UNFS UPDATE

Upper North Farming Systems Newsletter April 2017

Stubble Management in 2017 - the good, the bad, the ugly

Ruth Sommerville

2016 was a season for growing biomass. Unfortunately for many this wasn't converted into yield as a result of frost and several storm events, whilst those that missed these weather events were able to reap some of their highest tonnages on record.

Despite the outcome at harvest, the 2016 season has resulted in high to very high stubble residues across the district, and the storm damage has resulted in many of these stubbles being in poor condition with lodging, hair pinning and un-even chaff distribution being a common sight around the paddocks. There is a lot of discussion happening about how to manage this at seeding. Some basic factors to consider include;

- Total stubble residues in the paddock: Optimum stubble loads are approximately 2-3tonnes/ha at seeding time, with a total soil cover above 70%. If you have more than this there is potential for issues with herbicide soil contact and seeder flow. Less than this and your soils are exposed to erosion. Go out and measure your stubble load, understand what you have in the paddock and its implications.

- Height of the stubble: Many harvested higher than usual in 2016 to enable speed and ease of harvest. This has resulted in higher standing stubbles and in many cases longer stubbles on the ground. If high harvest heights were your tool for getting harvest over and done with, slashing may be an option for dropping this stubble on the ground.

- Stubble condition: lodged and hair-pinned residues are more likely to bundle up in the seeder and will prevent soil contact of herbicides. This is going to be a big issue this year. This may mean paddocks with optimum stubble loads still cause issues at seeding due to stubble condition being poor.

- Herbicide tie-up: Pre-emergent herbicides require soil contact to become active. A number of our current herbicide options will bind to organic matter and not be available to inhibit weed growth. Other more soluble options may be washed off the stubble and end up in furrow resulting in crop toxicity. Maximise your herbicide application efficacy by understanding how your spray system and nozzles work. Remember - once you've sprayed if you have to go back and remove the stubble to enable seeding to continue...the spray will be lost with the stubble. Decisions need to be made prior to spray application!

- Pests: Snails have built up in the region over the past 5 years, with many seeing problems at harvest last year in certain soil types. The baiting window is now for paddocks with susceptible crops in 2017 or to reduce the population across your farm. Snails are now active with the cooler weather and nearing mating. Once they begin mating (usually with increases in overnight moisture levels and morning dew) baiting efficacy decreases, so waiting until seeding may be too late.

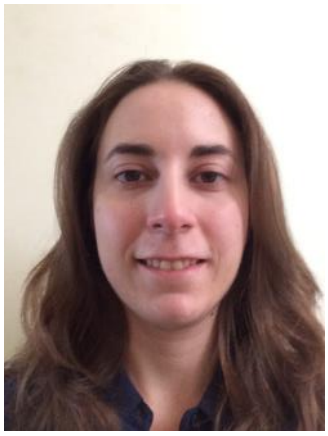
Links to great resources developed under the GRDC funded Stubble Initiative are on page 9.

Also In This Issue

New Faces at Upper North Farming Systems

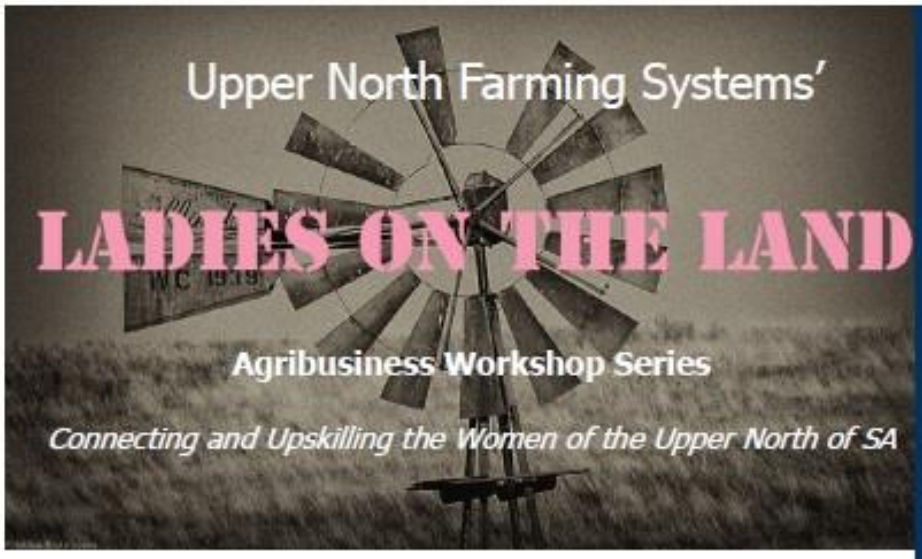
UNFS is thrilled to introduce 2 new staff members to you. In March 2017 UNFS made the bold step to employ staff rather than engage contractors. Previously all positions have been contractors, and as such the shift to employing staff has been a big step for the organisation, one made possible by good governance of the organisation by the Strategic Board over the past 3 years and great project identification by the Operations Committee leading to new projects being funded by many of our Funding Partners.

Hannah Mikajlo has joined the organisation as a full-time Project Officer based in Jamestown. Hannah has recently completed an Bachelor of Agriculture Sciences with First Class Honours at the University of Adelaide. In addition to this Hannah has a Bachelor of International Studies and Bachelor of Arts from the University of Adelaide. Hannah has recently moved to Jamestown from Flagstaff Hill and is looking forward to meeting the friendly faces of the Upper North and getting to know the farming systems of the district. Hannah will be working across all of our projects and is excited about getting out in the field over the coming weeks. If you are looking to find Hannah, her new office space is within the Davis Grain building in the Main Street of Jamestown. Welcome to the team Hannah.



Rebecca Gum has joined UNFS as a part-time Administration Officer. Many of you will know Rebecca and her family from Orroroo, with a long history of involvement within the district and with the group. Rebecca will be working approximately half a day per week keeping the group on track. Bec is the go to girl for all of your correspondence or membership discussions. Bec is a busy girl and having just completed a Bachelor of Ecological Agricultural Systems from Charles Sturt University is now undertaking a Bachelor of Agribusiness Management at CSU, whilst also working on the family farm. Welcome to the team Bec.

