

LIEBE GROUP NEWS

February 2021

Volume 24

Issue 1



What's Inside



Soil Moisture & Weather Station Network



Crop Updates & Trials Review Day



Getting Your Farm Finance Approved



Green on Green Spraying - the Revolution has come to WA



The Liebe Group mission is to facilitate grower prioritised research, development and extension to support our members to be profitable and sustainable.

From the Cover

2021 Main Trial Site host Matthew Hyde. This years site is located in Dalwallinu.

DIAMOND PARTNERS



Rabobank



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FROM THE EXECUTIVE OFFICER

KATRINA VENTICINQUE

WELCOME to the first newsletter for 2021!

The Liebe Group team have been busy preparing for what we expect to be a very jam-packed and exciting year for our members and the local agricultural community.

Kicking off the season is the annual Crop Updates and Trials Review Day on Wednesday 10th March. Thanks to our fantastic partners and valued industry networks, we are able to offer a program full of up-to-date and relevant information to assist you in your farming enterprises. More detail about this year's event can be found on page 12.

I would also like to acknowledge the Grains Research and Development Corporation (GRDC) for supporting the Crop Updates, along with AGT for kindly sponsoring the sundowner.

The 2021 AGM is scheduled for the morning of the Crop Updates at 9am and all members are encouraged to attend. The Liebe Group 5-year Strategic Plan is also being reviewed this year, which marks a great time to get involved and have input into the direction of the group moving forward. More information on this process can be found on page 4.

Planning is underway for the Main Trial Site at Harry, Jane and Matt Hyde's property just outside of the Dalwallinu town site. A comprehensive IMI-residue trial was implemented last year and the list of research priorities for the site is being compiled by the R&D Committee to round out the trial program.

On another exciting note, the R&D Book showcasing the trials from the 2020 season is ready! Please feel welcome to pop into the office to grab your copy over the next week, otherwise keep your eyes out in your mail box.

The Liebe team look forward to catching up with you all at the upcoming Liebe events and would love a visit anytime you're around the Liebe office for a coffee and catch-up to share any ideas, thoughts and feedback you may have.



GOLD PARTNERS



SILVER PARTNERS

Syngenta

Pacer Legal

Adama Australia

GrainGrowers

Nutrien Ag Solutions

Refuel Australia

Nufarm

Intergrain

Boekemans Machinery Dalwallinu

Australian Grain Technologies

FMC

Carbon Ag

McIntosh & Son

OPPORTUNITY TO
HAVE YOUR SAY!

THE Liebe Group will be undertaking a review of its strategic plan in 2021, providing an opportunity for members to identify the future challenges and opportunities for farming enterprises in our region and have input in the direction of the group over the next five years.

Strategic planning has always been a strong focus for the Liebe Group since its inception in 1997 and has become part of the group’s progression and succession over the years. Our strategy has been reinforced by continual improvement and evaluation of impact and success and will continue to provide the guidance to staff in operations and planning.

The review process will commence internally next month with staff reviewing the current planning in relation to achievement of targets, summarising activities and financials, and SWOT. We will consult with all key stakeholders, including a survey and hosting member crossroads workshops in four locations across our membership in July. The new strategic plan will be launched at the Spring Field Day in September.

More information will be provided as we work through the review process. Contact the office if you have any questions or would like to provide input.



Liebe Group stakeholders reviewing the Strategic Plan in 2017.



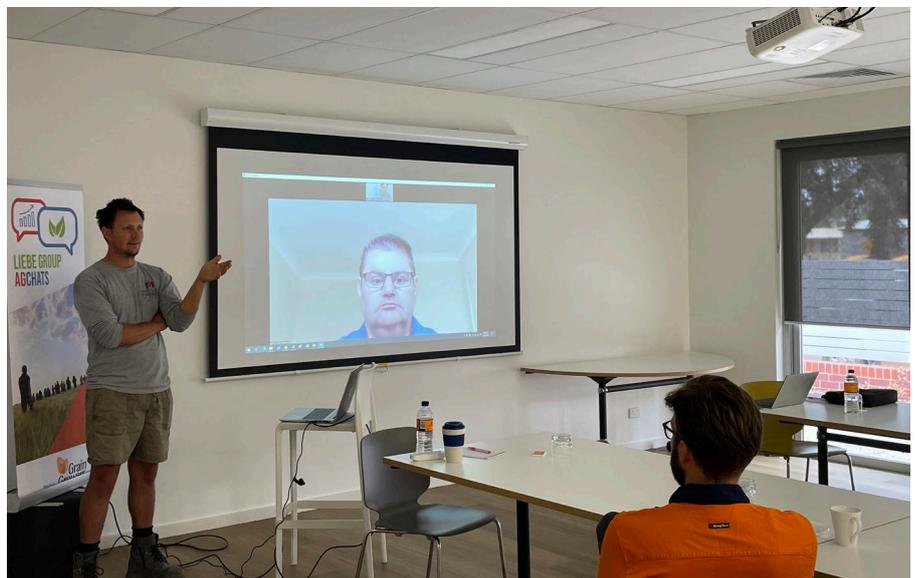
AGCHATS KICK OFF FOR 2021

With February marking the end of summer holidays, the Liebe Group hosted the first AgChats workshop for the season. Eight Liebe Group members came together this week to learn the basics of alternative insurance options for their farm businesses. Liebe Group farmer Dylan Hirsch, Latham, presented alongside Gallagher Insurance broker Norm Trethewey to provide both a grower perspective and technical understanding of these weather driven risk management opportunities.

Reflecting back on his Nuffield Scholarship travels, Dylan highlighted the achievement of the northern wheatbelt grains industry in facing the production volatility including various economic and climate challenges that are present.

It was discussed that Multi-Peril Crop Insurance (MPCI) works well outside of Australia due to less moral hazard i.e. the risk that the insured organisation will change their behaviour to make more claims and less adverse selection i.e. the risk that the insurance program will only attract the riskier clients. These terms helped participants understand the ‘why’ behind the lack of success MPCI has had in Australia.

Weather derivative products were also a key topic of discussion, with Dylan emphasising the need to determine specific goals for your farming enterprise. Norm provided technical aspects behind how these products work, with the response occurring when an external index trigger is met rather than when a physical loss is incurred.



Dylan Hirsch and Norm Trethewey (via Zoom) presenting.

A recommended ingredient list to start looking into these options include yield history, nearest BOM rainfall figure, budget and an excel spreadsheet.

Participant Casey Shaw from Buntine said that

“The AgChats workshop was very informative and helped us better understand the tools available. I found it very beneficial as we are always looking at ways to manage seasonal variability.”



Working together
in Agriculture

MEMBERS NEWS

Given the COVID-19 situation in WA, the workshop was conducted in line with all government regulations and safety precautions. The Liebe Group team sincerely thank the attendees for their assistance in these matters.

Planning for the AgChats topics for the remainder of the year is also underway. Thursday 4th March will see Judy Storer (Liebe Group) and Bob French (DPIRD) discussing lupin seed integrity and mechanic handling impacts, delving into the results from the GRDC-invested project. Additionally, AgChats workshops will be planned around carbon farming, science of pre-emergent herbicides, herbicide and fungicide resistance, farm safety, communication and management and finance Q&As.



Participants of the MPCl AgChats keeping COVID safe.



Dylan Hirsch chatting with participants

The Liebe Group would also like to acknowledge the ongoing support by GrainGrowers of the AgChats series. The AgChats were launched in early 2019 to provide members access to timely, relevant and innovative information in a more interactive and engaging format. These workshops encourage peer to peer learning for targeted agronomic and business management topics relevant to farm businesses in our region.

