

western division news letter

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Sheep industry update in Trangie in April

By Michelle Anderson
Project Co-Ordinator, Sheep Connect NSW
Industry & Investment NSW Orange



Industry &
Investment

Sheep producers from across western NSW are encouraged to attend a free sheep industry update in Trangie to hear the latest industry information on wool and sheep meat production. The industry update, presented by the Sheep Connect NSW network, will be held at Trangie in April and will include a range of industry speakers from across the State.

Sheep Connect NSW is a collaborative venture between Industry & Investment NSW (I&I NSW) and Australian Wool Innovation (AWI) that aims to connect sheep producers with information, events and expertise to help their sheep business.

'This free industry update is being brought to the heart of NSW and will allow producers to hear about and discuss some of the significant issues facing their industry,' Sheep Connect NSW Project Coordinator Shelly Anderson said.

'A range of sheep industry experts will be attending to discuss key topics directly with sheep producers and hear first hand about issues concerning producers.

'In recent months we have seen considerable rainfall and flooding in many areas of the west. This has intensified problems with sheep parasites, particularly flies and worms. The opening session of the industry update will concentrate on examining current parasite management practices and recommendations.'

Other sessions include managing business risk in a variable climate and precision sheep management.

Sheep Connect NSW aims to connect sheep producers with events, with expertise and with each other – all with a focus on learning and training.

'The Sheep Connect NSW network is all about connecting sheep producers with information and the industry updates provide farmers with

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Autumn 2011

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A sheep industry information update *Ewe can't miss out!*

Sheep Connect NSW Industry Update

April 6th 2011
Trangie Agricultural Research Centre
7878 Mitchell Hwy, Trangie NSW
8.30am start

Interact and gain valuable insight from experts discussing key topics including:

1. Strategies for managing lice, flies and worms this season.
2. Climate change and the sheep industry - what you can do to stay in front.
3. Managing your flock - precision sheep management and NLS.

For full seminar details and program visit:
www.sheepconnectnsw.com.au

Register now!

This event is FREE but an RSVP is essential by Friday 25th March 2011

Email your details to:
sheep.connect@industry.nsw.gov.au
or phone 02 6391 3964 to register your interest in attending.

sheep connect
new south wales
Keeping you in the know.

AWI Australian Wool Innovation
NSW Industry & Investment

Continued from page 1

important information at one easily accessible location,' says Shelly.

The Sheep Connect NSW Industry Update will be held on Wednesday 6 April at the Trangie Agricultural Research Centre.

For full conference details and program visit www.sheepconnectnsw.gov.au.

Registration is essential for this free event. To register please call Michelle Anderson on (02) 6391 3954 or email sheep.connect@industry.nsw.gov.au.

In passing »

By Greg Curran
Regional Veterinary Officer
Industry & Investment NSW
Broken Hill

and

Sally Ware
Livestock Officer
(Sheep & Wool)
Industry & Investment NSW
Hay



Industry &
Investment

Great rains – Is this what the country was like before rabbits?

There's been plenty to talk about with the rains. Some good stories, some bad. The good stories include the fantastic growth that is taking place in the paddocks and the running of new and ancient creeks and the filling of swamps, billabongs and lakes, bringing with it all the associated wildlife. The bad news is the multiple animal health issues that have arisen. Some of these issues are dealt with in this issue of the Newsletter.

In terms of growth in the paddocks, one comparison that has been made between this season and the early 1970s is that the pastures are not as tall (remember the marshmallows in the 1970s growing taller than cars around the sheep camps?) but there's more variety and perhaps more density. The other comparison made is more a question: with the pastures looking so good and with such a variety of perennials coming through, could the country be getting back to the state it was in before rabbits, thanks to diligent, long-term on-property rabbit control?

This idea might seem a bit of a jump, but there is some good backing for it:

- The mix of pastures reflects good rain over recent cool then warm months, but the type and quantity of longer-lived plants tell us more.

- These amounts of grasses and perennials haven't been seen for many years. Perhaps they're coming from seed banks that have lasted for a long time, or from a steady build-up (in response to the more recent small rains) in the abundance of plants and seeds that would previously have been wiped out by rabbits.
- Despite a long, dry spell over the last 10 years, the country has responded rapidly; it hasn't been quite the struggle for plants to grow that it may have been 10 or more years ago.
- The dust storms may have unearthed some seed, but they have probably buried more.

It seems likely that not having rabbits has made a big difference. However, the way the country has been managed has been just as important, with landholders prepared to destock early and keep stock numbers down during the long dry.

The payoff should be seen in coming years as it gets drier again. If the country retains its good cover and mix of long-lived plants, and even improves still further, the gains seen this year might be an indication that we are getting back to the times we had before the rabbit.



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- » Department of Environment, Climate Change & Water
- » Land & Property Management Authority
- » Lachlan CMA
- » Lower Murray Darling CMA, and Western CMA



Small schools of Carp swimming upstream in the flood flow across the Menindee road 65 km east of Broken Hill. *Photo by Michael Walden.*



Clare Curran running in summer grasses in a paddock on Tom's Lake, north of Booligal. *Photo by Greg Curran.*

Sheep Connect Industry Update

Presented by I&I NSW and AWI

Wednesday, 6 April 2011 – Trangie NSW

9:00–9:15

Event opening

- Welcome to Trangie Ag Research Centre
Trudie Atkinson – Livestock Officer, I&I NSW
- Official welcome from Australian Wool Innovation
Ian Evans – Program Manager, AWI

9:15–10.45

Session One – Making the Most out of Seasonal Opportunities

- Sheep & Wool markets – implications and opportunities for your business
Sandy McEachern – Director Holmes Sackett
- Fine-tuning management to make more from your sheep – tools to help you make the best decisions.
Cheryl Pope – Livestock Officer, Precision Sheep Management, Sheep CRC
- Fine-tuning management to make the most out of each season – a practical example
Ray Haigh – 'Macquarie View', Gin Gin and Greg Lee – Senior Livestock Research Officer, I&I NSW

10.45–11.15

MORNING TEA

11:15–11:30

Session Two – Staying Informed

- Sheep Connect NSW – making sure you don't miss out!
Shelly Anderson – Sheep Connect NSW Project Coordinator
- Protecting our industry – National Livestock Identification Scheme (NLIS)
Megan Rogers – Livestock Officer, I&I NSW

11:30–12:15

Session Three – Managing Business Risk in a Variable Climate

- What difference will climate change make to your sheep business and what can you do about it?
Phil Graham – Technical Specialist Grazing Systems, I&I NSW
- Evaluating your decisions in a variable climate – analysing cash flow.
Greg Meaker – Livestock Officer, I&I NSW

12:15–1:15

LUNCH

1:15–2.45

Session Four – Controlling Worms, Flies and Lice

- Sheep worms and drenches – what's new?
Stephen Love – State Worm Control Coordinator, I&I NSW
- Breeding to reduce flystrike in your flock.
Allan Casey – Technical Specialist Sheep Breeding, I&I NSW
- Chemicals for controlling flystrike and lice – working out the best option for your situation.
Gemma Turnbull – NSW Ectoparasite Coordinator, I&I NSW
- Chemical Resistance – how will it affect your flock?
Garry Levot – Principal Research Scientist, I&I NSW
- Controlling sheep parasites this season – your questions answered.
Panel Discussion

2:45–3:00

CLOSING REMARKS

Rainfall in 2010 was not normal

By Michael Cashen
Agricultural Climatologist
Industry & Investment NSW
Wagga Wagga



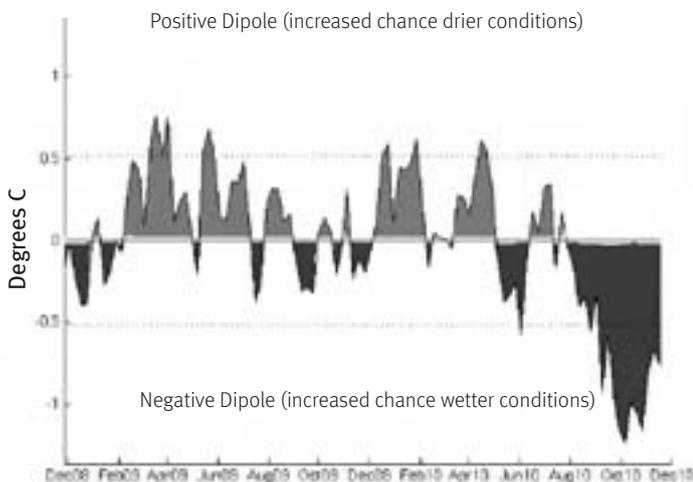
Industry & Investment

After record drought-breaking rain in 2010 and now again in early 2011, many farmers are heralding the return of a 'normal' season. The question is: What is normal? Australia has one of the most variable rainfall patterns on Earth. This variability is driven largely by Australia's latitudinal position, topography and proximity to large ocean surfaces. Ocean temperature gradients in both the Pacific and Indian oceans have a huge impact on atmospheric circulation patterns and rainfall, particularly in winter and spring in NSW. Small changes in ocean temperature drive changes in atmospheric circulation and affect the probability of rainfall. In 2010 both the Pacific (La Nina) and Indian (Negative Dipole) oceans came together in a 'coincidental occurrence' to break the drought over most of NSW, as illustrated in the graphs below.

