



## Sheep Connect NSW new project period 2016–2019 under way

### By Megan Rogers

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Australian Wool Innovation Limited (AWI) has approved the continuation of Sheep Connect NSW for a further 3 years, starting on 1 July 2016. Sheep Connect NSW is AWI's major extension investment in NSW and will be managed by Megan Rogers Consulting.

During 2015 AWI did some detailed market research. It ran seven focus groups with the state's sheep and wool producers to work out the evolving needs of sheep producers' businesses and how Sheep Connect NSW can best meet producers' information needs. The outcome is a set of strategic objectives that will drive the project's future. The ways we 'do business' with you—how you like to be communicated with, what information you're after, and when it best

suits you—have all been considered in the process of developing the direction and way forward of this new phase of the Sheep Connect network.

The direction of the network is guided by a Project Advisory Panel, allowing Sheep Connect NSW to best service the needs of all areas of the state. Western NSW will be represented by Mr Tom Hooke, who lives at Wanganella, and Ms Karene Cosgrove of Marthaguy. Both Tom and Karene will provide input into the project by informing the panel of the current issues as they arise in the areas that they cover. Sheep Connect wants to work collaboratively throughout NSW to keep sheep businesses up to date by providing information, events and opportunities.

In the short term, we'll be out and about at a few industry events across the state promoting the network to producers, as well as working on the nuts and bolts of the next 12 months of activities and priorities. We're currently rolling out a

series of Lamb Survival workshops, which can be held on an as-needed basis. Please contact [admin@sheepconnectnsw.com.au](mailto:admin@sheepconnectnsw.com.au) if you're interested in having a workshop in your area.

We have a website, which lists what's on throughout the state, and we welcome input from other parties: if you're running a sheep event, let us know and we'll list it. The events list is emailed to our members twice a month. The network also produces newsletters (currently electronically, but in the future, hard copy) on issues of importance and interest to the sheep industry. Sheep Connect NSW is also active on social media: like us on Facebook or follow us on Twitter!

### Join Sheep Connect NSW!

If you're not a member already, join Sheep Connect NSW to stay up to date on all things sheep in our state. Contact Megan at Sheep Connect NSW, Forbes, phone **0427 459 891** or email her at [admin@sheepconnectnsw.com.au](mailto:admin@sheepconnectnsw.com.au)



**As a sheep producer, Sheep Connect NSW is the key network of all things sheep for you and your business. We keep our members up to date with what is happening in the industry.**

Sheep Connect NSW is a significant investment by Australian Wool Innovation in keeping quality information reaching your fingertips when you need it.

Our key focus areas are:

- Breeding ewe management
- Lamb survival
- Measuring, monitoring and making change through improvement
- Working closely with industry groups

If you haven't already, join our network to stay up to date on the latest in what's happening.

Contact us on 0427 459 891 | [admin@sheepconnectnsw.com.au](mailto:admin@sheepconnectnsw.com.au)

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# Legal Roads Network Project

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The Legal Roads Network Project recently appointed Caitlin Maher as one of our new team members, while Luke Hardy is temporarily relieving in another position within the Department. Caitlin has started mapping the Walgett Shire, and landholders within that Shire will soon be receiving correspondence from her regarding their legal access.

The Legal Roads Network team has now drawn 62 plans that identify over 13,808 kilometres of Shire road and 2,713 kilometres of restricted easements to landlocked properties in the Western Division.

The project is currently finalising the Wentworth Shire, and plans representing 100% of the Shire's roads are now either complete or in preparation.

Within the Wentworth Shire, we're working on Low Darling Rd, High Darling Rd, Minda Rd, Garston Rd, Red Hill Rd, Pomona Rd, Anabranth Mail Rd, Milpara Rd, Tooperoopna Rd, Lagoon Rd, West Rd, Wentworth Boat Ramp Rd, Log Bridge Rd, Loop Rd, Perry Sand Hills Rd and southern sections of the Silver City Highway.

The roads within Walgett Shire that we've started working on are Angledool Rd, Springs Rd, Burranbaa Rd, Ridge Rd, Bonanza Rd, Koomalah

Rd, Fabians Rd, Millencowbah Rd, Boora Rd and Cambo Rd.

Landholders whose primary access is via these roads should have received paperwork outlining the actions required to ensure the provision of legal access. Landholders who haven't returned their paperwork should do so as soon as possible to ensure that their requirements for access are addressed.

As previously advised, in the coming months the team will be focusing on closing previously dedicated Western Division Roads (WDRs) in the shires of Bourke and Cobar in cases where a road no longer accurately defines the road casement and a new dedicated public road has been opened in the correct location.

Affected landholders have been sent correspondence from the Team requesting approval to add the closed WDRs to their adjoining Western Lands Leases.

For those landholders who haven't yet provided their approval, please note that this process can't proceed without your approval in writing. If the closed WDRs are not added back to each lease, then two areas will be excluded from a lease to provide for one legal access; this is effectively double dipping.

The importance of landholders' consent to the addition of the closed WDRs can't be emphasized enough by the Team.

The Team looks forward to your continued support and the timely return of paperwork so that an effective legal access system can be achieved in the Western Division.

The Western Newsletter is produced by Riverina Local Land Services with funding assistance from:

- » NSW Office of Environment and Heritage
- » Murray Local Land Services
- » Western Local Land Services
- » NSW Department of Industry – Lands
- » Riverina Local Land Services
- » NSW Rural Assistance Authority

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The information contained in this publication is based on knowledge and understanding at the time of writing (September 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Trade and Investment, Regional Infrastructure and Services or the user's independent adviser.

# Tibooburra Aerodrome ready for take-off

## By Shaun Barker

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Tibooburra Aerodrome is a Crown Reserve managed by the Tibooburra Aviation Reserve Trust. It provides essential aviation infrastructure to the remote communities in the far North West corner of the state. The aerodrome is currently managed by the Department of Industry – Lands.

The bitumen runway was last sealed in 2003, and the Department was very aware that it had started to deteriorate and would eventually become non-compliant with Civil Aviation Safety Authority regulations. A capital funding bid was submitted to NSW Treasury, and funding was secured from the 2015–2016 State Budget.

The Department called for tenders and, with the help of NSW Public Works, managed the tender process and made sure that the works were completed according to the tender specifications, on time, and within budget.

State Asphalt Services Pty Ltd was awarded the \$230,000 contract to



Tibooburra aerodrome resealing. Photo by Greg Goodlet

reseal the 976-metre bitumen runway. This company had previous experience working at remote aerodromes and was able to mobilise numerous trucks, rollers and other equipment from western Sydney.

