

Liebe Group Newsletter

CELEBRATING
20
YEARS
IN 2017

DECEMBER 2017 | VOLUME 20 | ISSUE 9

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LIEBE EVENTS

- ▷ **Christmas Sundowner**
Wednesday 20th December
- ▷ **R&D Committee Meeting**
Thursday 21st December
- ▷ **Annual General Meeting**
Thursday 15th February

GENERAL MEETING DATES

- ▷ Wednesday 20th December

LIEBE OFFICE HOLIDAY BREAK

The Liebe Group office will be closed from COB Friday 22nd December and will reopen Tuesday 2nd January.

The Liebe Group would like to acknowledge and thank the Department of Agriculture and Food WA, the Australian Government, the Grains Research and Development Corporation and Farm Weekly for their valued support.

LIEBE ANNUAL CHRISTMAS SUNDOWNER



Liebe Christmas Sundowner

The Liebe Group invite you to attend the Annual Christmas Sundowner

Join us to celebrate the end of another year and the beginning of the holiday season.

Food and drinks can be purchased over the bar.

Where: The Wubin Pub

When: Wednesday 20th December, 5pm onwards



DIAMOND PARTNERS



EO REPORT

Bec McGregor, Executive Officer, Liebe Group

Welcome to the Liebe Group December Newsletter. With the end of harvest around the corner and the Christmas break quickly approaching it is a great time to reflect on the year past.

2017 has been a difficult season for many of our members so we would like to thank you for continuing to support the group and providing your ideas, enthusiasm and time. I would like to thank the Liebe Group team for their excellent job in delivering quality events and trials despite the seasonal challenges and for helping to make the change into a fresh new staff team a smooth transition. Thanks to Alana, Danielle, Sophie and Rebecca and all of those who have left us this year for your hard work.

Looking into 2018 we have an exciting year ahead of us which will be kick started with the move into our new facility. On Thursday 15th February we will be holding our Annual General Meeting (AGM) followed by a busy-bee to assist with moving into the new building. We encourage all members to join us for the annual AGM and enjoy a member's preview of the building followed by an afternoon sundowner.

For those who are interested in joining one of our committees in 2018 please contact the Liebe office to express your interest prior to the AGM.

With the harvesting of all Liebe trials now completed in the region we are commencing report writing and the formulation of our R&D Book which will be released in early 2018.

Designed to help you get prepared for the upcoming season the Liebe Group Crop Updates on Wednesday 7th March is sure to be an information packed day. We will also be combining this with a Trials Review Session to allow for discussion of the interesting results from this seasons trials. See page 3 for more information.

We hope to see many of you at our upcoming Christmas Sundowner on Wednesday 20th December. We apologise for the changed date and location however hope that you can join us in celebrating the end of the year with fellow Liebe members.

On behalf of the Liebe Group team I wish you all a Merry Christmas and happy New Year!

GOLD PARTNERS



SILVER PARTNERS

Syngenta	Adama Australia	Australian Grain Technologies	Tek Ag
4Farmers	GrainGrowers	Scott's Watheroo Dolomite	NuFarm
Pacer Legal	Landmark	Refuel Australia	
AgriMaster	Pacific Seeds	BASF	

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OCTOBER GENERAL MEETING DEBRIEF

Danielle Hipwell, Administration and Communications Officer, Liebe Group

MONDAY 16th OCTOBER 2017, DALWALLINU DISCOVERY CENTRE

- **Spring Field Day Review:** Committee members provided feedback for 2017 Spring Field Day. Feedback was noted with suggested improvements collated for next year's event.
- **Governance Review:** The committee were updated on the Governance Review with the next step to be choosing a consultant to spend time with the Liebe Group.
- **Vision and Mission Statement:** The committee were provided with potential changes and were asked to review prior to discussion at the December General Meeting.
- **2018 Operational Plan:** A draft operational plan will be submitted to the committee to be endorsed at the December General Meeting.

CROP UPDATES & TRIALS REVIEW DAY

Wednesday 7th
March 2018



Join us for presentations on a range of topics including:

- How to grow your family farm
- Commodity and market review and 2018 outlook
- Agronomy decision making after a poor season - planning for 2018
- On farm technology and data management
- Best bet management of ameliorated non wetting soils
- Results from the collaborative pre-em herbicide and canola herbicide systems trials
- Nutrition management
- And much more...

Full details and agenda will be made available in the New Year

DIAMOND
PARTNERS



Rabobank



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NACC
Managing Natural Resources

LIEBE GROUP AGRICULTURAL RESEARCH AND EDUCATION FACILITY WELL UNDERWAY

Deb Metcalf, Project Manager

The Liebe Group Agricultural Research and Education Facility located at 17 Johnston St Dalwallinu commenced construction in July 2017. The Liebe Group is the first grower group in WA to construct its own purpose built facility to provide economic development opportunities for the agricultural sector through research, development and extension.

About five years ago it was identified that the current office location would not see the Liebe Group grow into the future so the group began scoping ideas and plans for a new facility. In 2015 Elma and Noddy Southcott and their family generously bequeathed a block of land, in the main street of Dalwallinu, to the Liebe Group. Planning and searching for supporting funds for a dedicated Liebe building began.

In November 2016 the Liebe Group were pleased to be successful in receiving funding for the facility by the National Stronger Regions Fund and the Royalties for Regions Regional Grants Scheme along with the generous pledges of money from Liebe Group members and supporters towards the building. A Building Committee was soon formed to research and scope up plans for the facility and Deb Metcalf was appointed as Project Manager. It was also announced in November that the group successfully received funding through the GRDC Infrastructure Grant for the enhancement of the Research Workshop.

Planning for the building has not only considered the Liebe members' needs, but also the wider community. The 356m² purpose built facility is planned as an inclusive and collaborative space, inviting conversation, generation of ideas, synergy of organisations, and building research opportunities.

It will have the capacity for video conferencing, educational and capacity building workshops, a workroom facility to conduct some of the groups own research activities, space for Liebe partners to meet with hotspot facilities, a boardroom and a lease office space.

It will provide the Liebe Group and research partners with access to modern infrastructure that will increase the level of highly relevant local R, D & E in the Northern Agricultural Region (NAR) in WA, enabling better outcomes for local growers. This will enable the group to increase its contribution when partnering on projects at a state and national level, effectively attracting greater investment into the group and region. The ability for this facility to become a key research hub for the Northern Agricultural Region opens a range of opportunities for creating strong partnerships, networking and encouraging a collaborative approach to R&D moving forward.

The building has progressed quickly under the meticulous supervision of building contractor Jeff Famlonga. The building is now at lock up stage with the remaining internal fitout to be completed after the New Year. The Research Workshop is currently under construction by local builder Goodthing United.

With the project due for completion in early 2018 the Liebe Group looks forward to a future of innovative and collaborative research, creating industry productivity growth and long term sustainability of the group. Guaranteed continuity of this exciting work encourages the next generation of industry innovators. It is very fitting for the Liebe Group to be achieving this in its 20th year of highly recognised regional, state and national research in 2017.

The Liebe Group would like to take this opportunity to again thank our members and supporters who have generously donated pledges towards the facility. To Elma Southcott for gifting the land to the Liebe Group. To Dalwallinu Haulage for the in-kind services for cartage of sand and the Fall's family for the sand donation. We would also like to thank the community for their interest in the progress of the building and we look forward to celebrating the opening of the facility in 2018.

NEW GENETICS AND AGRONOMY TO IMPROVE WHEAT ESTABLISHMENT WITH DEEP SOWING

G. Rebetzke, Research Geneticist, CSIRO,
B. French, Department of Primary Industries and Regional Development Merredin,
C. Zaicou-Kunesch, Department of Primary Industries and Regional Development Geraldton, and
C. Wlikins, Principal Consultant, Synergy Consulting

Key messages:

- Current Australian wheat cultivars contain dwarfing genes that reduce coleoptile length by 40%. New dwarfing genes are available that reduce plant height but don't reduce coleoptile length
- Breeding lines and DNA markers have been delivered to Australian breeders to assist in the breeding of longer coleoptile wheats
- Deep-sowing studies in WA support MEF research showing benefit with new dwarfing genes in increasing emergence at sowing depths of 120mm or more but without changing plant height
- Moisture-seeking points borrowed from research in eastern Australian states should reliably allow seed placement and emergence from sowing depths of 100mm or greater

Background:

In Mediterranean-type environments typical of the WA northern wheatbelt, crops are typically sown on the first rains, and water for growth is supplied as current rainfall. Here, faster leaf area development should reduce soil evaporation to increase crop water-use efficiency, yield and competitiveness with weeds. Key to high leaf area development is good crop establishment. An ability to establish wheat crops from seed placed 80mm or deeper in the soil would be useful in situations where the subsoil is moist but the surface dry. WA farmers regularly face this situation at seeding when there are limited follow-up rains. Seeding onto moisture at depth extends the opportunities for a greater portion of the cropping program to be sown in the traditional sowing months of May and June or earlier in April following summer rain. A separate but concerning issue is the influence of increasingly warmer soil temperatures on reductions in coleoptile length. Earlier sowing into warmer soils will reduce coleoptile length by as much as 60% so that a variety such as Mace with a 75mm coleoptile at 15 °C will likely have a 40mm coleoptile at 25 °C soil temperature. The use of some seed dressings and pre-emergent herbicides will reduce this coleoptile length even further to affect crop establishment.

