

Western Division newsletter

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Produced for landholders in
the Western Division of NSW



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Dust rolls in over 'Humewood', Booligal



This photo was taken by Simon Booth of 'Humewood' Booligal on 1 February 2005. It was the 'best' dust storm on record at Humewood according to Simon. At the completion of the storm, half the roof of the woolshed in the photo had gone. Unfortunately, only 17 mm of rain fell as a result of the change.

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by Sally Ware, Rangelands Officer, NSW Department of Primary Industries, Hay

My last editorial for this newsletter was May/June 2003. In that edition, over 50% of the articles concentrated on drought issues. Nearly two years later, here we go again, this big dry just keeps rolling on ... with 61% of the State still drought declared in January. Simon Booth's photo in this issue is a beauty – a big westerly dust storm arriving at Simon's property, located near Booligal, at dusk on February 1.

News from the Hay NSW DPI office – we sadly farewelled our very capable Drought Support Worker, Maryanne Kelly, at the end of December. Landholders wishing to access drought support information in the Hay/Balranald/Wentworth area now need to contact their local Rural Financial Counsellor or Drought Support Workers, Julie Greig located at Condobolin (ph: (02) 6895 1015), Don Burrowes located at Deniliquin (ph: (03) 5881 5766) or Lyn Leigo located at Bourke (ph: (02) 6872 2077).

News from the Bourke NSW DPI office is the appointment of a new Livestock Officer (Sheep and Wool), Gemma Junk. A big welcome to Gemma – see details of Gemma's appointment in this edition.

Finally, a big thank you to the authors for contributing articles for this edition. Your time and effort involved in writing articles is appreciated.

To all the readers of this magazine, I hope you find the articles useful and interesting.

Hot tip: consider ordering a copy of the latest Glove Box Guide on plants. The Guide is on trees and shrubs and is written by Peter Milthorpe and Margaret Wynne. Both authors are based at NSW DPI in Condobolin and there is an order form in this edition. Despite the contents of the book being based on plants in the Central West of the State, there are many species in the book common to the western areas.



NSW DEPARTMENT OF
PRIMARY INDUSTRIES



Department of
Infrastructure, Planning and Natural Resources

The Western Division Newsletter is jointly produced by NSW Department of Primary Industries and the Department of Infrastructure, Planning and Natural Resources with funding assistance from the Department of Environment and Conservation (NSW) and the Western Catchment Management Authority.



New Livestock Officer Bourke

by Gemma Junk, Livestock Officer, NSW DPI, Bourke

Following a 6 month training period made up of 4 months in Young and time spent at Trangie and Broken Hill, I will be settling in Bourke as the new Sheep & Wool Officer with the NSW Department of Primary Industries. My role with DPI will be to provide a rangelands advisory service to graziers in the Bourke and surrounding districts.

The majority of my experience with agriculture and in particular livestock, has been gained through an active involvement on the family property and casual positions in the areas of agricultural consultancy and artificial breeding. This practical experience has been combined with the completion of a Bachelor of Applied Science in Agriculture through Charles Sturt University at Wagga Wagga.



Having grown up in the Bourke area, I am looking forward to my new role with the DPI and I am very eager to meet with local landholders and to follow up any concerns or ideas that you might have.

WEST 2000 Plus evaluation

by Angus Atkinson, Acting WEST 2000 Plus Executive Officer

In the last eight years the State and Federal Governments have invested over \$30 million into the Western Division through WEST 2000 Plus and WEST 2000. To determine the success of the programs an independent evaluation of the programs will be conducted over the next 6 months.

A major purpose of the evaluation is to determine how successful WEST 2000 Plus and WEST 2000 have been in using the government's assistance and to recommend ways of improving future programs.

A major part of the evaluation will involve a survey of Western Division landholders to gather their opinions on the programs. The survey will entail 200 telephone interviews and 60 case studies. The telephone interviews will run for around 20

minutes and the case studies will generally require a farm visit and a face to face meeting to discuss their involvement with the program. All the information gathered during the surveys will be treated in the strictest confidence and under no circumstances will any individual or farm business involved in the evaluation be identified in the report.

