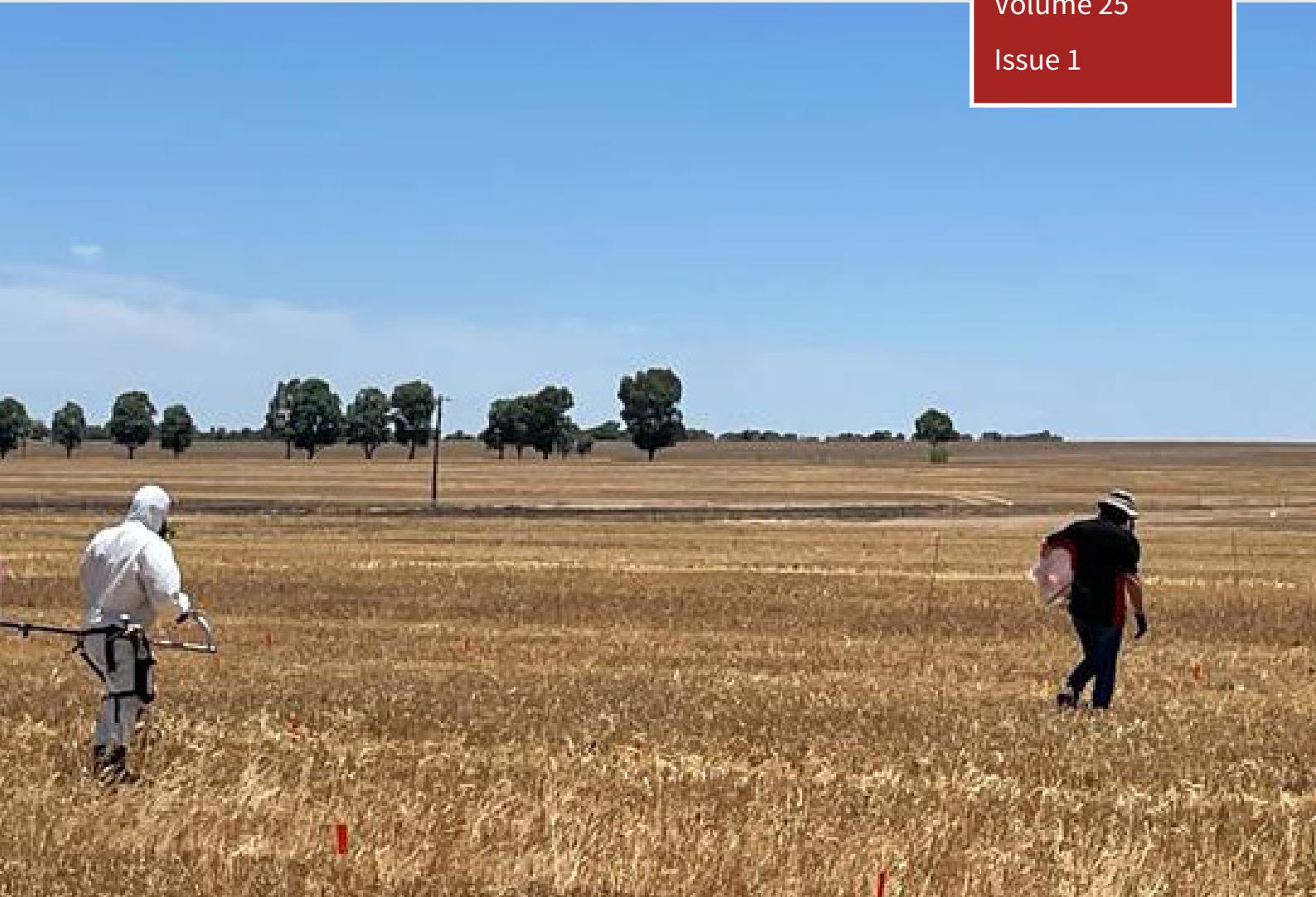


LIEBE GROUP NEWS

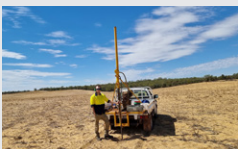
February 2022

Volume 25

Issue 1



What's Inside



*Maximise your soil
testing investment*



*Employment
Opportunities*



Crop Updates



*Holding machinery
longer, and losing
trade value*



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

IMI trial implementation at the 2022
Main Trial Site in north Miling.

DIAMOND PARTNERS



Rabobank



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FROM THE EXECUTIVE OFFICER

KATRINA VENTICINQUE

WELCOME to the first edition of the Liebe Group newsletter for 2022!

Is anyone else in disbelief that it is almost March? This year is flying by so quickly with plans for the season ahead starting to kick into gear. I hope that most of our members and partners got the chance to head away for a break after the long harvest experienced in the region.

The Liebe team have been working hard behind the scenes and are excited to announce that the R&D Results Book will be available on Monday 28th February! We will have these in the Liebe Group Office for pick up throughout the week, including at the Crop Updates. Following that week we will send the remaining copies via mail, so feel free to drop in to grab yours!