The green revolution Rht-B1b and Rht-D1b dwarfing genes reduced plant heights to reduce lodging and increase grain yields and so are present in most wheat varieties worldwide. Their presence also reduces the length of the coleoptile (the shoot that grows from the seed and allows seedling emergence through the soil) by as much as 40%. This reduces crop emergence when sown at depths greater than 50mm, and leaf size to reduce water-use efficiency and weed competitiveness.

New dwarfing genes:

A range of alternative dwarfing genes have been identified in overseas wheats with potential to reduce plant height and increase yields while maintaining longer coleoptiles and greater early vigour. Some of these genes (e.g. Rht8 and Rht18) have been used commercially overseas but have not been assessed for use here in Australia. We reduced the larger global set of alternative dwarfing genes to Rht4, Rht5, Rht8, Rht12, Rht13 and Rht18, and then developed linked DNA-markers to assist with breeding of these genes in a commercial breeding program. Separately, we then bred these genes using conventional and DNA-based methods into the old, tall wheat variety Halberd for testing and disseminating to Australian wheat breeders.

NEW GENETICS AND AGRONOMY TO IMPROVE WHEAT ESTABLISHMENT WITH DEEP SOWING CONT...

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Preliminary field studies:

Field studies have commenced on these Halberd-based dwarfing gene lines, and show that lines containing these genes produced coleoptiles of equivalent length to Halberd (up to 135mm in length; Fig. 1) and established well when sown at 100mm depth in deep sowing experiments conducted at Mullewa and Merredin in 2016 (Fig. 2). Grain yields of lines containing the new dwarfing genes were equivalent to the yields of lines containing the commonly used Rht-B1b and Rht-D1b dwarfing genes while previous studies have shown the new dwarfing genes were linked to greater grain yields when sown deep owing to greater plant number with improved establishment.

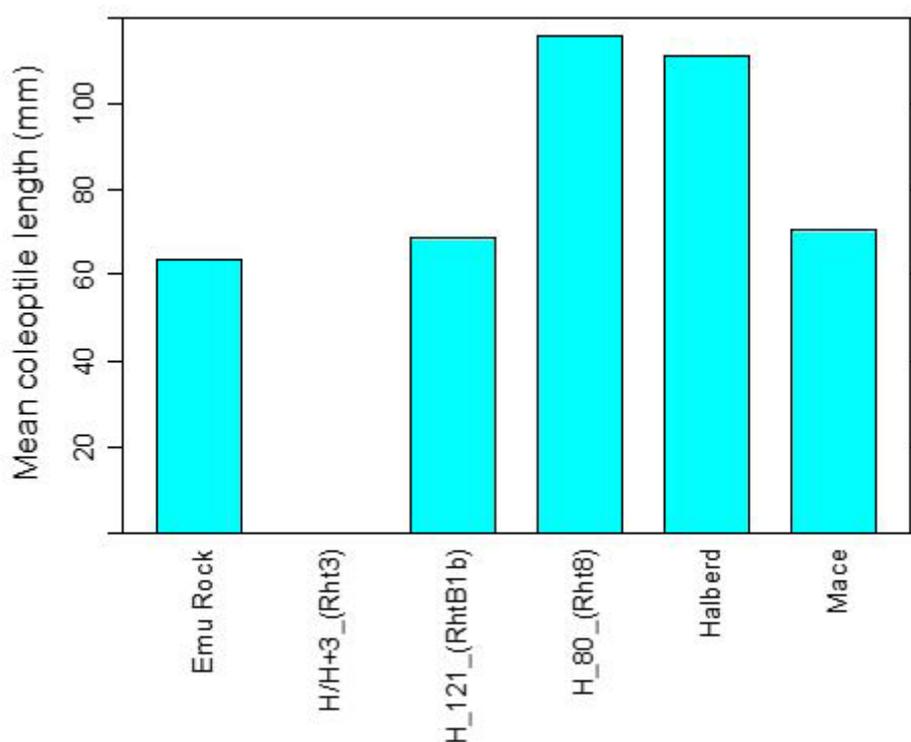


Figure 1. Coleoptile lengths of a tall wheat genotype (Halberd) and genotypes with dwarfing genes Rht-B1b (syn. Rht1) and Rht8 in a Halberd background. Emu Rock and Mace are current commercial cultivars with Rht-B1b.

The most likely useful new dwarfing genes, Rht13 and Rht18, have been bred into a range of current commercial wheats (Figs 3 and 4). Long coleoptile wheat varieties such as Mace, Scout, Espada, EGA Gregory and Magenta have been delivered to Australian breeders for testing and use in breeding. If there are no problems with these new dwarfing genes, we may see the first of the long coleoptile wheat varieties in 3-4 years in NVT testing!

Agronomic opportunities:

Although there is real promise in the new genetics, there is significant opportunity in coupling new genetics with new existing seeding technologies. Deep sowing is an issue overseas and in the eastern Australian states. The availability of moisture-seeking points commonly used elsewhere should allow the reliable placement of seed at depths of 100mm or greater. These points produce a slot deep into the soil at the base of which a seed is sown at 10-50mm depth. That said, further research is required aimed at tools and methods assessing across different

NEW GENETICS AND AGRONOMY TO IMPROVE WHEAT ESTABLISHMENT WITH DEEP SOWING CONT...

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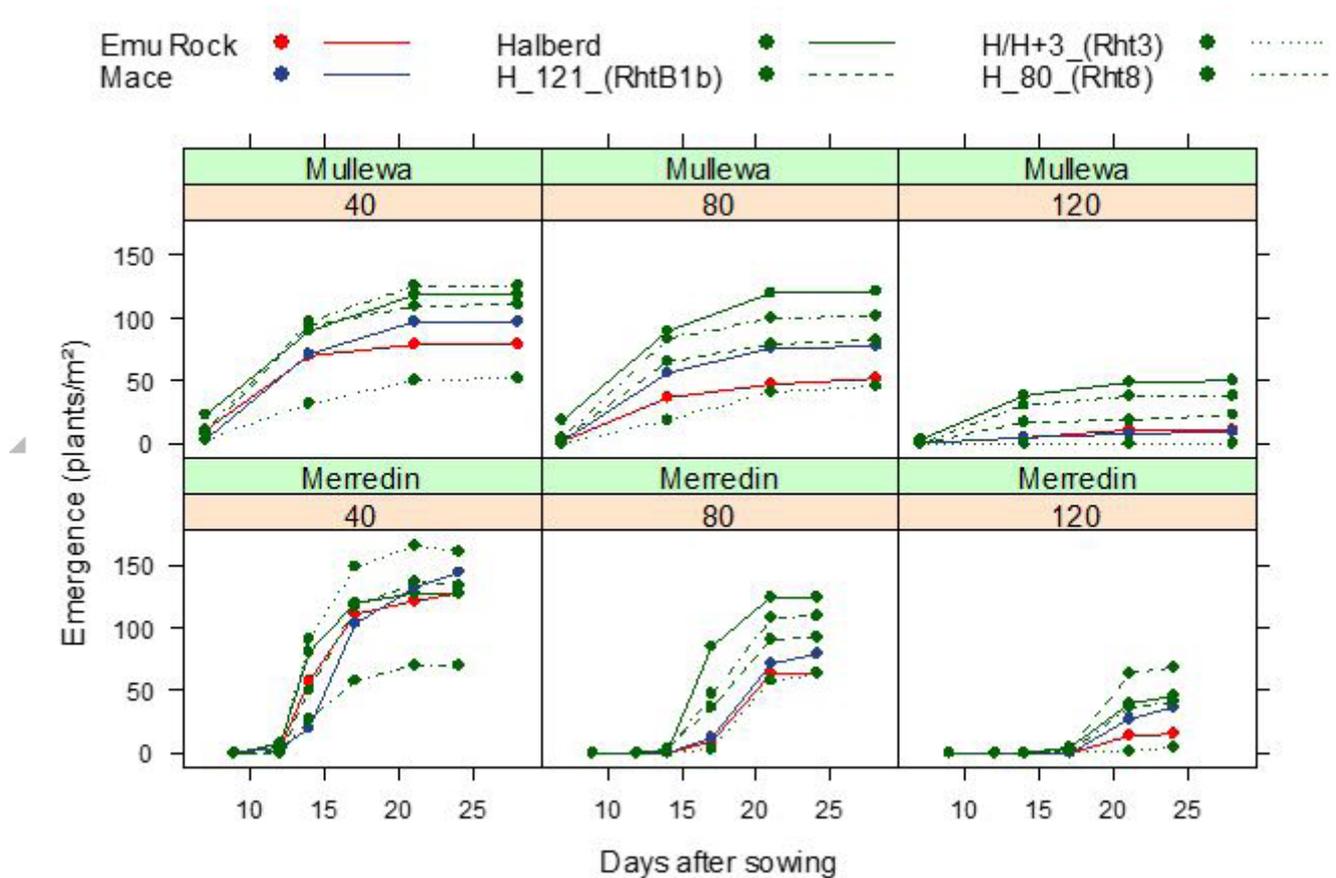


Figure 2. Patterns of emergence of wheat genotypes with different dwarfing genes sown at target depths of 40, 80, or 120 mm at Mullewa and Merredin in 2016 (after French et al. 2017).