Landholders will be chosen at random and contacted by telephone to determine if they are interested in participating in the evaluation. It is not compulsory for landholders to be involved in the evaluation.

URS Australia will be conducting the evaluation on behalf of the WEST 2000 Plus Management Board. URS is a well respected organisation with significant experience working with landholders and evaluating programs based in the Australian rangelands. URS have performed a number of evaluations of similar programs throughout Australia and performed the evaluation of WEST 2000 in 2001.

If landholders have any questions regarding the evaluation they should contact WEST 2000 Plus on 1800 068 072.

Tactical grazing management workshops

by Peter Jessop, Agronomist, NSW DPI Dareton

Are you interested in the finer points of sustainable grazing management in the rangelands? Are you new to the rangelands? Or do you just want to learn more about your pastures and how they function? Then you should consider participating in a Tactical Grazing Management Workshop conducted by the NSW Department of Primary Industries.

Tactical Grazing Management Workshops involve groups of graziers coming together on a participating group member's property to learn about practical sustainable grazing management and the tools and techniques available to help graziers implement and monitor their pastures performance. Most of the workshop time is spent in the paddock, not in a class room, learning about their pastures and better ways to manage them. The workshops encourage discussion by participating graziers in conjunction with officers from NSW DPI.

The suggested workshop format consists of four sessions conducted as two full days or four half days spaced at monthly intervals – although, the format and timing is up to the participants.

Workshop Overview:

Day 1

- Introduction
- Understand how the landscape functions
- Set a paddock management objective
- Estimate available forage for livestock and burning management

Day 2

- Estimate total grazing pressure including kangaroos
- Establish a pasture monitoring system
- Score animal condition and understand its implications for animal production
- Summarise the workshop series

At the end of the workshop series, participants will be able to:

- Formulate a management objective for their paddocks taking into account both production and ecological criteria.
- Formulate a management strategy to achieve the objective.
- Use the techniques outlined in the 'Glove Box Guide to Tactical Grazing Management' to implement the strategy and to monitor the results.

Cost: \$480.00

If you would like to know more please contact Peter Jessop at the NSW Department of Primary Industries, Dareton (03) 5019 8407 or contact your local DPI office.

Government information at your fingertips

by Fiona Drum, Information and Library Service, NSW Dept of Primary Industries

Bookmark this site for handy access: <http://www.australia.gov.au/>

Finding government information is not always easy! However it does get easier when you search the Australian Government web site at <http://www.australia.gov.au/>

Look for the section you want e.g. education, health, employment, business, or use the search feature to go directly to the information you're seeking.

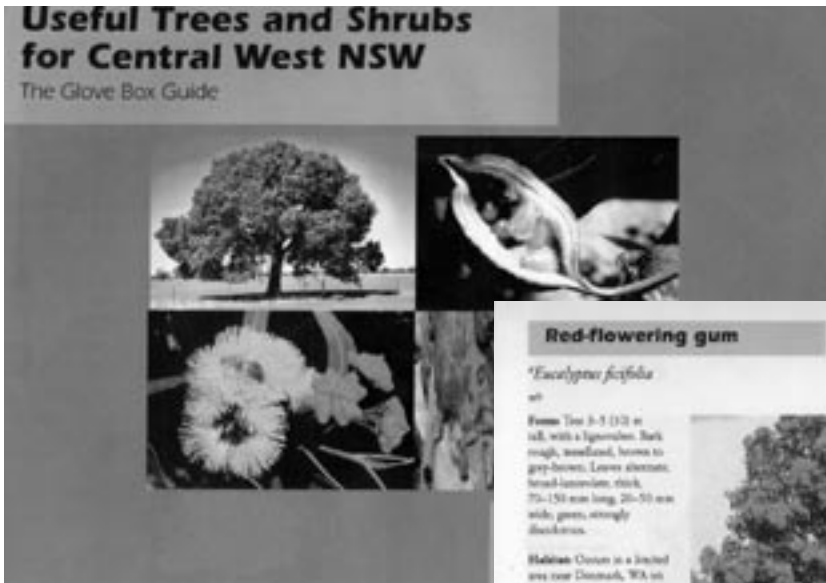
Information about employer responsibilities is found under the Businesses link along with other business

related advice covering legislation, small business, insurance and much more.