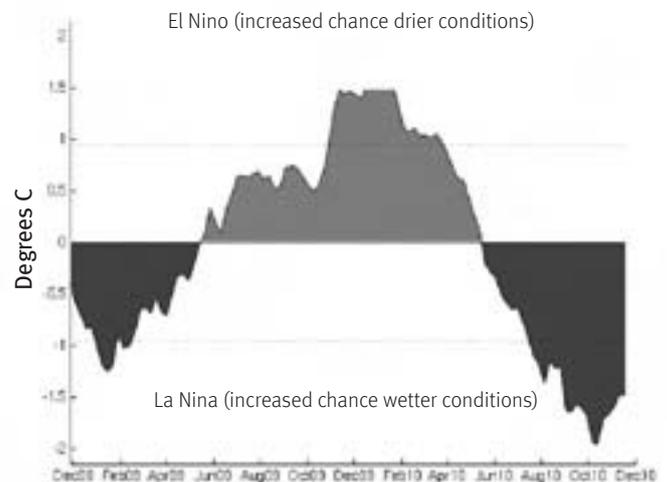
In a recent paper, titled *Indian and Pacific Ocean influences on Southeastern Australian Drought and Soil Moisture (2010)*, Caroline Ummenhofer and her colleagues provided a historical perspective on the conditions in both the Pacific and Indian oceans since 1877. According to this research, years comparable to 2010 would have been 1975, 1942, 1933, 1917, 1916, 1909 and 1906. Although the drought-breaking rains over the winter and spring of 2010 have been welcomed by many in NSW, the sea-surface temperatures that were responsible for the rains over 2010 could not be described as normal.

So what will happen in 2011? Long-range forecast models surveyed by the Bureau of Meteorology suggest that the La Nina is likely to persist into the autumn in the Southern Hemisphere. This climate pattern has its greatest impact on inland NSW during winter and spring. Autumn (March–May) is a difficult period and is often referred to as the 'predictability barrier'—a real dilemma for agriculturalists, who often commit themselves to management programs during this period. Autumn rainfall has been declining in southern NSW for some time because of global warming driven by human activity. During autumn, farmers are advised to better focus their attention on 'knowns' like soil moisture reserves. A useful national assessment is made available on a weekly time step for both upper and lower soil layers: see <http://www.csiro.au/awap/>.

Dipole Mode Index



El Nino Southern Oscillation - SST Nino 3.4



Above: Graphs showing the coincidental occurrence of the two events that caused the widespread rain in 2010. This climatic pattern is not normal and hence you would not expect such a widespread rain pattern in future years.

Wetter and drier periods across the Western Division

As part of looking at droughts and floods, I've looked at wetter and drier periods across NSW by using the simple method of comparing each year's rain with the overall average. In western NSW we're blessed with a remarkable number of quality rainfall records going back into the 1880s, such as those at Clare Station located south of Ivanhoe.

You may be interested in what these records tell us about rain. Rainfall in the drier periods has obviously been very different from the rainfall in wetter periods. The following table shows the annual average millimetres of rain expected in wetter and drier periods at each location; the

difference compared with the expected rain in drier periods, and how many years were 'drier' and how many years were 'wetter'.

For Clare Station, the distributions of rain in drier and wetter periods were very different, as shown in the graph.

At most locations there were many wetter than average periods and many drier than average periods. Remarkably, at each location, I found that the rain in each drier period was the same (using statistical tests) and the rain during each wetter period was the same.

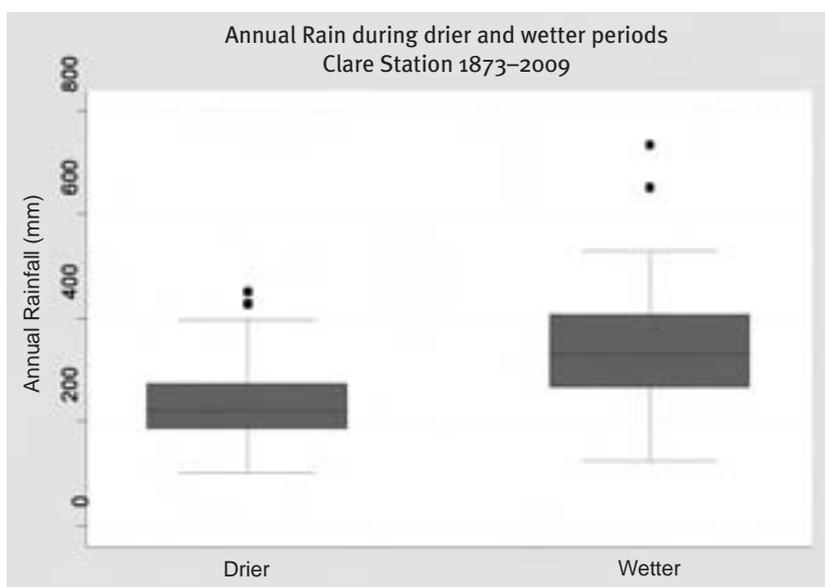
By Greg Curran
Regional Veterinary Officer
Industry & Investment NSW
Broken Hill



Years drier or wetter than average in the Western Division

Site	Wetter (mm)	Drier (mm)	$[(W-D)/D]\%$	No. of years wetter than average	No. of years drier than average	Total no. of years
Tibooburra	314	176	78	40	83	123
Wanaaring	378	216	76	47	77	124
Corona Station	277	162	71	53	75	128
Wilcannia	335	210	60	51	80	131
Louth	377	240	57	61	68	129
Ivanhoe PO	375	243	55	55	70	125
Menindee	302	198	52	54	80	134
Nymagee-Kenmure	499	334	50	60	60	120
Booligal-Belmont	392	266	47	57	62	119
Wentworth	345	237	47	60	82	142
Clare Station	342	237	45	75	62	137
Hillston	443	308	44	54	73	127
Balranald	393	275	43	50	81	131
Euabalong-Booberoi	452	334	35	59	67	126

Annual rain during drier and wetter periods at Clare Station, 1873-2009



Appointment of a new Western Lands Commissioner

By Sharon Hawke
Assistant Western Lands
Commissioner
Land and Property
Management Authority



With the retirement of Geoff Woods in July last year, the Land and Property Management Authority (LPMA) appointed Andrew Bell as the 15th Western Lands Commissioner. Andrew has over 29 years' experience in land administration and management in NSW and joined the Western Lands Commission in 1990, while it was based in Sydney. When the Commission relocated to Dubbo in 1991, Andrew and his wife Caroline also made the move and since then have raised four children, with the two eldest now at boarding school.

Andrew grew up on the far South Coast of NSW but quickly developed a keen interest in the NSW outback and pastoral life, especially after spending many holidays on 'Kalyanka' Station at Wilcannia helping with fencing and stock work.

Andrew's career started with the Department of Lands in Sydney in 1982, where he was studying and working in the field of land and engineering survey drafting. During the 1980s Andrew developed a strong grounding in the institutional framework for surveying and land titling in NSW.

Andrew's experience with Western Lands Leases and the Western Division expanded through the 1990s in his positions as Native Title Coordinator and Sales and Leases Coordinator. During this time he played a lead role in the progression of developments potentially affected by native title. He also travelled throughout the Western Division, undertaking Crown land auctions and assessing property subdivisions and lease diversification proposals.

In 2001, Andrew was appointed Land Administration Manager and was heavily involved in implementing legislative amendments to the Western Lands Act following the Kerin Review. These changes included provisions for a Legal Road Network for the Western Division and a new rent system for Western Lands Leases.

For the last 10 years Andrew has been a member of the Lightning Ridge Mining Board and the Inter-Departmental Working Party on Camps on the Lightning Ridge Opal Fields. This working group has successfully negotiated the purchase of parts of several properties affected by opal mining.



Recently appointed Western Lands Commissioner Andrew Bell.

Since 2007, Andrew has also worked as Assistant Western Lands Commissioner and has developed a strong association with the members of the Western Lands Advisory Council. More recently he played an integral role in the recent review of the Western Lands Act, which gave rise to new provisions for boundary fencing on Western Division properties and the creation of an easement along the dog-proof fence.

In addition to holding the position of Western Lands Commissioner, Andrew is also Chairman of the Wild Dog Destruction Board. This Board remains responsible for maintaining the dog-proof fences separating NSW from Queensland and South Australia and prevents wild dogs, including dingoes, from entering NSW from the adjoining States and destroying livestock.

Although Andrew has already been to many places in the Western Division over the last 20 years, he's now looking forward to meeting landholders and other stakeholders in his new role as Commissioner.

Who is your Rangelands Management Officer?

Within the Far West Area of the LPMA there are seven Rangelands Management Officers (RMOs). These RMOs are the 'on-ground' faces of the LPMA and perform a wide variety of tasks in relation to the management of leasehold lands and other Crown lands within their particular districts.

One of the major tasks for an RMO is to conduct inspections when an application for the transfer of a Western Lands Lease is

received. They also investigate applications, for example for cultivation permits on Western Lands Leases; changes of lease; lease subdivisions; licences (e.g. for extractive industries, pump sites, pipelines and mooring sites); and reserves management. They can also advise landholders and other interested parties on a range of land management issues, including boundary fencing, access, noxious weeds and feral animals.

By Elizabeth Burke
Property Management Project
Officer, Far West Land and
Property Management Authority



The areas covered by the RMOs are shown in the map. Contact details for your RMO are as follows:

Balranald: 32 Enterprise Way (PO Box 363) BURONGA NSW 2739
Phone: 03 5051 6204; Mobile: 0428 263 486; Fax: 03 5051 6259;
Email: david.gee@lpma.nsw.gov.au

Bourke: 21 Mitchell St (PO Box 342) BOURKE NSW 2830
Phone: 02 6872 2144; Mobile: 0428 265 666; Fax: 02 6872 2993;
Email: anthony.azevedo@lpma.nsw.gov.au

Broken Hill: 32 Sulphide St (PO Box 692) BROKEN HILL NSW 2880
Phone: 08 8082 5203; Mobile: 0419 497 947; Fax: 08 8087 2314;
Email: tiff.brown@lpma.nsw.gov.au

Cobar: 62 Marshal St (PO Box 307) COBAR NSW 2835
Phone: 02 6836 3018; Mobile: 0447 441 769; Fax: 02 6836 2988;
Email: jacqueline.mills@lpma.nsw.gov.au

Walgett: 89 Wee Waa St (PO Box 248) WALGETT NSW 2832
Phone: 02 6828 0111; Mobile: 0429 049 084; Fax: 02 6828 1741;
Email: peter.smith@lpma.nsw.gov.au

Wentworth: 32 Enterprise Way (PO Box 363) BURONGA NSW 2739
Phone: 03 5051 6205; Mobile: 0427 770 702; Fax: 03 5051 6259; Email: ian.kelly@lpma.nsw.gov.au