The Annual General Meeting, Trials Review Day and Crop Updates will all be held on one day – next Wednesday 2nd March. We have a great line-up of presenters on locally relevant and timely topics to help get your farm business more prepared for the coming year, sponsored by GRDC. Check out the agenda for more information on page X.

Following the presentations, a family-friendly sundowner will be held with all welcome to attend. This is kindly sponsored by AGT.

Please note, due to the location of the forum at the Dalwallinu Recreation Centre, proof of vaccination is required at the event. Fully vaccinated means at least two doses and as a condition of entry anyone aged 16 years and over must show proof of their COVID-19 vaccination status or a medical exemption, along with identification where required. We apologise for any inconvenience this may cause.

This week we welcomed our new Administration Assistant Alicia Hudson who is taking over from Lisa-May on her maternity leave. Alicia's family farms in Goodlands so is no stranger to the area and growers in the area. Check out her bio on page X and be sure to say hello when you see her out and about.

Liebe Group is still on the hunt for two new staff members to join the team, in the R&D Coordinator role and the newly established Project Officer position. More information can be found on page X.

Our 2022 Main Trial Site is being hosted by Sam, Terry and Andrea Reynold's on their family property in north Miling. A huge thanks to Sam for his enthusiasm taking on the site, as well as the R&D Committee for their input planning for this season's trials and demonstrations.

The Liebe team look forward to catching up with you all at the upcoming Liebe events and all the best for the approaching 2022 season!



GOLD PARTNERS



SILVER PARTNERS

Adama Australia

Australian Grain Technologies

Bayer

Boekemans Machinery Dalwallinu

GrainGrowers

Intergrain

McIntosh & Son

Nufarm

Nutrien Ag Solutions

Refuel Australia

Syngenta

FMC

Pacific Seeds

SprayTec Australia

Summit Fertilizers

CALLING ALL MEMBERS: LEARN HOW TO MAXIMISE YOUR SOIL TESTING INVESTMENT!

ARE you interested in knowing more about your soils and maximizing your soil testing investment?

Through a new project, the Liebe Group have the opportunity to support four growers to undertake in depth soil testing on farm and will provide comprehensive analysis and interpretation (up to the value of \$6,000 per year).

Growers will be expected to design and implement an on farm trial that aims to improve soil health and/or an identified soil constraint, and run this over two years, with support from the Liebe team.



If you are interested in this opportunity or have any soil related research ideas, please contact the office.

LIEBE GROUP WELCOMES ALICIA TO THE TEAM

THE Liebe Group is pleased to welcome its newest staff member, Alicia Hudson who has joined the team as Administration Assistant.

A Kalannie local, Alicia grew up on her family farm in Goodlands and is passionate about all aspects of farming. Community is also a core value of Alicia's and she loves to do whatever she can to help rural communities thrive.

As Administration Assistant, Alicia will be found working in the office planning events and keeping the office running, or out in the field assisting with trials.

We welcome all members to come say hello and get to know Alicia over the coming months.

Welcome to the team Alicia!



PACIFIC SEEDS A RETURNING SILVER PARTNER FOR THE LIEBE GROUP

THE Liebe Group are pleased to welcome a new Silver Partner to the group this month with Pacific Seeds.

Liebe Group partners are an integral facet of the success of the group and since our inception we have developed long and valuable relationships with a number of organisations who have mutual interests to the Liebe Group. These strong partnerships have given the group diversity, a level of security and the capacity to build a sustainable and healthy future.

Pacific Seeds are an Australian Company established in 1962 and today are part of the worldwide Advanta Seeds Group, a division of UPL Agrochemicals and are based in Toowoomba Qld.

Pacific Seeds are renown for developing and commercialising Innovative seed Technologies and were the 1st in the world to develop Hybrid Canola and more recently novel multiple herbicide stacked hybrids for Australian growers.

Pacific Seeds have been instrumental in developing sustainable agronomic packages for GM and non-GM dual tolerant Canola and Graze n Grain Winter Canola. We are extremely proud to bring these new Canola technologies to Liebe group members.

Our partners add value to the group through in-kind support, products or services and they see the relationship with the group as a meaningful way to stay in close contact with the grass roots innovators of the industry. We look forward to building an on-going relationship with our latest Silver Partner and thank them for their support towards the Liebe Group.



LIEBE GROUP EMPLOYMENT OPPORTUNITY

Position: Research and Development Coordinator



ABOUT THE LIEBE GROUP

The Liebe Group is a dynamic, grower-driven, not for profit organisation that operates within the Dalwallinu, Coorow, Perenjori and Wongan-Ballidu Shires in the West Australian Wheatbelt. The group has built a solid reputation over the last 24 years as being on the forefront of locally relevant research, development and extension as well as having a high status of reliability and professionalism. The group conducts valuable dryland farming R,D&E through trials, demonstrations and workshops, and provides information to local farming businesses in the region. More information can be found on the Liebe Group website.

We are seeking an enthusiastic and hard working individual to coordinate on-ground research and development in the Liebe Group area. This position is suitable for recent graduates as a great kick start for a career in the broadacre agricultural industry!

