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A MIXED YEAR FOR THE AUSTRALIAN HARVEST

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GRAIN CONSUMPTION
REACHES RECORD LEVELS

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MAGAZINE IS DIGITAL

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#### FOREWORD/ PHILIP HUGHES, COUNTRY MANAGER, AUSTRALIA / NEW ZEALAND

#### A MIXED YEAR FOR THE AUSTRALIAN HARVEST

The 2018/19 Australian winter crop is now in the bin and never before have we seen such a mixed harvest across the country.

Wears on record thanks to late season rains, with a total crop of approximately 18 million metric tonnes (mmt), while the east coast suffered through a severe drought and one of their worst years in living memory. South Australia had a varied year with some regions producing decent crops while other areas missed critical spring rain and had late season frosts, which resulted in below average yields.

The east coast domestic market has insufficient local supply to meet their usual grain demand for stockfeed and food manufacturing, so to cover the shortfall, record volumes of grain from Western Australia and South Australia are being transported to the eastern states to meet the shortfall in production.

An estimated 4mmt will be moved by ship, rail and truck by the end of the 2018/19 season, which is an unprecedented volume and a sharp increase on the 1mmt moved east in the 2017/18 season.

Due to the strong domestic demand and correspondingly high prices, export demand has been substantially reduced. While Australia will lose significant market share this year, particularly in Asia, our usual international customers still value the quality of the grain we produce, so export demand is expected to rebound when Australia has greater volumes available in the future.

Global consumption is continuing to climb to a new record of 2500mmt thanks to population growth, economic expansion and changing diets in developing countries, which is creating new opportunities for export countries like Australia. Meanwhile, China's Ministry of Commerce (MOFCOM) has recently announced an antidumping and countervailing duty investigation into imports of Australian barley. Australian exporters, Government and grower bodies are working closely with Chinese authorities in responding to the claims in the investigation.

Due to a record hot summer with below average rainfall in many areas, growers will be desperately wanting soil drenching Autumn rains to build moisture profiles right across the country.

At this time of year, it is also important to be thinking about our community's mental health and wellbeing. With severe drought in many areas, this is especially vital.

Programs such as the Young Farmer Business Program in New South Wales, profiled in this edition, gives growers hope and the opportunity to improve their business skills into the future – something important to keep their minds off drought, frost and other uncertainties in the agriculture sector.

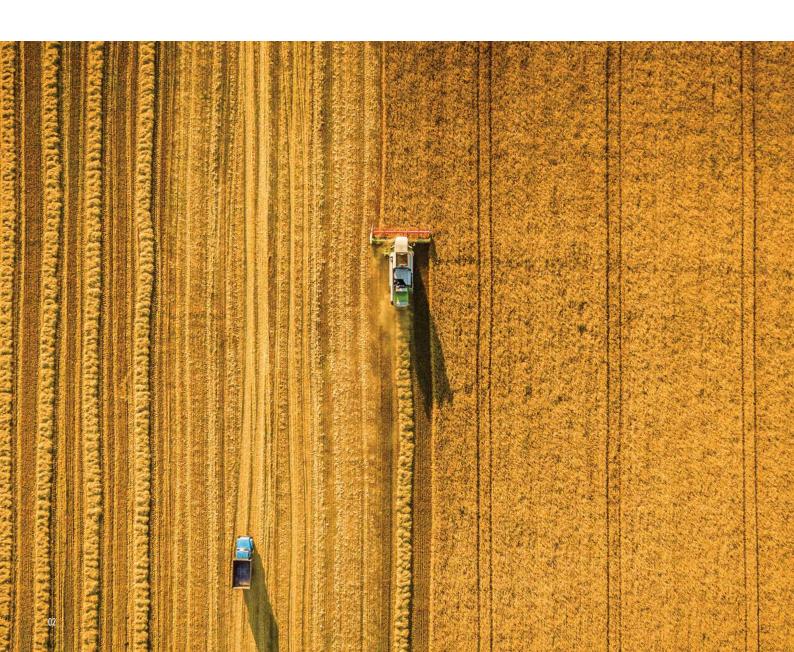
I hope you enjoy reading this edition of *AgriBusiness*, and as outlined on page four, we hope you sign up to our online version, which you will receive straight to your inbox. I wish you and your families all the best for 2019.

Philip Hughes Country Manager Australia/New Zealand

#### GRAIN MARKET UPDATE/ PHILIP HUGHES, COUNTRY MANAGER, AUSTRALIA / NEW ZEALAND

# GRAIN CONSUMPTION REACHES RECORD LEVELS

Population growth, economic expansion and changing diets in developing countries continue to drive the consumption of grain worldwide, which is now reaching record levels. In February, the United States Department of Agriculture (USDA) released their 2018/19 world grain data summary, which shows for the first time in five years world grain and oilseeds consumption is exceeding production.



The USDA states that overall, the world has seen a small increase in production from 2455 million metric tonnes (mmt) last season to 2465mmt this year, however, this is outweighed by consumption increasing to its highest ever level of 2500mmt, drawing down stocks.

Drought in countries such as Australia and the European Baltic regions (Germany, Poland, Lithuania, Latvia and Estonia) is contributing to stabilised production numbers and a five per cent decrease in world stocks from last year.

While world stock-to-use ratios are comfortable at the moment, if there is another drought year as forecast for Europe, these levels could change quickly.

Corn and soybean production reached record levels this season, while there has been a decrease in all other commodity production.

However, modern farming practices, management techniques and new varieties being grown through advances in plant breeding has increased the quality of commodities in some regions.

#### Wheat

As predicted by the USDA in 2018, world wheat production fell by four per cent from last season's 763mmt to 735mmt, a more modest level after five consecutive years of records. It is the first time since 2012/13 that world wheat consumption has topped production.

Wheat consumption has increased slightly by around one per cent year on year and is at its highest level ever of 747mmt. A growing population and changing diets in developing countries has contributed to this increase with wheat the second most consumed grain after corn.

Overall, most countries have produced an average wheat crop this season. Australia, Brazil and Argentina have all produced better than expected high quality wheat. On the back of the record Argentine wheat crop, better than expected quality has resulted in this origin displacing demand in Australia's usual export markets as Australia has outpriced itself as a result of strong domestic demand due to drought impacted production volumes.

Many of the large wheat producers – Europe, Russia, Australia and China have seen a decline in production compared to the previous year, due to poor conditions and drought. Europe in particular was well below the original estimate by the USDA of 150mmt, coming in at around 138mmt.

But it's not all bad news for wheat production this season, with Canada, Argentina, India, Brazil, the Middle East and North Africa producing more in 2018/19 than the previous season. Canada, Argentina, India and North Africa all experienced record wheat production years.

Russia's record crop in 2017/18 enabled the country to ship larger volumes than usual in 2018/19 as a result of the large carry over, however, with stocks near ports now exhausted, domestic prices are rising – leading to a slowing of exports.

Whilst total world wheat stocks are near record at 267mmt, stocks outside of China (who has 140mmt), are at five year lows of 127mmt. Any negative production outlook for a major producer in 2019/20 should be supportive of wheat prices.

#### Barlev

Total world barley production came to a figure of 141mmt for the 2018/19 season. This is only slightly lower than the previous season's total of approximately 144mmt.

World barley consumption has also reduced from last year with figures down five per cent year on year from approximately 148mmt to a total of 142mmt this year due to high prices pushing demand to cheaper substitutes.

Three of the major exporters; Europe, the Black Sea and Australia all had below average barley production in 2018/19 due to dry conditions, especially in Australia and the Baltic region of Europe.

While the barley stock-to-use ratio is at the lower end at 13 per cent, this is not alarming as the number of cheap feed grain substitutes, such as corn, in lower producing years is higher than less elastic commodities such as milling wheat.

#### Oilseeds

Just over 70mmt of canola was produced globally this season, about five per cent higher than the 10 year average. Canada is the largest producer of canola, with total crop production of 21mmt, their second best year on record. China, the world's second biggest producer of canola, had a below average year with a total production of 13mmt. While global production has dropped by 3mmt to 70mmt, consumption has plateaued at 71mmt globally.

It has been a record-breaking year for world soybean production with a total of 361mmt produced, up six and a half per cent year on year. The world's two largest soybean producers, the United States and Brazil have both had record breaking years, coming in at a total of 124mmt and 117mmt respectively. Argentina was also up 17mmt year on year to a more normal 55mmt. This is thanks to excellent yields and planted acres and good weather conditions throughout the season. World consumption has also increased this year, up 11mmt year on year to 349mmt.

#### 2019/20 outlook

At this stage, the outlook for next season is not looking positive – Europe and Canada have both had a dry start to their seasons, however, these are still early forecasts and with any luck the weather conditions will improve.



Population growth, economic expansion and changing diets in developing countries continue to drive the consumption of grain worldwide.

#### IN BRIEF/

#### AGRIBUSINESS MAGAZINE IS DIGITAL

Glencore Agriculture is excited to bring our highly regarded industry magazine, *AgriBusiness*, to readers in an online format.