Wilcannia: 32 Sulphide St (PO Box 692) BROKEN HILL NSW 2880
Phone: 08 8082 5202; Mobile: 0427 188 528; Fax: 02 6828 1741;
Email: geoffry.cullenward@lpma.nsw.gov.au



David GEE
Balranald



Anthony AZEVEDO
Bourke



Tiff BROWN
Broken Hill



Jacqueline MILLS
Cobar



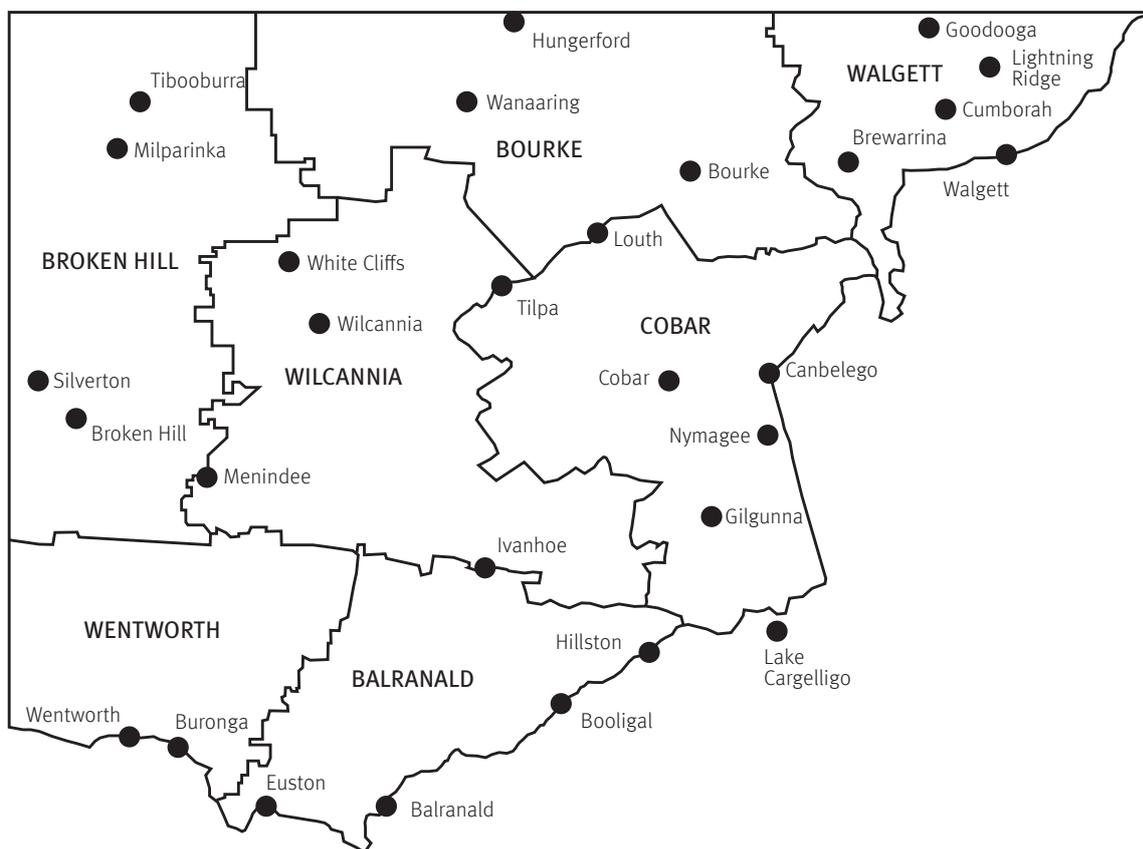
Peter SMITH
Walgett



Ian KELLY
Wentworth

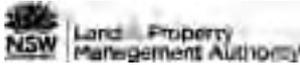


Geoff CULLENWARD
Wilcannia



Hazard-reduction works

By Jacky Wiblin
Natural Resource
Management Project Officer
Livestock and Property
Management Authority



Exceptionally high rainfall this season over much of the Western Division has created what could become an extreme bush fire hazard for landholders.

The LPMA is responsible for managing all Crown lands in the Western Division, including taking appropriate action to reduce bush fire hazards on Crown lands not under any form of tenure.

On untenured Crown lands within and surrounding the towns and villages in the Western Division, the LPMA is required to create 'Asset Protection Zones' (APZs) to reduce fire hazard risks and help contain any fires. On Crown lands held under Western Lands Leases, fire management is the responsibility of the landholder.



What is an 'Asset Protection Zone'?

An APZ, as described by the Rural Fire Service in the brochure 'Standards for Asset Protection Zones' is:

...a fuel reduced area surrounding a built asset or structure. This can include any residential building or major building such as farm and machinery sheds, or industrial, commercial or heritage buildings.

This zone provides:

- a buffer zone between a bush fire hazard and an asset
- an area of reduced bush fire fuel that allows fire to be suppressed
- an area from which back burning may be conducted
- an area that allows emergency services access and provides a relatively safe area for fire-fighters and home owners to defend their property.

Potential bush fire fuels should be minimised within an APZ. This is to stop the vegetation in the planned zone from providing a path for the transfer of fire to the asset, either from the ground level or through the tree canopy.

In the coming weeks several Crown land parcels managed by the LPMA within the Western Division towns and villages will have APZs graded or slashed. These preventive works will help make sure that these areas do not become fire hazards.

If you have any concerns about hazard reduction or wish to report a bushfire hazard on Crown land in the Western Division, please contact Jacky Wiblin, LPMA, on 02 6883 5427, or jacky.wiblin@lpma.nsw.gov.au.

Left (top and bottom): Clearing of Crown land parcels within several Western Division towns and villages will take place this summer to prevent a fire hazard occurring.
Photos supplied by Jacky Wiblin.

New book captures exciting new glimpse of history

The original Momba Station, which stretched from Wilcannia to White Cliffs, is the setting for a new book that's just been launched. It catalogues more of history photographer Frederic Bonney's photos of Aboriginal people in the 1800s.

A joint project of the Aboriginal communities of Wilcannia and Menindee, in partnership with the National Parks and Wildlife Service, the new book is an update to a publication already treasured by local families.

NPWS Ranger Julieanne Doyle says that the book includes rarely seen photographs:

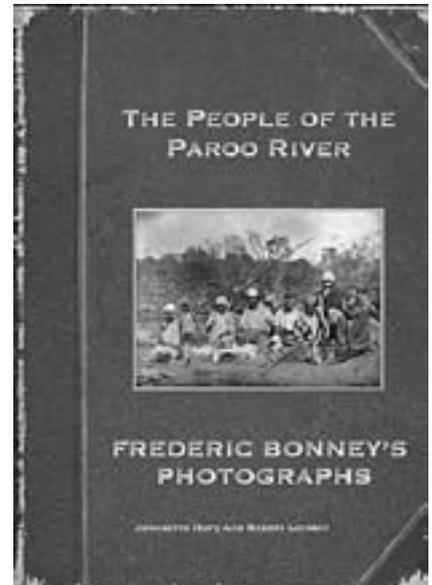
The People of the Paroo River – Frederic Bonney's Photographs is a stunning book full of photographs taken in the late 1800s on the original Momba station.

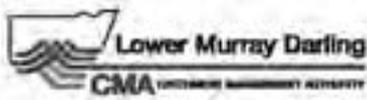
'Many people remember Robert Lindsay's original book, *Frederic Bonney's Photographs* (lovingly known as the Bonney Book), copies of which are treasured in libraries and homes across the Western Division.

'When Robert said he had found more photos attributed to Frederic Bonney we jumped at the chance to print an updated version of the Bonney book. Jeannette Hope, a historian of the Western Division, also came on board for this project and has added a lot of depth and history to the book.

'The photos in the book hold great significance to the local Aboriginal community, as it is very rare to find photographs of Aboriginal people and how they lived in the late 1800s. It's more than likely that the people depicted in the book are the ancestors of many Aboriginal people in our communities today,' Ms Doyle said.

The book is available for sale from the Broken Hill regional Art Gallery, Browsers bookshop and the National Parks office in Argent St Broken Hill for \$24.99.



PUT THIS DATE INTO YOUR DIARY!

2011 CATCHMENT CONFERENCE
"Let's Talk Landscape Management"

Wednesday 6 April 2011 at the Coomera Club, Darebin

Our Catchment Conference will bring together speakers that will continue the carbon conversation, delve into ways to make our Catchment resilient and lots more!

Our Keynote speaker will be
Assoc Professor Alan Dalin from Terrain NRM (Qld)
"Carbon in the Rangelands"

The full program available on our website at www.lmd.cma.nsw.gov.au

If you have any queries, please phone Susan on:
03 5021 9460 or 0428 035 801

The Board and Staff look forward to your participation




YOUR INVITATION TO PARTICIPATE

CATCHMENT COMMUNITY FORUMS
"HAVE YOUR SAY"

After 6 years of achievements, LMD CMA is wanting to update the Catchment Action Plan (CAP) and to get landholder input on how best LMD CMA can support landholders and community members to manage our Catchment into the future.

These Catchment Community Forums will be held at:

- Buronga, LMD CMA** Thursday 17 March at 10am till 12noon
- Broken Hill Musicians Club** Thursday 17 March at 4pm till 6pm
- Darwick Hall** Wednesday 23 March at 11am
- Balranald Greenham Park Hall** Thursday 24 March at 10.00am
- Easton Club** Thursday 24 March at 4.30pm
- Anabranch Hall** Sunday 27 March at 2.30pm

Program details can be found at: www.lmd.cma.nsw.gov.au

If you have any queries and to RSVP,
please phone Susan or Bonnie on 03 5021 9460

The Board and Staff look forward to your participation.

Women enjoy Wentworth Women's Gathering

By Chris Larwood
Publicity Officer
2010 Wentworth Rural
Women's Gathering
Committee

What a resounding success! Women wandered into Wentworth in droves for the 18th NSW Rural Women's Gathering last October to enjoy the activities, meet up with friends, join in the workshops and just enjoy the hospitality provided. With a packed house of 435 registrations, the rain was welcomed and didn't dampen the enthusiasm of any of the participants, and with the help of a few umbrellas and shuttle buses all activities went ahead as planned.