THE POSITION

Reporting to the Executive Officer, assisted by the wider team and guided by active grower members, you will be involved in diverse range of activities including:

- Coordinate and execute the Liebe Group's annual R&D Trials and Demonstration Program including the Main Trial Site, project sites and grower demonstrations.
- Conduct on-farm monitoring activities of trial and demonstration sites such as plant and weed counts, disease identification, crop health monitoring and nutrient/soil analysis.
- Evaluate data and results from projects to identify trends, key messages and research outcomes.
- Assist in the development and management of research projects including application writing and reporting.
- Understand and prioritise local grower agronomic, environmental and business management issues. by maintaining strong relationships with growers and industry stakeholders.
- Work alongside the team to deliver the research, development and extension program which addresses local on-farm issues including the coordination of annual events (field days, workshops).
- Assist in the production of the annual Liebe Group Local R&D Book including writing scientific trial reports.

SALARY: Salary package to be negotiated.

LOCATION: The Liebe Group Office is located in Dalwallinu, 260km north of Perth. There will be a requirement to be based within this area. Dalwallinu is a progressive community in the Northern Wheatbelt that offers a welcoming atmosphere with the best of rural living and amenities. More information can be found on the Dalwallinu Shire website.

ESSENTIAL CRITERIA

- Degree in Agronomy, Plant/Soil Science or related fields or experience equivalent.
- Current C Class Driver's license.
- The ability to live and work in Australia.
- The ability to relocate to the region.

VALUABLE CRITERIA

- General knowledge of Australian broadacre farming systems, products and technologies.
- Knowledge of or experience in scientific methods and analytical procedures appropriate to agricultural research.
- Knowledge and experience in research trial management including trial monitoring and writing scientific reports.
- Developed organisational skills and demonstrated ability to set priorities and to meet deadlines.
- Ability to work independently, be self-motivated, show initiative and work productively as part of a team.
- Demonstrated ability to build relationships with industry stakeholders, grower members and researchers.

THIS ROLE WILL PROVIDE THE SUCCESSFUL APPLICANT WITH

- Offered as a full time, permanent position.
- The opportunity to build an extensive network within the agricultural industry.
- A variety of independent work with an enthusiastic group of innovative farmers
- The opportunity to work in a well-equipped research facility.
- Mentoring and professional development opportunities
- A vehicle, tablet and mobile phone for work purposes will be provided.

FOR FURTHER INFORMATION & APPLICATION FORMS

Katrina Venticinque, Liebe Group Executive Officer
0400 941 412 or eo@liebegroup.org.au

LIEBE GROUP EMPLOYMENT OPPORTUNITY

Position: Project Officer



ABOUT THE LIEBE GROUP

The Liebe Group is a dynamic, grower-driven, not for profit organisation that operates within the Dalwallinu, Coorow, Perenjori and Wongan-Ballidu Shires in the West Australian Wheatbelt. The group has built a solid reputation over the last 25 years as being on the forefront of locally relevant research, development and extension as well as having a high status of reliability and professionalism. The group conducts valuable R,D&E through trials, demonstrations and workshops, and provides information to local farming businesses in the region. More information can be found on the Liebe Group website.

We are seeking a highly motivated and enthusiastic person for this exciting new position to lead and coordinate Liebe Group's project portfolio in the region.

THE POSITION

Reporting to the Executive Officer, assisted by the wider team and guided by active grower members, you will be involved in diverse range of activities including:

- Coordinate on-ground activities of WA grains-focused R&D projects.
- Conduct extension activities to engage with local growers and prioritise local agronomic, environmental and business management issues.
- Develop and implement collaborative project concepts that align with local R&D priorities that foster innovation and learning.
- Assist in the execution of the Liebe Group's annual R&D Trials Program including in-paddock sampling, monitoring, evaluation and analysis.
- Evaluate data and results from projects to identify trends, key messages and research outcomes.
- Assist in the organisation and running of events, meetings and workshops.
- Build and maintain strong relationships with growers, researchers and industry stakeholders.
- Assist in the management of various projects in accordance with project outcomes and funding requirements.

ESSENTIAL CRITERIA

- Current C Class Driver's license.
- The ability to live and work in Australia.
- Ability to relocate to the region.

VALUABLE CRITERIA

- Highly developed time and project management skills with demonstrated ability to set priorities and meet deadlines.
- Demonstrated experience working in the agriculture industry with knowledge of Australian broadacre farming systems, products, technologies and rural communities.
- Experience in the interpretation and evaluation of research data and scientific reports.
- Group facilitation/management skills and strong communication aptitude with farmers and industry partners.
- Experience planning and executing ag-focused events (field walks, workshops etc).
- Ability to work independently, be self-motivated, show initiative and work productively as part of a team.

THIS ROLE WILL PROVIDE THE SUCCESSFUL APPLICANT WITH

- Offered as a 2 year contract full time position, with the possibility of extension.
- An extensive network within the agricultural industry.
- A variety of independent work with an enthusiastic group of innovative growers.
- The opportunity to work in a well-equipped research facility.
- Mentoring and professional development opportunities.
- This is an exciting new role where you can put your mark on agricultural research in the region!

SALARY: Salary package to be negotiated.