GROWERS GET HANDS ON WITH PRECISION AG

PRECISION agriculture was the focus of a recent workshop hosted by the Liebe Group in early February. The strategic use of precision ag (PA) technologies in broadacre farming can provide a flexible tool for growers to maximise their productivity helping put the right inputs in the right place.

Participants were given training to help get ‘hands on’ with PA by experienced PA consultant Bindi Isbister from Agrarian Management. Local grower Daniel Birch also joined in to discuss his experiences using PA on his farm in Coorow.

Bindi said that “Daniel’s presentation was great! It really reinforced my key messages and it was good to hear it from a grower’s perspective with the opportunity for other growers to ask questions about the practical use of the technologies. The workshop also highlighted a challenge in PA in that everyone has different hardware/software”.

With a variety of machinery, software, imagery options, inputs, data, providers and integrations the technology can seem like a minefield to navigate. Bringing these aspects into some useful tips and tricks, Bindi was able to highlight important advice such as not letting PA compromise seeding and to always ground truth the outputs.



Growers completed interactive exercises using an aerial paddock on their farm and their own knowledge to illustrate soil types and constraints, as well as drafting their own PA implementation plan.

Local women learning about the basics of implementing successful precision agriculture

Todd Carter from Xantippe said ‘the workshop showed how much information we as farmers are collecting and how much more there is to learn to optimise our input management moving forward. I look forward to the next workshop later this year”.

This workshop was supported through the Grains Research and Development Corporation, the Grower Group Alliance and the Society of Precision Agriculture Australia.



Local growers getting hands on learning with Bindi Isbister.





SEEING INTO SOILS

SOIL MOISTURE & WEATHER STATION NETWORK

SEEKING EXPRESSIONS OF INTEREST FOR GROWER PARTICIPANTS!

The Liebe Group has received project funding to implement a soil moisture probe and weather station network in the region.

This project will establish a collaborative network of ten sites that will provide real-time information on soil moisture and weather data for informed grower decision making.

Additionally the project activities will support capacity building for members to better understand the information gathered from the technology and how the data can benefit their farming enterprise.

THE TECH

Supported by experienced agtech provider Wildeye, each site will include:

- 1 x 80cm EnviroPro Soil Moisture Probe;
- 1 x Dryland Weather Station; and
- Real-time access to data through mobile app.

The commercial value of this complete set up per site is \$6,700 +GST. Given the bulk nature of this project and the funding support, this cost has been heavily subsidised.

There is also opportunity for additional stations to be set up per farm business, however this would be at additional cost.

GROWER CONTRIBUTION

Participants in this project will own the equipment, and be required to:

- Identify a suitable paddock site for the installation of the technology. This will be installed prior to seeding this year (2021);
- Provide paddock use information throughout the season; and
- Contribute towards the capital equipment purchase for the soil moisture probe and weather station. This will be at a reduced cost of only **\$3,800 +GST per grower.**

LIEBE GROUP CONTRIBUTION

Throughout 2021 & 2022 Liebe Group will support:

- All equipment installation coordination and costs;
- Coordination of in-depth soil classification;
- Annual fees for professional servicing, calibration and network subscription*; and
- Assistance to growers to access and interpret the data.

*Ongoing maintenance/subscription (approx. \$480/year) fees after project completion to be determined.



WOMEN OF LIEBE

SARAH BARNES

MIAMOON FARMS

THE Liebe team caught up with one of the women of the Liebe Group to chat about their background, involvement in the group and their own goals and aspirations.

Note: Views stated in the Women of Liebe articles are strictly those of the individual and do not necessarily represent those of the Liebe Group.

Tell us a bit about yourself – what is your background?

I grew up in the small country town of Kulin, where I lived with my family before going to Santa Maria boarding school in Perth which I really enjoyed. Three of my friends from boarding school actually ended up marrying Dally boys! After school I lived in Perth for six or seven years and I love to travel so I would go travelling then come back and get a job until I could travel again. At one point I lived in America for about six months.

What is your role in your farm business? How long have you been in this role for and how do you enjoy it?

Even though I grew up in the country, I didn't grow up on a farm so it's been a big learning curve. My time working for Liebe really helped out with that. I started helping out with the books and payroll about a year and a half ago which has been interesting to learn.

It would be great to one day be based on the home farm and feel more connected to the day to day side of things.

Peyton (5), Xavier (3) and Madison (9 months) also keep me pretty busy.



Sarah with husband Gareth and children Peyton, Xavier and Madison.

What are the biggest opportunities and challenges for you and your farm business?

Where we live, we have so many like-minded people across a wide age range and they are all looking out for each other's best interests. They know what you are interested in and let you know when there are things going on.

The biggest challenge for me has been getting used to living on the farm and not having the interaction every day that I had when living in town.

What do you enjoy most about living in a rural area?

I really enjoy the people. I think it takes a different sort of person to live out here and everyone is super welcoming and accepting. One of the questions I got asked when I first moved here was do you play netball or hockey? The sporting teams are such a big part of the community.

I also think it's a really good place to raise a family.

What has been the involvement you have had with the Liebe Group? What have you gained from this?

I started off working in the admin role with Liebe when I first came here which was a good way to meet everyone. Liebe connected me with a couple of mentors and I was later involved in the mentor program which I really appreciated. Helping out with the events and being on the committees really helped with my confidence. It also really helped my farming knowledge with all the reading resources and workshops.

Who or what inspires you the most?

Gaz, because he loves what he does so much and I get really jealous of that. He always tries to better himself by being on committees and trying to get more information to expand his knowledge. He has such a strong passion for the farm.



LOOKING AFTER YOUR LUPINS: MACHINERY IMPACTS ON SEED INTEGRITY

THURSDAY 4TH MARCH

3:30 - 5PM | LIEBE GROUP OFFICE | BBQ & BEERS TO FOLLOW

AN IN-DEPTH DISCUSSION ON LUPIN ESTABLISHMENT IN THE LOW AND MEDIUM RAINFALL ZONES

Join Bob French, DPIRD, and Liebe Group R&D Coordinator Judy Storer for a comprehensive look into the results from the GRDC supported project “The effect on lupin establishment as a result of reduced seed integrity”.

Gain a better understanding of the factors limiting your lupin crops including:

- Seeding
- Storage
- Harvest activities
- And more!

TO REGISTER OR FOR MORE INFORMATION

Liebe Office: 9661 1907
Email: admin@liebegroup.org.au
Web: <https://tinyurl.com/LEP2021>

SUPPORTED BY



CROP UPDATES & TRIALS REVIEW DAY

Wednesday 10th March 2021 | 9:30am to 5pm
Recreation Centre, Dalwallinu



TRIALS REVIEW | 9.30AM MEMBERS ONLY

The Trials Review session is an annual members only event that links growers with industry representatives and researchers, allowing first-hand details and results from local trials and grains research to be discussed.

- Sessions include cereal and canola National Variety Trials, various herbicide, legume and soil health trial results.

