through another year, the next 6 months is going to have a busy schedule of events for you, the members, and associated industry people. There are a host of workshops & field days planned across the region for 2017, although some of it is a slightly different line up. As usual, all I can say is keep a close eye on the weekly updates calendar.

This year for Frances instead of a field day we are running a trial walk. Please note this is on **Tuesday 4<sup>th</sup> July 2017 at Chris & Tim Fry's 8.00am – 9.00am**. Topics will include:

- James Hawkins, update on his PHD topic Sub Soil Composting
- MFMG Wheat, Barley & Beans
- NVT Canola & Oats
- Elders evaluating new pre-emergence in TT canola for the control of Rye Grass & Radish

We are also currently planning our Field Days for Keith on September 21 and Conmurra October 25. MFMG will also have trial walks at our satellite sites at Sherwood, Wolseley, Bool Lagoon & Millicent during the year as normal.

Moisture probes, don't forget to utilise them, they can help to quantify & qualify some of the decision making in relation to cropping & pasture work that needs to be made throughout the season. For access to the southern probes & weather stations, Frances, Bool Lagoon, Conmurra & Millicent, access the MFMG website <http://www.mackillopgroup.com.au/> under reports, dryland probe trial in the members area and follow the link, select the site you require.

For the northern region, access the Alpha Group web site, <http://www.thealphagroup.com.au/> and follow link at the bottom of the page to access login to the Wolseley, Sherwood & Keith sites. For any login requirements please email me [ccrozier@mackillopgroup.com.au](mailto:ccrozier@mackillopgroup.com.au)

Some of the basics that are at the trial sites this year are:

Sherwood

- Wheat and Barley varietal trials
- Oats for grain and hay varietal trial
- Seed Free lamb – new MLA project

Wolseley

- NVT Wheat varietal trials
- NVT Bean varietal trials
- Cereal Challenge of 10 varieties

Keith

- NVT Wheat and Barley
- Oats for grain and hay varietal trial
- Aerial Clovers

Frances

- NVT Canola
- NVT Oats
- Wheat, Barley & Beans varietal trials

Bool Lagoon

- HRZ Canola (DAV00141)
- Omission trial Canola (DAV00141)

Conmurra

- High input Wheat & Barley
- Alternative Legumes
- Septoria (FAR)

Millicent

- High input Wheat & Barley
- Bean Nutrition, soils & inoculation
- Omissions trial wheat

In previous years we have worked closely with farm groups and Ag Bureau's to deliver trials, trial results and other extension activities – we look forward to continuing to strengthen these relationships across the region. If you have any potential project or trials that you would like to have in your area, please contact me.

This year MFMG has invested approximately, \$40,000 in requested members trials across the region. This is approximately \$10,000 more than previous years and has come about due to the operations committee asking for greater investment in our own trial work. To do this, we rely on members and sponsorship funds to bring an ever-increasing range of innovative and novel research to the region. This investment doesn't include the National Variety Trials (NVT) MFMG project trials or the GRDC, SARDI related trials and other Agri business firms that pay SARDI to have trial work at these sites. So, if you know of neighbours and friends that aren't members of MFMG then perhaps give them a copy of the newsletter or the trial book to show them what they are missing out on. Membership forms are accessible through the website or give us a call.

MFMG is not all about cropping either to ensure we are addressing your livestock needs we are always looking for project opportunities that aim to improve productivity and profitability in livestock enterprises for our members.

Felicity Turner is in the second year of a MLA funded project – Seed Free Lamb in conjunction with the Sherwood Farm Management Group. Can using alternative forage species and newer Clearfield® technologies to provide high quality fodder that will finish lambs, meeting market requirements in a grass-seed free environment?

“Good Clover Bad Clover,” is another recently funded MLA project, Tiff Bennett from Rural Solutions is managing this project. This project will focus on upskilling producers on oestrogenic clover identification and the implementation of practices to improve lamb marking rates. The project will be run in partnership with AgKI.

### **SENRM - Irrigation efficiency for irrigated cropping in the South East**

This project was conducted last year to provide cropping irrigators from across the region with skills to make their irrigation more efficiently, to adapt to WAP's through providing knowledge and skills in maintenance, scheduling, soil water relations, trading and licenses.

Last year due to the extreme weather we had to cancel a field day at Bool Lagoon, and so to utilise the unused funding, Penny Moorhouse organised 2 short movies, starring Tim Powell from Integrated Irrigation.

The topics discussed were:

- Irrigation Efficacy using a Catch-can test
- Moisture Probes

To view the short clips please follow the following link to our website;

<http://www.mackillopgroup.com.au/pages/irrigation/irrigation-efficiency-for-irrigated-cropping-in-the-south-east.php>

They will also be accessible on the NRSE web site.