It was a tight run to get the project finished before the wet weather closed in, but in the end it took only 4 days to complete the works to a very high standard, finishing on 7 May 2016.

The contract involved airstrip earthworks; drainage works; resealing the bitumen runway, apron and taxiway surfaces; and line marking (repainting) of the runway and taxiway surfaces.

The aerodrome is vitally important to Tibooburra and other communities

in the north-west because it is used by the Royal Flying Doctor Service for emergency patient transfers and for regular doctor visits and health clinics at Tibooburra hospital every Tuesday and Thursday.

The airstrip is also used by the NSW Police Air Wing, State Emergency Services, Rural Fire Service and other important services, including tourism operators.

The aerodrome's other runway—a 1532-metre dirt-surface landing strip—was able to be accessed during the works period.

Both runways are inspected annually to comply with Civil Aviation Safety Authority requirements and are regularly maintained.

## RHDV2 found in rabbits dying near Broken Hill

### By Greg Curran

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Broken Hill

A local grazing family noticed a few rabbits dying in late July and early August, even though there was plenty of feed. After mentioning this to Broken Hill vet Greg Curran, they dropped a dead rabbit into the Western Local Land Services Broken Hill office to check

whether the cause was RHDV1 (rabbit haemorrhagic disease virus strain 1) or the recently identified strain found near Canberra in May 2015.

The carcass was submitted to DPI's Elizabeth Macarthur Agricultural Institute near Camden by Grant Davis of Local Land Services, and it was confirmed that the animal had died from RHDV2. This strain has spread from Canberra across NSW and into Victoria. It affects very young rabbits and can overcome the vaccine for RHDV1. More information on this virus and its effects can be found on the PestSmart website. The PestSmart report also considers the likely effects of

this new virus on the planned release of the RHDV1 K5 virus strain.

RHDV2 is also known to affect hares, but its level of effect on the hare population is as yet unknown. If you see dead rabbits on your property you can now use Rabbit Scan to submit samples for testing. Download the Feral Scan app to your phone or use the website at [www.feralscan.org.au/rabbitscan](http://www.feralscan.org.au/rabbitscan) to record disease and request a sampling kit.

For further information on Rabbit Scan contact Peter West, the FeralScan Project Manager at Orange, by email on [peter.west@dpi.nsw.gov.au](mailto:peter.west@dpi.nsw.gov.au) or by phone on 02 6391 3887.

# New vet at Riverina Local Land Services Hay office

Dr Courtney Simkin joined the staff at the Hay office of Riverina Local Land Services last week in the role of District Veterinarian.

Her arrival will bolster the services available from the Riverina Local Land Services Hay office in the area of animal health and biosecurity. Courtney is a graduate of Charles Sturt University's Veterinary Science School and has been working in private mixed animal practice for the past few years.

Courtney, who's a local girl from Moulamein and the daughter of well-known local China Gibson, is glad to be back in the area.

As District Vet for the Hay district, Courtney will be focusing on livestock health and welfare issues, including herd and flock investigations (e.g. unexplained deaths in a number of stock; production losses through ill thrift, or reproductive losses), investigations of suspected notifiable or emergency diseases, and planning for managing these diseases; general flock and herd health advice; advice and certification regarding movement of stock interstate or for export; and advice on NLIS (National Livestock Identification Scheme) requirements for sheep, goats and cattle.



*Courtney Simkin is our new vet at Hay Local Land Services. Photo courtesy Courtney Simkin*

**Courtney will be working on Mondays, Wednesdays and Thursdays and can be contacted at the Hay office on 02 6990 1304, mobile 0427 418 006, or email [Courtney.simkin@lls.nsw.gov.au](mailto:Courtney.simkin@lls.nsw.gov.au).**

## Bottle Bend rehabilitation continues

Work at Bottle Bend Crown reserve, on the Murray River near Buronga, continues to rehabilitate the resident black box, cane grass and lignum vegetation communities.

The Reserve Trust continues to manage the area. Areas that were watered in 2014 have recovered markedly, and species are regenerating in the watered areas. Canopy cover and the understorey within the black box community have increased to such an extent that the area is nearly unrecognisable.

At the time of watering, there were large numbers of waterfowl at Bottle Bend and species such as swans, grey

teal and Pacific black duck were nesting. An Office of Environment and Heritage (OEH) survey found good numbers of several frog species.

During the watering there were around 60 bird species in the area, including the vulnerable hooded robin and brown tree creeper and the endangered regent parrot.

### **What else is happening at Bottle Bend?**

Wentworth Council has funded the installation of a boat ramp in the reserve. This will be a single boat ramp and will be designed to give small fishing boats access to the river. Other boat ramp sites closer to Mildura are

heavily used by large ski boats, making access hard at times for fishermen in their tinnies. The access track to the boat ramp has been completed and council are waiting for the weather to clear up to install the ramp.

OEH and the Far West Region NSW DPI – Lands have another watering of the Reserve planned for August 2016. The funding of this watering program will be similar to that for the 2014 event, with OEH paying for the watering costs and Crown Lands paying for levee installation and maintenance. During this watering, public access to some sections of the Reserve will be restricted.



*Bottle Bend: what we inherited in 2010. Photo by David Gee*



*Just add water ... Photo by Ian Kelly*

# Funding for small paddock restoration in the Hay district

## By Sally Ware

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For landholders in the Hay district, this is the time to submit expressions of interest in the next round of the Riverina Local Land Services Funding Program.

One of the projects on offer is the rangelands paddock restoration project. The project aims to revegetate degraded areas in small paddocks, which are often situated near woolsheds or homesteads. A number of Hay landholders successfully applied for this funding last year, and Project Manager Sally Ware is keen for other landholders to consider applying.

'Riverina Local Land Services ran the project as a pilot last year, and it was very pleasing to see funding distributed to farm restoration projects in the Hay district,' says Sally

One local landholder who participated in the program was Frank Headon from Benara, near Hay. Frank has a small 4.8-hectare paddock near his house and woolshed that he's wanted to revegetate for quite some time.



Frank Headon watching the recent sowing of old man saltbush on his property. Photo by Sally Ware

'We shear every eight months, and I wanted a backup paddock that I could use to hold shorn sheep if the weather turned nasty. I'd already formed rows of beds in a little paddock near the shed, with the idea of starting planting when I could. This funding program has allowed me to finish the paddock with plantings of old man saltbush, wilga and inland red gum trees,' says Frank.

'I'm hoping in a few years' time that when the saltbush and trees become established it will be a very handy little holding paddock for us.'