In other staffing news...Mary Timms and her family have relocated to the South East of SA to enable Marys husband Wade to take on an exciting property management role. The group has been lucky to retain Mary in the role of Finance Officer despite this relocation. We have worked to ensure that all of our management systems are cloud based to facilitate our staff to be located across the region, in this case we've just spread the net a little further. Ruth Sommerville will be taking some leave and starting to wind back hours over the coming months with another baby due in July. Mary, Bec and Hannah will be working closely with the Strategic Board and Operations Committee over this time to cover her role.



Tuesday 4th April

Booleroo Centre Sports Club

9:30am—12:00pm

Open to **Men and Women**—Safety is everyone's business

Guest speaker, Caroline Graham from Safe Ag Systems, will be delivering a Farm Safety session covering:

- Legislation changes, in simple terms.
- Why it's difficult for farmers to apply the normal WHS methods found in other industries.
- What are your options?
- How Safe Ag Systems™ can help.

Catering: Morning tea supplied
For further details and RSVP:
Mary Timms 0428 580 583
Email: accounts@unfs.com.au

FARM SAFETY WORKSHOP

GUEST SPEAKER CAROLINE GRAHAM, SAFE AG SYSTEMS

CRECHE AVAILABLE - PLEASE BOOK

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New snail control insights emerge

Author: *Rebecca Barr — Groundcover Issue 126*

A combination of cultural or on-farm practices and well-timed baiting is the most effective approach to controlling snail populations. This is the finding of a GRDC-supported research initiative through the South Australian Research and Development Institute (SARDI).

SARDI research officer Blake Gontar has found cultural controls (on-farm practices) improve the efficacy of snail baiting. ***PHOTO:*** *Ashley Flint*

As part of the GRDC Stubble Initiative, SARDI research officer Blake Gontar has been measuring the effects of cultural and chemical snail control techniques in stubble retention systems at a heavily infested site at Coulta on the Lower Eyre Peninsula.

"Our key finding so far has been the importance of cultural control, not only in killing snails over summer, but in improving baiting efficacy," Mr Gontar says.

"Where no cultural controls were undertaken, we still found untouched baits several weeks after baiting, whereas after rolling or light tillage, the baits were more accessible to the snails, so they were all taken."

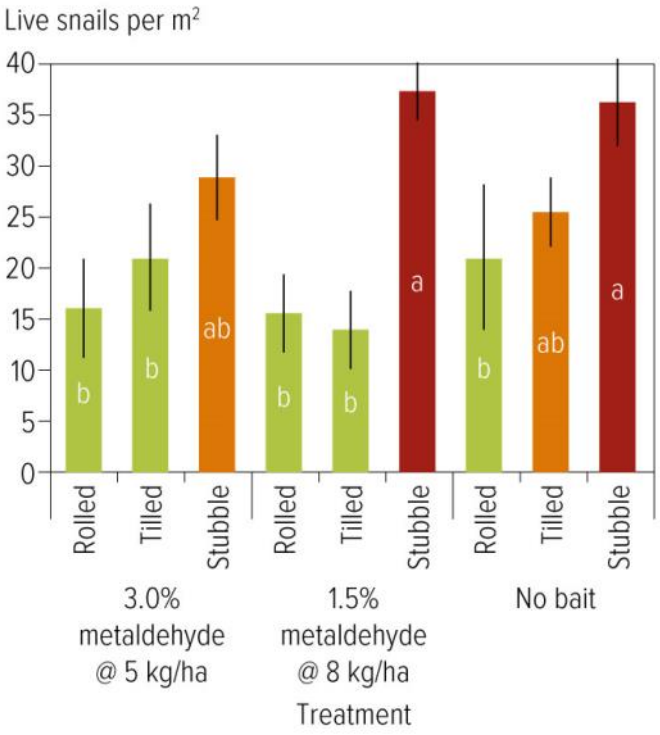
The trial showed areas that were rolled or tilled and baited with metaldehyde resulted in the lowest snail numbers, whereas areas where stubble was retained resulted in the highest populations regardless of bait application (Figure 1).

Working with Mr Gontar, SARDI entomologists Michael Nash and Helen DeGraaf have been analysing the sexual maturity of the snails collected during the trial.

"They saw that the snails were at sexual maturity from mid-March, with the first egg-laying observed in the field on 21 April," Mr Gontar says.

"The season didn't really break until May this year, so growers who baited at seeding or later would have been too late to kill snails before egg-laying."

The researchers are investigating snail behaviour in more detail and aim to better understand the triggers that lead to snail feeding in summer and early autumn.



Note: Letters indicate statistical difference, e.g. 'a' is statistically different to 'b', while 'ab' is not significantly different from either 'a' or 'b'. Bars indicate standard error. Data corrected for initial population density.

Product registration: 3 per cent metaldehyde products are registered at 3 or 6 kilograms per hectare, and 1.5 per cent metaldehyde products are registered between 5 and 7.5 kg/ha.

Figure 1 *Live snails following treatment at Coulta. Source: SARDI*

Bait degradation

SARDI research has also studied the effectiveness of metaldehyde and ethylenediaminetetraacetate (EDTA) baits following exposure to environmental conditions.

"Temperatures above 40 degrees, not ultraviolet light exposure as previously thought, is a cause of bait degradation," Ms DeGraaf says.

"This gives a guide as to when it is too hot to bait in summer. If temperatures in the sun are likely to exceed 40 degrees, the baits are not going to last long before their effectiveness decreases.

"This means that growers who have stored their baits in sheds over summer may get to baiting time and find the baits are less effective than expected."

EDTA (iron-based) baits did not show the same decrease in performance after exposure to high temperatures. However, their effectiveness was significantly reduced after rainfall.

"If growers pay attention to how they store and use their baits, whether they are using metaldehyde or EDTA

products, they can help ensure their baits are doing their job," Ms DeGraaf says.

"For instance, only picking up metaldehyde baits later in the summer, or storing them in a cooler shed, will help ensure they are in prime condition at baiting time."

Snail control measures

- Combining cultural and chemical methods can optimise snail control.
- Bait when snails are actively feeding and before egg-laying. This may occur after rainfall in late summer or early March. In summer, relative humidity of 90 per cent is likely to result in snail activity, whereas in cooler March temperatures, 80 per cent humidity is enough to expect snail movement.
- Keep metaldehyde baits below 40 degrees C, both during storage and when applying bait.
- Avoid applying EDTA baits when 10 millimetres or more of rain is forecast.
- Expect most baits to remain effective for about two weeks after application before they need to be replaced.
- Baits that develop mould in the paddock should still be effective.