The Honourable Steve Whan MP officially opened the 2010 Wentworth Rural Gathering. The Minister seemed to enjoy the gala dinner at the Wentworth Club; the Club looked very different with its unique decor, which included paper galahs flying around the room and painted pink paddymelons with the local saltbush as table centrepieces.

And the weekend continued on. From the showcase of Sunraysia produce on Friday—with tastings for all—the entertainment included the talents of locals Holly Wienert, Clancy Griffiths, the Stop The Clock Tappers and the Salsa Dancers. Desiree Baynes, the gold medal winner in the double trap-shooting event at Atlanta in 1996, both informed and entertained the attendees with her exploits and experiences of being a member of an Australian Olympic Team. She passed her memorabilia—including her gold medal—around the room so that we could all dream for a while that the medal was ours!

Raeleen Wattata-Drummond gave a warm Welcome to Country to all visitors to the area. She supported her speech by giving a small gift of gum leaves, hand-painted with traditional symbols, to everyone present.

Susan Chase, another amazing woman, talked about the challenges of running a company and building it up into a successful concern. Susan was the recipient of the 2009 Telstra South Australian Business Woman of the Year award and the Commonwealth Bank Business Owner Award.

With a selection of 45 different workshops for the weekend, the ladies and men who accompanied their partners had the opportunity to learn a few new skills, enjoy a leisurely cruise or tour, or even get time for a little exercise rowing on the river.

The Saturday event finished with a Gala Dinner and a 'Greece is da word' performance from the local group, Ratbagz. Everybody certainly exercised both their singing and dancing skills that night, and there was a lot of laughter.

All good things come to an end, and after Bronwyn Roberts had everyone laughing with her 'Let's Laugh' presentation and laughter exercises (yes, laughter can keep you healthy, too!) the Women's Gathering candle was passed onto the Gloucester committee, who will be hosting the 2011 NSW Rural Women's Gathering from 14 to 16 October 2011. As a nice conclusion to the event, the Wentworth Committee received the Community Group of the Year award at the Wentworth Shire Australia Day Awards.



Above: 2010 Wentworth Rural Women's Gathering Committee. Left to right, standing: Susan Walla, Rachel Strachan, Lesley Palmer, Eve Taylor, Audrey McPherson, Jenny Baird, Breeon Cole, Maureen Duncan, Robyn Ingram, Lindy Smith-Withers and Suellen Nunan. Left to right, seated: Chris Larwood, Cathryn Dawes, Dianne Pollard, Marie Patullo and Cheryl Vines. *Photo supplied by Chris Larwood.*

Western Lands Advisory Council Communiqué

The 20th meeting of the Western Lands Advisory Council was held in Dubbo on 1 November 2010.

It was great to welcome the newly appointed Western Lands Commissioner, Mr Andrew Bell, to the Advisory Council as an official member, and Mrs Sharon Hawke, Assistant Western Lands Commissioner, as an LPMA observer to the Advisory Council meetings.

Because of Parliamentary commitments, the Hon. Tony Kelly MLC, Minister for Lands, was unable to attend the Advisory Council meeting, but the members present were very pleased to have Mr Michael O'Brien, Chief Policy Advisor (Lands), representing the Minister for Lands at the meeting. Members were able to discuss first hand any concerns or outstanding matters with Mr O'Brien and have him refer these issues to Minister Kelly.

The members were given a presentation by Ms Lois Gray (Regional Manager, Western Region) and Mr Wayne Garnsey (Senior Environmental Planning Officer, Western Region), both from the Department of Planning in Dubbo, on the progress of the proposed Local Environmental Plan (LEP) for the Unincorporated Area. This LEP is very important, as it will allow for the strategic planning controls and processes that are needed to consider future developments and new industries in areas where there is no Local Government. The key process for the LEP is known as the 'Gateway' plan-making process; it was put in place by the Department of Planning in July 2009 and determines how to make or amend an LEP. The standard LEP template being used will bring the Unincorporated Area in line with the rest of NSW, ensuring that there is a standard instrument format, as well as standard zones and standard land-uses across the State. The draft LEP incorporates a large number of exempt and complying developments.

There will be two main periods of consultation on the draft LEP:

- There will be preliminary consultations with NSW Government Agencies, the Western Lands Advisory Council, Broken Hill City Council, the Silverton and Tibooburra Village Committees, and adjoining Shire Councils.

- Once the draft LEP has gone through the 'Gateway' process (anticipated to occur in early 2011), there will be formal public consultation on it. The relevant Catchment Management Authorities will need to be considered, and landholders outside the main villages, along with industry associations (such as the Pastoralists' Association of West Darling and the NSW Farmers Association), will need to be contacted as required.

The Minister for Planning has appointed the Department of Planning as the relevant Planning Authority. When the Unincorporated Area LEP has been approved, the Western Lands Commissioner will become the consent authority (rather than the local council, which is usually the case) for the development of new industry applications. Questions or comments on the proposed Unincorporated Area LEP (addressed by email or telephone to Mr Andrew Bell, Western Lands Commissioner) are welcomed for joint consideration by the Department of Planning and the LPMA, which are working closely together on this draft LEP.

The Advisory Council was very pleased to learn at the meeting that the government and the NSW Treasury have approved funding for repair works on the dirt runway at Tibooburra Aerodrome. The Civil Aviation Safety Authority (CASA) and the Royal Flying Doctor Service prefer both the sealed and dirt runways to be operational, owing to the strong cross-winds that affect Tibooburra. As a result of damage from dust storms in September–October 2009, CASA officially closed the dirt runway in December 2009.

Because of the remoteness of Tibooburra, it is vital that the dirt runway be repaired to CASA requirements and reopened to service the needs of residents, aircraft and tourists that visit the area. It is critical that aircraft resume landing on the dirt runway, because a life-and-death situation could arise in the event of, for example, a serious accident or heart attack could arise if the Royal Flying Doctor or Air Ambulance were unable to use the runway.

The Advisory Council has thanked the Government and the Premier for approving the funds for this aerodrome to be repaired and reopened: the residents out there have

By Jenny McLellan
Chairperson
Western Lands Advisory
Council

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a basic right to an essential service in times of need—and this need can be critical. Mr Andrew Bell and Mrs Sharon Hawke (LPMA), who worked tirelessly to achieve this funding, were also thanked.

The Advisory Council was updated on the LPMA's business reforms by Mr Graham Harding, General Manager, Crown Lands Division, LPMA Newcastle, and Mr Michael Kneipp, Director West, LPMA Dubbo. The business reforms are about not downsizing, but shifting staff to different locations and/or functions in order to ensure triple bottom line outcomes, rather than the organisation continuing to be a bureaucratic one. This has involved comprehensive and thorough consultations with staff.

The NSW Government has transferred all Crown land within NSW to the LPMA, which means that the LPMA now owns the land and is not just the administrator. The LPMA will need to focus commercially and make its own money, as all money that it earns is to be reinvested in the Crown Estate, not put back into consolidated revenue. It was reiterated that there are no profits for the LPMA in these business reforms. We trust that these new business reforms, in the long run, will have successful and beneficial outcomes for all concerned.

The members were updated on the Legal Road Network (LRN) Project by Mr Rex

Miller, who is co-ordinator of the Project with the LPMA, Dubbo. About 20,000 km of non-gazetted roads that traverse Western Lands Leases (WLLs) and were maintained by the Roads and Traffic Authority will be gazetted as public roads under the LRN. The Project deals only with WLLs and will provide only one legal access per WLL property or holding; it won't interfere with existing local agreements if this allows for an additional access. Gazetting in both the Central Darling Local Government Area (LGA) and the Unincorporated Area is now complete. The LRN Project is now working in the Bourke LGA, and it is likely that the next focus will be the Brewarrina LGA. The Advisory Council has long been an advocate of the LRN Project, as tracks are not well defined; this encourages trespassing and leads to public liability and insurance issues through the use of ill-defined tracks. The Western Division is the only area in the State that does not enjoy an LRN.

In his report, the Western Lands Commissioner, Andrew Bell, informed members that the Wild Dog Destruction Board undertook its annual inspection of the Wild Dog Fence from 17 to 19 September 2010. Given that a substantial proportion of the Queensland Fence is still inundated by floodwaters, the inspection did not cover the entire length of the Fence. Nevertheless, overall the fence remains in good condition, despite recent natural events (including dust storms and floods), although large sections will need repairs or replacement. The financial implications will not be known until after the floodwaters have receded, and this is likely to take up to 18 months.

The Minister for Lands has approved the creation of a 100-m-wide easement along the Wild Dog Fence, excluding Sturt National Park. Negotiations are continuing between the LPMA (through the Minister for Lands) and the Minister for Climate Change and Environment for the creation of a similar easement through Sturt National Park.

The next meeting of the Western Lands Advisory Council will be held in Cobar on 15 March 2011.

All the best to our readers and the communities we represent in the Western Division for 2011—let's hope it's a wet and prosperous year for all concerned!



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Managing blue-green algae in creeks and after floods

Blooms of blue-green algae are being seen recently in creeks and after floods. These blooms have been large. The questions asked have been: 'What is the risk to my stock?' and 'How do we manage these risks?'

First, surprisingly, it's uncommon for animals to be seen sick or dead when these waters appear. Deaths from blue-green algae were confirmed on one place during the severe algal blooms along the Darling more than a decade ago, but the stock generally appeared to be able to avoid this poisoning.

As blue-green algae usually have a distinct and unpleasant smell, and the water is discoloured, it is possible that stock avoid water that has the most dense populations of this bacterium (and is therefore the most toxic) and look for better water. There are usually areas in the water with lower densities of blue-green algae; dense populations of the algae usually form a scum, and the scum tends to blow downwind.

Blue-green algae levels tend to build up quickly when it is hot and in water that is over 25°C, and when the water has plenty of organic matter and phosphorus. The initially clear water allows sunlight to penetrate, enabling the blue-green algae to photosynthesise.