Summary:

Wheat breeders now have the new dwarfing genes and cost-efficient selection methods to breed longer coleoptile wheat varieties. Matching new genetics with appropriate agronomy and technologies should ensure the emergence and establishment of deep-sown wheats particularly when sown early to make use of summer rains sitting deep in the soil profile or to increase sowing opportunities in the traditional months of May and June.

Acknowledgements:

We'd like to acknowledge the support of the GRDC in funding much of the research reported herein.

References:

French B, Zaicou-Kunesch C, Rebetzke G (2017) Alternative dwarfing genes improve emergence from deep sowing. GRDC Updates Perth

NEW GENETICS AND AGRONOMY TO IMPROVE WHEAT ESTABLISHMENT WITH DEEP SOWING CONT...

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Figure 3: Wheat variety Mace (left) side-by-side with long coleoptile Mace containing the Rht18 dwarfing gene (right) at Condobolin in 2017.



Figure 4: Wheat variety Scout (left) side-by-side with long coleoptile Scout containing the Rht18 dwarfing gene (right) at Condobolin in 2017.





Women of Liebe

Narelle Dodd

We 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.

What is your background/where did you grow up?

I grew up on a wheat/sheep farm in Latham ... vowed and declared never to marry a farmer or live up here ... but I learned that it's unwise to make such bold statements!! I attended Latham Primary School, boarded at St. Mary's AGS in Karrinyup for 5 years, then began tertiary studies at WACAE to become a secondary PE teacher... until I was offered an opportunity of a lifetime.

Sport has always been a very big and very important part of my life. In boarding school, I was pursuing multiple sports careers, until I discovered volleyball. It was a new sport, played on a much smaller court (I was never an endurance athlete!). St. Mary's was like Fort Knox back in the 80s so it was really hard to get "out" to training for multiple sports, so I made a choice to play only volleyball. It was a great decision; for 6 years I travelled all over Australia and Asian countries representing WA and Australia. I did make a return to hockey when I moved to Buntine, and once I "matured", enjoyed 10 years of touring Australia and Europe playing hockey, Masters allows you never to be too old!!

I am a firm believer in making your own luck, and through hard work an amazing opportunity came my way, a volleyball scholarship to attend & play for the University of New Mexico, in the USA. Back then in the pre-mobile phone and social media era, it truly was a long



Narelle and Mike Dodd at the 20th Annual Spring Field Day (2017)

way from family with just the odd phone call and letter, but it was amazing! We trained every day, travelled most weekends to other states for matches, had the cheerleaders and games broadcast ... just like the movies! It was an incredible experience. A knee injury allowed me to come home to rehab for the summer, which brought me to watching my brother play footy for the Dally Bulldogs ... and to Mike! Need I say more?

We married in '92, and in the next 7 years added Danielle, Melissa, Courtney and Ryan to our family. Initially Mike's parents were on the farm full-time, then seasonally, which was fantastic for us to ease into taking the reins of the business. We had a very close and wonderful relationship with them, and this extended to our children whom they have had a very positive influence over. Of course, the babysitting benefits were enormous too!!

What is your role in your farm business?

I have always been a very "hands on" contributor to our farm business, far more enjoyable than being in the house! I manage the business finances but I especially love harvest time; driving the chaser and header whenever Mike vacates his seat! It's also a favourite time because all the kids come home and help out too. It is something very special to be in a business that allows our family to work together and I believe gives the kids a real appreciation for where what we have comes from (or in this case don't have).

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

As much as I never thought I wanted to live in Buntine, I've loved it. It's a fabulous environment to raise a family; so much time together, so safe and so much freedom. It's very special to belong to a community



where everyone is familiar and there for each other. Everyone is working together for the greater good of our wider community and to improve our farming practices, neighbours helping neighbours. It's so evident when you come down to a home game of winter sport, or the amazing event of "Who Stopped the Rain" last weekend. It's very special to live in a rural area. I love seeing our children having the same passion for the country as they've grown too.

What is your involvement in the Liebe Group?

I have not had an official role within committees of the Liebe Group, but our Farm hosted the first and 20th main trial sites, and Mike has been involved in the Liebe Group on various Committees since the group's inception. I have been a regular attendee of most Women's Field Days, bus tours and business workshops, all of which have given valued information on a personal and business level, and given an extended network

of farming women in the wider community.

What have you gained through the Liebe Group?

The Liebe Group has been a platform for me to increase my farm knowledge, mainly from an administration and financial perspective. It's been a valuable resource regarding employees and responsibilities as employers from the workshop to the ATO. The group is forever seeking feedback to provide what its members want, and it does a fantastic job in providing that. The Liebe Group has also been a wonderful networking forum to meet new people from a very wide area, whether it be social or industry; all of whom are an added value to what the intent of the Group was to provide.

Who or what inspires you?

I find inspiration in many places; the desire to achieve from within, whether it is from within me, or from all the amazing people I love to read and hear about that have faced incredible adversity

in their lives yet find courage, strength, and selflessness to overcome all manner of things to be who they want to be, do what they want to do, or help others to do the same. We are our own real limitation, instead of saying "I can't.." we need to say "how can I..."

What are your life goals/aspiration?

My goals are ever changing in their detail; but the bottom line is to be the very best that I can be. Whether that be as a person, parent, friend or in our business. My favourite saying is "Fear is temporary, regret is forever" – it's good for us to get out of our comfort zone and try things. Years like this remind us how important family, friends and happiness are ... take the time to appreciate all that we have.

What is your funniest moment of 2017 so far?

Dare I say it ... getting caught short in a royal garden!!



Narelle Dodd and Heidi Carlshausen celebrate the 20th Women's Field Day

LOWER COMPANY TAX RATES – DOES IT AFFECT YOU?

Judy Snell, Director, RSM

Companies who are looking to qualify for the reduced small business tax rate of 27.5 percent must, (where turnover is under \$25 million), be “carrying on a business”. This requirement has created some confusion for companies with investment or passive activities, especially when considering the draft ruling TR 2017/D2 which discussed that passive investment companies may be regarded as carrying on a business. It was a footnote noting a company albeit a passive investment will be viewed as carrying on a business where the company is established or maintained to make profits or a gain for its shareholders.

The Treasury in an effort to clarify the situation released an exposure draft that companies with predominantly passive income cannot access the lower company tax rate before the 2024 income year.

The new rules impose an extra condition to the business and turnover tests. To be eligible for the lower rate, 80 percent or more of a company’s income cannot be passive. The definition of passive income includes portfolio dividends, interest, royalties, rent, capital gains and trust and partnership distributions sourced from such income.

This could increase in compliance costs for small businesses, as there are additional areas they will have to consider:

- Constant review of their turnover across all related entities to determine if they have breached the turnover threshold
- Reviewing the mix of different income streams each year to identify if they have breached the 80 percent passive income threshold
- Tracking trust distributions through other trusts back to their initial source to identify the character of income. So if the original income was business – i.e. primary production income it could well be eligible for the reduced rate

The Exposure Draft does not discuss the dilemma that companies that qualify for the reduced tax rate can only frank dividends at 27.5 percent, although they may have paid tax on their retained profits at 30 percent.

This space needs watching once the legislation has passed through parliament as the devil is in the detail but it appears that there will potentially be winners from the proposed changes.



FARM FINANCES 101 WORKSHOP

Alana Hartley, Research Agronomist, Liebe Group

On Thursday 19th October, the Liebe Group held a capacity building workshop which focused on providing practical steps to understanding your financial position. The workshop was designed to support members to develop their knowledge around financial management to aid them in making more informed decisions for their own families, businesses and community. Open to all Liebe members and the wider community, the workshop produced positive outcomes for the group of 19 individuals in attendance. The workshop included presentations from guest speakers Greg Easton, Farmanco, Glynn Judd, RSM, and Michael Monaghan, Rabobank. Each presentation introduced the group to the basic financial calculations and farm budget worksheets that are required to keep track of farm income and expenses.

Greg Easton, spoke with the group about the importance of developing and maintaining a budget and explained that a budget is a living document that allows you to assess business performance, current financial position and can be used to help set financial goals for the future. Greg discussed the principles of budgeting stating that the first principle of budgeting is to avoid budgeting on the basis that everything will turn out as expected and to be cautious about optimistic forecasts. He then provided an overview of the types of budgets and their applications and an introduction to financial ratios and how to calculate and use your statement of position.



Members of the community participating in Liebe Groups Farm Finances 101 workshop



Participants of Farm Finances 101 working through examples from Glynn Judd, RSM

Michael Monaghan discussed the important aspects of farm business finance, which the banks will use to assess a business's capacity to manage debt. Michael highlighted that the banks look for business's that approach their budgeting in a realistic manner, claim ownership and responsibility for the management of their budget and, demonstrate the ability to manage debt through good communication, experience, skills and knowledge, business liquidity, equity and strategic direction. It was also noted by all three speakers that having a sound understanding of what the drivers of growth are within your business is key to understanding the balance of the financial ratios that reflect your businesses financial position. No two farming businesses are the same.