LOCATION: The Liebe Group Office is located in Dalwallinu, 260km north of Perth. There will be a requirement to be based within this area. Dalwallinu is a progressive community in the Northern Wheatbelt that offers a welcoming atmosphere with the best of rural living and amenities. More information can be found on the Dalwallinu Shire website.

FOR FURTHER INFORMATION & APPLICATION PACKAGE

Katrina Venticinque, Liebe Group Executive Officer
0400 941 412 or eo@liebegroup.org.au



CROP UPDATES & TRIALS REVIEW DAY

WEDNESDAY 2ND MARCH 2022 | 9:30AM TO 4:35PM
DALWALLINU RECREATION CENTRE



MEMBERS ONLY | TRIALS REVIEW | 9:30AM

The Trials Review morning session links growers with industry representatives and researchers, allowing first-hand details and results from local trials and grains research to be discussed. Topics for discussion include National Variety Trials, new chemistries, nitrogen strategies for wheat, knockdown crop safety, control of grass and broadleaf weeds in cereals and more!

ALL WELCOME | CROP UPDATES | 12PM

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

- Frost Management - Gary Lang, Wickepin Grower
- Western Australian Land Value Growth ... have we been here before? - Andrew Warren, Rabobank
- CBH Supply Chain and Logistics - Morne Van Wyngaard, CBH Group
- Post Seeding Deep Ripping - Dylan Hirsch, Grower & Wayne Parker, DPIRD
- Tax Effective Business Structures - Reagan Manns, RSM
- Wind Erosion Management in Low Rainfall Zones - Justin Laycock, DPIRD
- Update on Global Fertiliser Market & Supply Chain - Rusty Burke, CSBP Fertilisers
- Research in the region - Liebe Group

SUNDOWNER FROM 4:45PM

All Liebe Group members and partners are invited to come on down for a family-friendly afternoon sundowner to launch the start of the 2022 season!

DIAMOND PARTNERS



KINDLY SPONSORED BY



KEY NOTE



Diversifying your investments

with Preston Hamersley, Fund Manager at Indian Pacific Funds

EVENT PARTNER



TICKETS

Includes morning & afternoon tea, lunch, resources

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

REGISTER

tinyurl.com/LGUpdates22
or via Liebe Group Office
Tickets also available at the door

CONTACT US

08 9661 1907
admin@liebegroup.org.au

Proof of vaccination is required at this event. Fully vaccinated means at least two doses.

As a condition of entry to this event, anyone aged 16 years and over must show proof of their COVID-19 vaccination status or a medical exemption, along with identification where required.

ANNUAL GENERAL MEETING 2022

9:00 - 9:30

Liebe Group 2022 AGM

TRIALS REVIEW SESSION

9:30- 9:45

Registration and Morning Tea

9:45 - 9:50

Introduction to Trials Review and Housekeeping - Katrina Venticinque, Liebe Group

	Session 1	Session 2	Session 3	Session 4
9:55 - 10:20	Control of grass and broadleaf weeds in cereals Matt Willis, Bayer	Cereal NVTs Matu Peipi, Longreach Plant Breeders	Knockdown and crop safety matrix Bevan Addison, Adama	Host crop safety of Edge when applied PSPE and post em Nathan Moyes, Imtrade
10:25 - 10:50	Host crop safety of Edge when applied PSPE and post em Nathan Moyes, Imtrade	Cereal NVTs Matu Peipi, Longreach Plant Breeders	Nitrogen strategies for long season wheat Angus McAlpine, CSBP	Gen Y Grower Panel Dylan Hirsch & Blair Stone, Liebe Group members
10:55 - 11:20	Control of grass and broadleaf weeds in cereals Matt Willis, Bayer	Wheat varieties depth of sowing Alana Hartley, AGT	Nitrogen strategies for long season wheat Angus McAlpine, CSBP	Grain Losses at harvest Glen Reithmuller, DPIRD & Chris O'Callaghan, Liebe Group
11:25 - 11:50	Wheat varieties depth of sowing Alana Hartley, AGT	Grain Losses at harvest Glen Reithmuller, DPIRD & Chris O'Callaghan, Liebe Group	Knockdown and crop safety matrix Bevan Addison, Adama	New chemistries Peter Borstel, Farmanco
11:50am	Lunch & Crop Updates Registrations Open			

CROP UPDATES SESSION

12:30pm

Final Registrations

12:40pm

Welcome and 2021 Season Recap - Liebe Group President
Research in the Region - Katrina Venticinque, Liebe Group

12:50pm

Frost Management - Gary Lang, Wickepin Grower

1:20pm

Wind Erosion in WA - Justin Laycock, DPIRD

1:40pm

CBH Supply Chain and Logistics - Morne Van Wyngaard, CBH Group

2:05pm

WA Land Value Growth... have we been here before? - Andrew Warren, Rabobank

2:35pm

Afternoon tea

2:55pm

Post Seeding Deep Ripping - Dylan Hirsch, Latham Grower and Wayne Parker, DPIRD

3:15pm

Tax Effective Business Structures - Reagan Manns, RSM

3:35pm

Update on Global Fertiliser Market and Supply Chain - Rusty Burke, CSBP

3:55pm

Diversifying Your Investments - Preston Hamersley, Indian Pacific Funds

4:35pm

Close and Sundowner

Proof of vaccination is required at this event. Fully vaccinated means at least two doses.