Readers are now able to sign-up to receive articles straight to their inbox, in an easy-to-read email version. Glencore Agriculture Communications Manager, Jane McBride, said the online version of AgriBusiness magazine creates ease and convenience for readers.

"Offering the publication online means we can supply information to our readers quicker, and in a more interactive way," Jane said.

"Much of what we do is moving online, so we want to keep up with how people prefer to receive information.

"We will continue producing the hardcopy *AgriBusiness* magazine but we encourage readers who would prefer to receive the online version to register their email address and unsubscribe from the hardcopy."

If you would like to receive *AgriBusiness* magazine in an online format via email instead of hardcopy, please contact us at abm@glencoreagri.com.au

AgriBusiness continues to provide Australian growers with upto-date, relevant information, useful for your business.



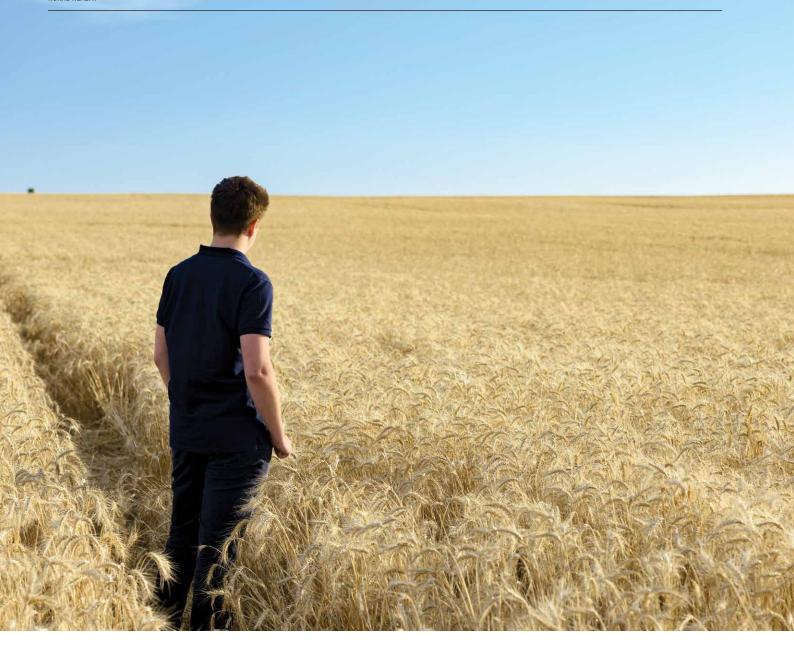


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#### **RURAL HEALTH/**

# BUILDING RESILIENT YOUNG FARMERS

Australian farmers are known for their optimism, strength and resilience in the face of uncertainty. Unfortunately, scarce land availability, paired with other uncertainties such as weather, debt, erratic commodities markets and crop yields are driving young people away from the land.

A 2014 study funded by the Rural Industries Research and Development Corporation found that the number of farmers aged under 35 years had fallen by 75 per cent since 1976.

However, president of the New South Wales (NSW) Young Farmers Council, Tim Carroll, sees this period of change as an opportunity rather than a threat.

"Now should be the time young Aussie growers take the reins of farms across the country as they have enthusiasm and fresh perspectives," Tim said.

"It is certainly difficult, hard work, I won't deny that. But it's also a passion you don't find in other jobs.

"Food production is a promising business to be in and young farmers are the key to the future success of Australia.



"Food production is a promising business to be in and young farmers are the key to the future success of Australia."

"They should feel very positive about their situation – there's more opportunity out there now to educate yourself and feel great about what you do, and to show you can turn

"The drought's opened up a huge amount of opportunity for me, and I think it will open up a lot more opportunity for young farmers moving forward."

things around.

To help growers leverage opportunities in times of uncertainty, Tim believes in taking a strategic approach.

Further education, up-skilling, applying for grants and funding and seeking out support groups are crucial.

In 2015, the NSW Young Farmer Council launched the Young Farmer Business Program, a four-year initiative funded by the NSW Government.

Designed for young farmers hoping to enter into or expand their existing businesses, the program helps them improve their business skills and connect with other young primary producers and business professionals.

"I've found the younger generation are more open to listening," Tim said.

"They're more than happy to ask experts and older generations for their advice.

"Many young growers know about practical farming but lack business management knowledge which is what this program addresses."

The programs teach young farmers to better manage risk, create and execute business plans more effectively and make decisions confidently, enhancing both their business and personal resilience.

Up-skilling is another strategy many growers around the country have employed to diversify during times of uncertainty.

Young grower Joey Fleming from Walgett in NSW re-trained in metalwork and fabrication and now runs an engineering business in conjunction with the mixed family farming enterprise that has been in the family for generations.

Joey has been commissioned by other growers and friends to engineer farming equipment such as feedlots and in a recent ABC interview he said his business was a good way to keep him busy and ensure a steady flow of income, uplifting his spirits during the drought.

Grants, subsidies, scholarships and other forms of financial assistance can

also make growers more resilient.

A range of organisations, both national and state based, can provide funding to young farmers, including the Rural Assistance Authority, Regional Development Australia, the Regional Investment Corporation, Local Land Services and Austrade.

In a bid to help young growers overcome any financial barriers to owning their own farm, Young Farmer Business Program member Sam Marwood has created Cultivate Farms, a social enterprise that matches the next generation of aspiring farmers with retiring farmers and investors, to own and operate a farm together.

"Cultivate Farms is an incubator program," Tim said.

"Sam sets up meetings between investors and young farmers, it helps them pitch their ideas, and then if the idea is right, facilitates investment in farms.

"He's going beyond the trend – proving that you don't have to own the land, to be a successful farmer," Tim said.

"The NSW Young Farmer Council has opened six branches, with a mission to look after young farmers in the state.

"Our role is to create support networks for mentoring and encouragement.

"We're running innovative activities all the time. Anybody that wants to have a beer, attend a meet and greet, go on a field trip or study tour is always welcome," Tim said.

For more information visit nswfarmers.org.au/youngfarmers 👁

#### MARKET UPDATE/

#### FOUR MILLION TONNES OF GRAIN IMPORTS FOR EAST COAST IN 2019

Experiencing a second year of drought in New South Wales (NSW) and Queensland (QLD), record amounts of wheat, barley and other alternative products continue to be moved from Western Australia (WA) and South Australia (SA) to the east coast.

Grain is making the journey across the country to fill the unprecedented levels of interstate grain needed to keep Australia's livestock, milling and malting industries afloat.

"We've never before seen the volume of grain being moved via bulk vessels from WA and SA to fulfil the east coast grain deficit." Glencore Agriculture Domestic Grain Merchant, David Wood, believes Australia has never imported via bulk vessels at this scale before.

"In the previous decade, subject to seasonal conditions, we may have had one or two smaller niche commodities come around for malting or milling grade deficits," David said.

"In regular years the east coast produces a surplus of wheat and barley that is marketed offshore through any of the grain ports located along the east coast.

"We've never before seen the volume of grain being moved via bulk vessels from WA and SA to fulfil the east coast grain deficit."

#### Declining wheat and barley production

In December 2018, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) forecast that wheat production would decrease year on year by 20 per cent to around 17 million metric tonnes (mmt), and barley would fall by 18 per cent to around 7.3mmt in 2018/19, from the year before.

This means the Australian wheat crop is the lowest since the drought affected 2007/08 crop, and production in NSW and QLD is forecast to be the lowest since 1994/95.

As a result, the eastern seaboard has become reliant on WA according to David, which experienced a bumper crop thanks to more favourable seasonal conditions.

#### Feedlot frenzy

Wheat and barley are being imported to the east coast to satisfy the ever increasing east coast feed demand as well as wheat for flour millers and barley needed for malting purposes.

The Australian Lot Feeders
Association's (ALFA) November 2018
survey figures suggest the Australian
feedlot industry is showing no signs
of slowing, with approximately 1.1
million cattle being fed in feedlots
– a record high. However, if an east
coast rainfall break is recorded in the

Opposite: This season WA produced nearly two thirds of the country's wheat crop and is playing a vital role in meeting the east coast demand.



Approximately 1.1 million cattle are being fed in feedlots - a record high.

season, the figure may drop to around one million.

ALFA also reported that cattle feed for the July to September 2018 quarter increased by 10 per cent from the same quarter in 2017. QLD recorded the greatest percentage increase, followed closely by NSW and Victoria (VIC).

With demand for grain exceeding supply, commodity prices have skyrocketed, particularly on the east coast.

"On the east coast, prices are at decile ten, reaching highs of \$455 and commonly trading a range between \$435 and \$455 which is well above the 10 year average," David says.

#### **Domestic consumption**

The high prices are not just hitting the feed industry. Some of Australia's largest food franchises are expecting increases in the cost of wheat and barley to be passed onto customers in 2019 as millers and maltsters across the country respond to a poor harvest.

Australia currently consumes approximately 15mmt of grain domestically per year. 12mmt of domestic grain consumption occurs on the east coast, accounting for around 80 per cent of Australia's human and livestock population, with the remaining 3mmt of domestic consumption split across SA and WA.