More information:
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Helen DeGraaf, SARDI entomologist
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Useful resources:
Snail Management Fact Sheet
Snail Bait Application
Bash'Em Burn'Em Bait'Em: Integrated snail management in crops and pastures
Snail Identification and Control: The Back Pocket Guide
GCTV Snails playlist

New Weather Station and Soil Moisture Probes for the Region

Through the generous provision of our commercial paddock by Northern Ag in Booleroo Centre, UNFS was able to generate a significant income in 2016. This is the first year of this significant partnership between the two organisations and planted with Canola in 2016 it generated nearly double the expected income off the paddock in the first year. As a result we've been able to fast track a project we've been looking to implement with this cropping income.

Last week Joe Koch and Todd Orrock worked with Leighton Wilsch to install our new weather station and soil moisture probes in the commercial paddock to the North West of Booleroo Centre. This station will go live in the next week and the information will be made available to all.

The decision to keep the data open was an easy one, as a significant benefit of the station will be better weather information for harvest fire danger rating decision making and for spray application timing information. Improved management from accurate and timely information during these two farming operations benefits all and as such should be made available to all. A huge thank you to Northern Ag for the use of the paddock and to Agbyte for the generous sponsorship to make this project a reality so quickly.

Diploma of Agribusiness Management

Regional Skills Training (RTO Code 140107) are looking for interested students in Orroroo and surrounding regions to undertake a AHC51410 Diploma of Agribusiness Management.

The course will cover topics such as business planning, succession planning, soil management, budgeting and cropping plans. Student cost will be $2250, subject to availability of WorkReady funding (eligibility criteria apply). For more information call Kayla Perry on 0437 351 263.

Targeting soil pH with precision mapping

Author: *Alistair Lawson— Groundcover Issue 126*

Healthy soils are the ultimate goal for South Australian grower Damien Sommerville, and addressing soil acidity through liming is one way he is looking to improve crop productivity.

He cites acidic clay soils as one of the biggest yield constraints on his family's grain-growing properties at Spalding and Burra in SA's Mid North region.

"Where the soil is acidic the crops are uncompetitive," Damien says. "We get ryegrass weed blowouts and as a result of poor soil structure we also get waterlogging and the associated denitrification."

Snapshot

Growers: Eric, Judith, Ben, Damien and Ruth Sommerville
Location: Spalding and Burra, SA
Farm size: 1600 hectares
Enterprises: cropping, contracting
Average annual rainfall: 440 millimetres
Soil pH: 4.5 to 8.5
Soil types: predominantly red-brown clay
Crops: wheat, barley, canola, oaten hay

The soil pH across the Sommervilles' properties is highly variable, from strongly acidic 4.5 on clay soils to a more alkaline pH of 8.5 on grey-brown powdery calcareous loams.

The Sommervilles crop wheat, barley, canola and oaten hay across 1600 hectares. Damien says the effects of acidic soils are more evident in barley than any other crop they grow. "The fact is that the more we increase production the faster we will acidify the soil," he says. "Nitrogen is a big driver of yield, and in turn, that has increased how quickly we acidify the soil."

On-the-go mapping

The Sommervilles have historically taken a blanket approach to liming, covering between 15 and 20 per cent of their property with spot sampling of soils using a pH soil test kit. However, in 2015, the Hart Field Site Group (HFSG) set up a trial in one of the Sommervilles' paddocks to demonstrate on-the-go soil pH mapping with AgTech Services consultant Michael Zwar.

South Australian grower Damien Sommerville uses precision pH mapping to help better manage his lime applications. ***PHOTO:*** *Alistair Lawson*

The set-up consists of a pH electrode that is connected to the rear of a utility terrain vehicle and dragged through the soil on a tyne to map soil pH as it goes.

Damien, now the chair of the HFSG, says the demonstration aimed to show the benefits of this on-the-go pH mapping.

"A lot of people seem to know the benefits of liming but they aren't actually doing it," he says. "The development of precision pH mapping is something that has been watched very closely by local growers and as soon as there has been a commercial option available, many have jumped on it."

While the machine was on the Sommervilles' property, Damien took the opportunity to map more paddocks.

Better-informed decisions

He says the data generated from the mapping has helped them to make more informed decisions about liming.

"The maps picked up on some zones I knew were an issue and highlighted potential zones that need to be monitored so they are maintained above a pH of 5.5," he says.

"It also showed that we were going to spread lime on a few areas where it was not required. I was surprised to see there were some heavier soil types in the paddock we had mapped which were not acidic. Without the mapping we would have wasted time and money on these areas as they were actually near neutral pH."

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The next step for Damien was overlaying the data from the pH mapping onto their existing GPS system.

"We use a basic Marshall ground drive spreader to put lime out, so we just programmed the auto-steer screen in the tractor with the maps," Damien explains. "We then turn the spreader on and off from the tractor cab as we drive across areas that require liming in the paddock."