COST

Members	Free
Non-members	\$100
Students	\$30

Afternoon tea, lunch and resources provided

CROP UPDATES | 12.30PM ALL WELCOME

Prepare for the season ahead with a selection of locally relevant presentations that highlight the latest research and technologies in the grains industry. Topics include:

- New chemistries in 2021 - *Dave Scholz, Elders Scholz Rural*
- Green-on-green spraying technology - *Guillaume Jourdain, Bilberry*
- Update on the GRDC Grower Network - *Julianne Hill, Grower Network*
- CBH Focus Areas - *Jimmy Wilson, CBH Group*
- Experiences from the Gen Y Paddock Challenge - *Local grower panel*
- Dryland Legume Pasture Systems - *Angelo Loi, DPIRD*
- Net Emissions: Is Ag in or out? - *Lachie Monsbourgh, Rabobank*
- How are you depreciating? - *Keiran Sullivan, RSM*
- Technology for the future - or just marketing hype? - *Ben White, Kondinin Group*
- Research in the region - *Liebe Group*

TICKETS

Register online
tinyurl.com/LGUpdates2021
or via the Liebe Group Office

Tickets also available
at the door

QUERIES

Ph: 08 9661 1907
E: admin@liebegroup.org.au

**FAMILY FRIENDLY
SUNDOWNER FROM 5PM**

KINDLY SPONSORED BY



EVENT SPONSOR



DIAMOND PARTNERS





MIFWA



BLENDDED ONLINE MENTAL HEALTH FIRST AID REGIONAL COURSE

**LEARN SKILLS AND GAIN CONFIDENCE
TO ASSIST PEOPLE EXPERIENCING
MENTAL HEALTH PROBLEMS.**

The Blended Online Mental Health First Aid Course for adults living in regional grain growing communities across WA teaches participants how to assist a friend, family member, or other members of the community who may be developing a mental health problem or experiencing a mental health crisis.

COURSE INFORMATION

SESSION DATES & TIMES

Stage 1 - Complete eLearning (5 to 7 hours self-paced)

Stage 2 - 8 June 2021, 9:30am to 12:00pm

ZOOM online

Stage 3 - 15 June 2021, 9:30am to 12:00pm

ZOOM online

This free training for regional grain growing communities across WA is proudly supported by CBH Group and MIFWA with thanks to the CBH Regional Mental Wellness Program.

To register: Contact Janine at janine.ripper@mifwa.org.au or call 08 9237 8900

Note: All components must be completed to qualify as an accredited Mental Health First Aider for three years.



LIEBE GROUP PRESENTS

MYERS BRIGGS TYPE INDICATOR WORKSHOP



WANT TO KNOW MORE ABOUT YOUR PERSONALITY AND HOW COMPATIBLE YOU ARE WITH OTHER PEOPLE?

The Myers Briggs Type Indicator is the most widely used personality assessment in the world!

AgConsulting Co Director Jeanette Long will help you understand the different personality types, and how to use this understanding to work effectively in a team environment. Topics for discussion include:

- Communication skills
- Time Management
- Leadership skills
- And more!

**THURSDAY 1ST -
FRIDAY 2ND JULY**

LIEBE GROUP OFFICE

\$120 per person
\$100 for each subsequent person
in the farm business

REGISTER TODAY!

Ph: 9661 1907

E: admin@liebegroup.org.au

 Ag Consulting Co.
Innovative Growth



Australian Government

**National
Landcare
Program**



CWBA

Central Wheatbelt Biosecurity Association Inc

www.cwba.org.au



FREE RABBIT BAITS

Now is the time to bait in rabbit hot spots while numbers are low!

The CWBA is offering to hold bait mixing days for landholders in the Shires of Koorda, Dalwallinu, Perenjori and Morawa in late February-March 2021.

1

CWBA WILL PROVIDE :

- Assistance with and pay the cost of obtaining an Restricted Chemical Permit (if you do not already have a current permit).
- The supply of poison one shot 1080 oats that will be mixed with the landholders oats (you supply) for the landholder to trail out on your property.
- A LPMT on-site at a pre-arranged bait-mix day* close to you!

2

REGISTER YOUR INTEREST TODAY!

By contacting CWBA Executive Officer:

Linda Vernon Mobile: 0473 163 050 Email: eocwba@outlook.com

**Bait mix day will only go ahead in each Shire depending on numbers of landholders registered so please register as soon as possible.*

Join NACC NRM for a
SOIL CARBON ROAD SHOW
DALWALLINU
22ND MARCH
Liebe Centre

9am-12.30pm followed by an optional site visit/field walk

Building soil carbon on-farm, how-to & why it's important
 Benefits, constraints and what's next in this space

Refreshments provided!



Guest speakers include:

Emeritus Professor Lyn Abbott
Associate Professor Frances Hoyle

**If you are interested in attending, please contact
 Annabelle at annabelle.garratt@nacc.com.au or (08) 9938 0100.**

This event is supported by NACC NRM and the the Liebe Group through funding from the Australian Governments National Landcare Program



**AUSTRALIAN
AGRICULTURE LOOKING
TO PROFITABLE YEAR
AHEAD - INDUSTRY
OUTLOOK**

Lisa Curtis
Assistant Marketing Manager
Rabobank



Rabobank

Australia’s agricultural sector is set to enjoy an overall profitable year ahead – underpinned by high commodity prices, positive seasonal conditions and low interest rates, and despite expected continuing trade tensions with China – according to a newly-released industry outlook.

In its flagship annual Agribusiness Outlook for 2021, global agribusiness banking specialist Rabobank says a generally profitable 2020/21 season for most Australian farmers will not only kick start recovery from the recent severe east coast drought, but also put the sector in a stronger position to navigate a number of major transitions it will face in the year ahead – the pandemic recovery, reducing reliance on China and increasing sustainability.

Report lead author, Rabobank head of Food and Agribusiness Research Tim Hunt said despite the turbulent environment facing the world as 2021 gets underway, global demand for food and agribusiness products remained “surprisingly firm”, while weather patterns were also favouring Australia ahead of competitors when it comes to production.



Rabobank head of Food and Agribusiness Research Tim Hunt

“In a current global environment marked by the pandemic, political tensions and tradewars, demand for food and agri products has remained unexpectedly strong,” he said.

“And despite the punitive actions of China on Australian agriculture, high agricultural commodity prices, low interest rates and positive seasonal conditions are underpinning a positive outlook for most farmers in 2020/21.”

Turbulent Place

The world is a “turbulent place” as Australia’s agricultural sector enters 2021, the Rabobank report says, impacted by factors including the continuing COVID-19 pandemic and lockdowns, the completion of Brexit and the emergence of the US from a tumultuous presidency, as well as continuing trade wars, which are distorting the direction and price of traded goods.

“Market intervention is back in vogue, with grain-exporting countries reconsidering export quota and taxes as they fret over food security, while elsewhere port strikes have impeded trade flows,” the report says.

Demand for agricultural commodities though is being supported, with several major importing countries appearing to be stockpiling to mitigate risk of shortages and by unprecedented support from governments helping to offset the impact of the pandemic on employment and incomes, and therefore spending on food.

PARTNER UPDATES

And while foodservice channels remain compromised in many markets due to pandemic lockdowns and restrictions, the otherwise strong demand for food and agri commodities is seeing global prices supported – which is good news for Australian farmers, Mr Hunt said.

Weather deals 'winning hand'

Weather has also finally turned in the favour of Australian farmers, the report says, “with mother nature dealing Australian farmers a winning hand”.

Above-average rainfall in 2020 had set up a very good winter crop along with higher-than-usual moisture to open 2021 and significantly-increased storages across the Murray Darling Basin.

“This is improving broad-acre farm incomes, boosting locally-grown feed and underpinning better water allocations for irrigators,” Mr Hunt said.

At the same time, the report says, while the La Nina weather conditions have been positive for much of Australia, they have “crimped the production prospects of competitors offshore”, with large parts of the US, Latin America and eastern Europe unusually dry.

This had helped to significantly tighten international markets and drive up global commodity prices, Mr Hunt said.

China tensions

While “mother nature” is supporting Australian farmers at the moment, the report says, “the Chinese government is in a less generous mood”, with tensions between the two countries showing no sign of easing.

“Australian barley, wine and timber exports into China remain effectively blocked as we enter 2021,” Mr Hunt said, “while informal impediments appear to be constraining shipments of cotton and lobsters.”

The report says the loss of some of Australia’s agricultural trade with China is now evident in data, with November 2020 shipments to China falling 33 per cent below the previous year’s (albeit unusually large) value. Although, Rabobank notes, a 10 per cent November month-on-month fall in shipments to China is probably more representative of the impact of the geo-political tensions.