With the east coast winter crop

production in 2018/19 at around 8mmt, WA and SA have to make up the deficit.

While high demand and domestic grain prices mean less of the 2018/19 production will be available to export, there is still an exportable surplus from WA and SA.

Although usual international markets will look elsewhere to meet demand shortfalls, these markets value the quality of Australian grain, which is expected to rebound when Australia has greater export volumes available.

#### Interstate imports set to continue

David expects wheat and barley will continue to be shipped from the west to the east coast at an elevated rate, with a total of approximately 4mmt crossing the country in 2019 via bulk vessel from WA, and road, rail and truck movements from SA.

"Going forward, coastal shipments will continue to the east coast through 2019 when the grain is priced accordingly, as it's a well trodden track and relatively easy to do."

David says it's too early in the season to say what the 2019/20 crop outlook will be, but growers have their fingers crossed for timely rain.

"Australia is lucky in the fact that we can meet our own stock requirements between the states if need be, and still have surplus for international markets."



A t the start of 2018, east coast grain levels were low after below average yields from the 2017/18 harvest. A lack of rain in the first half of the year saw demand build. In mid 2018 individual truck loads of grain began moving longer distances to smaller end-users.

Glencore Agriculture Domestic Grain Merchant, David Wood said that once growers saw the demand grow in the east coast, they were quick to start moving their grain into the market.

"The lower yields from the 2017/18 harvest meant that the eastern states were running low on grain by the start of 2018. As it became harder to source, buyers began looking elsewhere in Australia to purchase the grain they needed," David said.

"Growers were quick to react to the demand and began transporting their unsold grain by truck to the east. These loads might have gone to a cattle farmer in Victoria (VIC) or New South Wales (NSW) who thought they would just need a small amount to get through to harvest."

As the year continued, larger amounts of grain began moving across the country.

"As the months and the lack of rain continued, it was apparent that the eastern states weren't going to produce the 12 million metric tonnes (mmt) it requires each year for consumption, and so bigger movements by rail and ship began from bulk storage.

"Around 70 per cent of movements have been wheat.

"In the beginning the majority were feed grades going to cattle farmers as dry conditions meant their cattle weren't able to graze and instead they had to purchase feed.

"Now we are starting to see much more milling wheat being sold to the east coast, as larger end-users start buying for human consumption products."

#### Changes to the supply chain

For Australia to distribute grain to the drought impacted areas, many changes were required at all levels of the supply chain. The change required, and to what extent, was dependent on location.

In South Australia (SA) growers were advised to look at individual site based pricing at sites strategically located for domestic movements. As the strong demand from the east coast changed the region's pricing away from the more typical export parity port based pricing less the cost of freight to port.

"Prices were stronger at sites closer to the Victorian border as grain was freighted by road and rail from the South Australian site directly," David continued.

"Moving away from the Victorian border, rail sites such as Crystal Brook, Gladstone, Snowtown and Bowmans were showing the highest prices as large loads could be



transported to central NSW through Broken Hill.

"This was very different from previous years, where the sites that were closer to ports gave better prices."

David explained the challenges marketers were faced with.

"We have done lots of smaller contracts. Instead of the regular contracts of 60,000 tonnes going to one bulk customer we could be splitting that much between 200 different buyers. That's more time talking to each buyer, ensuring they get what they need and when they need it by.

"We also had a lot of first time customers, but because Glencore Agriculture has offices and teams across the country and close relationships with growers, we could communicate with our colleagues in NSW, VIC and Queensland (QLD) and organise a smooth and efficient delivery."

At first, obtaining importing licenses for our customers to deliver the grain to the east, was difficult.

"Getting an import licence was a long and slow process in the beginning, because this isn't the norm, the right processes weren't in place. The Government has since worked out a better process and it's now much more efficient to obtain the licences needed to ship grain to the east."

Bulk handlers also had to start making changes to their practices to meet their customers' needs. Viterra Operations Manager, Michael Hill, said that the company started outturning grain back to growers as early as January 2018.

"Due to dry conditions in some parts of SA we began facilitating outturns. In May outturns increased as the domestic demand on the east coast rose," Michael said.

"Viterra changed the Export Select status at some of its key sites for the 2018/19 harvest, making it easier for buyers to outturn grain onto road and rail from sites that had previously been dedicated to an export only supply path.

"We also introduced an initiative called Rail Select, which has been used by buyers to consolidate grain ownership into key rail sites for domestic outturn on rail, destined to the eastern states.

"Viterra has been able to provide a flexible service to our grower and buyer customers to efficiently facilitate movements of grain into the South Australian domestic market and the east coast by rail, road and ship.

"We continue to load trucks and trains to fill the deficit in the inland regions of the eastern states, as well as facilitate shipments of grain destined for ports on the east coast."

In Western Australia (WA), CBH Logistics Manager, Ben Raisbeck said that grain they received has been moved to the east by ship.

"Traditionally we don't ship to the east because they are self-sufficient, typically 100 per cent of exports of Western Australian grain is exported to international markets," Ben said.

"For us, the process of moving the grain is largely the same as exporting to another country as we use shipping for both international and domestic exports."

On the other side of the country bulk handler GrainCorp arguably had to make the most changes to their supply chain to bring grain into the east, where they are based.

Operations Manager Stephanie Jurd said they had to adapt to start accepting imports of grain instead of exporting.

"At GrainCorp we had to act pretty quickly to reverse our supply chain to be able to unload vessels and move grain into storage. We had to literally flip our supply chain upside down, which came with some issues. But we were able to work together as a business to accomplish what was necessary," Stephanie said.

#### Imports set to continue

The Australian supply chain has shown its resilience against seasonal conditions over the past year, and although it is clear that more grain will travel from west to east, it's difficult to say how much.

The 2018/19 east coast harvest produced approximately 8mmt, 4mmt below their consumption. "We haven't seen the last of the movements to the east," David said.

"Right now they have grain left over from harvest, but once that starts to run low, imports to the east will steadily increase."

Glencore Agriculture predicts that a further 2.5mmt will be imported to the east in the coming months.

The sorghum harvest is nearing, but the yields it will produce are difficult to predict. "It's hard to say how much sorghum the eastern states will produce this season, as the conditions haven't really improved," David said.

"Whether or not the sorghum harvest produces significant yields, Australia has enough grain to stay self-sufficient and our grain supply chains have successfully proven they can keep up with demand and adapt when necessary."

# THE BENNETTS AT LAWLOIT FARM PROFILE







- When was the farming district settled?
- Lawloit was established in the early 1860s as a staging post and hotel on the gold escort route between the Victorian gold fields and Adelaide. By the late 1860s, it was opened up for grazing and cropping.
- What is the history of your farm?
- In 1995, we both left our family farming enterprises in the Wimmera to create our own business. I was from north of Nhill and Allison was from Goroke. We purchased Lawloit in 2002.

Around 20 per cent of our operation is leased. Leasing land has helped us grow our business, and we have worked hard to create strong relationships with the owners.

- How do you manage your cropping program?
- Timeliness around sowing is our first and foremost management consideration, and allows us to extract the maximum value from all our other inputs, as well as utilise our plant's available water.

We aim to keep things as simple as possible so we can carry out our operations on time. Paying attention to detail is also very important.

- Rotation
- Wheat and canola are our most profitable rotation, and legumes and barley fit in around that. The canola wheat component of the rotation is also very good for cleaning up disease and tackling grass weed issues.
- Weed control
- We like to make sure paddocks are very clean before commencing the cropping phase. We green or brown manure vetch, spray top a pasture, or grow hay for two or three consecutive years to achieve this.

This avoids having to use expensive herbicides to tidy up weeds in the cropping phase, and also means we can dry sow without a big weed burden.

We are focused on a profitable rotation, but weeds dictate our rotation in a lot of paddocks. Our main weed issues are grasses, particularly ryegrass and brome grass. Barley grass is also becoming an emerging issue.

Summer weed control has been a game changer.

Soil moisture is money in the bank, and summer rainfall events are very important to us. We are fanatical about maintaining that moisture by controlling summer weeds. It lets us grow crops in dry years.

- How do you manage resistance to herbicides and fungicides?
- We rely on glyphosate for summer weed control, so we're conscious of the number of times we use glyphosate in our rotation, and are always implementing different strategies to ensure its longevity.

We're not afraid to take a paddock out of production to clean it up, either with hay, pasture or brown manure vetch.

When we're using glyphosate in a fallow situation, we graze sheep on that country to make sure nothing goes to seed.

We also do a double knock if there is an issue.

Since 2016 we have had to spray for Septoria, which brings another level of complexity to our fungicide strategy because Septoria is prone to developing resistance to fungicide.

We are very conscious of having a fungicide strategy that doesn't develop resistance, by using different modes of action at the right time.





- Which grain varieties work best in your area?
- Our main current wheat varieties are Sceptre and Beckom. We are using imi-tolerant and TT canola varieties. GM canola is a good tool, but we haven't needed to grow it at this stage.
- What are your tillage practices?
- We are predominantly no-till and use interrow sowing, which has significantly improved our ability to handle stubble loads. The soil moisture conservation from this practice has been a major benefit over the last two to three years.
- What is your fertiliser regime?
- We are very fussy about our fertiliser application. We test a lot of representative paddocks for deep soil nitrogen and moisture in autumn.