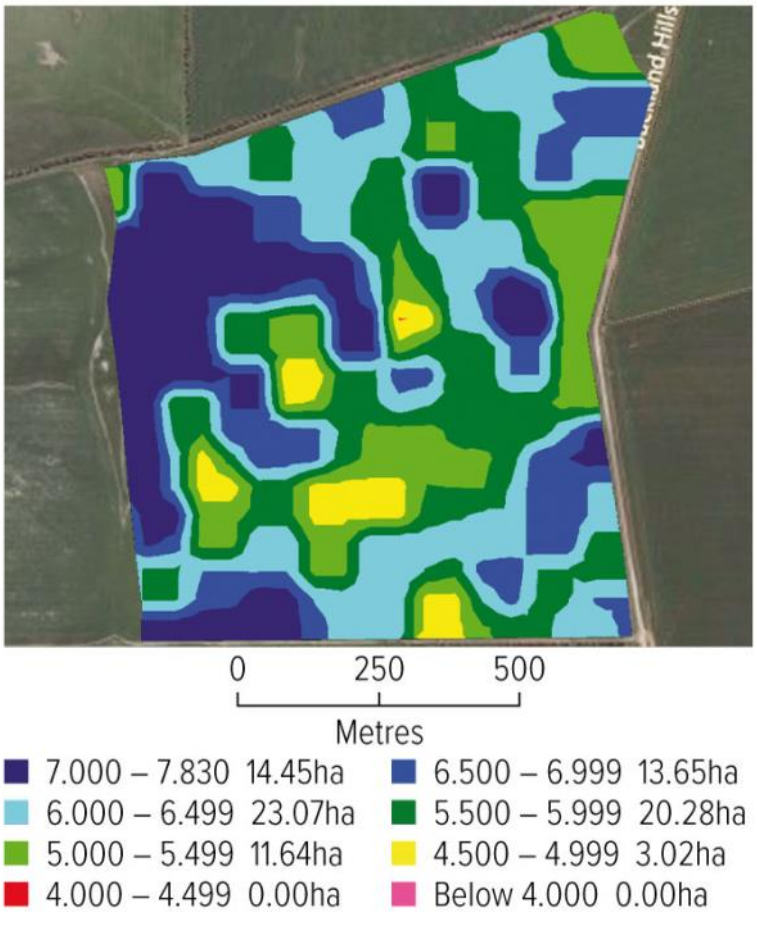
More for the dollar

"The cost set-up to do that was minimal, and we are getting more bang from the same dollar spent with precision application. We can now apply the lime where it is needed rather than just feeding the snails."

Accessing a cost-effective source of lime can be a challenge in the Mid North. However, the Sommervilles have an advantage in that the Clare Quarry at Spalding is just 10 kilometres from their farm.

They source dolomite dust from there and aim to spread about 600 tonnes per year. The product is very fine and fast-acting and the neutralising value of the product is 60 per cent, meaning more lime has to be applied for the soils to be neutralised.

Damien estimates that by the time their lime is purchased, freighted and spread, the total cost is about $50 a hectare. He believes the decision to soil test and produce pH map soils has ultimately paid off for his family.



Example of a soil pH map for one of Damien Sommerville's paddocks. The yellow areas indicate acidic soil with a pH between 4.5 and 4.99.

Figure 1 *On-farm soil pH for the Sommervilles.* ***SOURCE:*** *Michael Zwar*

"The science behind soil acidity is known and the theory is easy," he says. "It is a matter of working out what areas require attention so the operation is as cost-effective as possible."

Raising soil acidity knowledge

Limitations to crop growth resulting from soil acidity are said to cost South Australian farmers $50 million per year in lost productivity.

To help growers manage the problem, the GRDC has invested in research projects across Australia.

In the southern region, Primary Industries and Regions South Australia (PIRSA) soil and land management consultant Brian Hughes is managing the SA component of the Soil Acidity is Limiting Grain Yield project, while Southern Farming Systems manages its Victorian component.

Mr Hughes says there are 2.1 million hectares of land prone to soil acidification in SA and that area has been slowly increasing.

"We are seeing acid soil develop in areas that traditionally haven't had a problem, such as parts of the Yorke Peninsula and Lower North," he says.

"Historically, soil acidity was seen more in high-rainfall grazing and cropping areas, but it is starting to become more of an issue in medium-rainfall areas, where soils are not well buffered against pH change."

The project aims to: identify barriers to greater lime use; establish a state industry acidity committee; revise and improve various tools for liming; increase awareness of soil acidity and its impact on soil health and productivity; improve advisers' technical skills in diagnosing surface and subsoil acidity; extend information on new techniques for diagnosis and treatment; and increase treatment of acid soils.

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Mr Hughes says between 40 and 50 per cent of soil tests in SA areas prone to acidic soils show soil pH calcium chloride levels below 5, and the target is to lift them to at least 5.5.

“We have seen a small increase in liming since 2007,” he says.

“Producers have gone from spreading 70,000 tonnes of lime per year to 100,000t state-wide. But to break even on soil acidity prone areas, we probably need to be spreading 200,000t.”

More information:
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Soil Quality
Ag Excellence Alliance – soil acidity

Livestock SA Project Snapshots

Source: http:www.livestocksa.org.au/projects-snapshots/

Improving lamb survival by optimising lambing density

A key component of increasing productivity is lamb survival. As a Blueprint initiative, South Australia is part of the national project, ‘Improving lamb survival by optimising lambing density’. The SA component is being delivered through a collaboration involving the Davies Research Centre, SA Sheep Industry Fund, Landmark and Elders with funding from Australian Wool Innovation.

In SA, 10 on-farm trial sites will be established that quantify the effect of mob size and stocking rate on lamb survival for single and twin bearing ewes. Management guidelines for optimal management at lambing, including mob size, paddock size and stocking rate, which lead to a 10% increase in survival of twin born lambs over and above that achieved from adopting existing guidelines for management of ewe nutrition will be developed.

Development of a rapid sheep lice detection test

Control of sheep lice was highlighted as a priority during the South Australian Sheep Industry Blueprint development consultation with sheep producers across the state. Sheep lice cause a significant economic loss to the SA sheep industry with estimates of lice incidence in flocks of greater than 25%. The project aims to develop an in-shearing shed test based on presence of sheep lice DNA on shearing hand pieces, with results available in under 30 minutes.

This test will ensure the timely and cost effective treatment of infested mobs of sheep and significantly reduce the need for double handling of sheep with associated labour savings and animal welfare outcomes. Importantly, the availability of such a test will also reduce unnecessary lice treatment of sheep post-shearing and reduce the development of resistance to treatment.

Within SA, at a five-year adoption rate of 20% it is expected more than $2 million per year will be saved in treatment costs alone for a test cost of $200,000 per year. Further flow-on benefits will be realised through improved lice control leading to improved sheep productivity, wool quality and fleece values.

Keep The Date!

The 2017 State Community Landcare Conference will be held at Clare from September 11 - 13, 2017.

The theme for the Conference is "***Celebrating Innovation and Diversity in Landcare***" and will give landcarers from all sectors of the community the opportunity to explore the 4 streams of:

Biodiversity Management and Conservation

Indigenous Land Management

People and Volunteers

Sustainable Farming and Fishing.