Levels of blue-green algae can drop rapidly, especially with lower temperatures, rain, and inflows of fresh water that mix the layers of water.

To manage blue-green algae poisoning in creeks and after summer floods, the landholder needs to work out the risk of stock drinking quantities of the algae. If animals have no choice but to drink discoloured, malodorous algae-infested water, then the risks escalate quickly. If better water is available in the paddock, or the landholder can give the stock better water, then the risks drop.

To determine whether blue-green algae are a problem on your property, check whether the water has a blue-green paint look about it and check whether a scum is forming. Consider what the temperatures, water flows, and levels of organic matter and phosphorus

have been, and might be, in the coming days and weeks. Work out why you think blue-green algae have appeared and whether they might get better or worse. Move stock if the risks are too great. Alternatively, if you can't move your stock or if the risk appears manageable, watch the stock for signs of sickness and constantly monitor the water's appearance. Consider pumping water from deep under the bloom.

By Greg Curran
District Veterinary Officer
Industry & Investment NSW
Broken Hill



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Above (from top): Typical blue-green 'paint' water after recent flooding; Scum on the edge of the water; Photos courtesy of Lachlan and Jo Gall, 'Langawirra' Broken Hill.

Clean fallows, healthy crops

By Barry Haskins
District Agronomist
Industry & Investment NSW
Griffith



**Industry &
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Fallow management has been proved to play a vital role in the success of both dryland and irrigated farming systems. Throughout the drought, the use of clean (weed-free) fallows has conclusively allowed increased moisture conservation, increasing crop yields and the profitability of farming systems.

In 2010, however, with a wetter than average season, trials run by Industry & Investment NSW and Central West Farming Systems across the Central West of NSW were able to measure other benefits to the farming system from weed-free fallows, particularly in terms of soil nutrition and soil-borne disease carryover.

In the three trials held in 2010 (at Rankins Springs, Tottenham and Gunningbland), the aim was to compare various stubble management treatments (standing, mulched, cultivated and deep ripped) alongside various weed control strategies (full weed control, delayed spray, miss a spray, and no weed control). Measurements included soil water at sowing, soil nitrogen levels, soil disease levels, grain yield and quality.

The take-home messages were similar across all sites, even though soil types varied, weed numbers varied, and the types of weeds in the trials varied. The end result was that differences in soil moisture caused by the use of different stubble management treatments had a minor influence on yield in these trials, but differences in crop nutrition caused by the use of different weed control strategies had a major influence; that is, weeds robbed the soil of valuable nutrients. Soil disease carryover in weedy fallows, although low in all trials, needs to be further investigated.

Across the three trials, nil weed control in the summer fallow reduced yield by an average of 44% (1.38 t/ha), which equated to a loss of income of \$250/ha (if grain was worth \$180/t on farm). Consequently, water use efficiency also declined, by about 40%. This was mostly due to a lower level of nutrition, because weeds used the soil nutrients intended for the wheat crop. By missing a herbicide spray or delaying it, we also observed issues such as reduced yield and/or increased weed-seed set.

Given that full fallow weed control was costed out at about \$50 to \$60/ha, the return on investment in this type of weed control was very worthwhile.

The influence of the stubble treatments was less important, although individual trials did show varying responses to stubble management. When stubble was left standing at Rankins Springs, we observed more waterlogging, as stubble is renowned for its ability to enhance moisture conservation. We also observed higher plant vigour in the cultivated treatments early in the season, as cultivation unlocks nutrients such as nitrogen and sulfur. These effects were season-dependent and would be hard to replicate in a normal year.

The main lessons from these trials in 2011 highlight the fact that clean fallows not only are important for moisture conservation, but also are extremely important for conserving soil nutrients. With fertilisers accounting for such a substantial part of the cost of a farming business, efficiencies can be made, costs saved and profitability increased. Clean fallows promote healthy crops!



Left: A fallow trial at Tottenham in 2010 showing different herbicide and stubble treatments. *Photo supplied by Barry Haskins.*

Animal disease risk outlook: footrot and plant poisonings

Here, we review the risks of a number of diseases emerging in sheep and cattle during the ongoing wet season.

Low risk of footrot

Although footrot has now been eradicated from most of NSW, the continued wetter than usual conditions raise the possibility of footrot being seen again. Nevertheless, the risk of footrot is much lower than it was than two decades ago, when footrot was seen in the Western Division for the first time in many years. To avoid the risk of introducing ovine Johne's disease (OJD), graziers are now avoiding bringing in sheep from the cooler, wetter areas, and this has also reduced the chances of bringing in footrot.

If you see sheep with lameness and under-running of the hoof wall, give your Ranger a call, especially if the sheep have come from Victoria or from other cooler, wetter areas. Check out our website for information: http://www.dpi.nsw.gov.au/___data/assets/pdf_file/0015/102381/footrot-in-sheep-and-goats.pdf.



Above: Footrot during dry times: extensive under-running of sole. *Photo source: Industry & Investment NSW.*



Above: Footrot – separation of the skin horn junction, with under-running. *Photo source: Industry & Investment NSW.*

Increased chance of floodplain staggers on Darling floodplains with flooding

With early heavy rain, good growth of pastures along the Darling floodplain, and the recent expected later flooding, there is some chance of floodplain staggers. This problem is uncommon, but it was last seen after two consecutive floods in the early 1990s. The first flood brought a good mix of grasses, including blown grass (*Agrostis avenacea*). The second flood wiped out most of the grasses, thus allowing overgrowth of the blown grass. The poisoning occurs when soil nematodes move up into this grass, carrying bacteria that can produce corynetoxins. These toxins cause the staggers, convulsions, fever and deaths seen in cattle, sheep and other animals when they eat the sweet, deformed seed heads.

Continued on page 16



By Greg Curran
District Veterinary Officer
Industry & Investment NSW
Broken Hill



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Below left: Soil nematode gall on seed head of blown grass; Below right: Infected seed head of blown grass. *Photo sources: South Australian Research and Development Institute.*



Continued from page 15

Increased risk of flat billy button poisoning in Central Darling with flooding

The floods coming along the Darling will also raise the chance of flat billy button poisoning of sheep and sometimes cattle. It has been many years since floods and heavy rains have allowed this plant (*Xiolaena brevicompta*) to overgrow. Sheep and cattle are affected after 'button picking', i.e. eating large quantities of the seed head, which is rich in nutritious protein and oils. Muscles of the hindlimb are damaged, with signs of trouble walking, then collapse and death.



Above: Billy buttons can poison sheep and sometimes cattle. Photo by Greg Curran.

Worms in the West

By Kylie Greentree
Veterinary Officer
Industry & Investment NSW
Bourke



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Over the last few months we have had a lot of rain. This rain has many benefits, but unfortunately there are a few animal health issues that we really need to keep a close eye on.

One of our biggest problems at the moment is an increase in worms in our livestock. The weather conditions are hot and moist—perfect for worm proliferation. This is not going to be the case on every property, but everyone certainly needs to keep a close eye on their stock. Signs to look out for include loss of condition, scouring, lethargy, pale gums, and tailing of the mob when it is moved. Lambs at foot and weaners are the most susceptible, but, in saying that, I have had 3-year-old ewes that were dying with monstrous egg counts!

Producers should worm-test their stock. Worm-tests kits are available at your local LHPA or Industry & Investment NSW office. Worm testing gives the producer a total worm count and will type the worms. Worm typing tells you exactly what worms are present in your sheep, and you can then buy the best drench for those worms. Some producers choose to drench without worm testing. The problem with this is that you may not actually have a worm problem and you may have wasted all that money; or you may have targeted the wrong worms with your drench, so the worm problem remains and the worms stand a chance of building up drench resistance.



Above left: Sign of death caused by severe worm infection. The sheep's gums are white; Above right: In addition, the blood was just like pink water and the abomasum was full of barber's pole worms. Photos supplied by Kylie Greentree.

Ovine Johne's disease exclusion area: review

The Western LHPA District is an OJD exclusion area (EA). An EA is a protected area proclaimed under the *Stock Diseases Act 1923* at the request of producers. Six years ago, sheep producers voted to request the Minister to proclaim this Western LHPA area as an EA.

I&I NSW policy requires the LHPA to survey sheep producers regularly to gauge whether they support the continuation of the EA. Western LHPA will be conducting this producer survey in the coming months. In the meantime, here are some refresher points on the disease and its management.

OJD fact summary

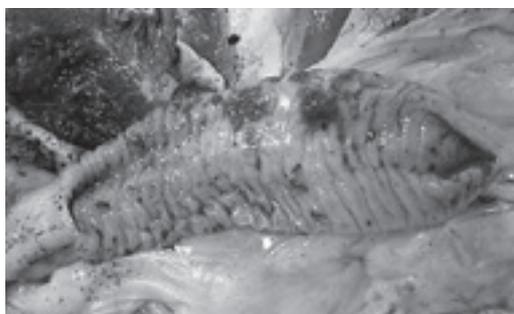
OJD is a wasting disease caused by the bacterium *Mycobacterium avium* subsp. *paratuberculosis*. It is a very costly disease, as it is difficult to detect, reduces weight and wool production, and kills infected sheep. If unmanaged, OJD can kill up to 10% of adults each year.

Sheep are usually infected for at least 2 years before showing signs of the disease. Once they start to show signs, they usually die within 6 months. There is no cure. Infected sheep begin to shed huge numbers of bacteria, which contaminate pasture, soil and waterways before the sheep show signs of disease. Bacteria may survive in the environment (especially in cool, wet sites) for a long time.

The vaccine (Gudair®) minimises the impact of the disease. Sheep are given one vaccination only, at a cost of approximately \$2 per sheep.

OJD exclusion areas vs OJD prevalence areas

In NSW there are three types of OJD prevalence area: high, medium and low, where the estimated maximum percentages of infected flocks are >12.5%,



Above: Note the thickened bowel, which inhibits uptake of nutrients. Photo: University of Sydney.