As a condition of entry to this event, anyone aged 16 years and over must show proof of their COVID-19 vaccination status or a medical exemption, along with identification where required.

THANK YOU TO THE FOLLOWING PARTNERS FOR THEIR SUPPORT IN THIS EVENT



CBH COMMUNITY GRANTS APPLICATIONS CLOSE SOON!

CBH Community Relations
Team

ENCOURAGE a community group, club or organisation in your region to apply for CBH's Grass Roots Community Grants today!

Applications are open until 28 of February 2022, with grants up to \$5,000 available for community events and \$10,000 for small-scale infrastructure projects.

The grants, which open twice a year in February and August, aim to fill funding gaps in regional WA with a total of \$150,000 available in each round for projects that contribute to the health and vitality of grain growing communities.

Over the past 8 years, the Grass Roots Community Grants program has contributed over \$2.2 million in support of infrastructure projects as varied as solar panels, playgrounds, gardens, toy libraries and water tanks, and community events such as agricultural shows, music concerts and science workshops.

For more information visit <https://www.cbh.com.au/community/grass-roots-community-grants>

CBH Grass Roots Community Grants

Applications close
28 February 2022



"SUN SHINES BRIGHTLY" FOR AUSTRALIAN AGRICULTURE IN THE YEAR AHEAD - 2022 INDUSTRY OUTLOOK

Lisa Curtis
Marketing Manager
Rabobank



Rabobank

AUSTRALIA'S agricultural sector is set for another profitable year ahead, with the gross value of agricultural production on track for a fourth consecutive year of growth in 2021/22, Rabobank says in a newly-released industry report.

In its flagship annual Australian Agribusiness Outlook for 2022, titled 'Making Hay While the Sun Shines', the specialist global agribusiness bank says a stellar 2021 – with high to record-high agricultural commodity prices and production volumes reaching record levels in some Australian commodities – represented a continued recovery from the crippling 2017-2019 drought and had positioned Australian agriculture for a strong year ahead.

"Australia's second year of great pricing and mostly exceptional production conditions in 2021 means the Australian agriculture industry is well placed to take on the challenges of 2022. More importantly, it means the industry can prepare for the time when the sun is not shining so brightly in its favour," the report said.

RaboResearch senior commodities analyst Cheryl Kalisch Gordon said while there will be some pressure on farming margins in 2022 compared with 2021 – with some heat forecast to come out of a range of commodity prices, a mixed production outlook and supply chain challenges – another favourable year was expected for Australian agriculture.

Local macro-economic settings also remain supportive for Australian agriculture, the report said. "In particular, we expect the Australian dollar to only gain a little over the year and remain near its five-year average," it said.

'Blue moon' year

Dr Kalisch Gordon said 2021 had been a "once in a blue moon" year for Australia's agricultural sector, with very strong prices resulting from "hardship globally", and with the high pricing coinciding with "favourable to very favourable Australian production conditions again".

"There was a combination of drought and adverse weather in key cropping regions around the world, strong stockpiling demand in the face of potential food shortages along with Covid-induced labour shortages which impacted intensively-produced agri products and transport," she said. "This delivered clouds to agriculture sectors in many regions of the world and a silver lining for Australian agriculture."



Dr Cheryl Kalisch Gordon, Rabobank.

PARTNER UPDATES

“This second straight year of increasing commodity prices coincided with again favourable to very-favourable Australian production conditions. And for those commodity sectors where production has been lower, high pricing still delivered strongly profitable positions.”

Supply chain and price outlook

While the outlook for 2022 is also positive, the bank expects the year ahead will bring “less pronounced opportunities” for Australian agriculture.

“We start 2022 with the Australian food supply chain under unprecedented pressure, supply chain disruption and bottlenecks being felt across the board – from access to inputs at the farm level through to consumers accessing food on supermarket shelves,” Dr Kalisch Gordon said. And the impacts on supply chains are expected to linger at least through the first quarter of the year.

“We also expect some of the heat to come out of prices for a number of commodities in 2022 as supplies are renewed globally, stock levels are increased and demand tempers,” she said. “However, we expect prices to remain at levels above the five-year average for our main agricultural commodities.”

The Rabobank Rural Commodity Price Index – which tracks local prices of key commodities in Australian-dollar terms – is forecast to ease from record highs reached in December 2021 over the course of this year, albeit to still sit five per cent above the five-year average (and 16 per cent above the pre-COVID five-year average) by the year’s end.

Production

For Australia’s agriculture production, the outlook is mixed, the bank says, coming off the high base of 2021 volumes.

“Very favourable seasonal conditions in 2021 – and in some cases record rainfall – have provided a beneficial start to 2022 for cropping and pasture prospects, due to good soil moisture,” Dr Kalish Gordon said.