Health is a major section with information about medical conditions, links to a wide range of health services, as well as guides to nutrition and fitness.

Students can find Australian facts and figures via the link to the Australian Bureau of Statistics, weather and climate information, economic facts about each State, and there is even a Student Homework Help page with loads of links to all sorts of interesting sites.

Book promotion



Peter Milthorpe and Margaret Wynne, NSW DPI Condobolin, have put together a fantastic book – *Useful Trees and Shrubs for Central West NSW*.

The book is in the form of the popular Glove Box Guides, being small enough to carry with you, with strong, glossy paper so it can be used in the field without ruining it and it has beautiful colour photographs of the trees, leaves, flowers, buds, fruits and seeds to help with identification.



75 trees and shrubs are shown in the book. They are trees and shrubs that are suitable to this environment and that have proven useful. The work Peter and Margaret have put together has come from research carried out on the Condobolin Research Station, knowledge from publications and Peter's years of experience.

CWFS and NSW DPI are selling agents for the book. If you would like to order your book through CWFS please fill out the form below and send it to us. A receipt will be sent to you with the book.

Book orders \$28 + \$3 postage and handling per book

For more information: CWFS, PO Box 171, Condobolin NSW 2877; Phone (02) 6895 1001; Fax (02) 6895 2688

ORDER FORM



Please send me _____ copies of *Useful Trees and Shrubs for Central West NSW*.

Books @ \$28 + \$3 p&h (\$31) per copy.

I enclose a cheque for \$ _____



Please send the book(s) to:

NAME: _____

ADDRESS: _____

Contact phone number: _____

Please mail the order form and cheque to: CWFS, PO Box 171, Condobolin NSW 2877

Huge increase in mulesing training and accreditation for NSW

by Ian Evans, Livestock Officer
Sheep and Wool, NSW Sheep
Ectoparasite Co-Ordinator,
NSW Department of Primary
Industries, Deniliquin



Participants at a mulesing training day in the Wentworth district

In response to the increase in public scrutiny of mulesing practice, the NSW Department of Primary Industries (formerly Dept. of Agriculture) in conjunction with the Rural Lands Protection Boards, NSW Farmers' Association and the Australian Wool Innovation, will dramatically increase the number of mulesing training and accreditation workshops held in NSW this year.

A number of mulesing training days were held across southern NSW in 2004 and the response from participants was overwhelmingly positive. The average rating for every section of the workshop was from Very Valuable to Essential Information. Having Mr Gordon Godson, one of Australia's foremost mulesing contractors, as Chief Instructor, made the job just a bit easier of course!

Principal Co-Ordinator for training and accreditation in NSW is Ian Evans, NSW DPI Livestock Officer, Sheep and Wool and

State Ectoparasite Control Co-Ordinator, based in Deniliquin.

At present, NSW DPI is urgently seeking property owners or managers to host training days across NSW. Ideally, these would be the earliest possible lambing flocks or mobs, however, later lambing groups will be needed to conduct the many accreditation workshops which (it is expected) will follow the first round of training.

So if you have an early lambing flock or an early lambing mob that you would like marked and mulesed for free, or you wish to undertake some mulesing training and accreditation, call Ian Evans on telephone number (03) 5881 9920 (office) or 0427 102 287 mobile.

Tough year for wheat trials

by Andrew Schipp, District Agronomist, NSW DPI, Hay.