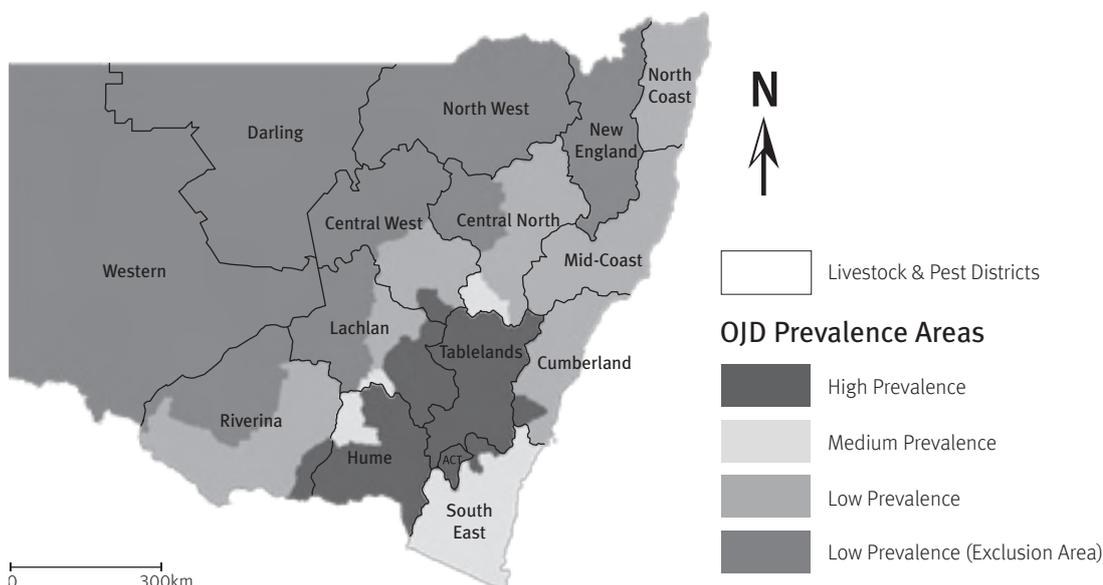
0.8% to 12.5% and <0.8%, respectively (see map). The Western LHPA is a low prevalence area.

All EAs are low prevalence areas but some low prevalence areas are not EAs, because EAs are proclaimed after local sheep producers have been surveyed. (Note the mid-grey shaded areas on the map. These are low prevalence areas that have chosen not to become EAs.)

OJD prevalence areas in NSW

By voting to establish or maintain an EA, sheep producers agree to be proactive in managing the OJD risk in their EA. EAs rely on sheep buyers as the first line of defence against introducing OJD.

When buying sheep, always ask for a Sheep Health Statement that has information on the OJD risk of the stock you wish to buy. Send a copy of the Sheep Health Statement to the LHPA office within 7 days, so that they know how many ABC points your sheep have. Read the notes that are attached to the Sheep Health Statement; they tell you how to calculate your ABC points.



By Dermot McNerney
Veterinary Officer
Industry & Investment NSW
Dareton



Flystrike: let's review it

By Gemma Turnbull
NSW Sheep Ectoparasite
Control Coordinator
Industry & Investment NSW
Bourke



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Unfortunately, with the warm, wet weather come health problems. Flystrike has been an ongoing, major problem, with some people saying that this is the worst fly wave we have seen in decades. In particular, body strike has been a big issue. Frequent rain or storms can promote fleece rot, which is especially attractive to flies, no matter how small the affected area is. Flushes of green feed or increased worm burdens bring on scouring, which increases the risk of flystrike around the breech area. Naturally, sheep vary in their susceptibility to flystrike, depending on factors such as conformation, body wrinkle, fleece characteristics and wool length.

The most common preventive flystrike treatments at present are no doubt the spray-on products containing cyromazine (Vetrazin Spray-On®) or dicyclanil (Clik®). These products provide longer term protection against flystrike, but monitoring for strike is still important, particularly under the current fly pressure.

These spray-on products are not suitable for sheep that are already struck: for these sheep, dressing or jetting is recommended. Ivermectin-based products (such as Coopers Blowfly and Lice ®) have been shown to be highly effective against blowfly larvae. Cyromazine products (eg Vetrazin Liquid®) may be used, but their slow action can be an issue unless the treated area has been shorn to remove all maggots. If this can be done, cyromazine will then provide up to 14 weeks' protection against restrike.

Diazinon is still registered for use in hand-dressing, but there is some resistance to this product in the blowfly population.

For more information on chemicals registered for fly control, visit: www.dpi.nsw.gov.au/agriculture/livestock/sheep/health/chemicals-lice-flystrike.

I can't stress enough how important it is to follow the label of the chemical being used. There have been rumours of people watering down flystrike chemicals (particularly spray-on products) in the hope that that will reduce treatment costs and/or cover a larger area of the sheep. Doing this not only reduces the ability of that chemical to prevent flystrike, but also creates a sub-lethal dose that will help flies develop resistance to the chemical, eventually rendering the chemical useless for flystrike prevention. Let's try to look after the effective chemicals we have!

Withholding periods should be taken into consideration when deciding which chemical to use, keeping in mind proposed plans for the sale of sheep or for shearing/crutching. Remember that the wool withholding periods for some products can be quite lengthy, and the wool must be still on the sheep in order for the chemical to break down effectively. This is contrary to the rumour that says you can shear and then store the wool in the shed for the remainder of the withholding period. Residues exceeding the minimum level can be easily detected if this is done.

For more information on flystrike, visit the I&I NSW website at www.dpi.nsw.gov.au/agriculture/livestock/sheep/health or The FlyBoss website at www.flyboss.org.au, or contact your local I&I NSW Sheep and Wool Officer.

LICE AND FLIES WORKSHOP

Tuesday 29 March: Hatfield Hall
Wednesday 30 March: Booligal Hall
9.00am to 4.30pm

(Replacing the workshops that have been postponed three times by rain!)

To reserve a place in the Lice and Flies Workshop, please RSVP to Sally Ware on 0429 307 627; 02 6993 1608 or sally.ware@industry.nsw.gov.au by Friday 25 March 2011.



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Making More From Sheep

Sheep measles, your sheep and your dogs

Sheep measles has nothing to do with measles in people. Sheep measles are the immature form of a dog tapeworm, *Taenia ovis*, and are cysts about 0.5 cm long. They can be found in the muscle of the heart, diaphragm, jaw and oesophagus and in other muscles of the body. The adults are large tapeworms and can reach 2 metres long in a dog. You may have seen some of the whitish segments of the large tapeworm in your dogs' droppings.

Are sheep measles important to you? Yes. If sheep measles are found in your sheep at the abattoir, the infested organ or meat will be condemned. This wastage is important to meat processors. Exporters of sheep meat need to be particularly careful.

You can do something about sheep measles. Control is based on how this parasite moves between dogs and sheep. Dogs are infested by eating meat or offal of infested sheep. The rules are:

- Never feed uncooked meat or offal from sheep or goats to your dogs.
- Make sure that if your dogs eat meat or offal it is cooked.

- Keep dogs away from where you dress out killers.
- Keep dogs away from dead sheep.
- Treat dogs regularly with an effective wormer.
- Check that your dog worming treatment covers tapeworms.

There are some questions about how sheep measles spread in pastoral areas. Given the fact that farm dogs (and dingoes) are believed to be the main hosts of the tapeworm (with foxes an uncommon host), and that farm dogs are usually restrained and kept away from sheep paddocks, it is an ongoing puzzle as to why some areas of western NSW have flocks where sheep measles are common.

The new Veterinary faculty at Charles Sturt University near Wagga Wagga has begun work to look at sheep measles and other important dog parasites. Darling and Western LHPA directors have agreed to work with this project. Keep an eye out for further information.

By Greg Curran
Regional Veterinary Officer
Industry & Investment NSW
Broken Hill



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Above: Sheep measles infesting a sheep's heart. *Photo source: FAO corporate document repository manual on meat inspection for developing countries.*

Vaccinate or lose sheep

By Edward Joshua
District Livestock Officer
(Sheep and Wool)
Industry & Investment NSW
Dubbo



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The warm, wet conditions provide bountiful feed and an environment suitable for the survival and spread of clostridial diseases caused by bacteria. These clostridial bacteria cause diseases such as tetanus, pulpy kidney, blackleg, black disease and malignant oedema. These diseases will kill animals fast, and usually they kill in large numbers. The site of infection is usually the same across the flock in a commercial situation, because we manage sheep in a flock and give all animals the same treatments that can cause injury and provide sites for infection to occur (e.g. from grazing in native stipa grass with seed heads, or from shearing, dipping, jetting, and marking).

Vaccination done properly with 6 in 1 vaccine will prevent disease. It will save many sheep and cost much less than one animal's value. Vaccination is the inoculation of animals with disease-producing micro-organisms that have been grown in a laboratory and treated to remove all harmful effects. The vaccine is provided under the skin. The vaccine stimulates the white cells of the animal's immune system to produce antibodies to combat the micro-organisms and hence gives immunity to the disease. For example, 6 in 1 vaccinates against cheesy gland, tetanus, pulpy kidney, blackleg, black disease and malignant oedema.

The immune system of a sheep requires two doses of vaccine close together to achieve healthy protection from disease. To start, a sensitising dose and an inoculating dose are given 4 to 6 weeks apart, and then an annual booster dose is given each year. The annual booster dose is best timed when the ewes are yarded before lambing (e.g. at crutching). This gives the lambs passive immunity from antibodies in the ewe's colostrum and milk until marking, when the sensitising dose of vaccine can be given to the lambs, stimulating them to make their own antibodies. The inoculating dose can be provided at weaning, activating more lymphocytes to produce many more

antibodies that give the lambs protection from disease while they grow through the year. When the ewe lambs join the flock as replacement ewes, they get their annual booster dose at crutching (i.e. before lambing) and the cycle of protection continues.

If adult ewes have not had a sensitising dose and an inoculating dose they will need two vaccinations 4 to 6 weeks apart and an annual booster to develop a large population of lymphocytes and thus build up their immunity and protection against disease infection.