“That said, at this point, we can’t expect a repeat of the record grain and oilseed harvest we’ve seen for the 2021/22 season. Although for livestock, we do expect year-on-year lifts in slaughter numbers for both cattle and sheep, given the extended period of good seasonal conditions we’ve seen in most regions that have enabled some rebuilding of stock numbers.”

Milk production was also likely to lift, but only in the second half of the year, the report said, while 2022 cotton production was on track to continue rising, to see an 85 per cent increase on last year.

Global changes

While 2021 had its share of challenges, 2022 will also bring some headwinds for Australia’s agricultural sector, the report says.

This will include the ongoing impacts of Covid, as the world grapples with the Omicron surge and also “the prospect of Rho, Sigma or Tau delivering the next blow”.

On top of this, Dr Kalisch Gordon says, “lies the pervasive challenge of inflation, which continues on one of the steepest rises in 30 years”.

“Additionally, we expect there will be global policy tightening around economic stimulus measures that have been in place during the pandemic, which will be designed to moderate demand,” she said.

“Getting the policy settings on reducing stimulus and managing inflation will be critical to maintaining economic growth and consumer demand in many economies, and failure to get this right could curb demand in some of our markets for some, especially more discretionary, purchases.”

Ongoing supply chain issues and geopolitical tensions also loom large as challenges for agricultural markets in 2022, the report says.

“Dry bulk freight rates have fallen considerably from their 11-year highs in 2021, but still remain elevated on several routes,” Dr Kalisch Gordon said. “Container rates remain near their recent record highs and we expect global trade to continue to be impacted by issues, especially relating to boxed freight, in 2022.”

In terms of geopolitical considerations, she said, the tight global market for agricultural commodities had shielded Australia from the impact of losing China as a buyer in 2021.

“However, as markets unwind, we expect Australia may need to work harder on diversifying into alternative destinations,” she said.

Meanwhile, the report said, there is also the potential for market fallout from current tensions between Russia and Ukraine, which could “deliver exaggerated volatility in markets ranging from wheat through to oil and fertiliser”.

Other challenges ahead included still-high farm input prices (albeit easing somewhat in the second half of the year) and ongoing labour shortages.

Ready for what's next

The report says with Australian agriculture positioned for another positive year ahead, it presents an ideal opportunity for the sector to prepare for future times when “the sun is not shining so brightly in its favour”.

This, Dr Kalisch Gordon said, included preparing for an increase in margin pressures (when global prices decline and Australian farm returns come under pressure), diversifying markets and trading relationships, and equipping farm businesses for future droughts and climate change.

To find out more about other Rabobank research, contact Rabobank’s local team in Moora and Dalwallinu on (08) 9690 8500 or subscribe to RaboResearch Food & Agribusiness Australia & New Zealand on your podcast app.

HOLDING MACHINERY LONGER, AND LOSING TRADE VALUE

Ben Curtis
Farm Management Consultant
Farmanco



IT is a commonly said “if I own the machine too long then the step up into the next machine will be too large. Therefore, I should turn over the machine now in order to avoid this.”

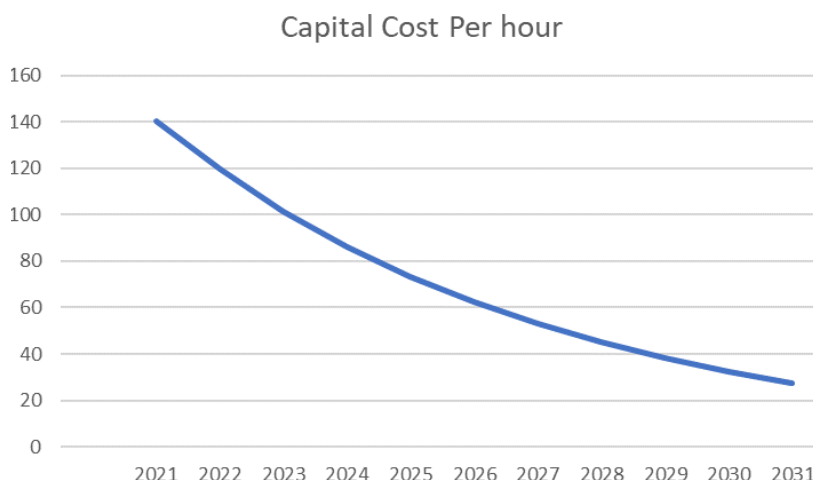
The argument is that as the machine ages resale value is lower and purchase price after trade in will be far larger, which may be too much. Extra finance required for a new machine after a longer period could be greater. However, it doesn't reflect the true cost.

Two main numbers we focus on throughout the life of pivotal farm business machines is their value and what is owed on them. It is easy to confuse which number is the most important.

As machines depreciate in value, the reduction is a major contributor to calculating the real cost, driven mainly by the use and age of the machine. The best way to measure and consider this cost is to calculate it back to a cost per hour value.

(Machine Value at start of the year minus machine value at the end of the year) / number of hours used = cost/hour.

This number is graphed for an SP sprayer, starting value of \$750,000, annually depreciating 15% in value, with 800 hours used pa.