Glynn guided the group through several case studies and activities which challenged the attendees to test their understanding of financial calculations. Participant's calculated gross profit, from working out total sales and cost of goods sold, carefully selecting the correct items that form a profit and loss statement and learned to identify errors in their balance sheets. Glynn also introduced the group to Xero and Figured accounting and planning cloud based software. He explained that cloud based accounting and management tools such as Xero and Figured are continually being improved and are increasingly user friendly, saving farmers time when managing their budgets.

FARM FINANCES 101 WORKSHOP CONT...

Alana Hartley, Research Agronomist, Liebe Group

The workshop was a great success with positive feedback from all in attendance. It provided participants with increased confidence and the practical skills and experience for application in their own businesses, families and community. The Liebe Group would like to thank Greg Easton, Glynn Judd and Michael Monaghan for taking the time to present to the group and share their knowledge and experience. Thank you also to Jenny's Bakehouse for providing a delicious morning tea and lunch and to all the participants for making the workshop a success. This workshop was all made possible with thanks to the Grants for Women Program, an initiative from the Government of Western Australia Department of Local Government and Communities.



EXPRESSIONS OF INTEREST

Would you like to visit China for 7 days?

As part of the group's R4R malting barley to Asia project, SEPWA is organising a week long trip to China in March 2018.

With 7 people from SEPWA in attendance, they can accommodate 2 other barley growers from WA in the trip.

Arriving in Guangzhou, the program includes a to visit Supertime malting house, Guangdong Baiyan Grain & Oil Industrial, Yanjing Beer Brewery plus much more!

The cost of this fantastic tour is approximately \$3000 with flights, visa, accommodation and transport arranged.

If you would like to take part, you will need 6 months of passport currency post March 2018 and you will need to contact Nigel Metz directly at nigel@sepwa.org.au or 0447 631 115



MANAGING EROSION

Clare Johnston, Agronomist, Elders

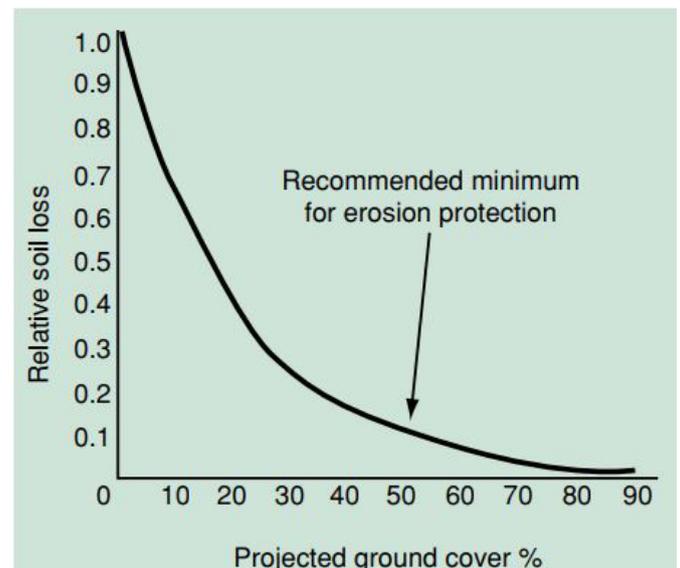
As we near the end of 2017 and look forward even more so to the 2018 season it is important to consider topsoil condition and how we can best manage our erosion risk, something you have no doubt been thinking about throughout the season. Unlike in “normal years”, there may not be enough stubble left after harvest to give protection until the next season. So what do you need to consider?

- Minimum groundcover requirements
- Grazing options
- Options for high risk areas

Minimum ground cover requirements

Standing stubble is more effective than an equivalent weight of prostrate stubble (Carter 1984). The critical cover percentage for standing stubble to minimise wind erosion is 30% (i.e. when viewed from above, more than 30% of the ground surface would be covered). Prostrate ground cover not only increases surface roughness but also physically covers the soil surface, which reduces the amount of soil exposed to the wind. Research in Western Australia has demonstrated that ~50% prostrate ground cover is adequate to minimise wind erosion (Figure 1). With ~50% of the surface covered, the predicted soil loss is 10% of that predicted from a bare surface (Fryrear 1985; Findlater et al. 1990). The stubble should be anchored in the ground. The relationship between prostrate ground cover and relative soil loss applies to all soils and plant covers, unless the vegetation is easily detached (e.g. field pea stubbles), where much higher levels are required to control wind erosion.

Figure 1: The effectiveness of prostrate ground cover in reducing the amount of soil lost by wind erosion, relative to bare ground (Findlater et al. 1990).



Grazing options

If grazing stubbles minimum groundcover requirements are higher and depend on 2018 rotation plans:

- Going to crop with zero tillage, leave about 1125kg/ha of anchored stubble after harvest. This will leave about 750kg/ha of anchored stubble by the beginning of autumn to give 50% cover during crop establishment.
- Going to pasture, leave about 1500 kilograms per hectare (kg/ha) of anchored stubble after harvest. This will leave about 1000kg/ha of anchored stubble by the beginning of autumn to give 50% cover during pasture establishment.

Assuming you have met the stubble targets at harvest:

- remove livestock when stubble cover drops to about 50% or if any bare patches develop
- limit all vehicle movement in the paddock
- protect bare areas and high traffic areas
- if there are summer weeds, balance the need to control them with the increased risk of wind erosion.

MANAGING EROSION CONT...

Options for high risk areas

- Stubble or other vegetation cover: clay, gravel, sprays and clods
- Minimise livestock trampling; minimise vehicle disturbance
- Tree windbreaks or shelterbelts – something to look at for longer term risk areas.
- Harvest weed seed control - Where weeds aren't too bad consider spreading to give wider cover. If weeds are a problem windrow burning rather than whole paddock burns will minimise risk.

For more information please contact Elders on 9661 2000 or Clare on 0417 253 586



WE NEED YOUR IDEAS!

The Liebe Group are looking for growers to share their curiosities about their farming system.

If you have any new ideas you would like to test in your own patch, let the Liebe Group know.

Your idea could become the next grower scale demonstration!

We are looking for summer and in-season demonstrations.

To share your ideas, contact Alana at the Liebe Office
(08) 9661 0570
research@liebegroup.org.au

ASSESSING THE VALUE OF GROWER GROUPS IN WA

Grower Group Alliance

Have you ever wondered what your return on investment (ROI) was from your grower group membership?

The Grower Group Alliance (GGA) have recently released a report that investigated the economic and social contribution grower groups made to the industry, rural communities and the WA economy. It found that as well as providing a strong economic benefit to local and regional communities, grower groups play a vital role in building social capital and a support network which contributes to general wellbeing and mental health in rural communities.

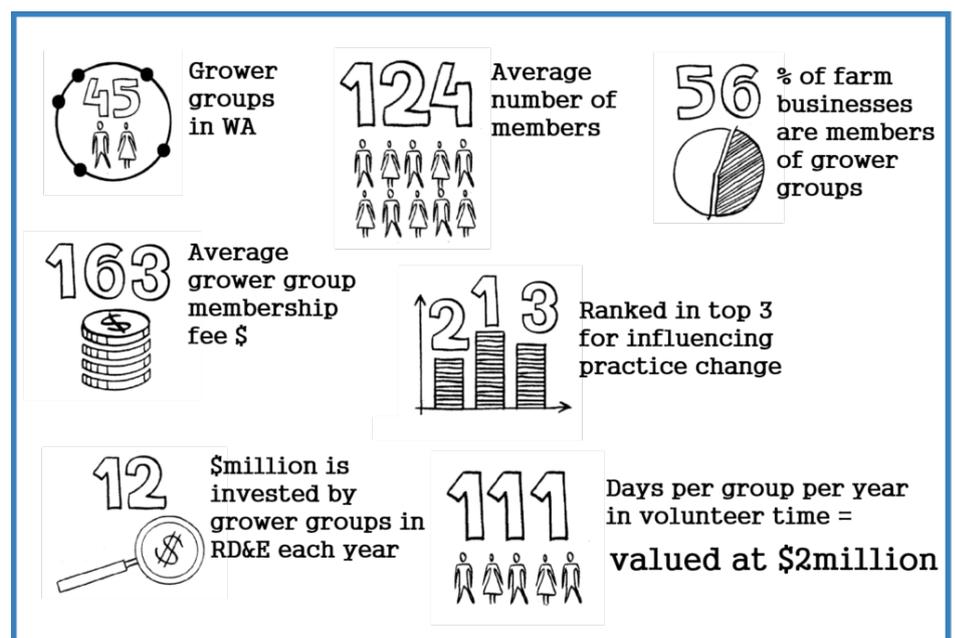
The study, conducted by Agknowledge and Advanced Choice Economics, comprised of comprehensive surveys of grower groups, desktop reviews and a series of extensive interviews with farmers, the research and development sector, consultants, agronomists and sponsors. Some key findings from the report included:

- A cumulative total economic value of \$3 billion dollars in direct and indirect benefits have come from WA grower groups over a 25 year period. This equates to approximately \$120m/year!
- \$12million dollars per year has been invested into research, development, extension and adoption activities by Western Australian grower groups
- There is significant and recognised in-kind voluntary contributions made by group members and partners
- A benefit cost ratio of 10:1 for every dollar invested into a group
- There is strong support for grower groups across the agricultural RD&E sector as they play a crucial role and are a vital part of the structure for primary industries in the state.