Then, based on the starting point for nitrogen, we develop a nitrogen calculator throughout the year. We track rainfall and soil moisture and the growth rate of crops to build our nitrogen strategy.

Twenty years ago we used a lot of nitrogen up front in one application, but now we apply smaller amounts of nitrogen at specific times of the year. We generally put about 20 kilograms of starter nitrogen down the tube at sowing on our cereals, and then come back

and apply nitrogen during the growing season.

This gives us the flexibility to make decisions about nitrogen application once the rainfall decile (average, below average or above average) has become more apparent.

We basically aim to make the most of all available moisture.

We don't put nitrogen down the tube with canola to avoid toxicity in the seed row.

If there is a specific problem in a paddock, we will do a full soil test.

In the past, potassium and copper have been spread prior to sowing. We will put out sulphur as gypsum on sodic country and ahead of canola.

- What is your harvesting routine?
- We have our own harvesting equipment, but also use local harvest contractor BJ Hawker. We use our trucks for transport to our on-farm storage and for delivery to the local receival site at Nhill, but contractors are used mostly for long distance freight. Legumes are delivered to accumulators in the Wimmera. This year, beans have been delivered to Viterra's site at Dooen.

- Do you have on-farm storage?
- We have increased our on-farm storage in recent years and can now store 60 per cent of our grain. This gives us flexibility, and evens out the seasonal and financial ups and downs of the business. It also drought proofs our livestock operation and enables us to carry grain into the following financial year.
- 10 Tell us about your grain marketing program
- We are really focused on doing the day-today work that grows the crop, so we employ people to provide good marketing advice.

We use a grain broker for advice about our cereals and canola. They work with us to develop a strategy and we are able to assess our risk at any given time. We get daily price updates from the broker and speak to them on a regular basis.

We have become more conservative when it comes to forward selling of physical contracts over time.

Since 2007, we have worked on minimum crop estimates to calculate our forward selling strategy as the growing season progresses.

In good years, when you have the luxury of high production, it is easier to make marketing decisions.



In drought years, excessive forward selling can bring you unstuck. For us, it is really important to know how the season is unfolding before committing grain to forward sales.

We really like options because they are just a form of insurance with a set cost, unlike other forms of hedging which can get out of control. It might cost you \$15-\$18/tonne but you have protected the price.

We generally use local brokers for our legumes as there is a strong buying presence in the Horsham region.

Our on-farm storage is an important part of our grain marketing strategy. It gives us a buffer against bad years and the ability to spread income into the next season.

- What are the biggest challenges/risks to your farm business?
- 1. Maintaining the standard of management we aspire to, given the increasing size of the farm and increasing level of complexity in the office and paddock.
  - 2. Cost of machinery.
  - 3. Operating in an environment where social pressures are becoming an increasing consideration. We cannot afford for consumers to doubt the science and to trust the fake news for example, the argument about glyphosate last year.
  - 4. Sourcing good staff.

- How do you try to manage those challenges/risks?
- 4 1. We try to keep things simple.
  - 2. It has taken us a long time to build up our plant. We are very conscious of keeping machinery costs low and generally buy good quality second hand machinery. We are particular about good maintenance and having gear ready to go when we need it. We are not afraid to use contractors.
  - 3. Our industry needs to be smart, and get ahead of this social pressure in a positive, constructive way. We need to show that agriculture provides many benefits to the world – not just producing food, but also things like sequestering carbon.
  - 4. We are lucky to have three great employees
     Mike McCabe, Jack Bone and Troy Walton.
    They can all multi-task but they also have a
    specific area they focus on, which gives them
    a higher level of expertise and additional job
    satisfaction. We value all our staff highly.
- What technological developments do you foresee which will improve your family farm?
- Sensing technology has the potential to help us maintain a high standard of management as farms grow in size. It will enable us to keep a footprint in the paddock, and keep track of weeds and plant growth without having to drive over every acre.

At the moment, the cost of sensing technology is prohibitive, but like autosteer, there will be a time where the cost is reduced to a point that it provides a practical outcome.

- Would you shift to another district for cheaper land, or if rainfall becomes a problem, due to climate change?
- Yes, we would. We have moved to take opportunities in the past. We purchased this property because the rainfall was better and seasons more reliable.

We are confident that through technological and breeding advancements we can stay in the game in drier years. Plus, we are fanatical about conserving soil moisture – that's what enables us to grow decent crops in dry years.

- Tell us about your sheep enterprise
- Stock has always been an important part of the business, and Allison and Sophie manage the sheep enterprise.

Merino ewes with good genetics are bought each year. Most are crossed with White Suffolk rams, but most recently a number have been crossed with Merino rams because the Merino wool prices are so strong.

Prime lambs are fattened on bean stubbles and turned off at around 22 kilograms domestically (sold via forward contracts on farm or through the livestock exchange in Horsham).

Merino ewe lambs are retained for their self-replacing Merino flock, and Merino wethers are sold depending on seasonal conditions.

We run a very simple low-cost sheep operation that fits really well with our cropping enterprise.

"We are very confident in the future of farming. There are wonderful opportunities in agriculture in Australia."

Sheep are great for picking off weed escapes after summer spraying, too.

- Do you think food production has a good future in Australia?
- We are very confident in the future of farming. It is certainly a good time to be in agriculture, with good livestock prices and good grain prices. There are wonderful opportunities in agriculture in Australia.

Australian farmers have always had to be quick to adapt to stay in the game. Because we are not subsidised, as soon as something happens that is detrimental to our business, we get onto it.

Land values are appreciating, which shows farmers are confident about re-investing in their businesses and industry.

- What is your retirement/succession plan?
- We started succession planning some time ago. We worked with Kate Bourke from Think Agri to have a discussion with our children about where they wanted to be when they were 30. This was done independently of us.

They were both keen to be involved in the farm, so we built our succession plan focusing on how to bring them into the business. We gave both children an option to purchase land when they turned 18, with assistance from us.

We decided getting them involved in the business early was a better option than waiting for us to hand over land when they are 50.

This has helped them learn some valuable business skills and has given them self-confidence, ambition, and self-determination.



#### MARKET UPDATE/

#### WEST COAST PROPS UP EXPORT MARKET

It's been a mixed year for grain production in Australia. The 2018/19 Australian winter crop has come in at a total of 31 million metric tonnes (mmt) according to Glencore Agriculture estimates, well below the 10 year average of 41mmt and the lowest production for the last 10 years. As a comparison, the record winter crop just two years ago in 2016/17 was 58mmt.

Western Australia (WA) experienced slightly below average seasonal rainfall, however, timely October rain saw the state produce close to the largest winter crop ever, estimated to be a total of 18mmt, up 30 per cent on average.

South Australia's (SA) winter crop was varied across the state with some southern regions producing strong yields, while others produced little or no crop at all. A lack of rain combined with multiple, heavy frosts saw yield potential fall further and production almost reach 5.9mmt, 26 per cent lower than the average of 8mmt.

The eastern states, Queensland (QLD), New South Wales (NSW) and Victoria (VIC), were severely impacted by drought in 2018/19, with most areas receiving less than half their average growing season rainfall. The eastern state's total winter crop production has come in at approximately 8mmt, 60 per cent less than the 10 year average (19mmt).

#### WA and SA meeting domestic and international export demand

In a normal year the eastern states would have enough stock to meet domestic demand plus a modest exportable surplus. This year, WA and SA are supplying grain to cover this east coast deficit plus international markets where possible.

Domestically, Glencore Agriculture estimate approximately 3 to 4mmt of grain will be moved to the eastern

states from WA and SA in 2018/19. This is, in contrast, a sharp increase from the previous season when only 1mmt was domestically transferred.

Glencore Agriculture Senior Wheat Trader, Simon Gellert said approximately 18mmt of wheat has been produced in Australia this season.

"We have seen 58 per cent of production come from WA, 18 per cent from SA and 24 per cent produced in the eastern states," Simon said.

"Usually the eastern seaboard would produce the majority of wheat, however, with two years of dry conditions, their contribution has fallen considerably."

Australia's indicative wheat export availability will be around 10mmt after deducting approximately 8mmt for domestic use.

With the domestic market rationing exports via high prices, the volume of wheat exports from Australia to the usual international wheat markets will be well down on average, with this deficit in supply being supplemented by alternate competing origins, said Simon.

"Argentina has enjoyed record wheat production with better than expected quality which has displaced high priced Aussie wheat in those traditional export markets," Simon said.

"In addition, large export availability from the Black Sea has meant wheat from this region continues to increase market share throughout Asia, the Middle East and Africa which is covering the shortfall." Like wheat, Australia's barley crop is also below average. Glencore Agriculture Barley Trader, Jonathon Evans, estimated the country's barley crop will total around 8.7mmt.

Australia consumed approximately 4.5mmt of barley domestically which leaves a little more than 4mmt available for export.