There is an exception to the annual program. The pulpy kidney part of the 6 in 1 vaccine lasts only for about 90 days after the inoculation (second dose). So if, as has occurred this year, the feed is very good and conditions are suitable for pulpy kidney because of a wet spring and summer; or if you put the animals in a feedlot or are production feeding or supplementing the pasture with grain; or if feed changes occur and the animals are growing rapidly, then extra vaccinations will be needed to prevent pulpy kidney. If you have the lambs in the yard for drafting, jetting or drenching and good feed conditions prevail and you are changing the feed, then take the opportunity to give a booster vaccine to protect the lamb against pulpy kidney. This will need to be done each 90 days until the bountiful feed and changing feed conditions decline next winter.

If this type of situation exists on your farm regularly, then you might consider using an 8 in 1 vaccine, which includes more strains of enterotoxaemia (i.e. pulpy kidney) and many more antigens to produce a larger response in the animals and a longer protection period of 12 months for growing lambs. But note that this vaccine does not cover cheesy gland.

Vaccinate your flock properly and reap the rewards of healthy prices for meat and wool. Those large, fast-growing animals on good feed are worth the most money and are worth protecting.

Western Division Newsletter

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The information contained in this publication is based on knowledge and understanding at the time of writing (March 2011). 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 Industry and Investment or the user's independent adviser.

From here (Wilcannia) to there (South Africa) and back in 16 Days

After 12 months of planning, talking and reviewing, four members of the Wilcannia Bestprac group boarded various planes and headed west: that is, thousands of kilometres west—destination, South Africa. The trip had been decided upon at a Wilcannia Bestprac meeting at Garry and Tracy Hannigan's property, Churinga Station, in October 2009, and it became the group's key objective for 2010 to visit the mother country where the Dorper originated and to see first-hand Dorper production in a similar arid environment.

After deciding to take the trip, the next priority for the group was to work with McMichael & Associates consultant Jason Southwell. Jason had benchmarked with the group in the past and had also previously travelled to South Africa. Jason planned and organised the itinerary and led the party while it was overseas. The final 'over the line' group consisted of Garry and Tracy Hannigan, Julie and Justin McClure, Jason Southwell and his wife Colleen, and myself [Sally Ware, Livestock Officer (Sheep and Wool) with I & I NSW, Hay].

Arriving in Jo'burg in early November, after an overnight stop, the group immediately flew to the Kalahari Desert farm town of Upington in the far north of South Africa. This is the area where the Dorper thrives; to us, it looked just like Australian pastoral country, with a 200 mm average rainfall, albeit seasonal summer rain. The rains had yet to come, and on day 5 we were followed back into town by a rolling dust storm—just like home during the drought!

We were hosted around the Upington district for 3 days by Deon Heyns, a manager from a local stock agency company known as KLK. Deon is in charge of the company's feedlots and abattoirs, including the Upington feedlot and abattoir. Deon was invaluable, as not only could he take us straight to the farms and venues we were visiting, but also, like all agents, he knew the district and the locals intimately, and under his guidance we started to feel like locals! We did have to overcome the language barrier, as the native west Germanic language Afrikaans is spoken as a first language in northern South Africa, but by day 3, we had Deon speaking nearly fluent Aussie and Deon was able to help interpret the information exchange between us and the farmers.

Our first farm visit was to an isolated property, about 2.5 h south-west of Upington, owned by Martin Compion. Martin is a second-generation Dorper producer and breeds both White Dorpers and Dorpers on three farms. On these farms he carries 1500 stud ewes and 3000 commercial ewes on 20 000 hectares. Martin and his father have been involved in exporting Dorper genetics to many countries, including Australia, but they now concentrate on selling rams through an on-farm auction each year. The country on the farm looked very similar to that of far western NSW, with its red soils, stony ridges and small shrubs similar to miniature blue bush. The stock water is supplied in troughs by bores pumped by windmills; the water is drawn from depths of 90 to 120 metres. Like a lot of South African farmers, Martin uses a rotational grazing system. The paddocks are divided into 300 to 380 ha and the sheep are moved around a five-cell system every 14 days: that is, the sheep are moved sequentially into the next paddock, which is nearly always a grazed paddock. However, as Martin explained, because the paddock is 'fresh' to the new mob, the sheep move around and graze the whole paddock. As there were no trees and, just like at home, the summers were hot, shade at the waters was a priority and Martin had placed home-made metal shade shelters beside each water trough.

Continued on page 22

By Sally Ware
Livestock Officer
(Sheep and Wool)
Industry & Investment NSW
Hay



Industry & Investment

Below: The tour group travelling around a farm in a 'bakkie', or farm ute in the Karoo area. The trick was to dodge the vicious thorns of the acacia trees. Left to right: three farm workers, Julie and Justin McClure, Colleen Southwell, Tracy and Garry Hannigan, Sally Ware and the driver, farm owner Gert Lotter. Photo by Jason Southwell.



Continued from page 21

Supplementary feeding was also part of the farm program, and ewes were fed a high-energy corn-based supplement in troughs beside the water trough from the last trimester of pregnancy right through to weaning. Lambs are weaned from 3 months onwards; the stud lambs go into a feedlot for 6 weeks on a urea-based higher protein supplement and the commercial lambs are taken to a farm situated in the drier Kalahari district.

Ewe lambs are classed at 10 months, before joining, and the culls and wethers are sold over the hooks to the local Upington KLK abattoir once they reach 40 kg liveweight. The average over-the-hooks meat price for lambs at the time of the visit (November 2010) was about \$6.30/kg, with a 20 kg carcass returning about \$126/lamb. Ten staff were employed on the Compion farm. Having such a high number of staff meant that time-consuming activities such as cleaning stock troughs were not an issue, and all waters and fences on the farm were well maintained. Because of the comparatively low wages paid in South Africa, the wage of about one station hand in Australia is equivalent to that of 10 labour units in South Africa.



Above (from top): A mob of Dorper ewes camped on the water at Martin Compion's farm with a constructed shade shelter in the background. The water in the troughs was bore water pumped by windmills; After the auction: Dorper and White Dorper sale ewes at the National Dorper Ewe and Ram sale at the showgrounds in Upington. Photos by Sally Ware.

The biggest issue in the area was low lambing percentages because of deaths from attacks by black-backed jackals. In fact, jackals were causing such a problem (lamb losses from jackals varied in the area from 15% to 20%) that Deon estimated that 10% of his clients were moving out of sheep and into cattle, even though the area was too dry to run cattle. The Compions were trying to discourage the jackals from coming on to the property by using wire-netting boundary fences that were buried into the ground and also by electrifying fences using solar panels and two offset wires. Checking fences and trying to reduce the jackal population on the property was a major issue for the Compions.

Another farm visited in the Upington area was owned by Albert van Niekerk, one of the founding fathers of the Dorper breed. Albert has a 36 000 ha farm about 50 km out of Upington, and he started his stud 'Klipkoppies' in 1965. Albert is one of the original members of the Dorper Society of South Africa and served as President for many years. He has exported Dorper rams and ewes all over the world and has sold semen and embryos to Australia. Over 4000 ewes are run on the farm, with approximately 2000 in the stud flock; the stocking rate is about one Dorper ewe to every 9 to 10 ha. Of the 600 members of the Dorper Society of South Africa, Albert is one of the 200 that provide objective measurement of his rams to his clients. The data collected include weaning weight and post-weaning weight, with a wean index provided in the sale catalogue, as well as the testicular circumference of each sale ram. Two on-farm sales are conducted per year, in May and September. Albert aims to produce a 20 kg lamb over the hooks in 120 days with no supplementary feeding from a hardy, productive South-African-classed type 4 ewe.

The ewes are joined in October and joined again 6 weeks after the lamb is born. The rams are fed a ration in a feedlot for 6 weeks before joining. The lambs are weaned at 7 months into weaning paddocks, with older ewes to act as lead animals. The average size paddock is 500 ha and the sheep are moved into a new paddock (camp) about every 3 months. As on the Compion farm, jackals are a problem, with 15% to 18% of lambs lost to jackals each lambing. Albert has yet to electrify his fences but was considering it as his next move to try to reduce the loss of lambs to the jackals.

While in the Upington area, we attended the National Dorper Ewe and Ram Sale. Fifteen studs across the country sold at the sale, with 138 ewes (110 Dorper and 28 White Dorper) and 286 rams (214 Dorper and 72 White Dorper) sold. The average price for rams was \$2000 and the average for ewes was about \$800. The black-faced Dorpers consistently brought higher prices. The sheep were sold individually by auction in the Afrikaans language, with no objective measurement of the sheep provided. Supplementary feeding of

the sale sheep had also taken place. It is perhaps worth noting here that 24% of the national sheep population are Dorpers (21%) or White Dorpers (only 3%). In the main, the Dorpers are run only in the drier, northern areas ; Merinos and Dohnes (a dual-purpose breed) are considered more profitable in the higher rainfall areas.

Our guide Deon also took us to the small, local Upington abattoir, which is owned by his company and which he manages. A maximum of 1350 sheep or 113 cattle are killed each day, over a 9-hour period. The abattoir is one of only five in the country that meet Woolworth standards. The throughput for sheep is 200 per hour, and 57 staff are employed in total, with most areas manually operated. The carcasses are stamped and graded with a colour code, depending on age. Each carcass is inspected by a government inspector. Carcasses are sold whole, with only the neck, legs and offal sold packaged. At the time of our visit, lambs were being bought for \$7.16/kg liveweight; this was considered a very high price, as there was a shortage of lambs as a result of the dry season. The abattoir aims to produce a carcass in the 16 to 21 kg weight range. As an example of wholesale prices, legs of lamb were sold wholesale for \$10.83/leg and staff could buy a carcass for \$116/sheep.

Farmers receive the data on their lambs the day they are killed, and the abattoir makes payments for stock twice weekly. The killing fee is \$6.50/lamb, or farmers can opt to not pay the slaughter fee and the abattoir will take the fifth quarter in lieu of the slaughter charge. Payment for skins varies from \$8.33/skin from sheep from the Karoo region to \$6.67/skin from the Kalahari region; this is because there are grass seed problems with the skins of sheep from the Kalahari area (i.e. around the Upington district). The skins are sold directly to Italy or via other South African companies to China and Turkey. The meat from the abattoir is sold locally, as well as through Woolworths stores.