Grower groups offer members significant value through peer-to-peer learning and access to trusted, independent, affordable information to assist decision making and practice change. Furthermore they are an incubator for new ideas, identifying issues and constraints and providing opportunities to influence research priorities that assist to improve farm business productivity and/or profitability.

The Liebe Group will be reviewing this report over the coming months to understand how it can use and implement the information and methodology to determine the value we provide to our members, partners and the wider industry.

Access to the full report is available on the GGA website - www.gga.org.au



Source: Assessing the Value of Grower Groups - Final Report (2017)

REGIONAL ROUND UP - HARRY AND JANE HYDE

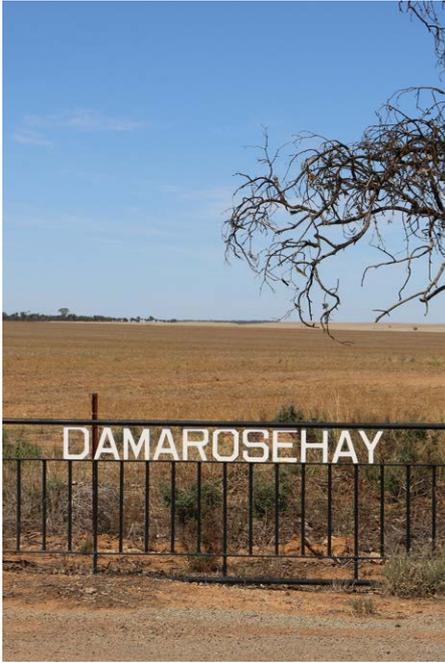
Alana Hartley, Research Agronomist, Liebe Group

Grower: H J Hyde & Co - Harry & Jane Hyde

Location: Dalwallinu and North Miling

Enterprise size: 5000ha

Area Cropped: 100%, including 70-80% wheat, 10% lupins, 5% Canola, 5% Field Peas



Harry and Jane Hyde run a 5000 ha 100% cropping enterprise at Dalwallinu and West Dalwallinu/North Miling. Harry has one permanent farm worker but will often get workers in for the busier times of the year. To manage his staff and any contractors, Harry has adopted the locally developed AgriTrack app. He uses this app to be able to track where machinery and staff are around the farm and, provides assistance to staff and contractors when shifting paddocks, getting lost or carrying out tasks while he is away off farm.

As Harry reflects on the season that has passed, he described the 2017 season as being considerably challenging, particularly for the two farm blocks west of his Dalwallinu home farm however; he has been pleasantly surprised at the resilience of his wheat and field pea crops, with good yields (for this season) being seen particularly on the home block. He has said that seasons like this really highlight our limitations to production such as machinery and input costs, and can see the industry value in addressing some of these key issues before our industry loses its competitive edge and farming becomes unaffordable.

Harry says, 'our biggest limiting factor is water. We really aren't seeing real yield increases despite the changes made to on farm practices and the advances in plant breeding so, how do we manage this more effectively?'. Investigation into seeding systems and machinery that help harvest water prior to and at seeding is incredibly important in a drying climate and Harry has already implemented some changes in seeding strategy within his own farm business to manage this.

Harry and Jane's Dalwallinu property was home to a number of trials this season, with the Department of Primary Industries and Regional Development Officer, Sarah Collins conducting a third season of nematode work, to which all Liebe members will be able to read her report in this seasons R&D book.

With a strong focus on soil disease management, Harry has also incorporated a rotational strategy which includes legume break crops. He has said that this season he has seen the benefits his field peas, and to lesser extent, his lupin crops are having on the control of diseases such as nematodes and rhizoctonia when entering back into the cereal phase. Agriculture Victoria Research and Plant Breeding has conducted a pea variety trial at Hydes with results also being available in this year's R&D book.

REGIONAL ROUND UP - HIRSCH FAMILY

Alana Hartley, Research Agronomist, Liebe Group

Grower: BA & JM Hirsch - Brad, Joanne and Dylan Hirsch

Location: Latham and Bunjil

Average rainfall: 2017 Annual: approx. 135mm **GSR:** approx. 95mm

Farm size: Total: 6150

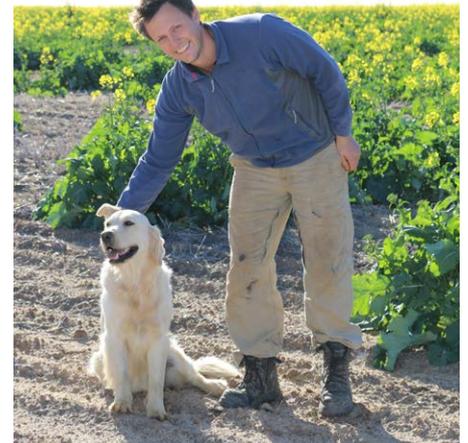
Area cropped: 1700 ha Canola, 550 ha Lupins, 800 ha Barley, 3100 ha Wheat

Earlier this season, the Liebe Group caught up with Dylan Hirsch, to find out what his plans were for the season and how he was enjoying being back on the family farm.

We have caught up with him again to see how he and his parents got on in 2017....

Dylan has reflected on the positive aspects of the 2017 season, despite the disappointments in rainfall and having to put off on farm projects for a further year, until in a position to revisit them again.

He said that the Water Use Efficiency of this year's crops was impressive compared to those crops witnessed in the dry seasons of 2002, 2006 and 2007; giving the Hirsch family confidence about the direction of their farming practices and the improvements within the industry.



Some of the practices they have addressed over the years, to reduce the risk of seasons like 2017 have been maintaining ground cover, including stubble retention, and keeping on top of summer weeds so as to take advantage of the stored soil moisture gained from summer rains when they fall. Dylan noted that this season they were still able to successfully get their lupins and canola out of the ground early, having placed them on paddocks where stubbles and weeds were managed to ensure soil moisture was accessible at seeding. He also believes that the strong liming history has also contributed to this ability for their early crops to access moisture deeper in the profile. Dylan says 'it certainly gives us confidence to sow earlier if our paddocks are managed effectively'.

The Hirsch's conducted some of their own on farm demonstrations, including N rich strips, to test the decision making strategies around rate and timing of N applications. There was a positive impact on the yield where additional N was applied however; Dylan is interested in conducting a similar demonstration again to validate the results obtained from this season. Like many, fertiliser and chemical applications were difficult due to the staggered emergence of crops.

CSBP have established two trial sites on Hirsch's Latham and Bunjil properties, looking at lime, gypsum and dolomite on acid and high aluminium soils and, nutrition management on deep ripped soils. Dylan says that this year's trial sites have shown some really interesting responses to all the treatments that have been applied. The results of this trial site will be made available to all members in this seasons R&D book.

As for some of the technology that he was interested in earlier in the year, to assist with their precision agriculture adoption strategy, he has been teaching himself how to use AgLeader SMS; a software system for variable rate, and has made links with other growers that are using the same technology, to learn from one another.

Both our regional roundup growers are looking forward to the 2018 season and, the Liebe group wish them both and all our members the best for the rest of harvest.

BLOCKCHAIN- COULD IT REVOLUTIONISE THE FOOD AND AGRI SUPPLY CHAIN?

Mick Monaghan, Rural Manager, Rabobank

There is a lot of excitement and talk about 'blockchain' but yet little is known about what it actually is, and how this digitised technology could be implemented in the agri sector.

Wes Lefroy, Rabobank's agricultural analyst has been closely following the potential of this new digitised approach to managing supply chains, and how it could revolutionise the food & agri supply chain, as we know it.

Authoring an article, **Blockchain: Changing Interaction in the F&A Supply Chain from Paddock to Plate**, Mr Lefroy looks at the shift towards a digitised supply chain and why it holds great promise for farmers through to the consumer.

"Conceptually, blockchain makes a lot of sense but the potential of it in the agri sector is not something that has been widely considered," Mr Lefroy says. "Yet the shift towards this technology is progressing quickly and it might be here quicker than we think, with a number of companies already trialing the technology."

Blockwhat?

As a digital platform, Mr Lefroy says 'blockchain' facilitates the transfer of physical commodities right along the supply chain, whereby all transactions are recorded on a shared ledger.

"This shared ledger, essentially a record book, records all the financial transactions, as well as any data or information, that is associated with transferring the physical commodity along the supply chain – from farmer to consumer," he says.

Mr Lefroy says all those involved in the transaction would have their own copy of the ledger, and each time a transaction is made, a new record (or block) is created and added to the blockchain.

"For it to work, input suppliers, farmers, port authorities, banks, logistical providers, and processors, all need to participate in a common interface and enter their digital information in the same blockchain," he says.

What does it mean for farmers?

Mr Lefroy says "blockchain offers huge possibilities", given consumers are increasingly demanding high-quality and safe products – as well as, visibility of the supply chain.

The two major benefits blockchain delivers are transparency and provenance, but Mr Lefroy says the secure nature of blockchain also removes counterparty risk – or the "will I get paid?" element from the transaction.