Landholders interested in applying for the rangelands paddock restoration project or any of the other funded projects can visit the website at <http://riverina.lls.nsw.gov.au/our-region/grants-and-funding>. Factsheets with details of the purpose of each project are listed on the website. All applications for funding must be made online by completing the 'How Can We Help You' form on the website by Friday 30 September 2016.

For further details on the rangelands paddock restoration project call Sally Ware on mobile 0429 307 627 or by email at [sally.ware@lls.nsw.gov.au](mailto:sally.ware@lls.nsw.gov.au).



Local Land  
Services  
Riverina

## 2016-17 FUNDING PROGRAM Now Open

Grants for farmers, land managers and community groups are available for projects under the Riverina Local Land Services 2016-17 Funding Program.

In the local government areas of Leeton, Griffith, Murrumbidgee, Carrathool and Hay, funding opportunities include:

- construction of stock management areas
- Innovation for Irrigation grants
- fencing to protect remnant native vegetation

- planting of native vegetation corridors to link existing native vegetation
- planting of native vegetation for Rangelands Paddock Restoration
- fencing and planting for Sandhill Pine Woodland Restoration
- community grants for groups to undertake a wide range of projects on sustainable landscapes and/or natural resource management.

Applications must be made online by downloading our 'How Can We Help You' form from the website <http://riverina.lls.nsw.gov.au/our-region/grants-and-funding>

**For help and more information, contact:**

Jess Hill, Griffith 6960 1331  
Peter Beal, Yanco 6951 2508  
Sally Ware, Hay 6990 1305  
Allie Hendy (community grants only) 6951 2751  
or phone 1300 295 299

**Funds are limited, so get your application in early! Applications close 30 September 2016**

# Wild dog workshops

**By Kade Small**

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Buronga

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**With the increase in sightings of wild dogs across south-western NSW, it's important for all land managers to prepare to deal with them. To help landholders to be proactive, the Western Local Land Services Southern Community, in conjunction with Dr Ben Allen, a leading wild dog expert from the University of Southern Queensland, recently held a series of wild dog workshops across the community.**

The workshops targeted local landholders, with group discussions and practical demonstrations on the management of wild dogs within Australia, with a view to preparing to deal with the potential re-establishment of the species across sheep and goat grazing lands.

Four identical workshops—at the Anabranah and Pooncarrie community halls and at Ivanhoe Rural Fire Office and Hillston RSL Club—were run over four consecutive days across the region, and despite rain the turnout was encouraging.

Dr Allen's two key take-home messages were:

- What you see isn't exactly what you've got on your property. The changes in wild dog behaviour over the year mean that evidence of wild dog activity can fluctuate cyclically. High activity during mating periods results in a lot of evidence of wild dog activity, but high activity doesn't necessarily mean large numbers of dogs. Wild dog numbers increase after the mating season, but outside the mating season, because of behavioural changes, there's less evidence of the dogs' existence. Landholders need to be aware that if they are seeing little evidence of dogs

it doesn't necessarily mean that they aren't there.

- To control wild dogs on your property you need to consider natality (births), mortality (deaths), immigration (movement into an area) and emigration (movement out of area). Although baiting and trapping decrease population numbers through mortality, it is important to remember that wild dogs can repopulate an area via immigration. With wild dog movements being recorded across Australia at over 500 kilometres in a month, wild dog management must extend beyond baiting, shooting and trapping on a single property. Dr Allen stressed the importance of using integrated control techniques (such as cluster fencing and baiting) tailored to specific situations to improve the likelihood of successful wild dog management across south-western NSW.

Dr Allen emphasised that, with current numbers of wild dogs in the NSW south-west relatively low in comparison with those in other parts of Australia, it's important for landholders to be proactive in their non-lethal management before a problem that requires lethal control arises.

He also reminded the attendees not to forget the lessons learned in the past, particularly in central Queensland. It's essential to remember that the situation south-western NSW finds itself in now was once the situation sheep graziers in central Queensland were in. Complacency and a lack of proactive management of wild dogs played a large role in the eradication of sheep from central Queensland farms some 30 years ago, and it would be unfortunate for history to repeat itself in western NSW, said Dr Allen.

Dr Allen also demonstrated the newly available Canid Pest Ejectors. This ejector is a new, effective and (in the long term) efficient way for land managers to control foxes and wild dogs on their properties. The spring-triggered device fires a dose of 1080 into the mouths of foxes and wild dogs that pull hard and upwards on a bait or lure.

With the increase in wild dog sightings across the community, all land managers—especially sheep graziers—should remain vigilant. To make sure that our sheep and goat grazing industries remain viable in future years, landholders will need to proactively prepare to manage this pest species.

**For further information on wild dogs, or if you have inquiries about baits, Canid Pest Ejectors or registering of a wild dog sighting, please contact the Buronga Western Local Land Services Office on 03 5021 9460.**

Alternatively, for further information on wild dog management, including access to answers to frequently asked questions, factsheets, case studies, wild dog management plans, and more, visit the PestSmart Connect website.

You can record wild dog sightings, wild dog impacts and control activities at Wild Dog Scan.



Photo by Steve McGlashan

# Western Division Resilient Landscapes field day at 'Gurrawarra', Bourke

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Field day participants at 'Gurrawarra', Bourke, had an informative and entertaining time listening to guest speaker Dick Richardson of Grazing Naturally, as well as speakers from program partners Soils for Life and Western Local Land Services.

The day was held as part of the Western Division Resilient Landscapes Project, in which program mentors are required to host a field day on their own properties. During the day, mentors demonstrate first-hand how they have implemented practice changes leading to more sustainable land use and production.

Russell Grant, Manager (Regional Specialist Services) with Western Local Land Services, welcomed attendees and set the scene with some information on the background of the Western Division Resilient Landscapes Project. The project aims to give landholders peer support and mentoring from other landholders to help them adopt regenerative practices to build resilience into their properties and their businesses as a whole.

Martin Royds travelled from Jillamatong in the Southern Highlands to represent Soils for Life, an environmental organisation chaired by Major General Jeffery, Australia's Advocate for Soil Health. Martin spoke about the history of the organisation and how they had partnered with Local Land Services Western Region and the Rotary Club of Sydney to encourage the wider adoption of regenerative landscape management. Martin touched on his own experiences in land management and emphasised the importance of sustainable food production as a way of ensuring happy, healthy communities.