This tells the common story of the highest depreciation when the machine is new, starting at \$141/hr, and highlights the reduction in total depreciation for the machine throughout its life. By Year 5, depreciation per hour of use has halved to \$73/hr. If the machine is in good condition and repairs are not excessive, the cost of owning the five-year-old machine will be less than a new one.

In gross terms, the sprayer cost the business \$112,000 in Year 1 and \$59,000 in the Year 5 at an average of \$83,000 pa across the five years.

After five years, we are at the point where this comment may be used.

“If I own the machine too long then the step up into the next machine will be too large, so I should changeover now!”

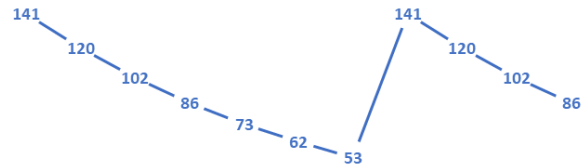
Look at the costs of either keeping the sprayer for another three years or trading it in. Then think about the impact of higher financing costs if you hold a machine longer. The graphs below show a simplified view of depreciation per hour.

DEPRECIATION PER HOUR TRADE AFTER 5 YEARS



2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

DEPRECIATION PER HOUR TRADE AFTER 8 YEARS



2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

Based on depreciation alone, holding onto the sprayer for another three years means a reduction in total depreciation cost over this period, which is a real reduction in cost.

Many of us think about finance costs and changeover, which is where the concern may come from, for a large step up if the trade price drops too far. Note that if you keep the old sprayer for longer you will have a period of time where you are not paying any finance costs for the machine. It appears free. However, there is some often-unconsidered opportunity profit here.

It is a real saving that you are not paying for finance in this period. Holding the old machine for longer means lower finance costs before a larger finance bill when you do trade in. Almost without exception the average of this finance cost to your business will be lower if you delay the trade, when considering the years preceding the changeover with no finance.

The only exception could be if you are offered a deal that is so good the depreciation of the new machine is significantly lower than normal.

I'm not saying that keeping all machines for longer will be the best choice. I am trying to debunk the argument of changing over more frequently, only to avoid a larger changeover cost.

In many instances, regularly turning over key machines will be the best economic decision. I have not discussed repairs and running costs, which can be just as important as depreciation. However, old well-maintained machinery with no difference in technology can often be cheaper.

DEVELOPING A FARM RISK REGISTER

Danielle McNamee
Managing Director
ProcessWorx HR & Safety



WORK, health and safety is getting more attention in the agricultural industry lately with the introduction of the Work, Health and Safety Act expected to come into force in March 2022. ProcessWorx understands how concerning the new Act can be for farmers, who are accustomed to operating with a level of risk.

Significant changes in the Act include

- Expansion of Duty of Care – Farmers have a greater responsibility for safety.
- Expansion of the definitions of Employers and Officers – The new definitions include the Person Conducting Business or Undertaking (PCBU) being the farm owner as well as, an Officer (Farm Manager) who is making or participating in making decisions that affect the business.
- The definition of a Worker has changed – A worker now includes anyone who carries out work in any capacity for the PCBU such as an employee, contractor, apprentice, student, or volunteer.
- Introduction of harsher penalties and Industrial Manslaughter - A farmer (PCBU) or Farm Manager (Officer) can go to jail or be fined up to \$10 million if a worker is injured or dies while conducting work on the farm.

With recent tragedies occurring on farming properties, safety has become more important than ever. To comply with the new legislation, it is important farmers understand their Work Health and Safety Duty of Care and implement a safety management system to manage the risks.

Work Health and Safety Duty of Care

Farmers must ensure that the health and safety of workers is not put at risk from the work they do on their farm. Specifically, this means:

- Managing risks on the farm,
- Providing and maintaining safe machinery and equipment,
- Having safe systems of work,
- The safe use, handling and storage of machinery, equipment and chemicals,
- Providing safety training and information,
- Monitoring the health of workers, and
- Maintaining safe accommodation.

Having a Work Health and Safety system is an effective way to help meet your duty of care. A good way to start addressing safety on your farm is by developing a risk register.

Using a Risk Register

Developing a risk register involves identifying the hazards on the farm, recording everything that could go wrong and potentially injure a worker or cause a fatality. Hazards include anything that can cause harm e.g. moving parts on machinery. Not all hazards present on the Farm will cause harm or injury, but they have the potential to so must be recorded. Then the risk of each hazard is assessed. Risk is the probability or likelihood that the hazard will cause harm and the extent of harm if they do.

The next step is to brainstorm control measures and start implementing them focusing on the most serious first. Control measures are actions that can be taken to eliminate or minimise risk e.g. using machine guarding.