"With blockchain facilitating traceability, it is set to drastically simplify the process of verifying product origin, quality attributes, and production practices," he says.

"For example, farmers will have much greater understanding of changing consumer preferences, giving them direct feedback into the demand for the different products they are producing. And in turn, consumers will have greater verification of how the product was grown, with input data and production location verifiable."

BLOCKCHAIN- COULD IT REVOLUTIONISE THE FOOD AND AGRI SUPPLY CHAIN? CONT...

Mick Monaghan, Rural Manager, Rabobank

Mr Lefroy says for blockchain to “take off”, it requires involvement from all the stakeholders along the supply chain.

“This is particularly pertinent for farmers, as the provenance story is diluted, without high-quality information about production inputs and origin,” he says.

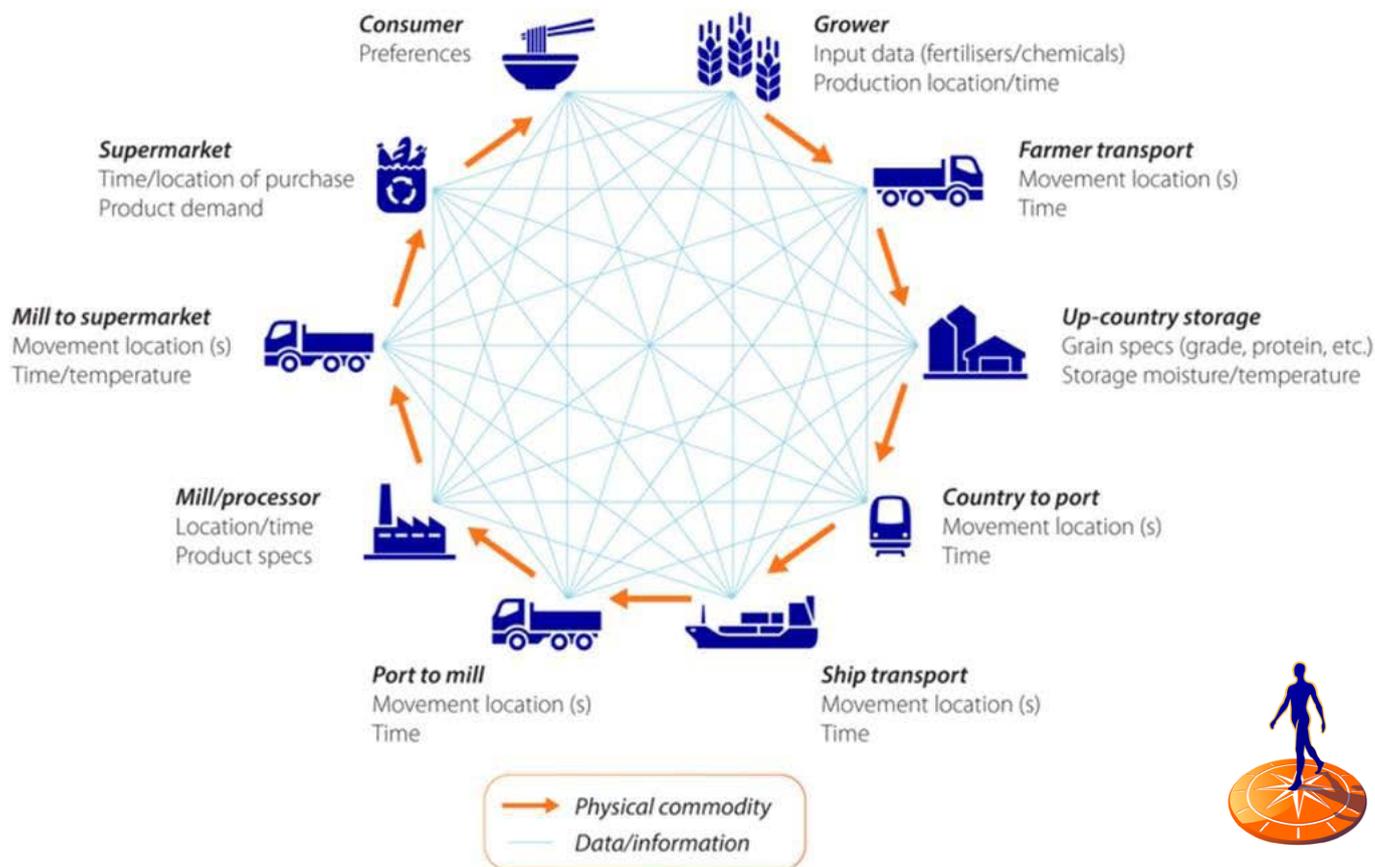
Commercialisation yet to take off

At home and abroad, Mr Lefroy says the shift towards a digitised supply chain is progressing quickly.

“In Australia, the world’s first settlement of a transaction involving a physical commodity on the blockchain was completed in 2016 by Australian AgTech Company AgriDigital,” he says. “And since then, we have seen some major grain handlers testing the application of this technology, with blockchain pilots also taking place for other commodities such as pork and mangoes.”

While there are still barriers to wide-scale adoption, such as calculating a proper distribution of costs and benefits, Mr Lefroy says “there is no doubt that it holds promise and is the way of the future”.

To find out more about other Rabobank research, contact Rabobank Dalwallinu on 08 9661 0900.



Rabobank

CALENDAR OF EVENTS 2018

Liebe Group Events

Event	Date	Location
Annual General Meeting	Thursday 15th February	Liebe Office
Crop Updates and Trials Review Day	Wednesday 7th March	TBC
Women's Field Day	Tuesday 19th June	Dalwallinu Recreation Centre
Post Seeding Field Walk	Wednesday 18th July	McCreery's Property, Kalannie
Liebe Group Annual Dinner New Liebe Building Opening	TBC 2018	TBC 2018
Spring Field Day	Thursday 10th September	McCreery's Property, Kalannie

General Meeting Dates

Event	Date	Location
February	Monday 12th February	Performing Arts Room
March	Monday 12th March	Liebe Office
April	Monday 9th April	Liebe Office
June	Monday 11th June	Liebe Office
July	Monday 23rd July	Liebe Office
August	Monday 13th August	Liebe Office
September	Monday 10th September	Liebe Office
October	Monday 15th October	Liebe Office
December	Monday 10th December	Liebe Office

FARM FINANCE FOR PERFORMANCE: BUSINESS STRUCTURE & CASHFLOW

REGISTER TODAY!

Would you like to expand your knowledge on business structure options and their strengths and weaknesses? How about learning more about the following topics?

- Business structures and asset ownership
- Taxation, legal, reporting and compliance requirements of structures
- Cashflow management reporting
- Living budgets for sound decision making and much more



If you answered yes to these questions, then this workshop is for you!

The Liebe Group have been offered the opportunity to host an interactive workshop in collaboration with Partners in Grain WA in 2018 but numbers are needed to make it a reality!

Suggested dates for the Farm Finance for Performance: Business Structure & Cashflow workshop are:

- **Friday 9th March**
- **Week starting 19th March**
- **5th or 6th April**

Register your interest and preferred date before **Thursday 14th December** to help us secure a date.

Contact Danielle at the Liebe Office (08) 9661 0570
admin@liebegrup.org.au
OR visit <https://pingwa.org.au/finance1/#> for more information.



LIEBE COMMITTEE OPPORTUNITIES

Are you interested in being a part of the driving force of the Liebe Group's research and development? Do you want to have a say in the direction of the Liebe Group in the future?

Now is an excellent time to join one of our collaborative Committees for 2018!

- Management Committee
- R&D Committee
- Women's Committee

To express your interest in joining a Committee, contact Danielle at the Liebe Office (08) 9661 0570
admin@liebegrup.org.au



SUMMER WEEDS SPRAYING AND RELIABLE CONTROL

Bevan Addison, Market Development Manager, Adama Australia

With variable rain across the north eastern wheatbelt in the past few weeks, there will be pressure to get summer weeds sprayed pretty quickly. The major focus needs to be not on the product choice or rate or super brew, but how you get that product onto the target and thus the job you get done.

For the majority of the summer weeds we come across, a brew of glyphosate, triclopyr, phenoxy herbicide and maybe a triasulfuron spike is the go-to mix. It is pretty robust, broad spectrum and usually works. Our weed spectrum is changing from the old melon issues we had to a greater mix of weeds so more thought needs to go into the control. With some emerging harder to kill weeds such as fleabane, you may need to go down the line of a double knock and a follow up with paraquat or paraquat + group G such as carfentrazone or oxyfluorfen is pretty handy. The key is don't skimp on either the glyphosate or the paraquat as they are the ones doing most of the heavy lifting.

Consistently we, the product developers and spray researchers, manage to control all sorts of hard to kill weeds in both fallow and crop but how does this translate into the real world. It can be pretty ordinary at times. Just see if you can spot the difference.



Trials: high volume, slow speed, correct nozzles, minimal drift. Commonly 25-30% coverage



Actual farmer rig tested at application workshop at normal working set up <5% coverage. Source Sacoa.

Despite the differences highlighted above, in most cases the herbicides still actually do the job they were designed for...amazing!

Look at the key factors involved in a successful spray job and what can you do about them.