For more information contact Glenn Gale, Executive Officer, Landcare Association of SA, execofficer@landcaresa.asn.au

Stubble Management Resources and Reading

The UNFS Website has all of the Stubble Management Guidelines, including on Inter-Row Sowing and Disease Management. Plenty more to be added to this compilation of Guidelines in 2017.

unfs.com.au/resources

Central west farming Systems has some great resources, they are one of the partners in the Stubble Initiative.

http://cwfs.org.au/category/stubble-project/

Birchip Cropping Group is one of the groups receiving the greatest level of funding through the Stubble Initiative and have done some great work. Some of it is not applicable to the low rainfall areas of our district, but they are pretty used to dealing with big stubbles over there, so plenty to learn from them.

https://thestubbleproject.wordpress.com/

Mallee Sustainable Farming has put together a downloadable summary of Stubble Managemet in the Mallee. For those with sandy soils most of this will be applicable, but there are great resources for all on tackling some of the intricacys of Stubble Management.

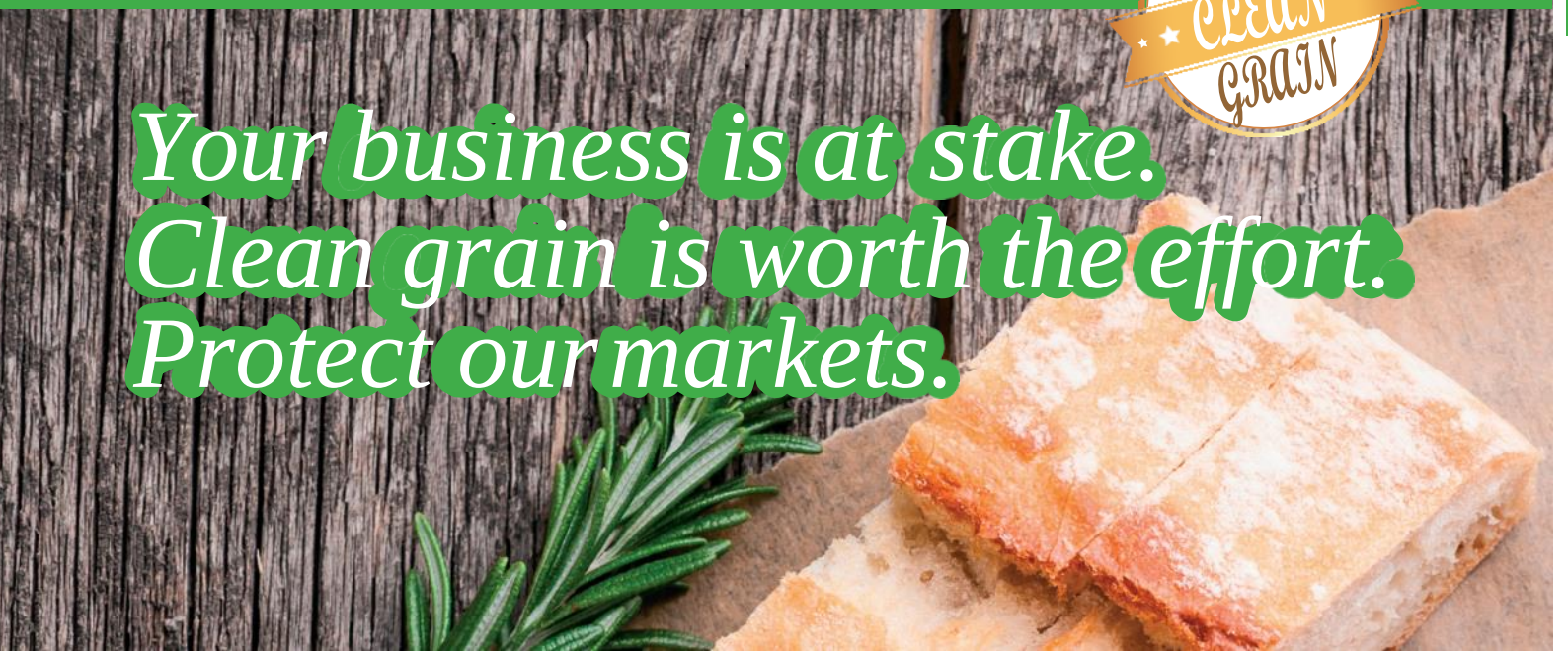
www.msfp.org.au/publications/msf-stubble-guide

Eyre Peninsula Agriculture Research Foundation at Minipa is also a project partner. Some great reading from their work so far.

http://eparf.com.au/research-project/maintaining-profitable-farming-systems-retained-stubble-upper-eyre-peninsula/

Another great location for trial info and reports from across Australia is the Online Farm Trials Database. Search “Stubble” and you get a huge array of reports and projects from across the country. Some great reading, but make sure you check the location/climate/soil type of the trial or target audience...stubble management varies significantly as a result of these factors!

www.farmtrials.com.au



Preparing for your next harvest begins NOW. What you do throughout the growing season can impact on grain quality and Australia's reputation as a provider of clean, green agricultural products. More importantly, any issues regarding grain marketability can impact your bottom line.

SPRAYING

When spraying, you must observe all label guidelines and permitted use patterns. This includes adhering to withholding periods, label instructions, application rates and safe operating procedures of the product being used. It is critical to only use registered/permitted chemicals on crops and any chemicals applied must be appropriately declared when delivering grain.

It is mandatory to make and retain accurate and detailed records when applying certain crop protection products in SA, e.g. when using Group I herbicides. In fact, it is good farming practice to keep detailed spray records of all chemical applications. These records should be kept for at least two years, depending on state regulations and label requirements. Details to record include:

- Location of paddock sprayed;
- Crop/situation and weed/pest;
- Application date, including start and finish times;
- Full name of the product, active ingredient and loading and product batch number;
- Product application rate per hectare, water volume, and number of hectares treated;
- Weather information including wind speed and direction, air temperature, relative humidity and cloud cover during application;
- Nozzle type, spray angle and spray pressure during application;
- Name and address of person applying the product;
- Personal protective equipment used; and
- Any additional information required as directed by the label or permit.

