

GRDC's Regional Cropping Solutions Network (RCSN) held three 'Summer Sesh' events during January 2020. The meetings were held at Jurien Bay Hotel (13<sup>th</sup> January at 5pm with 19 attendees); Broadwater Stilts Restaurant (15<sup>th</sup> January at 5pm with 65 attendees) and Due South, Albany (20<sup>th</sup> January at 5pm with 46 attendees). Online GroupMap technology was used to capture audience input. A key part of these events was the opportunity for participants to share the top issues affecting their profitability. The opportunities and constraints from these events were collated and included for discussion at the various RCSN member meetings held during February.

GRDC's Geraldton port zone RCSN held their member meeting on 11<sup>th</sup> February at the Grosvenor Hotel, Timaru (NZ) as part of the GRDC funded study tour to New Zealand held from 9-16 January 2020. Eight of the Geraldton port zone RCSN members attended their member meeting including: John Flannagan, Chad Eva, Jason Stokes, Raylene Burns, Andrew Cripps, Daniel Birch, Marcus Blake and Shaun Earl. In addition to the RCSN members the following joined the tour and participated in the RCSN meeting: Nicholas McKenna (Agronomist and researcher); Brad Burns (Grower); Nathan Dovey (Stirlings to Coast EO); Emma Russell (Grain broker); Ken Drummond (Grower, Stirlings to Coast Chair); Karen Drummond (Grower); Darrin Lee (Grower and GRDC Western Panel Chair); Rebecca Kelly (Grower); Tony White (Grower and Kwinana West RCSN member); Rohan Ford (Grower and GRDC Western Panel Member); and Carol Ford (Grower); Additionally, Julianne Hill (Project Coordinator) attended as the tour leader and facilitator. Apologies from the following RCSN members were received: Geoff Fosbery, Murray Thomas, Phil Smyth and Jerome Critch.

All RCSN members and participants were asked to bring ideas from five farmers/advisors from their area, and consider these ideas along with ideas raised from the Summer Sesh events. They were then asked WHAT WILL HELP GROWERS? Consideration was given to area, frequency and impact on profit of the issue or idea and ideas ranked accordingly. These ideas/issues were further discussed: Does this issue still need some work done or has it been fully addressed with past or current R, D or E?

RCSN members then further discussed and expanded on those top issues that need further investment, choosing three to further develop using a MAKAT framework. The following issues were further developed: Climate Change Debate; Blue lupin control options - no current options for control of blue lupins in white lupins; and Management of brome and barley grass which is increasing in area and severity.

**Table 1: Summary of areas of interest raised at Summer Sesh events or by RCSN members**

Areas of interest raised at Geraldton port zone Summer Sesh events & RCSN members	Expanded areas of interest	RCSN member feedback from RCSN member meeting and further action
<i>Climate change debate.</i>	<i>Can GRDC provide figures on actual emissions? Are farmers carbon neutral because grain farming is capturing carbon?</i>	<i>Ranked highly by RCSN members at their member meeting. The RCSN identified this as an issue impacting on profitability and further developed some aspects of this issue.</i>
<b>Farming without glyphosate.</b>	Roundup resistance is becoming a growing issue, growers are not familiar with alternatives. More extension on alternative chemicals	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as RCSN members developed this issue at their July 2019 meeting for GRDC consideration
<b>Strip and Disc systems</b>	Is there scope to trial the strip and disc system in WA - it looks to smash water use efficiencies in dry land farming in Victoria. If it could add 1t/ha of yield it would be a massive help to grain growers in WA.	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current RCSN initiated investment occurring in this space
<b>Management of heat later in the season, late break in the season and shorter growing season.</b>	How to manage this using the current genetics and stuff in the pipe. What tools can be used?	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current large GRDC investment occurring in this space
<b>Quicker access to new plant varieties.</b>	SARDI is currently looking at herbicide tolerance traits in pulses, including Lupins. Is there potential for a co-investment here? The largest gains in production, are achieved through varieties. In the Southern Ag Barley production has increased by 20% with access to better genetics. These	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West. There is current GRDC investment occurring in this space

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	genetics have been available globally for some years. Basta resistant lupin?	
<i>Management of brome and barley grass</i>	<b>Management of brome and barley grass is becoming and increasing issue in the eastern end of GTN port zone. Developing a package to control these weeds and manage them long term in the face of developing herbicide resistance and no HWSC options will be a great investment.</b>	<b>Ranked highly by RCSN members at their member meeting. The RCSN identified this as an issue impacting on profitability and further developed some aspects of this issue.</b>
<b>Machinery expense</b>	Machinery is continuing to be a large expense to the business, with costs rising faster than in the past	Noted as a high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue as there is a current RCSN initiated GRDC investment in this space
<i>Blue lupin control options</i>	<b>No current options for control of blue lupins in white lupins. This is resulting in a drop in the area of white lupins growing for canola with more diseases. Very important for Northern Ag region. Blue lupins are a major constraint to early sowing and hence yield.</b>	<b>Ranked highly by RCSN members at their member meeting. The RCSN identified this as an issue impacting on profitability and further developed some aspects of this issue.</b>
<b>Media training for growers on how to talk about social licence to farm</b>	Out of the social licence to farm and rise in activism is there some scope for media training for farmers, grower group staff so we have people in the field to turn to. MLA do this.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time but provided advice to GRDC on further extension in this space in collaboration with others
<b>Rotations for marginal areas</b>	Better rotation ideas in marginal areas including variations to current rotations. Short season varieties in lupins, canola, chickpeas etc. Also, to revisit and revaluation of stock in these areas.	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West. There is current GRDC investment occurring in this space
<b>Independent evaluation of liming products.</b>	Neutralising values established for lime sand. Does it relate to other lime products? ie calcium hydroxide, burnt lime, liquid lime, on farm lime sources? Economic analysis as to the most cost/time effective method.	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current large GRDC investment as well as RCSN initiated projects occurring in this space
<b>Succession planning</b>	Planning for the next gen and management of handing over the farm.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time but provided advice to GRDC on further extension in this space
<b>Accessing training/education around VRT and yield mapping.</b>	How to access and use their data to increase productivity and how they can get affordable expertise. Comparing Precision Ag software for farmer use. OEM (My John Deere, AFS) vs Ag Leader SMS, PCT agCloud etc.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time but provided advice to GRDC on further extension in this space from GRDC current and past work
<b>Broadleaf weed control including doublegee and radish in lupins</b>		Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Crop Protection Manager – West. There is current GRDC investment occurring in this space
<b>Control of invasive summer weeds</b>	Fleabane, caltrop etc especially along roads/public spaces	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current GRDC investment occurring in this space