"The east coast usually produces a significant amount of Australia's total barley crop, however, this year they have produced less than 2mmt, a mere 21 per cent of the nation's total, while WA has had 60 per cent share," Jonathon said.

"Domestic barley interstate movements will also increase this season.

"It is expected over 1mmt will be sent to the east coast by the end of the 2018/19 season compared to last season's total of 265,000 tonnes, just a quarter of this year's total.

"Approximately two thirds of this 1mmt will be destined for QLD and one third to NSW and VIC, with the majority coming via coastal shipments from WA, and smaller volumes moving from SA by truck, train and ship."

For all commodities, international exports will drop about a third year on year. While Australia has lost market share, our international customers still value the quality of grain produced from Australia so demand is expected to rebound when Australia has greater export volumes available.

#### AUSTRALIA'S 2018/19 WINTER CROP PRODUCTION IS 27MMT LESS THAN THE RECORD AUSTRALIAN WINTER CROP IN 2016/17





#### China investigates imports of Australian barley

In late 2018, China's Ministry of Commerce (MOFCOM) launched an investigation into imports of Australian barley into China from January 1 2014 to September 30 2018.

MOFCOM has accused Australia's barley industry of dumping, a practice in which a country sells a product to another country at a cheaper price than what it is selling in its local market.

It is alleged that imports from Australia in that time have been injurious to Chinese barley growers.

Glencore Agriculture Senior Commercial Manager, Lyndon Asser said exporters, the Australian Government and grower bodies are working together to address the allegations, lodging answers to MOFCOM questionnaires.

"We are doing as much as possible to defend these claims," said Lyndon.

"We're hopeful China will recognise the claims are unsupported, as the Australian trade sell barley at competitive global prices."

If the Chinese Government find the case to be conclusive, the Australian barley industry could be hit with importing tariffs into China.

"It could have an impact on next year's barley prices if tariffs are imposed," Lyndon said.

"This could encourage growers to look at reducing their barley planting area as China is currently the biggest buyer of Australian barley with over 75 per cent of exports going to China in the 2017/18 year.

"Even a small duty imposed could preclude China sales as it would make Australian barley uncompetitive against other origins.

"This not only affects Australian growers but also Chinese brewers and feedlots."

The investigation will be finalised within 12 months of the initiation.

#### The next 12 months

As always, Australia is awaiting the crucial seasonal opening in April and May.

As growers move through the early part of the year, there is also heightened awareness of the anti-dumping barley situation with China, the resolution of the east coast drought and the US and China trade tensions.



#### YIELD/

## TOP VARIETIES PERFORM WELL UNDER PRESSURE

It's been a tough year for many Australian farmers, with the eastern states in drought and much of south-eastern Australia experiencing one of the driest finishes on record.

The latest statistics by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) forecast that winter crop production would decrease by 23 per cent in 2018/19 to 29.3 million metric tonnes (mmt).

While it's been a bad year for yield – 20 per cent below the 20-year average, the unfavourable conditions have provided farmers and breeders with an opportunity to test Australia's most popular wheat and barley varieties up against the newcomers in extremely dry conditions.

The good news is, most of the stalwarts have shown they can take the heat, while a list of new varieties have proven their worth in a very tough test.

#### Scepter performs in tough finish

While Mace was the dominant wheat variety for many years, the relatively new kid on the block, Scepter, has been

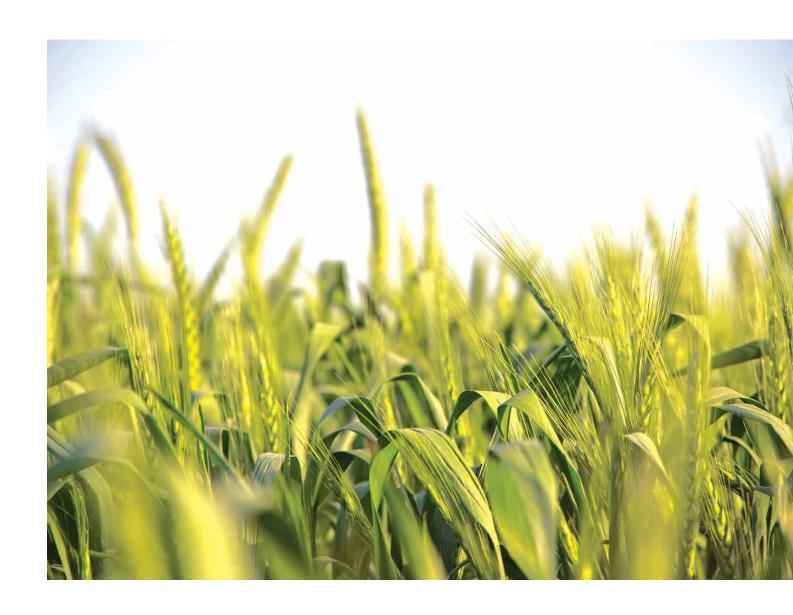
taking over from Mace in terms of popularity since its release in 2015.

A variety developed by Australian Grain Technologies (AGT), Scepter, has consistently outperformed Mace in yield trials from Western Australia (WA), through South Australia (SA) and Victoria (VIC), and into southern New South Wales (NSW), over a range of seasons and conditions.

"Across the 70 locations that Scepter and Mace were tested head-to-head in the 2018 National Variety Trials (NVT), Scepter beat Mace at 61 of them," AGT CEO and Head of Breeding, Haydn Kuchel said.

"Long term NVT data from 2014 to 2018 shows that Scepter is seven per cent higher yielding than Mace in both WA and SA".

"If there was ever a year to challenge Scepter, 2018 was it, but we're happy to see another excellent result.



"Across the board, it's been great to see that Scepter has proven to still be our best player in the market."

#### Quick maturing varieties win the race

New quicker maturing varieties Razor CL Plus and Sunprime also performed well this year.

"Razor CL Plus is our new Clearfield variety that is well adapted to low and medium rainfall environments, so it's ideal for growers in southern Australia, particularly in drought," Haydn said.

"Razor CL Plus is derived from Mace and as a result performs similarly in terms of adaptation, but is slightly quicker to mature and therefore has often shown a yield advantage at sites suffering terminal drought stress, which is why it performed well this year." NSW was certainly hit hard by the drought in 2018, and the short growing season played into the hands of the quicker finishing varieties.

"Sunprime was launched last year in NSW and went quite well, beating Suntop by four per cent in yield," Haydn said.

"Sunprime is a fast maturing APH quality wheat that gives NSW and QLD growers the opportunity to plant later in the main season sowing window.

"It's also a good news story as it was launched in celebration of the GrainGrowers' 60th Anniversary in October last year and has subsequently performed really well for farmers."

"Ultimately, it's been a year of reckoning for some of our most popular wheat varieties and most of them have performed well, which is good news for growers who have invested in the newer varieties," Haydn said.

A standout performer from InterGrain this year was Vixen, which is an early maturing Australian Hard (AH) variety.

InterGrain Marketing Manager
Ashleigh Brooks said that Vixen
showed its broad adaptation in the
tougher season, finishing in national
trials, on average, eight to nine per cent
higher than Mace, and three per cent
higher yielding than Scepter.

"We've also seen Vixen in WA NVT's, performing really well, showing its ability to yield in a shorter, although high yielding growing season," Ashleigh said.

"Vixen is a good alternative to Scepter for growers looking for an earlier maturing AH, with exceptional yield, improved stripe rust resistance (MRMS) and a moderate plant height, reducing stubble loads in high yielding environments."

#### Spartacus CL still a national warrior

In spite of the tough season in the east and more favourable conditions in the west leading variety Spartacus CL continues to perform well for growers nationally.

"Spartacus CL is still a paddock leader, with high yield, malt accreditation, early maturity and tolerance to the Intervix herbicide, coupled with a robust disease profile and good grain quality package," Ashleigh said.

"It also has good straw strength and a low risk of head loss.

"There's also a comfort factor there – growers are familiar with La Trobe and Spartacus CL and they know they can handle the tougher seasons."

La Trobe, which received malt accreditation in 2015 continues to perform consistently due to its early maturity and solid disease profile.

"While growers have been happy with La Trobe's performance over the past 5 years we are seeing many transitions to Spartacus CL to enable use of the Clearfield technology within the barley phase of the rotation," Ashleigh said.

#### New varieties on the table for 2019

In SA and VIC, APW variety Sheriff CL Plus provides a high yielding, earlier sowing, Clearfield Plus wheat option for growers, in a maturity class where there are currently few varietal alternatives.

Vixen was released last spring at the Baker Seed Co. Field Day and is available for sowing in 2019.

"Vixen's consistently high yields, challenging Scepter, across a range of seasons and environments is certainly very attractive," Ashleigh said.

In WA, a new variety called Devil, which was released in spring for the 2019 season, has performed exceptionally in WA 2018 NVT trials, on average, three per cent higher than Scepter.

"Devil is an early to mid-maturing variety, providing WA growers with

a varietal alternative to Scepter," Ashleigh said.

"It's an AH and APWN variety, has good yellow spot resistance, and seed sales have been very pleasing to date, so we should see a large number of farmers across WA growing it this year."

The WA noodle wheat industry also remains strong.