WITHHOLDING PERIODS

According to the Australian Pesticides and Veterinary Medicines Authority (APVMA), a withholding period (WHP) in relation to the use of a chemical product means the minimum period that needs to elapse between the last use of the product in a crop or pasture; and the harvesting or cutting of, or the grazing of animals on, the crop or pasture. WHPs are designed to ensure maximum residue limits in grain, fodder and straw are not breached.

Failure to observe and adhere to product withholding periods and registered application timings could compromise future access to domestic or international grain markets.

SNAIL MANAGEMENT

Snail population build-up is often a result of high rainfall corresponding with increased stubble loads and bumper crops. Some tips on snail management include:

- Combining cultural and chemical methods will provide optimal snail control.
- Cultural control methods including cabling, rolling, slashing and grazing are all effective for round snails. Undertake these activities on hot sunny days when the temperature is at least 35°C (preferably 40°C) for maximum efficacy, but be aware of the fire risk when working in paddocks at high temperatures.
- Burning is very effective for round snails. If summer weeds are controlled prior to burning and rocks are dislodged by

PLEASE TURN OVER

AN INITIATIVE OF THE SA GRAIN MARKET ACCESS GROUP SUPPORTED BY:

GIASA · GRDC Grains Research & Development Corporation · Grain Producers SA · Viterra · SAGIT · Grain Growers · Premium Food and Wine from our Clean Environment · South Australia · Government of South Australia, Primary Industries and Regions SA

Clean grain is worth the effort.
Protect our markets

cabling or similar, nearly 100 per cent snail kill has been achieved in trials.

- Bait when snails are actively feeding and before egg-laying. This may occur after rainfall in late summer or early March.
- In summer a relative humidity of 90 per cent is likely to result in snail activity, whereas in the cooler months, 80 per cent humidity is enough to expect snail movement.
- Baits differ in terms of longevity and effectiveness so consider this when making a decision.

RODENT MANAGEMENT

Mice populations can swell as a result of grain on the ground or around farms over summer. It is important growers reduce the amount of food available for mice and closely monitor numbers and activity. In particular, keep storage areas clear of weeds, debris and grain spills to minimise shelters and feed for mice. This also reduces the potential for carcase or faecal contamination in grain stored for later delivery.

GRAIN STORAGE

If you store grain on-farm, it is essential to have adequate infrastructure and a plan to manage pests. Different storage options have variances in their effectiveness over the short- and long-term, or may require additional fumigation or protectants, which need to be taken into consideration.

The use of grain protectants and fumigants is critical to ensure that grain can be safely stored and presented to customers in a clean, uninfested condition. It is critical you regularly monitor and follow all instructions carefully when fumigating or treating grain stored on farm to ensure it can be accepted into the bulk handling system and accepted for sale by domestic or international customers. If you have grain stored on farm and want to know if your grain can be delivered into the bulk handling system, contact your local bulk handler.

All participants in the grains industry need to continue to keep our grain clean, ensuring all grain meets market requirements and is within physical, chemical and biological tolerance limits. All domestic and export markets require adherence to maximum residue limits, which in some cases may be very low or nil. There is a zero tolerance for the following contaminants:

- fertiliser
- pickled/treated grain/artificial colouring
- live stored grain insects
- any chemical NOT approved
- rodent/snail bait
- glass and brittle plastic
- live or dead rodents
- toxic and corrosive materials

GOOD HYGIENE

Ensuring compliance to good biosecurity practices around hygiene and grain movement is simple and can effectively safeguard all involved. Prevention is better than cure and growers should always use a “keep it clean” policy:

- Thoroughly clean all equipment to ensure it is ready for use, including headers, augers, chaser bins, on-farm storage, field bins, trailers, delivery trucks and grain handling equipment;
- Keep ground around storage areas free from weeds or potential contaminants;
- Immediately clean up any grain spills, particularly around storage areas;
- Regularly monitor on-farm grain storages; and
- Prevent grain from mixing with fertiliser or other contaminants. This is particularly important if fertiliser is being transported to your farm and then back-loaded with grain.

WHY?

Globally, the grain production environment is becoming increasingly competitive. Australia competes against countries who often have a much lower cost of production and current shipping costs often negate historical advantages relating to close proximity to markets.

Australia, and South Australia in particular, has an excellent reputation for providing clean, green agricultural products and working closely with trading partners to ensure their needs are met. By continuing to uphold high grain hygiene standards, South Australian grain growers will continue to differentiate from global competitors and maintain access to a large range of markets across the world.

> *Remember: grain is a food which will be used for animal and human consumption.*
>
> *All participants in the grain supply chain have a role to play in protecting markets.*

MORE INFORMATION:

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www.pir.sa.gov.au/cleangrain

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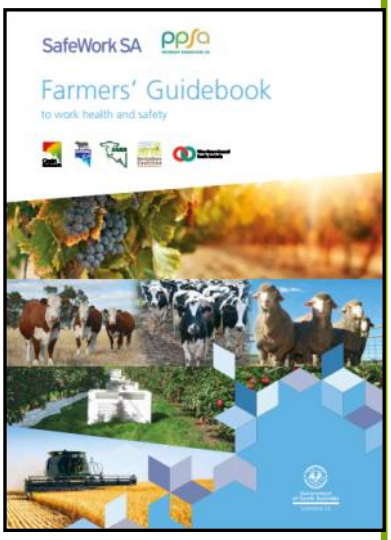
Work Health and Safety Roadshow

A series of free workshops across the state will promote safe work practices and help farmers eliminate or minimise workplace risks. Of all workplace fatalities since 2005, 19 per cent occurred on farms, yet agriculture accounts for just 4.5 per cent of our total workforce.

These free workshops, running from February to June 2017, are based on the *Farmers' Guidebook to work health and safety* and cover the crop and livestock, dairy, grape, fruit and vegetable growers sectors. They offer you an opportunity to get practical, sector specific information and advice on:



- hazard identification
- risk assessment
- WHS policies
- duties and legal obligations
- drafting a standard operating procedure.

TAFE SA has officially recognised the information being presented. You will be able to enrol with TAFE SA to gain accredited recognition for a workplace health and safety subject within a nationally accredited qualification from the Agriculture, Horticulture and Conservation & Land Management training package.

Participants can also continue their study pathway with TAFE SA in courses that are important for their business or career. Speak with a TAFE SA lecturer for more opportunities to attend free accredited courses in Chemical Card, Tractors, Front End Loaders, Telehandlers, Quadbikes, Chainsaws and agriculture qualifications from Certificate II to Diploma Agribusiness Management.