Here is a list of some of the projects we are currently involved in and as I said, keep an eye on the weekly updates for upcoming events and relevant articles for your cropping or livestock enterprises. These are just a few of the things happening within MFMG. If you have any questions or project ideas, please don't hesitate to get in contact with one of the MFMG Board or operations committee members or staff.

## **OVERVIEW OF MFMG PROJECTS**

### **B.FDP.0054 Exploring hidden economic losses in sub-clover pastures**

**Project Description:** Aims to explore the prevalence and production and economic impact of root disease in sub-clovers in the SE of SA

**Dates:** concludes July 2017

**Funding/Collaboration body:** MLA (Riverine Plains and FarmLink)

**Project Manager:** Felicity Turner

### **DAN00198 Irrigated cereal and canola**

**Project Description:** To address the improvement of adviser and grower knowledge of high yielding cereal and canola varieties under irrigated systems and specific agronomy management that will improve profitability of these crops under irrigation.

**Dates:** concludes June 2017

**Funding/Collaboration body:** GRDC funded to NSW

DPI Penny Rifkin

**Project Manager:** Amanda Pearce/SARDI with assistance from James Heffernan





#### **DAV00141 Optimising the yield and economic potential of high input cropping systems in the HRZ**

**Project Description:** The project aims to provide agronomists, growers, breeders and scientists with the knowledge and tools to reliably increase the profitability of wheat and canola production in the high rainfall zones of the Southern and Western grains regions

**Dates:** concludes May 2018

**Funding/Collaboration body:** GRDC funding to Dept of EDJTR (Vic)

**Project Manager:** Amanda Pearce/SARDI and Charlie

#### **PIRSA – Cluster Project**

**Project Description:** Cropping Collaboration across the Limestone Coast to enhance innovation and profitability through the value chain

**Dates:** concludes June 2016, extended until June 2017

**Funding/Collaboration body:** PIRSA Project

**Project Manager:** Charlie Crozier

#### **GRDC MFM0006 Maintaining Profitable farming systems with retained stubble in the SE and KI**

**Project Description:** This project aims to improve the level of stubble retention while maintaining profitability of mixed farming systems in the South-East and KI regions. This will be done through quantifying the effect that each of the impediments are having on yield and profitability and then developing practical solutions and extending the results. **Dates:** 2013 – 30<sup>th</sup> June 2018

**Funding/Collaboration body:** GRDC

**Project Manager:** Felicity Turner

#### **MLA – Good Clover, Bad Clover**

**Project Description:** The potential for high levels of oestrogenic clovers in pastures could be resulting in reduced lambing percentages and high numbers of dry ewes being recorded by growers.

**Dates:** March 2017 – November 19

**Funding/Collaboration body:** MLA

**Project Manager:** Tiff Bennett

#### **MLA – Seed Free Lamb with Sherwood Farm Group**

**Project Description:** Can using alternative forage species and newer Clearfield® technologies provide high quality fodder that will finish lambs meeting market requirements in a grass-seed free environment

**Dates:** March 2016 – February 2019

**Funding/Collaboration body:** MLA Project, SASAG

**Project Manager:** Felicity Turner



The project aims to assess the benefits of using alternative grass forage species and newer Clearfield technologies to provide high quality fodder that will finish lambs in a grass-seed free environment. It was implemented at the request of the Sherwood Precision Management Group and focuses on producing high quality, seed free pastures in this environment. In 2016, smaller scale plot trials were initiated as “proof of concept” to ensure that the species to be trialed performed as well as those traditionally grown, and that dry matter production or quality was not going to be lost by incorporating different pasture mixes.

The project will work with the PIRSA enhanced abattoir surveillance system to allow improved producer feedback around the issue, and will also allow for opportunities to work with processors around the grass seeds issue across the region.

**FOR A DETAILED UPDATE ON THIS PROJECT FOLLOW THIS LINK TO OUR WEBSITE;**

<http://www.mackillopgroup.com.au/media/Documents/Seed%20Free%20Lamb.pdf>

## SOWING TIME

Amanda Pearce – SARDI SE NVA Team

Can you believe it, it's that time of the year already, with the SARDI South East NVA team finished seeding their field trials.

SARDI are undertaking a SAGIT (South Australian Grain Industry Trust) funded trial looking at dryland dual-purpose canola for South Australia's high rainfall zone (Project 315).

The trial will evaluate dual-purpose canola at two different times of sowing. The first time of sowing was completed on the 17 March 2017 and the second mid-April. We irrigated the trial with 8mm and then the combined rainfall events of the 20 and 21 March provided a further 38mm.