However, while the spectre of further loss of access to China hangs heavily over the Australian agricultural industry, Mr Hunt said, “the data to date suggests that many products are still flowing through”, with AUD 800 million worth of food and agri products still shipped to China in November last year and preliminary data showing exceptionally strong wheat exports, at least, in December.

Major transitions ahead

Reducing the sector’s reliance on the Chinese market is one of three major transitions the report identifies that will need to be negotiated by Australian agriculture in the year ahead. The others are recovery from the effects of the COVID-19 pandemic and adjusting to a market more focused on sustainability.

“Whether China continues to reduce its purchases of Australian food and agri products in coming years – as we think likely – or not,” Mr Hunt said, “the risks of supplying this market have definitely increased.”

“2021 will likely mark a watershed year, in which Australia starts to reduce its reliance on China, voluntarily or otherwise.”

Positively, the report says, prevailing global market settings – with strong demand, limited supply and high prices for agricultural commodities – make this challenge seem less daunting at the current time.

“But reorientation to reduce reliance on China is a multi-year challenge that will still be ongoing when the market cycle inevitably turns again,” Mr Hunt said.

The year ahead would also require a delicate transition as governments looked to withdraw assistance measures for consumers that had propped up end demand for food and fibre during the global pandemic.

“If this is messed up, we could easily see demand for food and agricultural products soften during this transition,” Mr Hunt said.

An increasing focus on environmental sustainability also looms large in 2021, the report says.

“COVID-19 took the headlines from climate in 2020, but it didn’t alter the commitment of key players throughout the F&A (food and agri) supply chain to mitigate climate change, prepare for its risk and find mechanisms to reduce and/or recoup the costs of adjustment,” Mr Hunt said.

“If the pandemic wanes in late 2021 as hoped, this quest will again rise to the fore, creating both opportunities and challenges. And it may prove to be the greatest of all the transitions facing the sector.”

Commodities

Wheat – strong global demand set to keep prices firm through the year.

Feed grain – rising global feed grain demand and supply constraints to support prices in 2021.

Beef – a rebuild year, with favourable conditions triggering increased breeding numbers and reduced slaughter keeping cattle prices firm.

Sheepmeat – lamb prices expected to remain strong but fall short of recent record levels, given weaker demand and increasing lamb numbers.

Wool – a forecast recovery in global consumer demand set to lift prices.

While for agricultural land, the report says, “the big season will accelerate demand for properties and push up prices further in 2021”.

PLANNING YOUR ASSET PURCHASE

Kieran Sullivan
Director
RSM Australia



WITH most businesses commencing the budget process for the coming year, many of you will be forecasting the purchase of assets required in the business for the next 12 months. Have you considered how you will be purchasing these assets? Do you plan to pay cash for them, are you going to finance the purchase with a chattel mortgage or business loan or are you planning on leasing the asset? Outlined below are some key points to consider with each of the options above including looking at cashflow requirements along with GST and income tax implications.

Cash

Cashflow	GST	Income Tax
<ul style="list-style-type: none">You pay for the asset directly from funds in your bank account.This leads to a permanent difference in your cashflow at the time of acquisition.	<ul style="list-style-type: none">As long as the asset acquired is an eligible business asset, GST would be claimable.GST is claimed back via your Business Activity Statement which would either be completed monthly, quarterly, or annually depending upon your business.	<ul style="list-style-type: none">A tax deduction would be claimed via asset depreciation for the GST exclusive value in the financial year in which it is purchased.Under current income tax legislation (if you are classified as a small business* for income tax) you are able to claim the value of any asset purchased as a 100% tax write off up until 30 June 2022.

Chattel Mortgage/Bank Loan

Cashflow	GST	Income Tax
<ul style="list-style-type: none"> You finance the asset purchase via funding from a financial institution. Loan funding is typically for 3 – 5 years depending upon the asset purchased. There is no difference to your cashflow at the time of acquisition if the asset is fully financed. As you make repayments on the loan, there is a cashflow impact for your business. Repayments can be structured as monthly, annually or a different time throughout a year. Interest is payable on the loan and should be factored into the loan repayments. 	<ul style="list-style-type: none"> You must own the asset and title must pass to your business although the purchase may be funded via the bank. As long as the asset acquired is an eligible business asset, GST would claimable. GST is claimed back via your Business Activity Statement which would either be completed monthly, quarterly, or annually depending upon your business. 	<ul style="list-style-type: none"> A tax deduction would be claimed via asset depreciation for the GST exclusive value in the financial year in which it is purchased. Under current income tax legislation (if you are classified as a small business* for income tax) you are able to claim the value of any asset purchased as a 100% tax write off up until 30 June 2022. Any interest payable on the finance can be claimed as a tax deduction.

Lease

Cashflow	GST	Income Tax
<ul style="list-style-type: none"> Under a lease arrangement you are renting the asset. When you make the rental payments there is a cash outflow. A lease / rental arrangement will typically run for 1 – 3 years. At the end of the lease arrangement there is usually a “residual” payment required for you to acquire the asset should you wish. This need to also be factored into any cashflow. 	<ul style="list-style-type: none"> The asset is not yours, it belongs to the leasing company. As a result, there is no GST impact initially. GST is claimable on each lease payment when they are made. GST is also claimable on any residual payment at the end of the lease when you acquire the asset. The GST is claimed in each BAS period in which the lease payments or the residual is made. 	<ul style="list-style-type: none"> A tax deduction is claimable for each GST exclusive lease payment made. No depreciation is claimable on a leased asset. When the residual payment is made and the asset is acquired, it would be eligible for a tax deduction via the instant asset write off allowance rules outlined above up until 30 June 2022 or the depreciation rules if acquired after that date.

* Between 6th October 2020 and 30 June 2022, a small business for income tax purposes is an entity that has a turnover of less than \$5 billion.

When planning and considering your asset purchase requirements in the budget process, it is important to remember not only the cashflow implications for your business but also the associated tax implications that flow from the acquisition. Making the wrong decision at the wrong time can end up with unintended tax or cashflow consequences.

CLOSING THE HARVEST LOOP WITH NEW REPORTING TOOL

Amie Bolton
Lead Corporate Affairs
CBH Group



CBH Group has introduced a new reporting tool for growers that sums up their deliveries for the season in one easy view providing some insights that may help growers to prepare for the coming season.

Called 'My Dashboard', the tool is available to all growers who have delivered to CBH with an initial report that provides a snapshot of their deliveries for the 2020/21 season.

The dashboard brings together the grower's Paddock Planner estimates and delivered loads for all their properties, paddocks, varieties, grades and sites. Growers will be able to see a snapshot of hectares*, delivered tonnes and average yield*, plus average load size and cycle time for their deliveries via the CDF app. They can then take a closer look at commodities and grade splits with average yields and quality results.

Growers can also see which loads have an unmatched, missing or unknown paddocks when compared to their Paddock Planner estimates. By surfacing these loads it gives growers an opportunity to update and improve their report results within the dashboard, or any other analytics platforms they may use.

The tool was developed to round out the technology suite – which includes Paddock Planner and the CDF app – that CBH has developed over the past three years and aims to provide growers with the segregations and services they need at their local site during harvest and enable more efficient deliveries. My Dashboard can now provide growers with some key insights into their own season's performance specific to their farm business and right down to a paddock level.

My Dashboard can be accessed via LoadNet, and its recommended growers use Chrome, Firefox or Edge internet browsers for the best experience.

If growers would like some help or want to provide feedback, please email growerservicecentre@cbh.com.au or give CBH a call on 1800 199 083.

*Please note that Hectares and Average Yield only include loads that have a matching paddock estimate with hectares, commodity and variety recorded in Paddock Planner.