And once you've attended a workshop, you could help kick-start a local work health and safety network for ongoing community support.

Current Workshop Dates

Please let the staff or committee members at UNFS know if you would like a workshop in our region and we can arrange it in June/July. 10+ people required to secure a date.

Date	Time	Location	Topic
Tuesday 4 April	9am to 11.30am	Murray Bridge	Crop/Livestock
Tuesday 2 May	12pm to 2.30pm	Loxton	Crop/Livestock
Wednesday 3 May		Loxton	Grapes/Horticulture
Thursday 11 May		Coonawarra	Grapes
Thursday 11 May		Kingston	Livestock
Wednesday 31 May		Clare	Grapes

ppsa PRIMARY PRODUCERS SA Grain Producers SA Government of South Australia SafeWork SA

Chain of Responsibility update comes to SA

Amendments to the Chain of Responsibility (CoR) laws are coming in mid 2018. These changes align CoR laws more closely with workplace health and safety laws.

Impacts of changing CoR laws
The changes centre on vehicle maintenance. All parties in the supply chain will have to either take direct action to properly manage vehicle standards under a documented maintenance regime, or be more watchful and consultative with their transport partners.
Heavy vehicle operators are required to ensure that their fleet is free of defects, mechanically safe and in proper working order before a vehicle enters the road network. The maintenance systems in place may come under much closer scrutiny however. To assure themselves of compliance, and safe operations generally, investigators will likely examine systems features such as: fault reporting, fault correction, maintenance programs and schedules, documentation and partner collaboration for supply chain reporting.
More information is available at the NHVR website

Entries open for young growers to attend AGIC

Grain Producers SA sponsors two young grain producers every year to attend the Australian Grain Industry Conference. The conference, held from August 1-3, is hosted by Grain Trade Australia and brings together the Australian and international grain industries to network while providing the latest information on international grain markets.

GPSA's sponsorship is at valued at $2500 each and is designed to encourage participation of young producers in the grain industry and help build their skills by giving them exposure to end-users.

Download the entry form

Grain Producers SA News

Did you miss the GRDC Updates in Adelaide?

GRDC UPDATES

Below are links to a selection of key presentations and interviews from the events:

John Kirkegaard on the opportunities and challenges for continuous cropping Interview: https://youtu.be/0O2sjdjzua8 Presentation: https://youtu.be/XL7cDvVMirM Paper: http://bit.ly/2nLcZtZ

Peter Newman Reloading IWM for 2017 Presentation: https://youtu.be/Wh4ozniPCNQ

Rob Norton on the impacts of the wet season on crop nutrition Interview: https://youtu.be/RwQTDdRwuus Presentation: https://youtu.be/oTqlEfVy_Vk Paper: http://bit.ly/2klB6N7

Nick Poole's Septoria tritici update and latest developments in rust management Interview: https://youtu.be/jWWMqiykE-M Presentation: https://youtu.be/n5Ir8XMTNu4 Paper: http://bit.ly/2n9kQOB

Russian Wheat Aphid – the 'war room' briefing Presentation: https://youtu.be/DmWDu0hwdtA Frank Peairs paper: http://bit.ly/2mWMz4e

Andrew Whitlock Using precision technology for drainage solutions Presentation: https://youtu.be/BIpt6PNZkLk

Dale Grey on seasonal forecasts Presentation: https://youtu.be/c0YMfCSj5kc

Larn McMurray on what's new in pulse performance and agronomy Presentation: https://youtu.be/APnYZYsjJQ4

Mike McLaughlin discussion real time soil test results in the field Presentation: https://youtu.be/rPX2s3nYxK0 Paper: http://bit.ly/2npGNLn

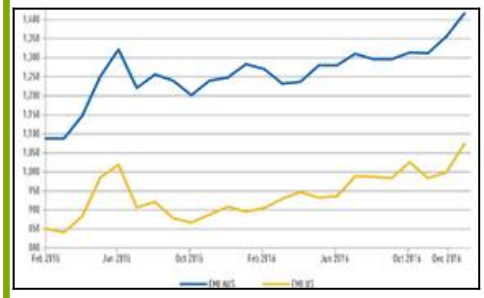
John Manners on the next big thing in science for Australian agriculture Presentation: https://youtu.be/_ErkteW83ow

Summary of What's New with Australian Wool Innovation

New strain of rabbit calicivirus released

The strain of calicivirus new to Australia will boost current biocontrol activity that is already impacting pest rabbit populations and help woolgrowers increase their productivity. Read More

New trends for wool in activewear Reports at recent sports and outdoor trade shows indicate that Merino wool's natural benefits teamed with technical innovations are driving the increased demand for the fibre. Read More



Wool prices hit record highs Demand for Australian wool has been steadily building during the past few years, with the result that the Australian wool auction markets are now surging into record territory Read More

Free market intelligence via SMS AWI is sending free wool prices and market intelligence direct to woolgrowers' mobile phones. To sign up, email feedback@wool.com with your name and mobile phone number.

LTEM App v2 The latest version of the popular Lifetime Ewe Management (LTEM) smartphone app is now available for iPhone, with various updated features. Read More

Footrot vaccine now available After years of research and development by the University of Sydney School of Veterinary Science, a serogroup specific footrot vaccine is now being manufactured by Tréidlia Biovet Pty Ltd and is now available to Australian sheep producers. Read More

Source: www.wool.com

CHURCHILL FELLOWSHIPS OPEN

People living in rural and regional South Australia are being encouraged to apply for the next round of Churchill Fellowships, and take up the opportunity to explore a topic or issue they are passionate about. You could spend up to 8 weeks travelling the globe to investigate a topic you are passionate about, whilst gaining the international expertise you require to create or affect change for a better Australia! **Read more**

Pastoral Profit

A joint initiative of awi mla

A one day workshop for current and aspiring pastoral business managers with **Linda Eldredge** of Eldredge & Assoc.