Results from wheat variety trials reflected the very dry finish to the season experienced in south-west NSW in 2004. While yields across our trial sites were up to 75% below long term average, unfortunately some farmer's paddocks were too light-on to put the harvester in. NSW Department of Primary Industries had several wheat variety trials in south west NSW in 2004. Sites included Kyalite, Euston and Swan Hill in the west with Merriwagga, Weethalie and Beckom on the eastern side.

Growing-season rainfall (April to October) for Kyalite was 138 mm. While not dramatically below the median of 164 mm, the virtual absence of precipitation during the critical flowering/early grain-fill period in September and October took its toll. Variety yields confirmed this with the early-flowering lines performing much better than late-maturing lines.

One trial site near Swan Hill received freak storms early and late in the season, pushing average site yields to 2.9 t/ha. At this site some short-season varieties (eg. H46) and some later flowering types (eg. GBA Sapphire, Ventura, Janz) performed best.

Of the currently available varieties, Yitpi performed best overall across the majority of trial sites, especially those that had a tight finish. This variety is well adapted to the very south-west corner of NSW. It has the necessary resistance to Cereal Cyst Nematode and its tolerance to excess boron may also be an advantage. A big plus is the variety's inherently large grain size which helps to avoid high screenings penalties.

The next best performing variety in terms of yield at dry sites was Wyalkatchem – a popular variety in Western Australia. The main drawback for local growers would be the ASW classification and lack of CCN resistance. The variety's stripe and stem rust susceptibility may not be such an issue in low rainfall areas.



Gary Bond (NSW DPI Finley) harvesting wheat trials

Acknowledgements: These trials are only possible with the generous assistance of our co-operator farmers. Special thanks also to Gary Bond (DPI Finley) for doing most of the work.

Other released varieties that were consistently in the top ten were GBA Ruby, CLF Janz, Ventura and H46. Ruby has performed well in some northern NSW trials and CLF Janz is becoming a popular choice in brome grass situations. The recently released Ventura is from the Narrabri-based Sunprime program and H46 is similar to the old H45 but claims to have better rust resistance.

The experimental variety RAC1055, an early flowering line with possible APW or AH quality, performed even better than Yitpi in these trials this year and appeared best overall. This variety is up for potential release by Australian Grain Technologies (SARDI/Adelaide University) in 2005. It has CCN resistance and similar grain size to Yitpi.

The trial included three durum varieties as well. These all performed poorly at the dry sites with nearly all bread wheat varieties yielding more. The durum varieties look like they are only an option in years that allow early sowings into paddocks with good subsoil moisture. At the wetter Swan Hill site, 3 of the durum varieties were still 10–25% below the site average for yield but the variety Arrivato yielded very similar to Yitpi.

Before making a change to variety-mix growers are urged look carefully at the quality classification and disease profiles of any new varieties. Of assistance is NSW DPI's Winter Crop Variety Sowing Guide 2005 which is now available.

'Furlong' trial work continues despite 19 months of drought

by Sally Ware, Rangelands Officer, NSW DPI, Hay

Work continues on a grazing pressure trial on Jon and Naomi Vagg's property, despite the worst drought in living memory. Situated west of Hillston, their property 'Furlong' is located in the Hillston RLPB which has been continuously drought declared since April 2002. The trial is one of eight trials involved in the Western Total Grazing Pressure (TGP) Project. The Western TGP Project is funded through the WEST 2000 Rural Partnership Program. The Vaggs are running the trial in partnership with the NSW Dept of Primary Industries. The Furlong trial started in early 2002.

The aim of the trial is to determine whether the adoption of a rotational grazing system has beneficial effects on rangeland pastures and animal production. A 820 ha paddock has been subdivided into four paddocks, one paddock is continuously stocked whilst the other three paddocks are rotationally grazed. Ongoing drought has caused the trial to stop and start as trial paddocks



Jon and Naomi Vagg of Furlong (right) with Sally Ware, Rangelands Officer, NSW DPI, Hay

have required destocking. However, staff from NSW DPI has continued vegetation sampling on the trial site very six months. Preliminary results show the ground cover is continuing to decrease in all paddocks as the drought continues, despite the destocking of sheep.