GETTING YOUR FARM FINANCE APPROVED

Hayley Bowie
Marketing Executive
Agrimaster



SECURING finance is an ongoing process for many farmers either to renew existing funding arrangements or to finance a large capital acquisition, i.e., additional land or equipment purchase. However, the new rules set by APRA require farmers to provide more information when renewing or applying for finance. This change protects all parties involved. The downside to this is that you as the farmer need to supply a lot more data to apply for the loan - which can be daunting and time-consuming.

Our industry partners made up of accountants, farm consultants and banks have advised that customers are finding it difficult to get finance approved due to the new requirements. To make the process easier, we have created a 3-part eBook series that outlines what the banks want to know and where to find the information for finance applications to be successful.

The first eBook will help you understand the banks' requirements by explaining the 5 C's of farm finance approval - why & what the banks want to know.

Character

Banks want to know that all borrowers and guarantors are honest and have integrity.

Collateral

Banks will consider the value of your business' assets and personal assets of the guarantors as a secondary source of repayment.

Capacity

Banks want to ensure your business can repay the finance. The business needs to have sufficient cashflow to pay expenses and debts comfortably.

Capital

Banks will ask what personal investments you have planned for the business. Injecting capital indicates you have skin in the game.

Conditions

Banks want to understand the condition of the business, the industry and the economy, which is why it's essential to work with a bank that understands the agricultural sector.

The second eBook is a finance approval overview & checklist - a list of everything you need to prepare to get your farm finance approved while the third eBook explains what data is required, where to get the data and how to make it all easier with a few reports from Agrimaster.

To request a copy of the first eBook, visit <https://bit.ly/3rEL7En>

SKELETON WEED CHECK REMINDER - EARLY DETECTION IS THE BEST PROTECTION

Jodie Thomson & Megan Broad
Media Liaison
DPIRD


Department of
Primary Industries and
Regional Development
GOVERNMENT OF
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GRAINBELT farmers are encouraged to keep up paddock searches for the declared pest skeleton weed throughout late summer and autumn.

Department of Primary Industries and Regional Development (DPIRD) project manager Martin Atwell said monitoring should include previously searched and treated skeleton weed paddocks for any late plant finds.

“Early detection is the best protection,” Mr Atwell said. “Skeleton weed can grow quickly, up to 20cm a week, setting seed within days of flowering.”

Mr Atwell said it was imperative that farmers kept an eye on skeleton weed infested paddocks and continued with follow-up monitoring and treatment of infested sites throughout summer and early autumn, to ensure these plants were prevented from setting seed.

“Now is also the best time to search any suspected skeleton weed paddocks, with plants flowering and seeding,” he said.

“The Skeleton Weed Program is currently undertaking its surveillance searching program, using a mix of traditional vehicle searching and drones.”

Skeleton weed program activities are funded by growers through the Grains, Seeds and Hay Industry Funding Scheme.

Skeleton weed has upright and usually leafless stems, which give the appearance of the skeleton of a plant.

It is most recognisable for its bright yellow daisy flowers when flowering during summer and autumn.

Information on skeleton weed and control is available from agric.wa.gov.au/skeletonweed, or contact your nearest DPIRD or Local Action Group.

Any suspicious plants should be reported using MyPestGuideTM Reporter, or to DPIRD’s Pest and Disease Information Service on +61 (08) 9368 3080 or padis@dpird.wa.gov.au.



Skeleton weed is most recognisable for its bright yellow daisy flowers when flowering during summer and autumn. (©2020 DPIRD)

**SKELETON WEED
PROGRAM - HELP IS
AVAILABLE!**

Kate Detchen
Biosecurity Inspector
DPIRD

WITH distinctive yellow daisy flowers, skeleton weed is easy to spot when flowering over the summer months. The flowers quickly develop into fluffy seed heads like dandelions and the seed can be transported on the wind for kilometres. They don't stop at boundary fences, which is why it is so important that you do the right thing by your neighbours and control it if you find it. These weeds can have root systems of up to 5m long which allows for easy access to moisture and continued flowering and seed setting all summer – even without rain!



Distinct yellow flowers quickly turn into fluffy seed heads

With such long a long root system, skeleton weed is highly competitive with crops. Trials in barley have shown that 80% yield loss is possible due to competition with skeleton weed in the crop. The long roots make it impossible to control by hand-pulling, as they will snap if you try to pull the plant up, and all the remaining broken root shoot sections will reshoot and produce more plants on the surface. Grazing is not a viable management option either; plants chewed down to as low as 2cm are still able to set seed. The best control options are herbicides, and these work best on young plants. Old and well-established infestations may require multiple consecutive treatments over a number of years for successful eradication.



Barley: treated post-emergent with Lontrel and 2,4-D amine to control skeleton weed. Apart from this treatment, plots were grown under identical conditions



Barley: no in-crop herbicides targeting skeleton weed. Dark green skeleton weed rosettes are clearly visible throughout the crop. Skeleton weed has starved the barley of water and nutrients



Department of
**Primary Industries and
Regional Development**



Skeleton weed can still flower even when grazed to as low as 2cm



Skeleton weed without the distinct yellow flowers

Although it is manageable in cereal crops, skeleton weed is much harder to remove from canola and lupin crops. There are a range of treatment options available which work best when implemented straight away, and the best option can be found by meeting with a local biosecurity officer sooner rather than later.

It is a really tough weed to control – but you don't have to control it alone. Help to manage skeleton weed on your farm is available through an industry funded assistance program. If you think you may have found skeleton weed, ring your local biosecurity officer to access assistance funded through the Skeleton Weed Program. Your biosecurity officer will:

- Come out to your place to meet you and have a look at the plants and confirm whether it is skeleton weed;
- If you are harvesting when you find it, your biosecurity officer can organise a contractor to search the whole paddock so you can keep harvesting (at no cost to you);
- Once the paddock has been searched and all the skeleton weed has been mapped, you can discuss your plans for the paddock with your biosecurity officer and formulate a treatment plan that is tailored to fit with your program.
- Winter treatment of infested areas is also included in the assistance program, and there are different options available for erosion prone paddocks.
- Quarantine no longer applies to skeleton weed. Instead there is a common sense, flexible approach that can be tailored to fit with your farm.

Your local biosecurity officers are:

Shires of Moora, Wongan Ballidu, Perenjori, Dalwallinu & Koorda - **Kate Detchon 0436 629 587**

Shires of Victoria Plains, Gingin, Chittering, & Dandaragan - **Peter Robson 0491 370 870**

Shires of Morowa, Mullewa, Coorow, Carnamah, Three Springs, Geraldton Greenough, Chapman Valley and Northampton - **Mike Jones 0427 997 146 and David Lisle 0429 889 384**

CSIRO MAPS 1.7 MILLION GRAIN PADDOCKS FROM SPACE

This article has been
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from Australian Grain, Volume
30, No. 5, 2021.

SCIENTISTS at CSIRO, Australia's national science agency, have solved a farming challenge using artificial intelligence to identify the boundary of every individual paddock in Australia's growing region from space - around 1.7 million of them.

The technology has been developed into a new product called ePaddocks, designed to save time for farmers and others in the agricultural sector when using digital services for farm analytics and insights.

Currently, farm management software requires users to manually draw paddock boundaries for every service they use, like satellite-assisted fertiliser application or crop growth monitoring, and they may have to update this information every growing season.

Unlike property boundaries, which are recorded in local council or title records, paddock boundaries aren't historically recorded anywhere.

ePaddocks can identify paddock boundaries from season to season but doesn't identify a particular property or landowner, or what paddock belongs to whom.

CSIRO remote sensing specialist Dr Franz Waldner said ePaddocks was highly accurate, details and available at the touch of a button.