How to Build a Risk Register

1. Identify hazards – This can be done by consulting with farm personnel, reviewing previous incident reports, injuries or illnesses, or by conducting a site inspection of the farm. Record the hazards in the register, as well as potential consequences of harm.
2. Assess the risk – Using a risk matrix like the one below, assess the likelihood of the event occurring as either unlikely, possible, or likely. Then assess the consequences of that event on a scale of minor (first aid injury or illness, minor environmental or asset damage), serious (restricted duties injury or illness, serious environmental or asset damage), or major (disability, fatality, major environmental or asset damage). Find the cell where the two parameters meet to determine the risk score, either low, moderate or high. Record these in the register.
3. Implement control measures - Eliminate the risk using control measures as far as reasonably practicable. Control measures can include physically removing the hazard or task, using a less hazardous chemical that would do the same job, placing a barricade around a hazard, improving equipment or guarding, using policies, checklists or signs, and wearing protective equipment like gloves, earplugs or masks. Consider the available resources when implementing control hazards and address high-risk hazards first.
4. Evaluate – Review the risk register at least once a year, after significant changes to the farm e.g. purchase of new equipment, or after significant incidents, injuries or illness. Ensure that the risk register is accurate and add any new hazards. Ensure that control measures are effective and being implemented. The risk register should be treated as a live document continually subject to improvement.

If you would like more information or assistance developing a risk register, ProcessWorx has extensive experience working with farms to ensure they meet their Safety duty of care. Farmers can have peace of mind that a team of expert WHS consultants are helping their business, so you can focus on farming.

Risk Matrix				
		Consequence		
		Minor	Serious	Major
Likelihood	Likely	Moderate	High	High
	Possible	Low	Moderate	High
	Unlikely	Low	Moderate	High

GROWING INTEREST DRIVES SPOT SPRAY INNOVATION

Mike Symes
McIntosh Distribution (Miller)

RISING chemical costs are triggering further interest in spot sprayers, which is driving continued innovation in systems for summer applications as well as in-crop spraying.

Some of the leading systems can be conveniently retrofitted to grower's existing suspended boom sprayers and the sensors are significantly lighter than their predecessors.

A range of system features are enhancing the appeal for growers.

ISOBUS compatibility allows for the use of just one screen in cabs and auto-calibrating sensors means they constantly adjust to the environment they are working in.

Weed mapping, which pinpoints where and when weeds are treated in paddocks and, hence, can assist with herbicide resistance management, is set to become a valuable tool.

Something growers are already highly familiar with, section control, also is now available with spot sprayers, allowing growers to further reduce chemical costs by eliminating double applications.

Preventing double rate applications can be important to avoid residual issues for following crops as well. Some of these issues have occurred when spot sprayers have targeted problem weeds in fallow situations. With nozzles that overlap, some areas can receive double and triple the rate if section control is not an option.

The use of two light sources, both infrared and near-infrared, continues to be a prerequisite for the most accurate detection of all weeds. The dual frequency light band is particularly important in dusty conditions as well as situations where the conditions can change quickly.

In-crop spot spraying with green-on-green application technology is now becoming the new frontier. Leading systems use an embedded camera network, artificial intelligence and deep learning software to identify weeds in-crop or in green-on-green applications.

High speed, high definition cameras are installed along booms to scan paddocks and weed recognition algorithms are constantly evolving to ensure specific weeds are precisely targeted with the appropriate herbicide in real time. The cameras can travel at speeds of up to 20 kilometres per hour, allowing growers to maintain high capacity spraying operations.

For some systems, blue lupin is this season expected to be added to the list of broadleaf weeds currently identified for green-on-green applications, while grass weeds in some broadleaf crops could be added in 2023.

The technology can be used in wheat, barley and oat crops and is set to be available for lupins this year and soon-after for broadleaf break crops and pastures.

Green-on-green trials with systems are showing an average hit and kill rate of 80%, as well as chemical savings of up to 90%.

The technology also allows opportunity for more concentrated herbicide applications and use of particular selective herbicides to better control difficult weeds, while reduced in-crop spraying can help delay the development of herbicide resistance, avoid potential yield penalties and minimise environmental impacts.

Weed population mapping is available with green-on-green technology as well, helping to further prevent herbicide resistance.

Growers also can potentially gain an understanding of crop growth stage and disease status and receive GPS-logged data that can assist nitrogen and fungicide applications, as well as their overall farm management strategy.

Subscriptions to leading systems also provide for all software updates and performance improvements.

McIntosh & Son offers the WeedSeeker 2 spot spraying technology to be fitted to existing self-propelled sprayers and boom sprayers as well as a stand alone option on Stoll units.

The Bilberry “Green-on-Green” Intelligent Spot Spraying System is currently also available on Miller self-propelled sprayers. For further information on the technology and these systems, contact your local McIntosh & Son dealership.



Some of the leading spot spray systems can be conveniently retrofitted to grower's existing suspended boom sprayers.

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CALENDAR OF EVENTS

LIEBE GROUP EVENTS 2022

Annual General Meeting	Wednesday 2 nd March	Dalwallinu Rec Centre
Crop Updates & Trials Review Day	Wednesday 2 nd March	Dalwallinu Rec Centre
Season Launch	Wednesday 2 nd March	Dalwallinu Rec Centre
Rural Edge: Farm Safety Workshop	Tuesday 22 nd March	Liebe Group Office
Women's Field Day	Tuesday 14 th June	Dalwallinu Rec Centre
Post Seeding Field Walk	Wednesday 27 th July	Main Trial Site, North Miling
Spring Field Day	Thursday 8 th September	Main Trial Site, North Miling

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