1. Rates: Totally controllable. GRDC research indicates summer spraying has some of the greatest return on investment for anything you can do in your cropping phase. Depending on your system a pass over the paddock costs between \$7-10/ ha if you do it yourself. Don't let a poor rate selection undo all that.

2. Weed size: Partially controllable. We all know small weeds are easier to control but have to balance time constraints, potential second germinations etc. Some weeds won't be as critical as others but some are very important. Caltrop is very easy to control but develops really quickly and you need to get onto it before it starts setting seed. Fleabane is not overly hard to control when small but let it get to 25-30 cm tall in it becomes very problematic. Button grass is developing across many northern areas and is a bugger to control, apparently. Trial work manages to get it done reasonably easily though? Target key problem paddocks first opportunity you can.

3. Delta T: Partially controllable. Early mornings or late evenings depending on your product choice will make things better but we always spray outside the range at some point.

4. Dust: Partially controllable. In-crop trials have shown 15-20% reduction in control of wild radish due to dust. How many of you vary which end of the paddock you start spraying depending on wind direction and

SUMMER WEEDS SPRAYING AND RELIABLE CONTROL CONT...

Bevan Addison, Market Development Manager, Adama Australia

make sure you are spraying into clean air. I have asked this question of several hundred farmers over the past few years at farmer meetings and nobody does. How else can you get 20% improvement for no real outlay? Easy money if you do it right.

5. Adjuvant selection: Totally controllable. People get very emotional about this one. The key issue is know what you are trying to achieve. More penetration on grasses in a winter crop, maybe you go for esterified canola oil such as Plantocrop®, Hasten® or similar. They penetrate well but will not give the same level of droplet survival under hot conditions as a mineral oil based product. Summer spray oils are cheap and do a reasonable job but better still, aim for something with a better wetting capability such as Uptake® or Enhance® or similar. They will be good all-rounders and these may be better with multi-product mixes due to better surfactant loadings. They will also aid droplet distribution and deposition better than straight wetters. What about soy phospholipid products and acidifiers I hear you all cry. For the most part acidifying the water will get done by the glyphosate anyway. Soy phospholipids can modify droplet spectrum but there is some conjecture about their use with summer weed control, especially with triclopyr brews. Adama has a product called Raizer® so we do play in this space if clients want to but from what I have seen, a quality mineral oil will probably be better.

6. Water quality: Partly controllable. Water hardness and total dissolved salts is far more of an issue than pH for most people. Combine that with a brew where we have products that may be antagonistic and we often need ammonium sulphate in the mix. If you had limited funds and were deciding pH or hardness, spend the money on the ammonium sulphate in majority of cases. Remember put AmSO₄ in first

7. Droplet distribution and application: Very controllable. There are a lot of very expensive spray rigs charging around with very poor set up and can be improved a lot with some care and time. I constantly get asked "which is the best spray rig?" Simple...the one you have got unless you want to fork out 500-600K for a new one. Even if you get a brand new one I can almost guarantee it will not be set up to the best it can be. Get some water sensitive paper from a spray shop for \$100, download the snapcard app for accurately measuring the coverage and play around with your set up of water volume, spray pressures, nozzle selection and operating speed until you can maximise your droplet deposition and minimise fine particle losses etc. If you want to get real tricky get some trial pegs and pin card at different heights to see what coverage is on a simulated tall weed.

Summary:

- Get your rig working the best it can to get the product to the target. This will be applicable to everything you do and one size does not fit all jobs.
- Control as many of the controllables and physical limitations as you can.
- Get the herbicide and adjuvant selection right, but make sure all the rest is done as well.
- Make sure your mixing order and speed of mixing is good so you don't turn it all to glug before you get a chance to spray. Just because you can fill 7000L in 5 minutes doesn't mean you have to.
- Don't think you will get a head start by mixing everything in the boom the night before so you can take off nice and early. Multiple products together for several hours fighting each other in the tank is not a good idea. If you don't have lights at your mixing area, spend 3K on a good diesel generator and set some up. You get a tax deduction and you can use it for fishing trips too.



FARM DECISION MAKING #4 - FARM BUSINESS BASICS

Grain & Graze Program and Grains Research and Development Corporation

The Liebe Group will be including snippets of information from the publication 'Farm Decision Making - The interaction of personality, farm business and risk to make more informed decisions'. This book is a collation of insights and experiences from the Grain and Graze Program, based on four important concepts to assist farmers and advisors to make good, informed decisions. This book can be obtained from the Liebe Group office, and we invite you to request a free copy - it is worth the read.

The bottom line in agriculture

Many people (and most farmers) in Australia would agree that agriculture can be a great industry to be involved in. Yet history shows that many people have opted out of the industry seeking better fortunes in other areas.

It is important to appreciate that people farm for more than just money, they do it for social and environmental reasons or values as well. Everybody will have a different perspective on what they are seeking from being involved in the agricultural industry.

Economists have come up with a name for the value people seek from farming, a thing called utility.

The concept of utility, the triple bottom line

If you talk to a farmer about utility, most will think it is an invaluable piece of machinery, with four wheels and available in many colours (but usually white). Speak to an economist and utility refers to the financial, social and environmental values, the triple bottom line.

Few farmers are in agriculture for financial gain alone. While profitability is clearly an important element, and many advisors think it is the primary motivation, other components of the triple bottom line like job satisfaction, family and environmental aspects will always play an important part in decision making. Farmers will often accept poorer financial returns as a trade-off for some of these other perceived benefits. See if you recognise some of these statements that reflect the utility of farming.

“My role as a land manager is to hand my farm onto the next generation in a better condition than I inherited it – if I have to forego some profits to achieve this then so be it”

“I love the aspect that all the family are involved at harvest- it is great working together”

“It’s a lot easier to be green when you are not in the red!”

The importance of cash flow, profit and wealth management

A fundamental requirement for a sustainable business is to be profitable and financially viable. To achieve this requires a clear understanding of how profit and wealth is created in a farming business and how important it is to manage costs and cash flow.

Cash flow

Cash flow or liquidity refers to the money received into the business during the year and can affect the short term viability of a business. Sufficient access to funds (cash flow) is critical because this money is used to pay for inputs required in the production system. These can be direct input costs such as fertiliser, supplementary feed, herbicides and fuel as well as overhead costs such as electricity, living expenses and insurance. It can also be required to pay for other commitments such as tax liabilities, GST and capital expenditure.

FARM DECISION MAKING #4 - FARM BUSINESS BASICS CONT...

Grain & Graze Program and Grains Research and Development Corporation

Restrictions on cash flow can prevent important and time sensitive decisions from being implemented, resulting in less than optimum production (see side story – The value of having a short term credit facility). It can also mean products may have to be sold immediately they become available, rather than at a timing that increases potential income.

The nature of primary production means that income tends to be received in fewer, but generally larger amounts, while expenses tend to be in smaller amounts but more frequent. This usually results in the business having a peak debt which tends to fall at a similar time each year e.g. prior to sale of spring lambs in October or receipt of grain income in December.

Most farm businesses use some sort of short term trading account from a financial institution to cover short term requirements. The traditional facility is the overdraft. The expectation is that this type of facility would be cleared (i.e. move into credit) at least once each year (see side story - Is my cash flow good, bad or ugly?)

Is my cash flow position good, bad or ugly?

A few simple questions to examine the working account of the business and the cash flow budget can be quite informative. Consider these:

- Does the overdraft account move into credit at least once during the year? If so, by how much and how has this changed over time?
- In which month does the overdraft account peak? Has this changed over time with changing strategies e.g. enterprise mix?
- Are any surplus funds (i.e. when the overdraft is in credit) being used effectively either within or outside the farm business?
- How has the peak debt of the business increased over a number of years? If it has, is there an obvious reason (e.g. land purchase) or is it a symptom of annual expenditure consistently greater than income?
- Are major capital items being purchased out of cash flow or are these being financed in another way?
- Is profitability being compromised by the need to achieve income flows to meet expenses? Can the timing of major expenditure items be altered to better fit with cash incomes?
- Is there usually some margin between peak debt and the overdraft limit available for contingencies or unforeseen circumstances?

FARM DECISION MAKING #4 - FARM BUSINESS BASICS CONT...

Grain & Graze Program and Grains Research and Development Corporation

Where an overdraft is provided, it is common to also have additional facilities such as term loans or equipment finance to service longer term funding requirements (e.g. for capital purchases such as land or machinery). In more recent years, demand has moved more towards provision of Lines of Credit (LOC) where short and longer term funding needs are rolled into one facility.

Funds to cover cash flow requirements can also be obtained from commercial sources such as input suppliers (seed, fertiliser, chemicals) and possibly grain buyers through advance purchase options. Credit cards with substantial limits may also be used. Some of these options can be expensive so it is necessary to look at the underlying interest or holding costs.

Businesses which operate in credit can take a different approach. Such businesses need to decide where they will invest their surplus funds. It is possible and often likely that investment in other areas, either on or off farm, will result in better returns than using these surplus funds to meet on-going cash flow needs (for further discussion in this area, refer section on opportunity cost and spending the marginal dollar).

There are a number of software packages available to help create a cash flow budget. A simple computer based spreadsheet is commonly used. The GRDC also has some very useful tools to help www.grdc.com.au/GRDC-FS-FFT-CashFlowBudget.