Kinsei, a late maturing, Australian Noodle Wheat (ANW) is providing farmers with an option, ideal for maximising early sowing opportunities.

Noodle variety Ninja (ANW) has also been a consistent performer this year, with similar yields to Mace in WA.

#### Feed barleys prove popular

Given the enormous domestic demand for feed grain in NSW and QLD, feed barley varieties have also been under the spotlight this year, with Rosalind, a mid-maturing feed barley doing well in National Variety Trials again, delivering outstanding yields and yield stability.

"2013 to 2017 long-term national NVT results have proven Rosalind is the highest yielding barley, this combined with its strong agronomic package, make it an ideal option for growers focused on growing high yielding feed barleys," Ashleigh said.

"There's also been a lot of discussion around Buff in the lower rainfall areas of WA with its stellar NVT performance. The variety is currently classified as feed whilst undergoing malt accreditation. It is an early maturing, white aleurone, acid soil tolerant variety, the first available to growers, marking a significant breakthrough in barley breeding."

#### Scepter quality and yield "remarkable"

Ben Wundersitz is a grower based in central Yorke Peninsula, SA, and saw the lowest rainfall in the area since 1982 last season, down on average by 40 per cent.

With over 6000ha of land ranging from low rainfall areas near Price, SA, where the average is 200mm; to higher rainfall areas such as Maitland, SA, where average rainfall can be up to 500mm, Ben grows four varieties of wheat, two varieties of barley, lentils and canola.

"When it comes to wheat, we grow Trojan, Scepter, Chief and Grenade, and considering the season we were very happy with the performance of all of our varieties," Ben said.

"We've built up Chief to replace Grenade as our Clearfield variety, and have been pretty happy with how it performed this year, in spite of the low rainfall."

While yields were down, Ben says Scepter still managed to yield relatively well, in spite of the low rainfall.

"Scepter did really well everywhere, it's our most reliable wheat. We didn't have any of our Scepter wheat downgraded this year, with no test weight problems at all, which says a lot about how robust it is, it's just a great variety to have," he said.

"In addition to the high quality of the wheat, Scepter performed remarkably well in terms of yield, considering how dry the season was."

Trojan was the only wheat variety that underperformed, however, Ben said this was more to do with where it was, rather than the quality of the variety itself.

"Trojan suffered a bit more than the rest this year, but it's hard to quantify because the areas we had it in were prone to frost," he said.

"With everything considered, it was a surprisingly solid year, so we won't be changing anything in our rotation."

Ben says he's just waiting for the rain now, to decide if he uses Scepter or Chief in the areas he applied a Clearfield herbicide.

"We've cleaned and prepared seed from both Chief and Scepter, but it will depend on how much rainfall we get between now and sowing as to which variety we'll sow.

"If we don't get at least 250mm of rain we'll have to go with Chief because of Clearfield residue.

"We'll also be carrying on with Spartacus for our barley crops, as it tends to grow well in our climate and is also Clearfield resistant. We may also sow Compass in the coastal areas as it has good vigour and growth, which provides plenty of stubble cover for the lower rainfall areas."



#### INDUSTRY PROFILE/

# OATEN HAY EXPORTS BOOM AS CHINA LIVESTOCK INDUSTRY GROWS

China is in the midst of a livestock boom, fuelled by Australian oaten hay.

A growing Chinese middle class, that no longer considers meat, milk and egg consumption a luxury, has triggered a growth in domestic dairy production that has more than tripled since 2000.

The development of large-scale, modern dairy farms in China that focus on production and efficiency of scale have recently become key importers of Australian fodder.

Hay Australia Managing Director, Andrew Bolt, a leading hay processing and exporting company, has seen exports of oaten hay to China increase from around 32,000 metric tonnes (mt) in 2013, to close to 300,000mt in 2018.

"The Chinese view their dairy industry as a core part of their agricultural development," Andrew said.

"Around the early 2000s, they started developing their dairy industry and the first step was buying some of the best genetics they could access around the world, including from Australia.

"They've also looked at increasing productivity through other means, and one of the most important things after genetics, is the fodder they provide their cows.

"Australian fodder has found a really good position as an accessible, competitive and quality product that has really helped their productivity and animal health," he said.



#### Australian hay: pick of the crop

Since 1998, Western Australia (WA) has produced over 40 per cent of Australia's export hay, followed by South Australia (SA) and Victoria (VIC). Andrew attributes the record levels of Chinese demand for Australia's oaten hay to its consistently high quality.

"The Chinese dairy diet is based on a lot of concentrated feeds. To ensure those concentrates are effective, and to maintain animal health, it's important to have a really good quality fibre.

"Australian oaten hay is really palatable, and it makes the rumen work more efficiently and effectively. That's why Australian oaten hay is a really good fit for the Chinese market."

The Grains Research and Development Corporation (GRDC) believes WA's export hay success is largely due to its climate, with its mild spring weather providing a good window for curing hay.

The limited secondary markets for hay (i.e. domestic dairy and beef producers) have also meant WA growers and contractors have had to develop skills and experience in producing high quality export products.

WA now has the largest number of export accredited processing facilities – the majority within a two-hour drive

of Perth. This not only gives efficient transport access to port, but keeps costs down.

#### A balancing act

In 2018, WA's position as a key exporter of hay was criticised by east coast feedlotters and dairy farmers, who were struggling to feed their livestock.

"In reality, only 10 to 15 per cent of all hay grown in Australia is exported," Andrew said.

"But the eastern state's drought will certainly have an impact on the amount of hay Australia will have to export in 2019.

"The volume exported to China will certainly be less, due to the drought conditions making oaten hay a scarce resource and highly demanded by the domestic market."

#### A growing relationship

Given its potential for growth, Australia's export relationship with China is of significant importance to Australia's agricultural industry.

"As a large-scale importer of livestock feed, China's demand for our hay adds a lot of resilience and robustness to Australia's overall fodder market," he said. "There are other parts of the Chinese market that are not currently buying oaten hay, but potentially could be, like their beef market, which they are starting to develop. There's also potential demand from an equine market."

The current trade standoff between China and the US may also result in opportunities for Australian hay producers and exporters.

Andrew says the US dominates the protein fodder sector with its alfalfa hay but demand could emerge for lucerne, wheaten and barley hay as an alternative if tariffs are imposed on US fodder.

"Currently US alfalfa hay is subject to a 25 per cent penalty tariff and that's on top of an existing seven per cent tariff, so buyers currently pay a penalty of more than a third on the price in tariffs.

"These tariffs have certainly increased the demand for Australian oaten hay, but with prices reflecting Australia's seasonal conditions, short term demand from China has cooled.

"But I'm pretty confident they recognise the long-term value of Australia's contribution to the livestock fodder industry." ••

#### IN BRIEF/

#### SOUTH AUSTRALIAN NO TILL FARMERS ASSOCIATION CELEBRATES 21 YEARS

For 21 years, the South Australian No Till Farmers Association (SANTFA) has been helping South Australian growers implement minimal tillage practices and coordinating research for new on-farm technology.



Pictured (L to R) Jack Tansley, Leighton Pearce, Adam Crabb, Callum March.



(L to R) Viterra Central region Operations Manager, Jack Tansley with Glencore Agriculture Grain Merchant, Adam Crabb and Strathalbyn grower David Kropp

As a not-for-profit organisation, SANTFA promote the benefits of conservation and no-till farming systems, and support research for new farming technologies that can be introduced within South Australia (SA).

SANTFA Communications and Sponsorship Manager, Leighton Pearce, has seen firsthand the benefits the organisation provides to its members.

"22 years ago, no-till farming was non-conventional, but now it's the norm," Leighton said.

"Our magazine, The Cutting Edge, the annual SANTFA conference and crop walks have allowed our members to keep up to date with modern farming practices and technology through information we supply, plus talking to one another which is facilitated through our events."

Now in its twenty-first year, SANTFA has approximately 450 members across SA.

Grower and SANTFA member of over ten years, Callum March said the organisation has introduced him to new technologies he uses on his farm at Balaklava, in the state's mid-north.

"I now use technologies that help minimise disruption to our soil such as disc seeders," Callum said.

"Without SANTFA I would not have implemented these as early as I did.  $\,$ 

"The conference and crop walks are a great way for growers to get together and share ideas.

"The Cutting Edge, which I receive every quarter, is a great publication that also shares information on new advances in farming practices that SANTFA helps push."

Looking to the future, Leighton said SANTFA is moving into coordinating research for other technologies.

"We are currently looking at a technology called Aqua Till, which is used in other industries such as glass cutting," Leighton said.

"We're interested in how it cuts straw residue in paddocks.

"Our other focus this year is making advances in improving soil health," he said.

Glencore Agriculture and Viterra are SANTFA's longest serving sponsors, having supported the organisation for 15 years.

Leighton said the support of Glencore Agriculture and Viterra has allowed SANTFA to bring more opportunities to their members.

"The sponsorship ensures we provide members with high quality information in our magazine, and has allowed us to bring international speakers to our conferences."