Program mentor Glenn Humbert, who hosted the day along with his partner Julie, spoke about their journey since purchasing 'Gurrawarra' in 2010. The property had been overgrazed by domestic and non-domestic animals,

but the Humberts have been applying change-management practices by erecting total grazing pressure fencing and using planned cell grazing of agisted cattle. They have invested a lot of time and effort into both training for themselves and planning and erection of fencing and water infrastructure, but they believe that their ultimate achievement is demonstrated by the happiness of their family. Glenn is convinced that the initial step in achieving improved landscape management must be to gain control of total grazing pressure by enclosing the boundary of the property.

Keynote speaker Dick Richardson has been working in holistic management since 1990, and his main strength is being able to mix practical farming with ongoing holistic management facilitation, training and process consulting. He spoke about his experiences in his native South Africa and how routine management regimes had led to scrub encroachment, more burning and 'simplified' grasslands. This is very similar to the pattern we use in Australia; as Dick said, 'Nature works in patterns and the whole is a result of the pattern'. The audience agreed that biodiversity is important, and that to achieve it there must be a diversity of patterns or the system will become 'patternless'. A simple system or pattern always results in a simple ecosystem, which all agreed is not the ideal.



*Glenn and Julie Humbert, hosts of the field day at 'Gurrawarra', Bourke. Photo by Fiona Harris*

Dick acknowledged the fact that holistic management was developed by ecologists, not farmers, and that, at the end of the day, farmers still have to make a living. However, livestock that are doing poorly don't make money, and without biodiversity in the system production is lowered.

The day finished with a paddock tour of 'Gurrawarra' and some valuable discussions among Glenn, Dick and the attending landholders.

Thanks again to our keynote speaker, Dick Richardson, who engaged everyone with his knowledge, stories and humour. Thanks to the other speakers, Glenn, Russell and Martin, and to those who attended the field day. Lastly, we thank Glenn and Julie for taking the time out of their busy schedules to host the day.



**Local Land Services**  
Western

## On-farm biosecurity and sheep disease workshops

Western Local Land Services, along with Sheep Connect NSW and the Livestock Biosecurity Network, will be running three On-farm Biosecurity and Sheep Disease Workshops at various locations throughout the region in late September. The workshops will cover a range of practical topics, including:

- practical steps for on-farm biosecurity
- seasonal sheep health issues: problems, causes, signs and diagnosis
- disease investigations: some simple steps, including sample collection
- signs to look for when describing a problem to a vet
- requirements for transporting stock
- precautions when introducing new stock onto your property.

**If you're interested in coming along to these workshops and would like to be notified of locations and further details as they are confirmed, please contact Gemma Turnbull on (02) 6872 2144 or email [gemma.turnbull@lls.nsw.gov.au](mailto:gemma.turnbull@lls.nsw.gov.au)**

# Progress of incentive projects in the Western Region

## By Jennifer Azevedo

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It's been a busy few months for staff in the Western Region: we've been rolling out the 2016 Incentive Program and also revisiting incentive projects that began in 2015. Fortunately, and despite delays due to the wet weather (which we won't knock back!), all projects from our

2015 Incentive Program are on track to complete their contracted works later this year.

The 2015 Incentive Program included three main areas of funding across the project themes of Groundcover, Riparian and Rangeland Rehabilitation. Progress is being made in the Rangeland Rehabilitation projects with the help of Local Land Services officer Paul Theakston, whereas the Riparian and Groundcover projects are largely the responsibility of landholders to complete.

In the southern community, on-ground works include over 3500 hectares of riparian vegetation, with more than 10 kilometres of stream bank protected through fencing and improved livestock management practices. Over 33,000 hectares of native pasture will be under total grazing pressure control when the fencing is completed. There are also several 2015 Groundcover projects in the Broken Hill area, with the total area

soon to be under Total Grazing Pressure management exceeding 45,000 hectares. Although the Broken Hill area is not typically known for its rivers, there are projects in this area that seek to protect the unique ephemeral creeks and wetlands that it's known for. In the Bourke and Cobar districts, a further 59,000 hectares is to be enclosed with total grazing management standard fencing. Not surprisingly, there are also several Riparian projects in the Bourke area, and these will see areas protected along rivers such as the Paroo and Bogan.

Although the fencing for these projects will be completed later this year, the actual projects do not end there. Once the infrastructure is completed, landholders have the responsibility to implement their grazing management plans for the project across a period of 10 years. Landholders with projects must also submit the results of annual photo-point monitoring, which are due in September of each year.

## In progress: a 2015 Total Grazing Pressure project at Kara Station

John Nicholas of Kara Station via Packsaddle in Western NSW, who is one of the successful applicants to have received funding under the National Landcare Programme as part of the Western Region's Incentive Program, will be upgrading 24 kilometres of fencing to Total Grazing Pressure standard. These works will enclose an area of 3450 hectares and not only will enable the Nicholases to run their domestic livestock more effectively but will also help them to take control of grazing pressure from unmanaged goats and large numbers of migratory kangaroos. In taking this strategic approach to improve infrastructure, and in turn grazing management, the project aims to create an effective grazing rotation to provide native groundcover with adequate rest for a healthier landscape.



Work in progress: John Nicholas of Kara Station is on track for completing his 2015 Total Grazing Pressure project. Photo by Mitch Plumbe

# Plenty of interest in rangeland nutrition workshops held in March at Conargo and Jerilderie

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Two workshops were held in March by the Yanco, Colombo and Tributaries Advisory Council (YACTAC) and Murray Local Land Services as part of the Billabong Yanco Creek System Project and the Murray Local Land Services Community Small Grants Program. The workshops aimed to increase the skills and knowledge of land managers around nutritional management of rangeland pastures and improve their understanding of the importance of plant diversity for livestock nutrition. A secondary objective was to find out how interested landholders were in participating in a study of the nutritional value of local rangeland plants. The workshops were supported by Murray Local Land Services and YACTAC through the Australian Government's National Landcare Programme and were attended by a very enthusiastic group of 25 local landholders.

Many Murray Local Land Services staff attended and helped with the events. Staff included John Fowler (mixed farming systems), Genevieve Reardon (livestock), Helen Waudby (environment), Thomas Carberry (environment/agriculture), and Sue Logie (Murray Local Land Services Seed Services). Kate Stephan (YACTAC Project Officer) played a major role in event organisation and attended both events. The Conargo event was also attended by Ken Crossley (Murray Local Land Services Board Member, Billabong Yanco Project Steering Committee member and local landholder) and Colin Bull (Billabong Yanco Project Steering Committee member and local landholder).