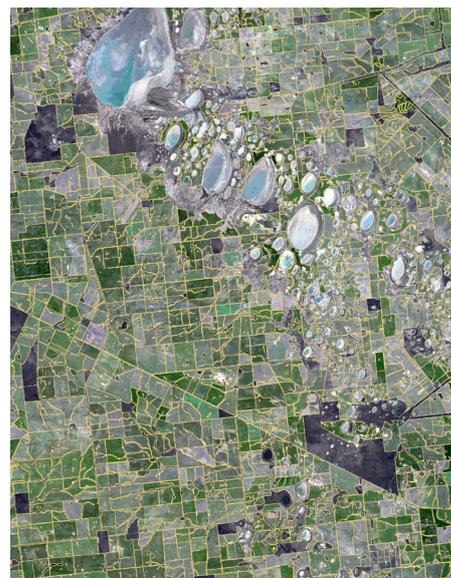
"The satellite images we use, although publicly available, are cumbersome to download, store and analyse by the average person" Franz said. "So we apply our deep neural network and algorithms to produce the paddock boundaries based on vegetation signatures and land features."

"Our method only needs one satellite image taken at any point in the growing season to distinguish the boundaries. It relies on data driven processes and decisions rather than assumptions about what's on the ground."

"Paddock boundaries have been highly sought after in the digital agriculture world for a little while now, but we've tackled it over the past year or so with new technologies and solved it. Our method will see the standard for similar geo-spatial products."

CSIRO experts in agronomy, satellite imagery, data science, software engineering and innovation joined forces and developed the product in record time. The ePaddocks technology could also be used in other countries and to improve land use maps and track species richness.

A free sample of ePaddocks is available to view online. Fully functioning national and state-based versions of ePaddocks are available for purchase on CSIRO's Ag Climate Data Shop (<https://acds.csiro.au>)



Satellite image overlaid by ePaddocks showing the paddock boundaries (in yellow) on 45 x 45 square kilometres of Western Australia. Credit: Copernicus Sentinel data 201

GREEN ON GREEN SPRAYING - THE REVOLUTION HAS COME TO WA

Peter Norris

GREEN on Green (GoG) spraying is the concept of being able to spray only the weeds in a growing crop. The front running example is to be able to spray wild radish in a wheat crop. In some farms in the northern ag region the use of harvest weed seed management, mouldboard ploughing and high spraying capacity have all lead to much lower weed numbers. This heavy focus on weeds for at least a decade now, has driven the numbers to a point where they are now countable per hectare in many instances. These weeds, in particular radish, typically have some level of herbicide resistance. Hence, the frustration for farmers and agronomists, having to apply expensive herbicides across the whole paddock knowing only a small single digit percent of the paddock realistically requires it!

Discussions between Andrew and Rod Messina and Bilberry led to the purchase of an Agrifac boomspray fitted with the Bilberry GoG technology. This allowed Andrew and Rod, and operator Tony Harding, to spray almost their whole wheat program targeting wild radish alone with Bilberry GoG spraying. Across the program there were a couple of paddocks with higher weed numbers requiring a blanket spray.

As with any new technology there are teething issues and these were sorted as they occurred. Boom height, spray setup, droplet spectrum, filled hard drives, software upgrades and algorithm changes were issues that were dealt with as the spray operation progressed. Bilberry are a French tech company founded in 2015 with a focus on using new digital technologies to help farmers and the environment. The focus on optical spray system control has lead the company to move some of it's people to WA to develop GoG spraying systems. This is a real win for WA grain farmers! The Managing Director Guillaume presented to the WA crop updates a few years ago and is definitely excited to be working in our innovative WA grains industry. The Agrifac machine was chosen with Bilberry having been working with them for a number of years in Europe and allowing the GoG Spot spraying system to be incorporated into the boomspray with ease, not to mention their boom stability being ideal for the GoG camera system to operate.



Radish hit by spot spraying

Spot spraying to target broadleaf in wheat was used twice in the 2020 season with 12,000 hectares of wheat sprayed in total. The main weed targeted was wild radish. Also, blue and narrow leaf lupin were developed as a potential target weed for control in a few specific wheat paddocks. For each application

Spot Spraying Efficiency Tests were undertaken monitoring the health of more than a hundred weeds 14 and 28 days after treatment. These weeds were distributed in 20 zones, each 5 by 5 meters, spread over several paddocks. More than 100 weeds, mostly wild radish were studied for each test. Savings in herbicide costs were very high. There were two spray application timings. Two different products were used to rotate herbicide groups for resistance management. The timings, products and boomspray setup are outlined in figure 1.

Figure 1: Showing the various applications, crop and weed stages, spray setup for the Green on Green spraying that Messina's and Bilberry carried out in 2020.

	1st Application	2nd Application
Area	6000 ha	6000 ha
Crop stage	Wheat 3-5 leaf.	Wheat 6 leaf to Mid Jointing.
Weed species and size	Radish 2-5 leaf.	Radish 5 leaf to flowering.
Weed infestations	Density – light to medium.	Density – light to medium.
Products, rates, price/ha	Quadrant® 1L/ha	Velocity® 1L/ha
Sprayer Setup	Spectrum: Extremely Course Low Drift Twin Fan 03 nozzles 3 bar 130 L/ ha at 20 km/hr	Spectrum: Course Low Drift Twin Fan 02 nozzles 8 Bar 150 L/ha at 20 km/hr
Spot Spraying Efficiency Test results	14 DAT: 93.5% Affected 28 DAT: 78.9% Dead and 2.4% Affected	14 DAT: 88% Affected 28 DAT: 78% Affected
Herbicide savings	90%	93%

Trial discussion

The first spray was done with “extremely coarse” spray droplets with what was thought to be a to be a high enough water rate to achieve control. The droplet spectrum was too coarse and was changed to a much finer and higher volume application for the second spray. The improved coverage meant better control of much bigger weeds. A key learning from this type of in crop spot spray is how much a regular boomspray, with a mist of droplets, covers everywhere. The difference between the ratio hit rate versus kill rate with the spot spraying efficiency test showing that some plants were symptomatic of herbicide contact early, but likely a sub lethal dose that didn't ultimately kill them. The challenge is to continue working on the best coverage combination for different target weeds and infestation level with second setup was better than the first. This included a combination of product, rate and sprayer setup.

The major strengths of GoG spraying are the massive reduction in herbicide application. This has big impacts on reducing herbicide spending, crop injury from the herbicides and a big environmental upside with much lower chemical application to the growing crop. It also provides greater options for herbicide resistance management with higher rates, herbicide mixes and more effective herbicide use being possible. The weaknesses of the system are really the areas that are constantly being worked on and developed. These include some differences in weed hit rate, especially in our challenging spray conditions. The spot spray application coverage is being constantly fine-tuned for improved coverage including altering the number of nozzles that turn on to ensure adequate weed contact.

Summary

Green on Green (GoG) in crop spot spraying was done on a wide scale in 2020 by Andrew and Rod Messina with the Bilberry GoG spray system and an Agrifac boomspray. This resulted in 90% and then 93% reduction in herbicide use for the two passes over 12000 ha of wheat. The level of weed control was very good and more than acceptable in the Messina's weed management system. This exciting technology will likely be adopted very quickly on WA farms with the massive cost saving where herbicide resistant radish are present.



Boom stability is ideal for efficient operation of the Green on Green camera system

HARVEST WEED SEED CONTROL SHOWS CONTINUED SUCCESS IN CONTROLLING RESISTANT WEEDS

Joel Johnstone
DPIRD

RESULTS from a two-decade annual survey continue to show the success of harvest weed seed control as a part of broadacre farmers' integrated weed management strategy in the Geraldton region. Although herbicide resistance is as present as ever, farmers in the study have reduced weed numbers by over 99% since 2001.