Profit

For any business to be sustainable, it must be profitable over a run of seasons. Profit provides income for the business proprietors, by providing funds for both consumption in the short term and the building of wealth in the long term.

In simple terms farm profit is the annual gross income less annual costs. Due to the seasonal nature of agriculture, farm profit is normally accounted for annually, compared to some other business that report quarterly or every six months.

Farming is similar to any production business, to grow enough products at prices to exceed all production and overhead costs. The surplus remaining is the profit. However there can be different definitions of profit, depending on what costs are included and excluded and whether the figures are being used for taxation or management purposes.

Be aware that high productivity does not always equate to high profitability. A business can operate profitably at quite low production levels per hectare if appropriate control of costs and natural resources are maintained.

The GRDC has produced an excellent factsheet to help prepare farm profit budget (www.grdc.com.au/GRDC-FS-FFT-ProfitLossBudget).

Gross margin

Many external factors influence the gross margin obtained (i.e. the gross income less production costs). Weather and markets are obvious external factors, but the decisions of the farm manager also has considerable impact. These include things like:

- Production skills in agronomy and animal husbandry.
- Choice of enterprise selection, in particular taking into account risk and return.
- Choosing to produce a bulk commodity or a differentiated product.
- Choosing the desired allocation of labour and capital.

FARM DECISION MAKING #4 - FARM BUSINESS BASICS CONT...

Grain & Graze Program and Grains Research and Development Corporation

It is uncommon for production businesses in agriculture to report negative gross margins, except when production failures occur due to severe climatic conditions e.g. drought, severe frost, pests etc. Usually the value of production meets or exceeds the direct input costs to produce the commodity. The main challenge to profitability then becomes the ability of the gross margin to meet all overhead costs with a surplus to cover the operator's needs, including growth.

Overhead costs

Overheads are the costs that we have to pay even if we sat on the farm and did nothing for the year. In this booklet overheads include the direct farm wide cash costs such as rates, administration, insurance, electricity etc. Overhead costs also include depreciation, owner / operator allowances, interest and lease payments. Other types of analysis often separate the different types of overheads, but for our purposes they all have to be services from the gross margin if we are to make a profit. The critical number is knowing if the business has made a profit before tax.

Unlike enterprise costs which are assigned to a particular commodity, overhead costs are spread across the entire business. They can be difficult to reduce directly because of the types of expenses incurred e.g. council rates, finance costs, insurance etc. Influencing overhead costs is primarily through scale and efficiency of operation. It is not always achieved by increasing size.

Scale

Increasing scale to reduce overhead costs makes sense when there is capacity to do more with what we already have. Farming more land with existing equipment and available labour dilutes overhead costs because it is spread over more area. As economist Tim Hutching says "scale is not size, scale is about margin". If increasing size, say by buying land, leasing or the purchase of larger capacity machinery increases repayment and depreciation costs more than the gross margin generated, then overheads will rise, not reduce.

Increasing farm size has been a feature of Australian agriculture for many decades. However downsizing to consolidate overhead costs, commonly by using contractors, can be a more sensible way of reducing overhead costs. The challenge for any farm business, in a competitive environment, is to be able to access the efficiencies associated with scale irrespective of the businesses current size. Using the competitive advantages of a business is critical in achieving this (see section on competitive advantage).

There are numerous benchmarks to examine efficiencies of scale, such as DSE per labour unit, dollars invested in machinery per tonne of grain produced, gross income per labour unit etc. These can be useful to appreciate efficiencies in a farming business.

Cost of Production and its link to profitability

As mentioned previously a profit will occur when a business is able to sell its products for more than it costs to produce them (providing all costs are allocated correctly). Therefore it makes sense to know the cost of production (COP).

It is important to recognise that the unit costs of production (i.e. the cost per tonne of grain or per head of livestock) is driven by productivity. Low productivity such as that occurring in drought years can see costs per unit output at very high levels and generally at much higher levels than the returns that the commodities will bring in the market place. The opposite of course occurs in high production years, where good profits can be achieved by low unit cost prices and fair market value.

FARM DECISION MAKING #4 - FARM BUSINESS BASICS CONT...

Grain & Graze Program and Grains Research and Development Corporation

While some may question the 'value' of the COP number (see side story – The pros and cons for calculating cost of production), it can help to identify the components that make up the COP figure and what strategies could be employed to lower them. The five major cost centres are:

- **Enterprise costs:** These will typically comprise less than half of the total costs of production. The focus here is production economics and scale should not have a significant bearing on the result.
- **Overhead costs:** These tend to be relatively constant from year to year and are influenced by scale.
- **Machinery Costs:** Gaining operational efficiency through work rate and scale are the major driver for reducing COP.
- **Labour:** As with machinery, operational efficiency with labour input has a major influence on COP.
- **Capital:** This is the area which is often overlooked when assessing COP. Capital tied up in land needs to be accounted for, usually by allocating a lease value. Scale will generally not have a significant influence here, however productivity tends to have a good relationship with capital values.

The pros and cons for calculating cost of production

It is a commonly held belief that knowledge of the COP for individual enterprises is a valuable measure of the level of prices required from the market place to achieve a profitable outcome.

However there is an academic view that COP as a measurement is irrelevant for a price taking, export driven, commodity production system which typifies much of broad acre agriculture in Australia. The argument against the COP calculation is twofold:

1. It is almost impossible to calculate COP with a high level of accuracy given that many of the parameters involved in the calculation are subject to individual interpretation and allocation across enterprises.
2. In the final wash up, COP has no influence on the price actually received in the market place given that commodity prices are set by supply / demand factors. Producer's margins will not drive market sentiment in any way and may well be forced to accept a price lower than the COP because of other circumstances e.g. cash flow requirements.

APP OF THE MONTH

Elders Grain App

Elders Grain is making it easier for growers to access the best price they can get! Previously Elders accumulated on behalf of other traders but now they will also be able to transact growers grain to the best available bid on the day!

Growers will have all prices available through the app and then they simply call Elders to access the best price.

Once they are happy with the price, Elders will place the grower into a Firm Offer, sending a direct request to the trader.

Once accepted, a Elders Trade Confirmation Note is formed, pairing the grower and trader. From there, the trade will issue their own contract.

For only \$1/t upon a Trade Confirmation Note, take the hassle out of getting the best price for your grain.

Available for both Android and iOS



KIDS CHRISTMAS PAGE

Liebe Word Search

R	Y	A	D	D	L	E	I	F	G	N	I	R	P	S
E	A	F	G	E	H	G	H	Q	X	H	Z	Y	N	U
S	W	H	E	A	T	W	A	I	B	E	P	L	M	M
E	C	Q	Q	G	R	F	R	K	L	A	I	Y	K	M
A	B	D	X	E	D	X	V	A	G	D	R	R	Z	E
R	F	D	B	A	S	H	E	C	H	E	H	L	L	R
C	V	E	A	Y	C	V	S	V	B	R	A	J	E	L
H	I	J	R	Z	A	J	T	A	G	A	Q	F	T	Y
L	B	R	L	G	N	I	D	E	E	S	Q	R	H	A
A	B	R	T	D	O	K	P	F	S	O	A	G	K	S
L	H	A	E	N	L	E	J	P	H	C	D	B	I	T
P	A	V	S	H	A	J	C	L	T	N	B	S	G	R
A	O	C	D	R	U	P	R	O	J	E	C	T	S	L
S	U	G	T	S	G	Y	R	T	O	N	A	C	E	Y
G	N	I	Y	A	R	P	S	T	R	I	A	L	S	M

- Wheat
- Barley
- Canola
- Liebe
- Harvest
- Seeding
- Spraying
- Trials
- Spring Field Day
- Gus
- Header
- Tractor
- Projects
- Research
- Summer



Find the differences!



Find the differences and colour me in!



Q: What do you get if you cross Santa with a duck?
A: A Christmas Quacker!

Q: What do you call a three-legged donkey?
A: A wonkey donkey!

Q: What goes "oh, oh, oh"?
A: Santa walking backwards!



Merry Christmas

To:

POSTAGE
PAID
AUSTRALIA



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NEXT GENERAL MEETING WEDNESDAY 20TH DECEMBER

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LIEBE OFFICE HOLIDAY BREAK
The Liebe Group office will be closed from COB Friday 22nd December and will reopen Tuesday 2nd January.

CALENDAR OF EVENTS

Event	Date	Location
Christmas Sundowner	Wednesday 20th December	Wubin Pub
R&D Committee Meeting	Thursday 21st December	Kalannie-Dalwallinu Rd and Cottage Road
Annual General Meeting	Thursday 15th February	Liebe Office
Crop Updates & Trials Review Day	Wednesday 7th March	TBC
Women's Field Day	Tuesday 19th June	Dalwallinu Recreation Centre
Post Seeding Field Walk	Wednesday 18th July	McCreery's Property, Kalannie
Spring Field Day	Thursday 13th September	McCreery's Property, Kalannie



From all of the staff at the Liebe Group, we would like to wish all our members, partners, supporters and the local communities a safe and happy holiday period.

We hope everyone has a wonderful Christmas and a happy New Year.

We look forward to working together again in 2018