The event at 'Old Coree', Jerilderie, was hosted by Russell Ford (Billabong Yanco Project Steering Committee member and local landholder). Martin Driver (local landholder) hosted the paddock walks with Sue Logie and San Jolly (Productive Nutrition P/L), who was engaged as a keynote speaker.

The format of the workshops worked really well. Both kicked off in the mid-afternoon with a really informative and practical paddock walk to identify local plant species and discuss their value to livestock. The groups then returned to the venues for tea and coffee, and while dinner was being prepared there was plenty of time to look at the excellent display of plant samples and educational materials that Sue Logie had set up, and to have a chat.

Gourmet meals at both venues were prepared by Emily Ford (YACTAC) and warmly received. Groups relaxed and got to know each other before San's presentation. After-dinner topics included grazing management and destocking strategies, with particular emphasis on the profitability of retaining older vs. younger stock in times of prolonged dry conditions. Although it's been common practice for many years to retain young stock, San highlighted the need to consider the cost of feeding young animals and the value of older

animals (which are well adapted to the local environment), because the latter are more readily able to reproduce once conditions improve. The disconnect between the nutritive value of native shrub species and the demands of reproductive stock were discussed in the context of grazing management, as was the value of retaining species diversity and groundcover. The information delivered at both workshops focused on keeping key profit drivers front of mind when making decisions, as well as selecting sheep and cattle that perform well under local environmental conditions rather than altering local conditions to accommodate underperforming stock.

The workshops generated a lot of questions and lively discussion, particularly at Conargo, where proceedings had to finally be drawn to a close at 11 pm! Feedback from both groups indicated strong interest and overwhelming support for a local study of the feed value of commonly grazed plant species: there's a dearth of knowledge on the nutritional values of local pasture plants, and this probably affects how people value and manage their rangeland pastures. More information about pasture management, plant ID and sheep nutrition was also high on the list of landholder requests.



*San Jolly (in checked shirt) discussing rangeland management at one of the rangeland workshops.  
Photo by Helen Waudby*

# When the soil turns green: biological crusts come alive

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We know they exist: we see the obvious ones during the dry and even capture a fleeting view of the cryptic ones when wet, but what do they do?

Biological soil crusts (BSCs) are communities of organisms living on or in the soil surface in arid and semi-arid environments. The term 'biological soil crust' is a general term that includes 'cryptogamic', 'microbiotic', 'cryptobiotic' and 'microphytic' crusts, but to put it simply, it's a living community of algae, bacteria, cyanobacteria, liverworts, lichens and mosses.

BSCs are found throughout the Western Region of NSW. The more visual foliose components (mosses and lichens) are located mainly in the southern winter-rainfall-dominated regions, whereas the more cryptic (hidden) components (cyanobacteria, algae and some lichens) are found farther north. Within the paddock, you'll find the foliose components under the shade of bushes,

whereas the open spaces between bushes are dominated by cyanobacteria.

These crusts play important roles in the environment.

## Biochemical cycles

They contribute to the soil carbon cycle through respiration and photosynthesis after rainfall events. Some BSCs (cyanobacteria) fix atmospheric nitrogen. In semiarid ecosystems, BSCs are the dominant source of fixed nitrogen.

## Soil stabilisation

BSCs also bind the soil surface by gluing the soil particles together with organic compounds or entwining the particles with networks of filaments. This contributes to soil aggregate stability and ultimately increases resistance to wind and water erosion. An increase in soil relief by some BSCs also helps to increase soil stability.

## Water relations

BSCs are extremely drought tolerant, remaining dormant for long periods until they become active within minutes of a watering. They have great water-holding capacity and an ability to retain water under high tension. This benefits the surrounding vegetation by slowing evaporation. The effects of BSCs on infiltration rates are complex. Some studies report increases in infiltration rates, whereas others show decreases or no effect. Differences are often related to differences in soil texture: infiltration is reduced on coarser (sandy) soils.

## Seedling germination and plant growth

Increases in small-scale soil relief and nutrient availability increase the probability of germination. However, some studies suggest that the darker coloured surface crusts may increase soil temperature and alter soil moisture and water infiltration dynamics. All of these factors are thought to be detrimental to seed germination. Much of this uncertainty is related to the spatial variability of BSCs and the specific requirements of each seedling.

Many studies show that, once established, plants surrounded by BSCs have greater survival rates and higher nutrient content (e.g. nitrogen, phosphorous, calcium) than plants surrounded by bare soil.

## Can they be damaged?

Biological soil crusts are well adapted to severe growing conditions, but they are poorly adapted to disturbances. They can be damaged by livestock grazing, fire, recreational activity (e.g. hiking, biking and off-road driving). Disruption of BSCs decreases organism diversity, soil nutrient levels, stability and soil organic matter levels. These crusts can require a lot of time to recover their composition and function.

We are currently exploring the contribution of Hay Plain BSCs to soil carbon and, importantly, how the organisms respond to rainfall.

For further information contact Craig Strong at [craig.strong@anu.edu.au](mailto:craig.strong@anu.edu.au)



Biological soil crusts in association with bladder saltbush near Hay (A). Foliose (leaf-like) organisms such as moss (B) and liverworts (D) are found sheltering under the shrubs, whereas the crustose (tightly attached) lichens (B – white) and cyanobacteria (C – black and E) dominate the inter-shrub space. Photos courtesy of Australian National University

# Albury LambEX Conference Roundup

By **Genevieve Reardon**

Senior Lands Services Officer – Livestock

Murray Local Land Services Albury

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LambEX, the Australian Lamb Expo 2016, held in Albury from 10 to 12 August, was a resounding success by anyone's standards: the national conference attracted over 1000 delegates from all around Australia to Albury to hear the latest updates from world-class speakers.

Futurist Paul Higgins reminded the crowd that as people get wealthier they

consume more protein; the future of the lamb industry looks pretty good, but we need to remember that the customer drives the market now.

Dinner, lunch and even the snacks all involved lamb—but none of it was boring or repetitive (especially those scrumptious chop snacks handed out during breaks!). As ever, Jason Trompf reminded us of all the hands-on practices farmers are still adopting that will boost sustainability, productivity and profitability. Our own home-grown (Holbrook) Vicky Geddes showed what farmers can really do when

the data are used well, with a strong emphasis on a good feed base. Among the inspiring presentations was Chris Wilson, who really broke the mould (and I'm sure caused many to shed a silent tear) when he openly talked about his struggle with depression. Presentations covered meat science, climate drivers and much more, while the trade stalls provided ample opportunity for producers and service providers to see and play with the latest technologies, network with industry bodies and—again—eat lots of lamb. It was a great event and the lamb industry is a great industry to be in.