Although a wide variety of strategies have shown success, once ryegrass numbers were brought low, farmers including Harvest Weed Seed Control in their regime have consistently kept weed numbers close to zero, while those without have experienced more volatility.



An example of Narrow Windrow Burning in Western Australia

Background

Twenty years ago, high levels of herbicide resistance in annual ryegrass were becoming a serious problem for many farmers in the area. Annual ryegrass has one of the highest levels of herbicide resistance worldwide, with tolerance to multiple herbicide groups, including glyphosate. As a result many farmers were struggling to control numbers, with one farmer claiming that when you picked up a handful of soil from the ground, "there were more seeds than soil." This had detrimental effects on yield, due to light competition and weeds taking water and nitrogen from the soil.

As a way to combat this resistance, growers were experimenting with new and innovative ways to control numbers and creating a more comprehensive management approach than herbicides alone. This comprehensive management approach is known as integrated weed management (IWM), and has grown widely in popularity since then, due to its success at keeping weed numbers low and preventing further development of resistance.



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Some examples of IWM strategies are the double knockdown, which involves applying two generalist herbicides (usually glyphosate and paraquat) in quick succession before sowing; the rotation of herbicide groups to slow down the build-up of herbicide resistance; and the mixing of herbicides in a single application to further prevent resistance. Other strategies include crop-topping, crop rotation, chemical fallows, grazing management, mouldboard ploughing, and crop competition. Harvest weed seed control (HWSC) is another tool in the IWM toolbox, which has been used with great success by a number of growers in the Geraldton region.

Former department officer, Peter Newman, was a vocal advocate for integrated weed management and took particular interest in the benefits of HWSC. As its name describes, harvest weed seed control takes place at harvest, and may involve one of a range of interventions designed to prevent weed seeds which are captured by the header from returning to the soil. Commonly adopted techniques include the use of chaff carts, narrow windrow burning, chaff lining, and chaff dumps. More recently, seed mills such as the Harrington Seed Destructor have also gained in popularity.

To gauge the effectiveness of these methods on-farm, Peter collaborated with farmers to monitor about 30 “problem paddocks” with known herbicide resistance. The average number of annual ryegrass per square metre were counted annually beginning in 2001, along with the herbicides used and any HWSC applied that year. He continued this monitoring for 16 years before exiting the department, and the project has since been continued by DPIRD. This is the twentieth year of the survey and has yielded some interesting results in that time.

Results & Discussion

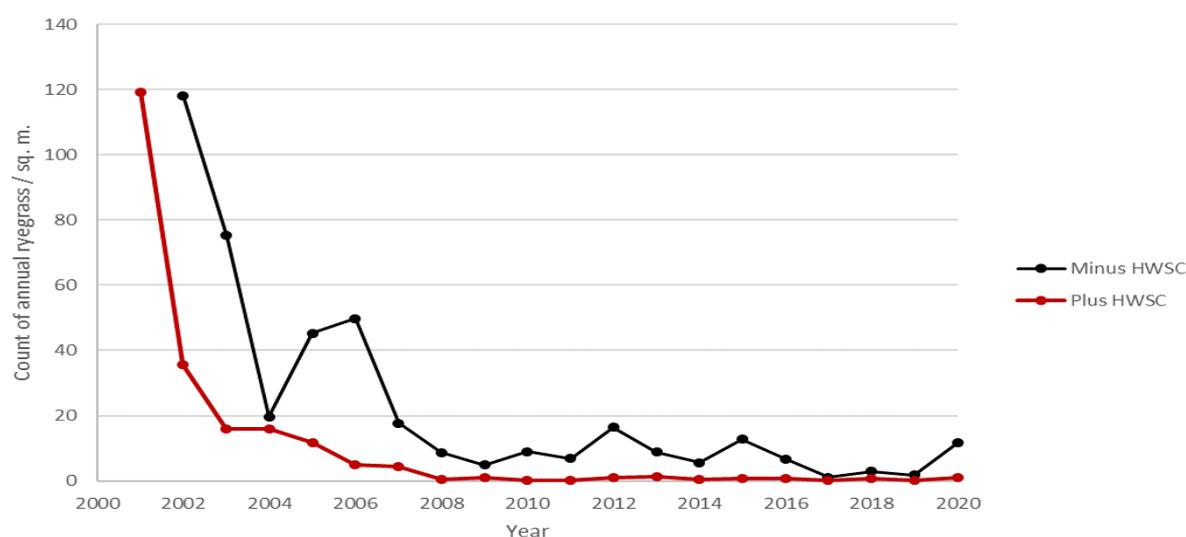


Figure 1: Averaged ryegrass counts for paddocks with Harvest Weed Seed Control (HWSC), shown in red, and without HWSC (black). There were 13 paddocks averaged in the minus group, and 14 in the “plus” group. The peaks in 2000 – 2002 were left out in order to provide a scale which highlights the differences in later years.

In Figure 1, “Plus HWSC” is defined as paddocks where HWSC was used in at least four years over the study period. In their first year, HWSC paddocks all averaged over 100 plants/m² and non-HWSC paddocks over 300, but in only a handful of years all were reduced to single digits. In the first few years, strategies used by the farmers to bring the weeds under control were numerous and diverse. Livestock were more common at the time and many adopted the use of spray topping of pastures in the paddock. Lupins were crop-topped, some farmers burnt their stubble after harvest, and some even made the tough decision to sacrifice their crop and spray it out when ryegrass numbers became too out of control. Crops were rotated which allowed a more diversified herbicide regime, and double knockdowns were used when possible.

The HWSC methods commonly used were windrow burning, chaff carts, and chaff lining. Windrow burning involves placing all of the stubble into windrows at harvest and burning it. Having concentrated lines increases the temperature at which it burns, thus killing a higher percentage of seeds. Chaff carts are towed behind the header and collect the chaff directly from the header, which is dumped later to be burnt or fed to livestock. Chaff lining simply involves dumping the chaff onto the wheel tracks behind the header, which is a low-cost but still a relatively effective method.

Nowadays, pastures are much less common, and as an alternative some growers make use of a chemical fallow the weed numbers have risen too high. Mixing of herbicides in application has become more common, and in the last five years seed mills such as the Integrated Harrington seed destructor have also become popular. These take the residue directly from the header and physically grind it, destroying over 95% of seeds, before spreading the residue back over the paddock. Roundup ready® canola has also provided another avenue for chemical control.

Interestingly, once the weed numbers were under control, paddocks where HWSC was adopted were on average much more successful at keeping near-zero levels of weeds. This makes sense when you consider that 60-70% of weeds can be captured at harvest, and over 95% of weed seeds captured are physically destroyed by these methods. Some farmers are even at the stage where they have run the seed bank down low enough that they feel confident in reducing chemical usage. In fact, wild radish is generally considered to be more of a concern these days, but luckily many of the same strategies are just as effective on this weed as they are for annual ryegrass.

In this current year (2020), weed numbers in non-HWSC paddocks have increased to an average of 11.6 / m², while in the HWSC group numbers are just below 1 / m². This sudden increase may be attributable to the exceptionally strong wind event which occurred in late May.

Conclusion

Most farmers now feel that they have a good control over their ryegrass numbers, and comment that either brome grass or wild radish are their biggest concern. Luckily the strategies used to control ryegrass are transferrable to these weeds also, as their heads are relatively upright and can be captured by the header at harvest.

This survey has allowed growers to see the level of control which can be gained by incorporating HWSC into their practice, and how a wide variety of weed management strategies combined can give growers the confidence that they can continue to successfully control weed numbers and to continue their cropping rotation long into the future.