For more information on the South Australian No Till Farmers Association, visit **santfa.com.au** 

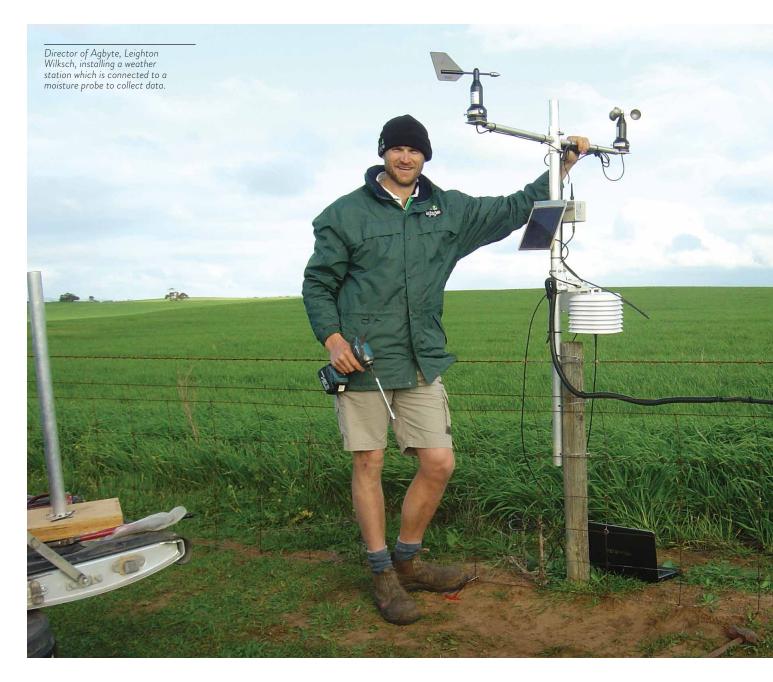


#### TECHNOLOGY/

# WATER EFFICIENCY MANAGEMENT MADE EASIER WITH PRECISION AGRICULTURE

While drought proofing your farm is a near impossible task, researchers and agronomists say effective management and using precision farming technology can increase water efficiency and dramatically reduce the impact of drought in tough years.





H aving just experienced one of the worst seasons of his career, agronomist working in southern New South Wales (NSW), Mitch Dwyer says recent conditions have further emphasised the need for moisture retention strategies and investment in precision farming technology.

"We've been pretty fortunate here in Cowra in the past, with good stubble and rainfall showing marginally better returns, but this year we were caught out," Mitch said.

"This is why preventative management is so important. All of the information is there for us, it's just about linking the research with what we're doing practically on the farm." The Grains Research and Development Corporation (GRDC) recently released results from its research initiative to increase the water use efficiency (WUE) of grain-based farming systems by 10 per cent.

The research – which was conducted in partnership with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and a network of 16 regional grower groups – measured the factors that influence WUE and investigated what management practices would lead to an increase in WUE, with impressive results.

"Moisture retention is a big one when it comes to preparing for potential drought seasons," Mitch said. "Managing stubble loads, using moisture probes to understand the efficiency of the soil, and choosing the right grain varieties for your climate all have a major impact on the quality and quantity of your yield."

Higher summer rainfall in recent years has presented a shift in weed type and a number of challenges for growers, particularly those in southern Australia.

Because of this, the research has shown that retaining water from summer showers by controlling weeds, can help farmers store an adequate amount of soil moisture leading into winter crop seeding.



"Fallow spraying is a great way of

controlling weeds in the summer and

making the most of late season rain,"

"The GRDC and CSIRO have

research, that improved summer

fallow management, including weed

management and stubble retention

can lead to a 60 per cent increase in

"The results also show that a legume break crop, following two consecutive

The use of variable rate technology is

also recommended, as it allows farmers

to gain a bigger picture understanding

cereal crops, can lead to an increase of

between 16 and 83 per cent."

demonstrated, in their recent

of how every acre of their property is functioning and responding to intervention, in good times, and bad.

"Soil sampling, using variable rate technology, is highly recommended for those who are looking to save money and time," Mitch said.

"Taking a blanket approach to the management of soil nutrition can lead to unreliable results and less of a return from inputs."

Mitch said he has recommended WEEDIt in the past, a spot spraying system that pinpoints plants, because it is very precise.

"This precision approach helps with resistance and reduces the overuse of sprays, which saves time, money and the environment."

The results from the GRDC and CSIRO research also revealed that by matching nitrogen supply to the soil type it is possible to achieve a yield increase of up to 91 per cent.

"A lot of harvesters are collecting grid data using infrared imaging now, which is assisting farmers with soil sampling, and variable rate spreaders make it easy for farmers to adapt their fertilizer regimes to the needs of specific soil types," Mitch said.

"New technology in farming is a given, but it's been great to see the next generation of farmers really embracing the products on offer to plan ahead for challenging years."

"When you start to put all of these things together you get a good understanding of your entire property, and the unique needs for each area."

Mitch said that it's promising to see so many farmers now embracing technologies that allow them to make calculated decisions about their farming approach through the collection of data.

"New technology in farming is a given, but it's been great to see the next generation of farmers really embracing the products on offer to plan ahead for challenging years," Mitch said.

"There was a disconnect for a while there, when agricultural technology companies were making great products but farmers just weren't using them.

"Now we're seeing an increase in adoption of precision agriculture as the farmers, who have grown up with digital technology, start to take over the management of their farms and this technology becomes more accessible.

"The latest research has proven that preventative management increases water use efficiency and we are fortunate to have the technology that allows us to do this. The positive impact of water retention should not be underestimated or forgotten."

For more information about the management techniques and crop models used by the CSIRO in their researching water use efficiency for increased grain yield study go to csiro.au 💩

Mitch said.

grain yield.

#### IN BRIEF/

# AWARD WINNING SILO ART DRAWS RECORD TOURIST NUMBERS

Since its unveiling, Tumby Bay's silo art mural in South Australia (SA) has become a major attraction for the country town, and was recently announced as a winner of the People's Choice Award in the 2018 Brand SA Regional Showcase.

The mural, organised by the Tumby Bay Progress Association (TBPA) with Viterra, was painted in just under a month by highly-regarded Argentinian artist, Martin Ron.

As one of 30 finalists, the award provides an opportunity to celebrate and promote the achievements of individuals, groups and organisations that have made significant contributions to regional SA.

TBPA Treasurer, Stephen Hibbit said the silo artwork and award win would not have been possible without the support of the community.

"We're thrilled the silos have been recognised across SA," Stephan said.

"It is exciting to be recognised as one of the award winners, especially after seeing what some of the great businesses from around our state are doing."

The award was a positive ending to an already successful year for the TBPA.

Tumby Bay grower and project lead of the silo art mural project, Dion LeBrun, said the benefits to the town have been enormous.

"The growth we have seen is bigger than we ever thought," Dion said.

"Businesses are saying they have never seen so much tourism and are reporting record turnovers which was the TBPA's intention when starting the Colour Tumby project.

"Hopefully the award further encourages visitors to come and stay.

"A credit to Viterra for bringing silo art projects to fruition."



"Businesses are saying they have never seen so much tourism and are reporting record turnovers which was the TBPA's intention when starting the Colour Tumby project."





#### RESEARCH/

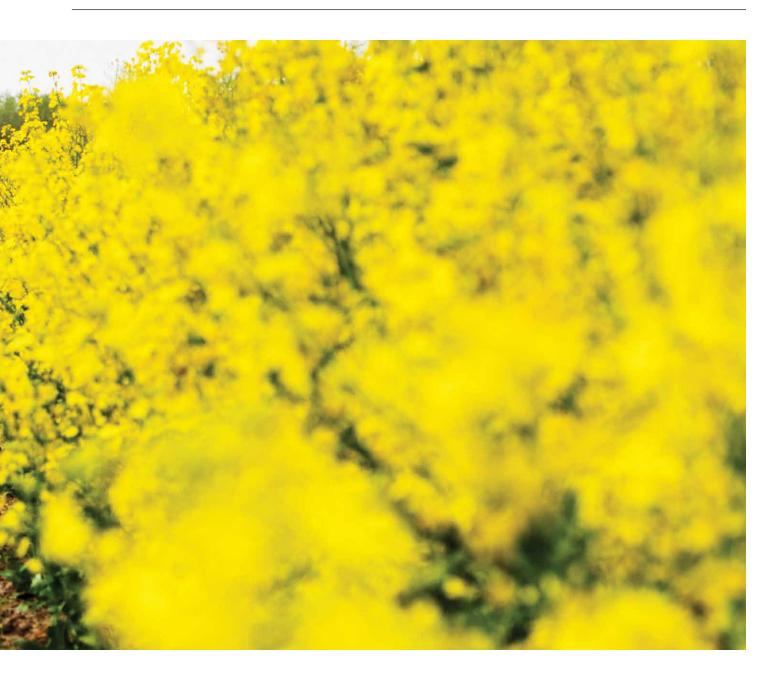
#### NEW CANOLA GROWERS GUIDE FOR WESTERN AUSTRALIA

A new canola growers guide, released in December 2018, has been published by the Grains Research and Development Corporation (GRDC) to assist Western Australian (WA) growers in their agronomy decisions for the upcoming 2019 season and beyond.