## Dust-storm watchers awarded for 10 years of volunteering

Twelve residents—the majority from rural south-western NSW—have been recognised at the inaugural DustWatch Volunteer Awards ceremony for their contributions to vital dust-storm and wind-erosion research in Australia for more than 10 years.

Dr John Leys, leader of the DustWatch program at OEH (which manages and partly funds the program) said that DustWatch is the first citizen-science wind erosion project of its kind.

'The program relies heavily on the ongoing support of its 44 volunteers. Most of the 39 monitoring stations across the state are set up in extremely remote locations, and we could not operate without the dedicated volunteers who collect data during dust events and maintain instruments on a monthly basis', Dr Leys said.

'Large dust storms such as the "Red Dawn" that hit Sydney and Brisbane in September 2009 can cost the NSW economy \$300 million. DustWatch volunteers provide rapid information and early warning signals to protect our soil, economy, health and lifestyle from these events.'

Recipients of the DustWatch Volunteer Award include Laurence and Helen Barnes, who manage a DustWatch station at 'Lethero', their cropping and grazing enterprise. They have monitored the site since it was installed back in 2004.

Audrey and Michael Sheehan have dedicated their time to DustWatch since 2008 from their sheep and cattle farm at

Moolawatana Station near Lake Frome in South Australia.

Dr Leys said that Audrey also completes a dust diary every month and emails extra information to the DustWatch team in Gunnedah. The data are vital, particularly as there have been seven regional and 14 local dust storm events across south-eastern Australia since 2011 alone.

'Vic Seekamp and her son Angus from Woolcunda Station run a grazing enterprise near Coombah and have been looking after the DustWatch site since 2004', said Dr Leys.

'Mrs Seekamp's late husband, Robert Seekamp, was instrumental in establishing DustWatch in the beginning.

'Paul and his sister Belinda Hansen from Kulcurna Station near Lake Victoria are the fifth generation to live and work on the family property and have been managing their DustWatch site since 2004.

'Greg and Lorraine Ayson are organic sheep graziers from Bidura Station near Penarie and have also been contributing

to DustWatch since 2004. Greg and Lorraine have recently decided to retire from the property and will be greatly missed by the DustWatch community when they leave later this year.'

Sheep and cattle graziers Clive and Fay Linnett, from Kilfera Station near Ivanhoe, were also recognised for maintaining the DustWatch station in Ivanhoe for about 12 years.

Dr Leys said that, as climate change continues to unfold, the role of DustWatch and its citizen scientists will become even more important as some areas—particularly western NSW—become hotter and drier, leading to increased soil erosion.

'On behalf of DustWatch, we'd like to say thank you for the important work of our volunteers.'

The awards were presented at the 9th International Conference on Aeolian Research, at Mildura. To get involved or learn more about DustWatch visit [www.environment.nsw.gov.au/dustwatch](http://www.environment.nsw.gov.au/dustwatch)



Front row left to right: Lorraine Ayson, Helen Barnes, Fay Linnett, Jenny Richards, Chelsea Mason. Back row left to right: Stephan Heidenreich (OEH), Greg Ayson, Laurence Barnes, Clive Linnett, Paul Hanson, Angus Seekamp, John Leys (OEH). Photo courtesy OEH



# Help secure your future with the Farm Innovation Fund

The Farm Innovation Fund is an incentive-based initiative to assist farmers within New South Wales to improve permanent farm infrastructure, identify and address risks to their farming enterprises, ensure long term productivity and sustainable land use.

Assistance is in the form of concessional interest rate loans up to \$250,000 to meet the cost of carrying out permanent capital works that will have a significant beneficial impact on the land, long term profitability of the enterprise and address adverse seasonal conditions. Such works fall into four main categories being Farm Infrastructure, Drought Preparedness, Environmental and Natural Resources.

For further details about the Farm Innovation Fund contact NSW Rural Assistance Authority on **Freecall 1800 678 593** or visit <http://www.raa.nsw.gov.au/assistance/farm-innovation-fund>

## New silos a winner at Condobolin

Condobolin farming couple Roger and Fabien Todd know only too well the benefits of storing barley on-farm to wait for a price premium.

They picked up an extra \$100 per tonne, or about 50 per cent more, by selling stored barley in August this year rather than at harvest in November the previous year.

Two new 285 tonne grain silos meant they were able to take advantage of the predictable price improvement.

"The thing with barley is it's tricky to store – due to the bugs especially," said Roger.

"These silos are elevated, fully sealed and aerated – so there's less likelihood of anything going wrong.

"We've had deliveries rejected in the past because we were using older, less reliable silos to store our grain – so we know the benefits of the new, modern silos."

The Todds are so convinced by the benefits that they have utilised a \$220,000 loan from the Farm Innovation Fund to increase their farm grain storage further with another two 285 tonne grain silos to add to the two put in last year with bank finance.

Roger and Fabien's property 'Wirrinun' includes 2500 hectares of controlled traffic system cropping and 7500 hectares of pastures for agistment livestock.

"We're finishing off a project with the grain storage," said Roger.

"We're also storing chickpeas and wheat at harvest time, as well as the barley.

"With chickpeas there are no local delivery points so it's best for us to store it on farm and deliver it to Dubbo afterwards.

"The four silos will further improve harvest efficiency because they are placed strategically in the farm's controlled traffic area so the headers can keep going at harvest."

The Todds have also used part of the funds to vastly improve their stock and domestic water system with tanks and troughs fed from a reticulated supply.



"In 2003 we built a large 12 mega-litre dam in a good catchment area – but it is in a 300 acre paddock and we wanted to distribute the water to other paddocks," said Roger.

"This year we have put in a large solar pump at the dam, lifting water up to a 20,000 litre tank at a high point.

"We then reticulate the water to eight cup and saucer troughs around the farm – four 25,000 litre troughs and four 5000 litre troughs.

"We now have two watering points in most of our paddocks which is great for good even grazing." "With large mobs of 300 head running together, it helps having water at both ends of the paddock to distribute grazing pressure.

"Also, I think stock do better with fresh running water – especially sheep – rather than muddy dam water.

"The new system has definitely given us more options with our livestock."

Roger said he hadn't put a price benefit on the increased efficiency but it would be significantly more over time than the upfront cost.

"Like many investments on farm, the cost benefit of adopting something new is clearly beneficial but the upfront money is what is hard to find," he said.

"This loan has helped with that upfront money."

## NSW Farm Business Skills Professional Development Program

The Farm Business Skills Program is an initiative of the NSW Government which is helping primary producers to better manage their businesses.