Plots sown will be grazed (simulated by a ride-on-mower) and taken through to grain. Grazing will occur once plants have anchored and prior to bud elongation beyond 10cm. Dry matter production and grain yield data will be collected and compared between varieties to determine the impact of grazing on grain yield and the use of canola as a dual-purpose crop.

This is the second year into the three-year project.

In 2016 three conventional, three Triazine Tolerant (TT) and six Clearfield (CL) canola varieties were evaluated at two times of sowing (TOS), TOS 1 - 5 April and TOS 2 - 20 May. In 2017 the same conventional and TT lines will be evaluated and three CL canola varieties. Seeding has occurred much earlier than in 2016 a consequence of seasonal conditions and in particular the soil moisture profile.

In 2016 canola yields were low, but were reflective of the season and the co-operating growers adjacent paddock. The dry matter production was lower than anticipated and lower than what has been reported in previous research. The waterlogging and high variability of the site has confounded the results, with varieties not reaching their full potential in DM production and grain yields.

Hopefully the earlier sowing date in 2017 will give the dual-purpose winter-canola types the opportunity to reach their full potential.

The SARDI Team looks forward to working with MFMG and its grower members in 2017.

See you in the paddock



The seeding of the first time of sowing (17 March 2017) of canola for the SAGIT funded trial at Bool Lagoon

## GOOD CLOVER BAD CLOVER

Following feedback from a MacKillop Farm Management Group Productive Pastures for Sheep field day in September 2016, funding has been secured from MLA for a project 'Good Clover, Bad Clover' which will focus on upskilling producers on oestrogenic clover identification and the implementation of practices to improve lamb marking rates. The project will be run in partnership with AgKI.

### Background:

Around the 1960's, oestrogenic clover was a major issue on many properties and resulted in severely low lambing percentages, significant research was undertaken at the time regarding fertility issues in ewes, and also on wethers which can appear to lactate when grazing oestrogenic clovers. Despite the extensive research undertaken over those earlier years, it is now very difficult to find up to date, farmer friendly information on the issue and how to address it. With a new generation of producers, lessons learnt from earlier research and extension have been largely forgotten and skills lost in managing the issue.

Over the years, the focus on oestrogenic clovers (or 'bad' clovers) has reduced and it is highly likely that high levels of oestrogenic clovers in pastures could be resulting in reduced lambing percentages and a higher than necessary number of dry ewes. Lambing percentage is a key profit driver for prime lamb enterprises, however the variation in lambs scanned and lambs marked is enormous. Whilst management via feed and ewe condition score are key factors influencing lambing percentages, there appears to be 'other' issues contributing to lower than expected lambing percentages in these areas.

### The Project:

Oestrogenic clovers have recently been identified in pastures on properties in the South East and Kangaroo Island as well as in the Barossa, Adelaide Hills and lower Eyre Peninsula. It is suspected that there has been a slow buildup of oestrogenic clovers given the recent dry years (particularly in the South East), which have favoured these clovers. The oestrogenic clovers tend to be hard seeded, short season varieties and are less palatable than many of the non-oestrogenic ('good' clover) varieties. This project will aim to quantify the issue of oestrogenic clover in the South East and Kangaroo Island and up skill producers in the identification of oestrogenic clover species.

MFMG will undertake a preliminary benchmarking survey of reproductive performance. Pasture assessments will be undertaken in Spring on focus farms to establish whether oestrogenic clover may be a contributing factor to poor conception rates and lamb marking rates. Property management plans will be developed by each producer. These plans will include the identification and application of strategies to reduce or eliminate issues associated with oestrogenic clovers. The aim being to upskill producers in identifying the bad clovers and implementation of practices that will increase 'scanned in lamb' numbers, increase marking rate and reduce the number of dry ewes.



**For further information, please contact Tiffany Bennett - 0488524609 [tiffany.bennett@sa.gov.au](mailto:tiffany.bennett@sa.gov.au)**



## MFMG AND REEDY CREEK MID SE IRRIGATORS ALKALINE SOIL FIELD DAY AND PROJECT SCOPING WORKSHOP



Dr Melissa Fraser (PIRSA Rural Solutions  
SA) [Melissa.Fraser@sa.gov.au](mailto:Melissa.Fraser@sa.gov.au)

Twenty six farmers and consultants recently attended a workshop at Reedy Creek to discuss production constraints on alkaline soils of the South East. Many of the alkaline inter-dunal plains were represented on the day with farmers coming from Keith, Conmurra, Avenue, Millicent, Naracoorte, Kingston and Reedy Creek. The day commenced with Dr Melissa Fraser (PIRSA Rural Solutions SA) providing an overview of the geology of the SE and how and when the numerous dune ranges and interdunal plains formed over the last 800,000 years. The resultant soil types of the plains were then discussed, from shallow dark clay loam over limestone to deep cracking clays. A bit of soil chemistry followed with the basic concepts of pH, salinity, sodicity and dispersion presented. Phosphorous availability on clay-rich alkaline soils was also a key talking point. Next on the agenda were two paddock visits to inspect soil pits and discuss soil test results, the first to a dryland pasture at David Lloyd's, followed by a flood irrigation bay at Josh Hancock's.