References

- Focus Paddocks: Case studies of Integrated Weed Management. Peter Newman & Glenn Adam
- Focus Paddocks: Case studies of Integrated Weed Management 2nd Edition 2009. Peter Newman
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Acknowledgments

The department thanks all of the growers involved in the focus paddocks study who were willing to have their paddocks continually monitored, although the initial project finished in 2012.

Thank you to Peter Newman for his assistance in providing detailed insight into the study and IWM.

Grains Research and Development Corporation (GRDC) for their support of this work being continued within the Regional Research Agronomy project (DAW00256).

GRDC project number: DAW00256 (Building crop protection and crop production agronomy research and development capacity in regional Western Australia).

THE GRDC spend a lot of time working to help growers understand the importance of having a “sealed” silo option if storing seed or marketable grain on farm.

But there is a misconception that a silo seals up to keep grain storage insect pests from entering the silo.

In fact, the only reason a silo seals up, is to maintain sufficiently high concentrations of fumigant to successfully kill grain storage insect pests at all life-stages; adult, pupae and eggs. In most scenarios, we can achieve a full kill at label rates in Western Australian storage conditions in 7-10 days.

For the balance of the storage it is worth considering letting the grain breathe freely. This is particularly important if the silo is not completely full.

A partially filled silo holds a relatively large volume of air which heats up and expands during the day then contracts at night as it cools. If this happens in a sealed silo, there is often not sufficient air mixing with the outside ambient air even through gas-tight sealable silos have a pressure relief valve to ensure the silo is not damaged by these pressure changes.

Because of this large diurnal pressure variation and resulting air exchange, a partially filled silo will be more prone to condensation build-up on the walls which will drip down onto the grain and cause spoilage and mould. Higher moisture grain in storage will likely make the issue worse.

If growers see some spoilage when unloading seed grain in silos that have been sealed up, this may be the cause.

While it is important to seal a silo up for fumigation, whenever the silo is not under fumigation, remove the bottom seal plate and consider cracking the lid open to let air more freely exchange in and out of the silo.

Moylan and Bird silos, for example can be set or modified to lift the lid slightly, while still ensuring rain does not blow into the silo. To modify the lid position on a Moylan silo, simply drill a second locking pin hole position in the lid lift arm.

Taking pressure off the seals can also ensure they are not permanently compressed and are more likely to work when looking to seal the silo for the next fumigation.

If unsure whether your silo seals properly, call the GRDC grain storage extension hotline on 1800 WEEVIL (1800 933 845) and Ben White will be able to assist. If there is a group of growers, a brief workshop can be arranged with a demonstration test of silos to see if they meet the Australian Standard pressure test in accordance with AS2628.

For more information, contact Ben White ben@storedgrain.com.au



Ben White from the GRDC grain storage extension team will be holding a 2-hour seed and grain storage workshop in Dalwallinu in the morning on 11th March 2021. Learn how to maintain seed and grain quality in storage and avoid insect pest damage.

WHY DO SILOS SEAL?

IT'S NOT TO KEEP INSECTS OUT!

Ben White and the GRDC stored grain extension team



PROTECTING YOUR PROFIT: WEATHER INDEX PRODUCTS

Norm Trethewey
Account Manager – Crop &
Index Products
Weather Index Solutions

THE Australian Bureau of Meteorology (BOM) believes that Australian growers operate in one of the riskiest environments in the world. The variability of our weather and climate has one of the biggest impacts on yield and production and climate change is forecast to increase this variability further. In many countries traditional insurance has been successful in assisting Growers in managing the majority of their production risks but this is not the case in Australia where the crop insurance offerings are, at best, limited. These limitations can apply to:

1. Crop type: Various crop types cannot be covered
2. Regions: Many high-risk areas cannot be covered
3. Perils: Often key perils cannot be covered
4. Levels of cover: There are often limitations that apply to the cover in terms of the maximum sums insured and minimum excess levels.

This means that in many circumstances, growers are retaining either a significant portion or all of their crop production risks. This is far from ideal as the financial impact of catastrophic perils can undermine the ongoing viability of the farming enterprise which places significant stress on all stakeholders.

Weather Index Products

Family farms and corporate agricultural enterprises do have other options for managing risk but are often not aware of what options are available. One of these options are weather index products. Weather index products are financial products that respond when an external index trigger, BOM rainfall, for example, is met within a predetermined period rather than when a physical loss is incurred. Settlement is based on pre-agreed amount regardless of any financial loss incurred.

As the cost and settlement of Index Product is based solely on independent and transparent data, no loss history or extensive application process is required. Periods of cover can be very short i.e. 2 weeks or very long i.e. 2 or 3 years. No proof of loss so no loss adjustment process is required and claims are settled very quickly.

As Index product settlements are based on external independent data, index products have Basis Risk which is the risk that a loss is incurred but the external Index trigger is not met - in this instance no settlement is paid. The flipside to this is that the external index is triggered but no loss is incurred and a settlement is paid.

The most common index products rely on BOM data and include;

- Temperature – too high or low,
- Rainfall – insufficient or excessive
- Excessive, windspeed - cyclone,
- Solar radiation, day degrees, humidity



However all that is required to underwrite index products is an historical base of independent data. Interestingly, advances in technology such as satellite imagery is expanding the range of index products. We are already seeing products for the following indicies;

- Wave, river and snow height, dam level, NDVI, pasture level, bushfire footprint, crop yield, soil moisture

The best way to understand how an Index Product works is by reviewing an example;

Example: Insufficient Rainfall

A wheat crop is susceptible to a lack of finishing rain in August – September which can result in significant yield and therefore revenue loss. The grower purchases a weather index insurance product to manage the rainfall risk. The grower nominates:

1. The period of cover: 1 Aug – 30 Sep
2. The rainfall trigger at which they want the product to respond: 40 mm
3. The BOM Recording station or Grid where the rainfall will be measured: Latham
4. The Amount of cover they require: \$10,000 for each mm below 40 mm with a max \$250,000 during the period

At the end of the period the insurer secures the rainfall data from the BOM for the selected period of cover.

For each mm that the total rainfall is below 40mm, the Insurer will pay \$10,000 up to a maximum of \$250,000.

- If the recorded rainfall during the period is only 33mm then the claim will be \$70,000 (7mm x \$10,000/mm)

The Grower will be required to complete a Declaration of Loss confirming that they have incurred a crop loss and in all likelihood this was due to the impact of the insured peril. The crop loss can be a loss of yield or quality, delays in harvest etc. The loss will not be quantified.

How is the premium determined?

Premiums are based on the likelihood of the trigger being met during the period of insurance and the amount Insurers would have to pay. To assist growers in assessing the value of the product each indication/quotation highlights how the structure would have responded had it been in place over the last ~20 years. Clearly if you create a structure that would respond every year the premium will be very significant

How are cereal crop growers utilising weather Index Products?

The majority of cereal crop growers are using weather index products to put a floor under their income in the event of insufficient rainfall, either for germination in March – June or finishing rain in July – September or a combination of both for the for the whole season. Some growers have also utilised minimum temperature contracts to protect against frost in September and a few have taken protection against excessive rainfall at harvest for crops such as export hay.

In summary Index products offer cereal crop growers a new way of managing the financial consequences of a variety of perils that cannot be traditionally insured. They are certainly worth reviewing to determine if they can complement your existing risk management strategy.



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CALENDAR OF EVENTS

LIEBE GROUP EVENTS 2021

AgChats Looking after your lupins: Machinery impacts on seed integrity	Thursday 4th March	Liebe Group Office
Liebe Group AGM Crop Updates & Trials Review Day	Wednesday 10th March	Dalwallinu Recreation Centre
Women's Field Day	Tuesday 15th June	Dalwallinu Recreation Centre
Post Seeding Field Walk	Wednesday 21st July	Hyde Property, Dalwallinu
Spring Field Day	Thursday 9th September	Hyde Property, Dalwallinu



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