The program provides access to professional development opportunities, particularly in the areas of financial management and managing on-farm risk.

Individual primary producers are able to access up to \$5,000 to assist them to build skills, while enterprises can receive up to \$9,000.

A large range of preapproved courses are now listed on the RAA website. The scheme also allows applicants to seek preapproval to undertake professional development tailored specifically to their enterprise.

For more information about this fantastic opportunity visit: [www.raa.nsw.gov.au/assistance/professional-development-program](http://www.raa.nsw.gov.au/assistance/professional-development-program)

[www.dpi.nsw.gov.au/climate-and-emergencies/droughthub](http://www.dpi.nsw.gov.au/climate-and-emergencies/droughthub) or freecall 1800 678 593

Note: Calls to '1800' numbers from your home phone are free. Calls from a public phone and mobiles may be timed and attract charges.

Recently a group of farmers met in Bathurst to better understand the relationship between grass, livestock and making money.

Participants were excited to be exposed to new ideas and be given tools they could immediately use in their businesses.

*Great step for government – invaluable to have a little support.*

Course participant

*If we can get a 10% improvement in our business the course will pay dividends very quickly.*

Course participant

*You know, back in the old days it was easy to get away with talking to the bank manager and having our finances managed easily, but we need now to understand the financial side of our business, we need to understand the physical side of our business, it's constantly changing.*

Course facilitator

[www.raa.nsw.gov.au](http://www.raa.nsw.gov.au)



# High-tech solutions for a precious old icon

Standing tall on a low sandy rise near the Darling River, Kinchega woolshed casts a dramatic shadow against the Far West skyline close to the Darling River. Built in 1875, the main structure comprises trimmed river red gum trunks, sawn roof frames and raised timber flooring, with a wide, pitched roof with annexing skillions.

Listed on the State Heritage Register, the National Trust of Australia register, and the Register of the National Estate, the 26-stand woolshed is a testament to the evolution of shearing technologies during the nineteenth and twentieth centuries and demonstrates all eras of shearing in its arrangement and

remnant technology. Remotely located and constructed of lanolin-soaked timbers, the structure is potentially susceptible to fire damage.

To protect this precious icon from accidental or more sinister fire risks, the National Parks and Wildlife Service (NPWS) has installed an automatic detection and suppression system. A major upgrade of the water supply pipeline was completed, an additional water tank was added to increase water storage capacity and improve head pressure, and a state-of-the-art fire detection and suppression system was installed in the woolshed during June 2016.

Careful and deliberate consideration was given to the heritage of the building in the design of the system. The system is integrated into the building and is painted to complement the surroundings. Because of the open and dusty conditions within the woolshed, thermal detectors were used; they are able to trip at 93°C to compensate for the heat generated from the roof on a summer's day.

If the thermal sensor to a sprinkler head is tripped, that sprinkler will automatically deluge the area and send an electronic message to an NPWS employee via the mobile network. Each sprinkler is individual, so fire suppression is targeted to the required area, preventing the entire building from being unnecessarily inundated.

National parks such as Kinchega provide opportunities to protect and showcase more than just biodiversity values. Some of the state's most important cultural heritage values can be found in parks and reserves, and parks in western NSW play a unique role in documenting the pastoral history of NSW.

To learn more about Kinchega Woolshed visit:  
<http://www.nationalparks.nsw.gov.au/things-to-do/historic-buildings-places/kinchega-woolshed>



The 26-stand Kinchega woolshed, built in 1875, has had an automatic fire-detection installed. Photo supplied by NPWS



## 2017 Biennial Peppin-Shaw Ewe Flock Forum

# Save the date

**Tuesday 7th March and  
Wednesday 8th March 2017**

For more information visit our webpage  
[www.peppinshaw.com.au](http://www.peppinshaw.com.au)  
or phone Annabel Lugsdin (Secretary) on 0428 539167  
Sally Ware (RLLS) on 0429 307627

# Sandhill Paddock Walk at Booororban, south of Hay

## Sally Ware

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and

## Martin Driver

Manager

Australian Network for Plant Conservation

With the native vegetation bouncing back after a series of recent rain events following a long, dry summer and autumn, a third successive Paddock Walk was organised in early June by staff from the Hay office of Riverina Local Land Services in conjunction with Landcare, Greening Australia and other agencies, focusing on the Riverine White Cypress Pine Sandhills. This time the destination was the sandhill communities around Booororban.

Funding for the Walk was provided by the National Landcare Programme. As with previous Paddock Walks, Australian Network for Plant Conservation Project Manager and local Conargo property owner Martin Driver was the principal speaker. The day started with the 25 participants meeting at the Royal Mail Hotel at Booororban for refreshments and a discussion of a native plant and resource display before moving on to local property 'Zara'.

Situated near the Zara homestead is a fenced reserve that contains a long-time-preserved extensive sandhill vegetation community.

The abundance of species in the reserve was breathtaking, with many at the point of flowering or setting fruit following the rain. Some of the species observed were shrubby rice flower (*Pimelea microcephala*), native jasmine (*Jasminum lineare*), native clematis (*Clematis microphylla*), elegant speargrass (*Austrostipa elegantissima*), a seeding rosewood (*Alectryon oleifolius*) (rarely observed, as this plant usually reproduces by suckering), narrow leaf hopbush (*Dodonaea viscosa* subsp. *angustissima*), sandalwood (*Santalum lanceolatum*) and a seeding white cypress pine (*Callitris glaucophylla*); Martin explained the difference between the fruits (cones) of a white cypress pine and those of a Murray pine (*Callitris gracilis* subsp. *murrayensis*). The differences between a fruiting sweet quondong (*Santalum acuminatum*) and a bitter quondong (*Santalum murrayanum*) were also discussed.

Following a lunch kindly provided by the Royal Mail Hotel, the group drove to another

local property, 'Elmsleigh', which was recently bought by the Hooke family. The first site visit was to a proposed sandhill reclamation area. This was followed by a stop at a neighbouring State Forest reserve, which contained many local species, including shrubs such as senna (*Senna artemisioides* subsp. *coriacea* and subsp. *filifolia*) and yanga bush (*Maireana brevifolia*) and copperburrs (*Maireana* sp.), as well as young white cypress pines and many flax lilies (*Dianella* sp.) growing in the leaf litter.

The final stop was to a fenced native quondong plantation on the next-door property 'BurraBuroon', owned by the Butcher family, where the prolific growth of sweet quondongs was observed and discussed.