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<b>Maximising protein in wheat whilst maintaining yield and profit.</b>	What are the issues surrounding protein? What's the link between gluten and protein? Farming systems/rotations - how can we improve farming systems and rotations to increase protein?	Noted as a very high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current large GRDC investment occurring
<b>Soil moisture at seeding</b>	A better understanding of moisture at sowing when trying to get crops established during the early warm part of the growing season	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West.
<b>Access to chemicals to do the right job.</b>	We need also to have some help in improving legislation, enabling us to have the freedom to farm in a responsible way especially for smaller crops eg lupins	Noted as a high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Crop Protection Manager – West. There is current GRDC investment occurring in this space
<b>Connectivity issues.</b>	This impacts on a number of things including mobile coverage, farm coverage, access to apps, documentation, syncing of machinery	Noted as a high impacting issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time however will ensure is it visible to GRDC
<b>Does lupin seed coat thickness affect split seed?</b>	Not yet tested by DPIRD or other. Growers suspect this is impacting newer varieties rather than Mn deficiency. Can it be managed or is it a genetic trait? This could be added to the scope of an existing split seed lupin project.	Noted as a high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as there is current RCSN initiated investment occurring in this space
<b>Difficulty in getting barley to perform year in, year out</b>	People gone off barley after last years results, heat late in season having too much impact	Noted as a high ranking issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time as RCSN members developed this issue at their July 2019 meeting for GRDC consideration
<b>Water holding capacity on tight gravel soils.</b>	Preliminary work deep ripping 600mm on tight gravels has shown 30-40% yield increase in 2019. Water holding capacity of all soils - there might be a lot of data out there with number of soil probes	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West. There is current large GRDC investment occurring in this space
<b>Deep ripping PSPE in canola and cereals.</b>	This is being done by a few farmers with good success when a ripping window is not available pre-seeding and following a large break. How does it affect establishment and required seeding rate increase? When should it not be done?	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West.
<b>Winter by spring wheat and barley crops to suit HRZ growers in WA.</b>	Especially those interested in grain and graze systems. We need longer season varieties that suit WA conditions. If they are out there, then we need to evaluate them asap.	Noted as a very high ranking issue by RCSN members at their member meeting, with this feedback passed onto the Manager Agronomy, Soils and Farming Systems – West. There is current GRDC investment occurring in this space in the HRZ project
<b>Mixed farming options</b>	What is the best balance between sheep and crop to maximise profitability and long term options?	Noted by RCSN members at their member meeting, however the RCSN did not further develop this issue but provided advice to GRDC on this issue and advised cross collaboration between MLA and AWI and extension of outcomes from Grain and Graze

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<b>Clovers suitable for the shorter season of the northern wheatbelt</b>	Pastures (sub clovers) that play a part in a cereal rotation are not setting seed in a short season - not quick enough.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time but provided advice to GRDC on this issue and advised cross collaboration between MLA and AWI
<b>What does anyone know about ripping before seeding lupins?</b>	No summer ripping is bunching up the programme. When you get a go sometimes rotations don't allow you to rip. Should you rip before seeding lupins or does anybody? Big biomass response, but not often a yield response.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time however will ensure is it visible to GRDC
<b>Input decision-making</b>	Evolving the decision-making tree in regards to input decisions to maximise potential while minimising risk.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time however will ensure is it visible to GRDC

***NB: ALL issues raised at the Summer Sesh events and RCSN member meetings will continue to have presence at the RCSN discussion table and will be forwarded to the GRDC Western Panel and GRDC for continued visibility that may feed into existing or future initiatives.***

#### Thanks and Further Details.

Thank you to everyone who attended the Summer Sesh events and RCSN member meetings and contributed to these detailed discussions.

For further details, contact the RCSN Facilitator Julianne Hill on 0447 261 607 or email [regionalcroppingsolutions@gmail.com](mailto:regionalcroppingsolutions@gmail.com). You are also welcome to visit the RCSN website – [www.rcsn.net.au](http://www.rcsn.net.au); and to follow us on Twitter @Julianne\_Hill, or visit GRDC - [www.grdc.com.au](http://www.grdc.com.au).

A number of RCSN initiated projects have been put on the ground in the Geraldton port zone since 2011 and can be found on the RCSN website at [www.rcsn.net.au](http://www.rcsn.net.au).

The winter round of Open Forums will be held during late July 2020 within the Geraldton port zone, followed by an RCSN member meeting (depending on Covid-19) which will be held in Dongara in the last week of July 2020. Further details will be available soon.