The pits had been dug to intercept areas of 'good' and 'poor' pasture growth; it became quickly evident that the 'good' actively growing pasture occurred on seams of deep soil or where the underlying shallow limestone rock was fractured, allowing root access to the water table below (within 0.4m). Key differences between the sites included lower salinity in the soil at Hancock's, owing to the lower EC of the irrigation water used there (in comparison to the EC of the shallow unconfined aquifer water). Despite this, the salinity of the soil at both sites was still high enough to impair the production of salt sensitive crops and pastures such as beans and some clover species. Phosphorous availability was also low to moderate as indicated by both the Colwell P and Diffusive Gradients in Thin-films tests (DGT). Exchangeable sodium percentages were greater than 6% in most cases at both sites, indicating that the soils may be prone to dispersion and waterlogging (sodicity) in some years and seasons.

The key take-home messages from Hancock's was that irrigation should be scheduled to meet the needs of the driest parts of the paddock to reduce the development of bare patches of soil that are prone to evaporation and the accumulation of salts.

An afternoon brainstorming session was then held to identify production constraints and project ideas. The common themes presented by each of the small groups included:

- Alternative grass and legume pasture species – particularly Messina and summer active brassicas (fodder beets and tillage radish)
- Optimising pasture productivity and utilization – nitrogen use
- Forms, rates and timing of phosphorous fertiliser and P tie up in the soil
- Trace elements and foliar fertilisers
- Shallow limestone rock – how to break it without bringing it to the surface
- Gypsum – how, when, where, rates



Dr Fraser worked through these ideas and delivered a second follow-up meeting at the Reedy Creek hall on Wednesday 12 April; sodicity and gypsum, Messina and rock breaking were the main focus of discussions. Messina trials have subsequently been established at three sites across the SE, gypsum and inoculants are being trialled on beans, alternative trace element formulations are being explored and a field walk will be held in late spring to inspect and discuss. Mel was supported on the day by Daniel Newson (Natural Resources SE) and Tiffany Bennett (Rural Solutions SA) in addition to the Reedy Creek Mid South East Irrigators and Mackillop Farm Management Groups.



# MACKILLOP FRANCES CROP WALK

**TUESDAY 4th JULY 2017**

**Chris & Tim Fry's Frances from  
8.00am—9.00 am**

- *James Hawkins, update on his PHD topic Sub Soil Composting*
  - *MFMG Wheat, Barley & Beans*
    - *NVT Canola & Oats*
- *Elders evaluating new pre emergence in TT canola for the control of Rye Grass & Radish*

**Directions**

Head 16km out the Gap Rd from Frances, turn right onto 74 Walkington Hills Rd first entrance on your left. Please note, if wet use main drive







### Enhanced Abattoir Surveillance and Rib Fractures in Lambs

Join us for a webinar on Jul 05, 2017 at 6:00 PM ACST.

**Register now!**

<https://attendee.gotowebinar.com/register/522192540340383747>

This webinar provides the opportunity to hear from two meat industry experts.

Kirsty Cordon (PIRSA) will speak about the PIRSA Enhanced Abattoir Surveillance Program.

Colin Trengove (University of Adelaide) will speak about how Rib Fractures occur and prevention strategies.

Did you know that in South Australia:

- Rib fractures have long been recognised as a cost to processors, but few abattoirs provide trace back to lamb producers
- A recent survey at the Bordertown abattoirs found over 90% of lamb consignments had some lambs with rib fractures (ranging up to 18% prevalence)
- Rib fractures mostly occur as young lambs associated with handling and/or mineral deficiencies

Learn more at this free webinar.

If you cannot attend on the night, please register and you will be sent a recording afterwards.

Brought to you by Limestone Coast Red Meat Cluster. For more information about the LCRMC or to sign up for our e-news please visit the website, [www.limestonecoastredmeat.com.au](http://www.limestonecoastredmeat.com.au).

This webinar is facilitated by Rural Directions Pty Ltd.

After registering, you will receive a confirmation email containing information about joining the webinar.

[View System Requirements](#)



# MFMG FIELD DAYS

We look forward to seeing you at this year's Keith and Conmurra Field Days or join us for one of our crop walks at Sherwood, Wolseley and Millicent. The first one will be held on July 4 at Frances. For more details go to our website or keep an eye on the weekly emails for updates.

## Contact Us

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