For further details contact:

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Landholders observing a large individual yanga bush found in remnant bushland on a recent sandhill walk with Martin Driver. Photo by Annabel Lugsdin

## Women getting together in Broken Hill

The annual NSW Rural Women's Gathering looks forward to seeing you at our 'Rocks, Rust, Stars & Dust' 2016 gathering in Broken Hill from 28 to 30 October.

### FEATURES

- guest speakers Tania Kernaghan, Stephanie Dale, Susan Bryant and Catherine Britt
- entertainers, including the Janes

- information stands and displays
- optional Rock the Frock dinner at Broken Hill's iconic Palace Hotel; buffet at the Broken Hill Regional Art Gallery; Outback Astronomy dinner at the Space Base; or country fare at Silverton Pub

- a men's program for partners
- a special session on 'What Rural Women Say' and showcasing of the 'Story Pod' by the Rural Women's Network.

**GETTING THERE** DPI's Rural Women's Network are providing two subsidized bus services travelling from Orange in the North and Wagga Wagga in the South for just \$55 return. To book your seat call Emma Regan on 02 6391 3612 or email [emma.regan@dpi.nsw.gov.au](mailto:emma.regan@dpi.nsw.gov.au)

**EXPLORE THE FAR WEST** Tri State Safaris is offering discounted tours for all RWG participants. Call 08 8088 2389, email: [tours@tristate.com.au](mailto:tours@tristate.com.au) or visit: [www.tristate.com.au](http://www.tristate.com.au)

**ACCOMMODATION** Contact Sonja O'Connor on 08 8091 2501, [floodscreekstn@gmail.com](mailto:floodscreekstn@gmail.com)

### FOR MORE INFORMATION

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email [brokenhill2016@gmail.com](mailto:brokenhill2016@gmail.com)

Facebook: [RWGBrokenHill2016](https://www.facebook.com/RWGBrokenHill2016)

Twitter: [@rdsbrokenhill](https://twitter.com/rdsbrokenhill)

Or register online at

[www.brokenhill2016.wixsite.com/rdsd](http://www.brokenhill2016.wixsite.com/rdsd)

# Be prepared for a big barley grass year!

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## Lisa Castleman

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There's a lot of barley grass (scientific name *Hordeum* spp.) across NSW this year, and some of it is already going to head. It has been many years since we have had such a significant barley grass problem. Some of you may not have ever experienced the stock health problems that a bad barley grass year can bring. Not only can grass seeds damage the eyes or ears of sheep, but also they can penetrate the wool and enter the skin, particularly in young sheep. The extent of contamination is often more visible after shearing of the sheep or post-slaughter. The most common grass seeds to affect livestock and farm dogs are from the barley grass, crowsfoot, brome grass, silver grass and spear grass species.

Sheep affected by barley grass penetrating their skin may reduce both their water and their feed intake. The seeds can also cause damage around the mouth, and any abscesses will not only be painful but also have the potential to become fly-struck. Grass-seeds enter sensitive eyes and can go undetected below the eyelids; the seeds are both irritating and painful and can cause temporary blindness, preventing stock from moving to water points or better feed. If the seeds are

not removed as part of regular animal husbandry, then the temporary blindness can become permanent. Healthier animals are productive animals, and grass seed issues will reduce individual body weights in affected stock.

Raw wool contaminated with vegetable matter such as grass seed is discounted, as the contamination can cause discolouration and coting (matting of wool). The barley grass seed's arrow shape causes the seed to continue through the wool into the skin of the sheep. Any holes caused by grass seed will discount the skin, as the holes increase in size during tanning. Once through the skin, the grass seed will continue into the muscle of the sheep, often causing abscesses. All of the affected meat must be trimmed off the carcass, costing the abattoir more in labour and reducing carcass weight. In saleyards, any wool contamination with barley grass is seen as a large warning sign for any potential buyers, as they weigh up the risks of the skin and carcass also being contaminated. Meat & Livestock Australia has estimated that grass-seed contamination will cost a producer about \$1.50 per kilogram of carcass weight.

NSW DPI has advised that sheep producers need to take action to make sure their key grazing paddocks will be free of damaging grass seeds in spring and summer.

## Recommendations

Using a high stocking rate, graze grassy paddocks hard before the grasses run to head, as grazing pressure can keep the grasses vegetative for longer and a more even stand is better for any spray-topping operation.

Slash pathways and main traffic areas through paddocks to allow sheep to get to watering points. Stock camps, or weedy areas around trees where stock lie down in the shade, can also be problem areas for picking up grass seeds.

Pasture-topping or spray-topping is a technique that uses a sub-lethal dose of herbicide to reduce the seed-set of grass species such as barley grass, brome grass or silver grass. Naturally, this technique will not be available in organically certified places.

Have you got some paddocks with no risk of grasses going to seed and causing issues? Can you put young lambs or weaners into these safer paddocks to maximise their growth rates before sale time?

Spray-topping is an agronomic technique that uses a non-lethal dose of the herbicide glyphosate or paraquat to control the seed-set of some annual grasses, including barley grass. Both herbicides are registered to target grass weeds in pastures, but only one is registered for aerial application. Spray topping is used when the plant is in its reproductive mode but before the grass sets seed; it can be an effective way of preventing the stiff-awned seeds of common grasses such as barley grass and brome grasses from developing any further.

A good practical reason for using the spray-topping technique is that prevention is better than cure, and many of the stock health problems caused by barley grass can be avoided or minimised. Speak to your agronomist or farm consultant about whether spray topping suits your specific paddock situation and the growth stage of your pasture. The timing of this sub-lethal dose is important: if it's left too late, the grass seeds can still become problematic for livestock. There are differences in the specific timing of the application of either glyphosate or paraquat to barley grass. Always check the label and respect absorption periods for the uptake of the herbicide and grazing withholding periods.

The most suitable situation for the use of spray-topping is where there has been even regrowth of the grass species (after grazing) and the plants present are at a similar growth stage. Spray-top after the heads have emerged but while the grass heads are green and before there are any signs of the plants 'haying off' naturally.

Paraquat works quickly but targets a very specific window between flowering and the milk-dough stage of the grass seeds within the heads. Ask your agronomist to check the stage of your pasture for you if you are unsure. Glyphosate (read the label for the specific, low rate) for spray topping is applied from the head to the milk-dough stage. Herbicide labels also remind us that there can be a reduction in pasture legume populations as a result of treatment; such labels specify caution in pastures intended for seed or hay.



Grass seed contamination of a shorn sheep's belly (left) and a carcass (right). Photos by Karl Behrendt