Deon's company KLK also runs a sheep feedlot to supply their abattoir. Usually the feedlot contains 3500 lambs, but because of the dry season the numbers in the feedlot had swollen to 8000 lambs. The minimum weight for entry into the feedlot is 26 kg, with the preferred weight in the 28 to 30 kg range. Ram lambs are bought entire, with no discounts paid. Dorper lambs are normally on feed for 36 days and Merinos for 49 to 52 days. It costs approximately \$6.16/lamb to initially process the lambs into the feedlot and about \$12.50/lamb to feed them, owing to the relatively low cost of bagged commercial feed mixes and cheap labour units.

Leaving Upington, we self drove for 7 hours to a town called Cradock, which is in the Karoo region. This is another very arid area, but it is more

mountainous, with various large succulent plants dotting the landscape.

Our local escort was Rodney Raynor, a Dorper classer well known in both South Africa and Australia. The first property we visited was located 3 hours from Cradock, past a town called Graaff-Rienet and across a dusty plain to the base of a high desert range. The area was in extreme drought. The property, 'Willowmore', has been owned by more than 50 years by another well-known Dorper and White Dorper breeder, Gert Lotter. Gert has also exported Dorper genetics to Australia. Once again, jackals are a major issue, and to reduce lamb losses the ewes are brought into small bore-water-irrigated lucerne paddocks near the house for lambing.

Ewes are joined again 6 weeks after lambing. Often sheep bells are placed on one grown sheep in the mob, as the noise of the bell keeps the jackals away. All lambs on this property wear sheep bells during weaning. Because of the current extreme dry, ewes in the paddocks were being given a commercial pellet supplement in sheep feeders, but small monkeys were causing problems by eating the feed in the feeders. Monkey cages, similar to possum traps, were being used near the feeders to control the monkeys. Gert had used a high netting fence to lock up paddocks of prickly pear, which is considered locally to be a useful drought forage for both sheep and cattle. The high fence was intended to keep the large eland antelope from jumping in and eating and knocking down the prickly pear.

Below: Another way of stopping the jackals from taking lambs: placing bells on one sheep in the mob. The sound of the bell scares the timid jackal. These mixed-age White Dorper ewes were lambing in small, irrigated paddocks close to the house.
Photo by Sally Ware.



The second property we visited in the Karoo region was owned by Norman Kroon. Norman owns three farms, one at a nearby town called Aberdeen, one on a nearby plateau, and the one that we visited, on the Karoo flats. Norman has lived in the area all his life, and he considered the current drought the worst he had ever experienced, with the Karoo farm receiving only 113 mm for the year (although the average rainfall for the area is only 200 mm). The farm on the plateau, however, receives an average rainfall of 700 mm a year.

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Norman has implemented holistic resource management techniques on his properties since 1973 and has divided the Karoo flats property into 40 ha paddocks. He runs Merino sheep and native Nguni cattle (from Zulu country) together; the Nguni are not as well muscled as European breeds, but they are quiet, drought tolerant and tick resistant. The average calving rate is 95% and the lambing rate is 90%. Using grazing charts, Norman moves the stock every 2 to 5 days and aims for a 9 month rest period for the grazed paddock. This farming system allows for a relatively high stocking rate, with one ewe run per hectare or 1 cow per 16 ha. Norman is aiming to stimulate the growth of the native grasses with his grazing regime and to reduce the abundance of the unpalatable resin bush. Urea licks and chopped aloe vera plants were being used to provide a source of protein and green chop during the current drought.

As with every property we visited, jackals were a major issue among the lambing ewes. However, on the plateau, baboons were also an issue, both by killing adult wether sheep and unscrewing plastic water pipe fittings. Maremma guard dogs are now used to protect the sheep, and more solid steel pipes are used in the watering systems! The cost of shearing by labourers using hand shears

was 35c/head, compared with approximately \$6.50/head back at home.

In summary, the trip certainly provided the travelling group with an insight into Dorper production and rangeland management in the northern part of South Africa. The similarities between western NSW and South Africa were obvious, from the arid environment to the size and isolation of the properties and some of the on-farm sheep-production systems. The national sheep population is declining in South Africa because of a number of outside-the-farm-gate factors. The first issue is predation, which is making farms—particularly those running a single purpose animal such as a Dorper—unsustainable (no lambs no income). Another problem is the theft of stock from farms owing to the continuing high increase of the country's population; and a third major issue is the increase in number and size of game parks, which are buying out family farms and contributing to the predation problem. Perhaps the editorial quote we found in the November 2010 South African *Farmer's Weekly* says it all:

... South Africa has the best livestock genetics for arid regions in the world. So instead of having Mongolia crawling with Australian Dorsers, why can't they be Northern Cape animals?

'Dankie' (thank you) South Africa for an extremely interesting 16 days.



Above: The tour group on a farm in the Karoo region. L to R: Julie and Justin McClure, farm owner Norman Kroon, Sally Ware, Colleen Southwell, Garry and Tracy Hannigan, local host and well known Dorper classer Rodney Raynor. Front: Jason Southwell. *Photo by Jennie Kroon.*



Lower Murray Darling CMA Photographic Competition

2011 theme:

"Breaking the Drought"



The LMD CMA's vision is to inspire our community to work together for improved management of our natural resources and to build a resilient future. If you have a photograph that reflects our theme of *"Breaking the Drought"*, then this is your opportunity to share your vision.

Categories include:

- Primary School
- Secondary School
- Open - over 18 years

Prizes for First and Second in each category.

Further details from Susan on 03 5021 9459 or
mobile 0429 035 961
www.lmd.cma.nsw.gov.au

Free entry. Entries close 4.00pm
Friday 29 July 2011



Breaking the Drought - Entry Form

Name

Postal Address

Phone Number Mobile

Fax Email

Please tick one category you are entering your photograph in

Primary School Secondary School Open (over 18yo)

Title of photograph

File name of photo (if relevant)

Description of the photograph, including subject and location details (within the Catchment).

I declare that the information I have supplied in this entry form are true and correct, and that I agree to abide by the rules of entry.

Signature Date

(If you are under the age of 18 on the closing date of the competition, please ask a guardian/parent to sign on your behalf.)

Please complete one entry form for each photograph you are entering.

Entries can be dropped at the Lower Murray Darling CMA Office or mail to:

Lower Murray Darling CMA
2011 Photographic Competition
Attention: Susan Walla
PO Box 363, Buronga NSW 2739

www.lmd.cma.nsw.gov.au
03 5021 9460

Rules of Entry

- The "Breaking the Drought" Photographic competition is open to ALL residents of the Lower Murray Darling Catchment excluding LMD CMA Board, staff and their immediate families and professional photographers. The judges decision is final and no correspondence will be entered into.
- Subject matter is restricted to the locality of the Lower Murray Darling Catchment .
- Entries can be submitted as colour, black & white or sepia-tone photographic prints, or digital jpeg files. Photographic prints must be 7x5 inches (13x18cm) in size. Digital jpeg files can be submitted on CD/DVD disk, with a maximum file size of 15MB per photo and a preferred resolution of 300dpi. Negatives, slides and related media will not be accepted. Entries must be unpublished and cannot have won other awards or competitions.
- Lower Murray Darling CMA will not be held responsible for any loss, damage or non-receipt entries however so caused.
- There is no limit on the number of photographs you can enter—however, each entry must be accompanied by a separate Entry Form. Submissions may be mounted but not framed. Negatives or larger digital file sizes of winning entries may be required to allow enlargement to display size.
- Each print or disk must bear the entrant's full name, address, contact telephone number, location of the photograph and the category you are entering.
- All entries submitted in the competition will not be returned.
- The Lower Murray Darling CMA reserves the right to use images submitted in publications and promotional material. The creator of the image reserves the copyright and has the right to continue to produce, publish and distribute the photograph entered into this competition. It is the entrant's responsibility to obtain any and all permissions of photograph subjects. The Lower Murray Darling CMA also reserves the right not to publish works submitted in the "Breaking the Drought" photographic competition.
- Participants are advised to read the terms and conditions of the competition carefully. If a photograph is received that does not meet the rules of entry for the competition, it will still be retained in the Lower Murray Darling CMA Photo Library and LMD CMA reserves the right to publish or not publish the photograph in publications and/or promotional material, but these photographs will not be judged in the competition.
- In the event that a prize winner is subsequently found to breach the terms and conditions of entry, their entry may be ruled invalid. The entrant will be liable for any costs incurred and must return the prize(s) received.
- Entries must be received at the Lower Murray Darling CMA office by 4.00pm on Friday 29 July 2011 or final mail entries postmarked on this date.

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Pooncarie Field Day

**Saturday, 7th May 2011
at the Pooncarie Race Course**

Events include:

- The Tri-State blade shearing title
- Sheep & goat dog trials
- Fleece comp & pastoral wool show
- Pen of 4 lambs
- Machine-shearing competitions
- Sunraysia Toyota ladies' trailer-reversing competition
- Whip-cracking competition & demonstrations
- Well-worn Akubra & boot art competitions
- Bush photo competitions
- Children's competitions
- Evening entertainment; full catering & bar facilities

For more information email: pooncariefieldday@bigpond.com or contact Gus Whyte Ph: (03) 5027 0230 • Rachel Strachan Ph: (03) 5027 9209
Mark the date in your diary for a great family day out!



You are invited to a: **Managing Scanned Ewes and Sheep Health Workshop**

Tuesday 10 May 2011: Hay
Wednesday 11 May 2011: Mossgiel
9.00am to 3.00pm

To reserve a place in the Workshop, please RSVP to Sally Ware on 0429 307 627; 02 6993 1608 or sally.ware@industry.nsw.gov.au by Friday 6 May 2011.



Industry & Investment

Making More From Sheep



Deadline for articles for the next Issue 137 of the Western Division Newsletter is Monday 16 May 2011. Please send articles to Sally Ware, I&I NSW, PO Box 393, Hay 2711, email to sally.ware@industry.nsw.gov.au or phone (02) 6993 1608.

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