The guide documents research findings from more than five years of trials conducted by the WA Department of Primary Industries and Regional Development (WA DPIRD) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and provides agronomy information for growers in the lower-rainfall regions, who may be new to growing canola due to their location.

GRDC Manager of Agronomy and Farming Systems in the west, Dr Julia Easton, said that the research projects have supported the expansion of canola into lower-rainfall zones over the past five years.

"The relative importance of canola in the system is demonstrated in the



doubling of area sown to canola in the low and medium-rainfall zone," Dr Easton said.

"GRDC will continue to strive for reducing the yield gap in canola in WA.

"The role of the project teams from WA DPIRD and CSIRO in delivering the expansion of canola in WA needs to be celebrated."

WA DPIRD Development Officer Jackie Bucat said the guide came from the GRDC Western Panel spring tour, where growers were focused on finding ways to maximise the potential of canola in areas of 300mm of annual rainfall or less.

Farmers were particularly interested in learning more about the timing of nitrogen application, which was addressed in the trials.

"Growers have been asking us about nitrogen timing, and our trials have illustrated that some yield benefits can still be achieved by applying nitrogen to medium and lower-rainfall-zone canola crops even up to early flowering," Jackie said.

"Trials in the higher-rainfall zones, in Kojonup and Esperance, have shown nitrogen can be applied even later, at pod-fill stage, and there will be a yield advantage."

The guide covers comprehensive information on the timing of nitrogen applications in lower rainfall areas in WA, and also reveals that nitrogen rates are more important than timings in high rainfall canola in WA.

There is also a chapter on critical nutrient levels for canola in WA and low

fertiliser inputs to canola in lower rainfall areas.

Ms Bucat said that while WA DPIRD still recommends nitrogen application at seeding and before bolting stage, the trials illustrated growers could have a "second bite of the cherry".

Other trials documented in the publication include seeding depths and seed size, plant density, weed competition and weed pressures, open-pollinated versus hybrid canola potential, optimal sowing times in different regions and seed retention.

For more information, or to download the guide, visit: agric.wa.gov.au/canola/canola-agronomy-research-western-australia-bulletin

#### IN BRIEF/

#### **MEET THE MINISTER**

Biosecurity, drought and the health and wellbeing of farmers are some of the issues South Australian Minister for Primary Industries and Regional Development, Hon. Tim Whetstone MP, will be focusing on in 2019.





The Hon. Tim Whetstone MP (middle) with the Premier of South Australia, Steven Marshall and Grain Producers SA Chairman, Wade Dabinett.

#### Tell us a bit about yourself.

I hail from Keith in SA's South-East where my family had dryland farms and livestock. On finishing my schooling I completed a tool-maker apprenticeship at General Motors Holden and went on to become a project manager on the Moomba gas fields. After moving to the Riverland in 1989, I purchased a citrus property and developed vineyards. From there I also held positions as a director of the Renmark Irrigation Trust and chairman of SA Murray Irrigators. I moved into politics after being elected to the seat of Chaffey in 2010 and I became Minister for Primary Industries and Regional Development in March 2018. Away from politics I am a father of three children, Nic, Charlotte and Eliza, and I am a dedicated jam maker, encouraging participation in our country shows.

#### Why did you enter politics?

As a passionate advocate for irrigators and regional communities that rely on the River Murray, I entered politics to represent the people of the Riverland and ensure their voice was heard. Helping to make a difference on behalf of your community is a critical element to being a good local MP.

#### What are the key areas of focus for your portfolio in 2019?

Under the former government in SA, agriculture and the regions were neglected. My focus is to bring our farmers and their regional communities back to the forefront in SA as they are the key drivers of our economy. While we have, and continue to face a number of challenges, such as drought, I will work closely with industry to grow our sectors, including the important grains industry. As always, continuing

to uphold our pest free biosecurity status is important and I believe there are huge growth opportunities for the state in Ag-Tech and capitalising on commercialising SA's research and development.

### What do you believe are the key agricultural challenges for SA in 2019 and beyond?

Currently SA's key horticulture region is battling fruit fly, so eradicating that threat is a key challenge. The dry conditions continue to impact our farmers and they need ongoing support, particularly in the health and wellbeing area.

#### What do you enjoy most about being a Minister?

I enjoy working closely with industry to implement policies that will make a positive change and grow the economic prosperity of the regions in SA.

#### IN BRIEF/

#### GLENCORE AGRICULTURE – AN AUSTRALIAN TRUSTED TRADER

Glencore Agriculture has recently been accredited as an Australian Trusted Trader, providing its imports and exports with faster access to markets.



A ustralian Trusted Trader is an Australian Government initiative, developed by the Department of Home Affairs and the Australian Border Force with input from importers, exporters and representative bodies.

It accredits Australian businesses that have compliant trade practices and secure supply chains.

Glencore Agriculture's Senior Commercial Manager, Lyndon Asser, said there are many benefits of being an Australian Trusted Trader.

"Australian Trusted Trader is a partnership between the Australian Border Force and businesses to improve access to markets by reducing red tape at the border, improving certainty in export markets, and expediting the flow of cargo in and out of Australia," Lyndon said.

"Being an Australian Trusted
Trader is a mark of distinction.
It means Glencore Agriculture
has been accredited against the
international supply chain and trade
compliance standards set by the World
Customs Organization.

"In order to demonstrate we have a secure supply chain, Viterra's Laverton site – the largest packing and processing facility we use – had to be assessed and confirmed to meet the required standards."

Australian Trusted Trader allows accredited businesses faster access to export markets, as they are given priority treatment of goods at the border. Businesses with the certificate receive faster customs processing and fewer interventions.

"Australia follows many countries who have similar systems in place," said Lyndon.

"Some of these countries partake in Mutual Recognition Arrangements with Australia, giving Trusted Traders trade facilitation benefits at the border. So, we are provided with faster access to international markets as well.

"Having this accreditation and the Mutual Recognition Arrangements gives Glencore Agriculture, and the Australian grain industry, a competitive advantage and selling point when working with our buyer customers.

"If we can provide them with their grain quicker then that's a huge plus."

To find out more about the initiative, visit **abf.gov.au/trustedtrader** 

### Western Australia's new home of agri-innovation and industry

Rich in natural resources, the Peel region is a giant step closer to becoming an agribusiness and innovation hub in Western Australia. Offering strategically located land for new and emerging industries, Peel Business Park, Nambeelup services a broad range of sectors, including agriculture, technology, research and development, as well as general and light industrial businesses.

The first major project of the Transform Peel initiative, Peel Business Park is strategically located just 70 kilometres south of Perth and is made possible by Royalties for Regions funding of essential trunk infrastructure.

Phase 1 of the 1,000-hectare Peel Business Park is being delivered by LandCorp, forming a critical component of the Transform Peel initiative, which also includes the 42,000-hectare Peel Food Zone and Peel Integrated Water Initiative. Funded and supported by State Government, Transform Peel will help future-proof food and water supplies and drive economic growth.

With a focus on research and development in agri-innovation, Peel Business Park will offer opportunities to develop high-quality, value-added food production and processing, which isn't climate dependent. Designed to create stronger connections between agricultural and logistics chains, it will help build critical capacity, business capability and export readiness.

General and light industrial, and service commercial businesses will benefit from the park's location and flexibility of lot size – unlike other developments which are constrained by surrounding land uses.

Phase 1 includes a renewable energy microgrid, expected to be one of the largest for an industrial development in Australia, which will offer a unique power solution delivering low-cost, renewable energy, in conjunction with a robust grid connection. Innovative tariffs are expected to offer the flexibility required to meet the power needs of diverse customers.

Lots include flexible design, power, water and waste-water. High-speed internet, with international submarine cable network linkage, and the Bunbury to Dampier gas pipeline will also service businesses.

LandCorp's recent first release of lots ranging from 2,400sqm to 20,400sqm has already attracted strong interest from businesses who recognise the potential of the transformational development.

#### Why can't land come with more incentives?

It can – LandCorp promotes, offers and assists on a range of local, State and Federal Government incentives for Peel Business Park. Incentives will be offered on a qualification basis and range from deferred land payments and case management support services, to cash incentives and rebates. The Shire of Murray is currently offering a three-year rate holiday and will waive all local government planning and building fees for the first five businesses who commit to purchasing in Stage 1\*.

See the vision come to life by viewing the flythrough at landcorp.com.au/peelbusinesspark

\*Conditions apply.







### The answer for agri-innovation

Peel Business Park's five innovatively-designed and sustainably-built precincts will cater for the agri-innovation, renewable energy, general industrial, light industrial and service commercial businesses of tomorrow.

Agribusiness – Phil Melville 0488 203 088 Industrial – Warick Irving 0413 863 335 **landcorp.com.au/peelbusinesspark** 









Local team with global contacts. It's our

# AGRICULTURE

As one of Australia's largest buyers and exporters of wheat, barley, oilseeds, pulses, sorghum and cotton, growers' needs are at the heart of our culture.

We understand payment security and competitive prices are important to you.