Strategies for Building Enduring Pastoral Businesses

- Learn how to drive a lower lending interest rate, potentially savings thousands of $$ by understanding and **influencing your financiers**
- Managing risk using **business structures** – asset protection, tax mitigation & strategic succession planning

Burra Town Hall - Supper Room

Friday 7th April

9.00am – 4.00pm

Cost: $66 per business plus $22 per additional business member (invoice issued)

For more information, and to register for this workshop, please contact Anne Collins, SA State Coordinator

T: 0427 486 115 E: anne.collins@sa.gov.au

www.pastoralprofit.com.au

Government of South Australia
South Australian Murray-Darling Basin Natural Resources Management Board

Natural Resources SA Murray-Darling Basin

Australian Government

National Landcare Programme

The 2017 edition of the SA Crop Variety Sowing Guide has been compiled by SARDI.

It is proudly sponsored by the South Australian Grain Industry Trust in association with Primary Industry and Regions SA and the Grains Research and Development Corporation with contributions from New Variety Agronomy and Oat Breeding research staff in SA, as well as collaborative research staff in Victoria .

Available for download here: https://grdc.com.au/SA-SowingGuide2017

South Australia worms, flies and lice update - March 2017

Author: Colin Trengove,
Sheep Health Lecturer, University of Adelaide, Roseworthy campus.
trengovet@icloud.com
Source: www.paraboss.com.au

The weather pattern over the past month has settled into a more typical autumn, suiting the commencement of grape harvest. However, spasmodic rainfall has continued to be a feature, resulting in abundant green feed in much of the 400 mm plus rainfall regions.

This contributed to the persistence of many less desirable plant species such as melons, heliotrope, lovegrass, wireweed and caltrop. The positive outcome is minimal supplementary feeding has been required and pregnancy rates should be very good given prevailing ewe body condition.

A negative is the consequent higher than usual worm egg counts for this time of year. Two thirds of mobs monitored between the upper south east to mid-north and across to the lower Eyre Peninsula have recorded counts worthy of a drench. These results have been independent of age, sex or pregnancy status. Isolated reports of *Haemonchus* species have also been evident. I discovered, during a recent visit, that Ceduna has received 200 mm rain this year and producers reported unusual instances of significant worm infestations.

It illustrates that one cannot assume that good feed and body condition negates the opportunistic nature of worms. Worm egg count monitoring is even more relevant when conditions suit worm larvae survival on pasture regardless of season or location.

Another observation across several flocks over summer/autumn has been the presence of lungworm, causing significant pneumonia and pleurisy. Abattoir surveillance has identified this in many cases, while on-farm post mortem investigations and subsequent personal follow-up of sheep at the abattoir has also been used to confirm this diagnosis.

Lungworm is not normally reported with regular faecal egg count monitoring because it requires a specific test to be performed. If you suspect lungworm or have had positive abattoir surveillance reports it is worthy of further investigation as it could be causing significant unapparent production loss. The presence of snails on pasture that act an intermediate host for some lungworm species can be an indicator, while coughing and ill-thrift are other signs. Not all drenches are effective against lungworm and so a further incentive for follow-up investigation.

Blowflies have also been a feature of the moist and humid conditions over summer/autumn and so frequent checking of mobs for flystrike has been an extended activity for many producers. A temporary shortage of flystrike chemicals occurred in early spring as the prevailing conditions forebode a bad season for flies. The only thing that we can be sure of is that seasonal conditions and parasite activity are subject to change and require ongoing close monitoring.

SA WormBoss Worm Control Programs

Sheep

South Australian winter rainfall Pastoral

Goats

South Australia Rangelands (pastoral)

SA WormBoss Drench Decision Guides

Sheep

South Australian winter rainfall Pastoral

Goats

South Australia Rangelands (pastoral)

Precision Ag Factsheets

Source : Ag Excellence Alliance January Enews

SPAA has recently launched factsheets providing a snapshot of the capabilities of a range of PA tools & technologies applied across the grains industry.

These factsheets look at a range of innovative practices, systems and techniques. They address the capacity to innovate to ensure that PA information outcomes are targeted and delivered in a timely and effective manner.

'Airborne Imagery': http://www.spaa.com.au/pdf/455_9055_SPAA_fact_sheet_(Airborne_Imagery)_A4.pdf
'Weed Senses' http://www.spaa.com.au/pdf/456_9056_SPAA_fact_sheet_(Weed_Sensing)_A4.pdf

Upcoming Events Calendar

April

3 Spray Workshop with Bill Gordon - Hart Field Site Group Sandy Kimber 0427 423 154

4 Farm Safety Workshop - Booleroo Centre - UNFS Ladies on the Land Group Mary Timms 0428 580 583

6 – 7 Ag Excellence Annual Forum & Awards, Adelaide Kerry Stockman 0418 841 331

7 Pastoral Profit, Burra **Anne Collins 0427 486 115**

11 Focus on Ewe, Sheep Forum Ladies Day, Burra Kelly Devine 0427 091 611

27-28 Safe Chainsaw Operations Course, Quorn **Diane Cavallaro T** +61 (8) 8562 0508

May

13-14 Safe Chainsaw Operations Course, Quorn **Diane Cavallaro T** +61 (8) 8562 0508

June

28 EPARF Member Day – Managing Legumes, Minnipa **Dot Brace 08 8680 6202**

July

3-5 Innovation Generation Conference, Adelaide More Information Here

18 Hart Field Site Winter Walk, Sandy Kimber 0427 423 154

August

2-3 Australian Grains Industry Conference Asia, Melbourne More Information Here

10 UNFS Members Expo

September

6 MAC Annual Field Day, Minnipa Naomi Scholz 8680 6233

7 SA Durum Growers Crop Walk, Roseworthy, Ann Price 0429 962 032

12 UNFS Eastern Spring Crop Walk

11-13 State Community Landcare Conference, Clare, Glenn Gale

19 Hart Field Day, Sandy Kimber 0427 423 154

24-28 Australian Agronomy Conference, Ballarat More Information Here

26-28 Yorke Peninsula Field Days, Paskeville Elaine Bussenschutt 08 88272 040

October

17 Hart Spring Twilight Walk, Sandy Kimber **0427 423 154**

Upper North Farming Systems

Contact Details

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Quorn - vacant

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M: 0401 042 223

Finance Officer

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Lucindale - Part-time
Mondays
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Administration Officer

Rebecca Gum
Orroroo - Part-time
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Project Officer

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Jamestown - Full-time
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