Kangaroo numbers down in the west

by Nicole Payne, Manager Kangaroo Management Program DEC

In a trend similar to past drought events, kangaroo populations continued to fall during the annual kangaroo survey in the western plains commercial harvest zone last year, resulting in a decreased quota for 2005.

Across the west, kangaroo populations on the whole decreased by about 17 per cent between winter 2003 and winter 2004. The biggest declines were at the eastern end of the western commercial harvest zone where declines in all species surveyed were recorded, while in the north west numbers of red kangaroos were up. These statistics are similar to trends during previous drought events, which show populations

can take a few years to recover once conditions improve.

The decline in population estimate is reflected in a lower quota for commercial kangaroo harvest in 2005 at 1,060,083. This equates to 15.75% of the estimated population.

The kangaroo population is estimated annually in the western commercial zone in a low altitude aerial survey where kangaroo numbers are counted. The raw figures are collated and adjusted using correction factors and an estimate of the population is produced. The Commonwealth Government then approves the harvest quota, based on these estimates.

Sturt National Park a hive of research activity

by Jackie Roberts, Senior Public Affairs Officer, Dept of Environment and Conservation

Sturt National Park, in the far north-western corner of NSW, is attracting plenty of research attention after the discovery there in 2003 of a species thought extinct in NSW.

National Parks and Wildlife Service Tibooburra Area Manager Dr Ingrid Witte in conjunction with Dr David Croft from the University of NSW was supervising an Honours student and a Diploma Biologist from Germany who captured several Dusky Hopping mice, including lactating females, in September 2003.

This discovery led to the NSW Scientific Committee changing the status of the Dusky hopping mouse in NSW from 'presumed extinct' to 'endangered'.

Now one of the biologists who made the amazing discovery, Ulrike Kloecker, has returned with a scholarship from the



Dusky hopping mouse

University of NSW, to study the ecology of the dusky hopping mouse and what threatens its persistence.

While completing her PhD, for the next three years, Ulrike will look at such aspects as predator/prey interaction, competition with other small mammals/granivores/herbivores and habitat alteration.

NPWS Tibooburra Pest Officer Daniel Hough will also assist in part of the project looking at experimental pest control in the area where the Dusky Hopping mouse has already been discovered.

But there's more research on its way. In April an Honours student from the University of Potsdam in Germany will look into the biodiversity of the interdune country. Simon Scholze will spend six months conducting surveys in the sand dunes in Sturt.

Both research projects will be overseen by Dr David Croft from the University of NSW and in the field by Dr Ingrid Witte.

Records of a number of threatened species in Sturt National Park have been very sparse, possibly because research has been limited since the early 1980's. The intensive work planned and conducted now should be extremely beneficial.

But even in times of low numbers, the quota is rarely used. Looking back at 2004, tags were issued for only 75% of the approved quota in the western plains zones. At time of writing harvest data for 2004 was not finalised but to 1 December 2004, about 61% of the approved quota had been taken in the western plains, ranging from 75% in the Narrabri zone to 44% in the Tibooburra zone. While in 2003, just 50.6% of the approved quota was taken.

The NSW Kangaroo Management Program issued 4,774 commercial licences last year, a decline on the previous year of about 9 percent.

‘Trigger Point’ – a useful concept in climate risk

by Paul Carberry, Advisory Officer, Climatology, NSW DPI Tamworth

Making management decisions that involve taking a chance on future climatic conditions are always difficult – and more so when rainfall is not strongly seasonal, as in western NSW.

Sometimes there can be good indicators of likely future conditions, as revealed in the recent project ‘Improving Seasonal Forecasts for Wool Producers in Western NSW’ but this project also concluded there are times of year and even some whole years when indicators are very neutral. In these times producers need a backup guide to decision making.

Having a ‘rule of thumb’ about when are some critical dates to make decisions while there are no strong indicators of likely future grazing conditions will assist stocking rate planning under deteriorating circumstances.

Alternatively, a rule of thumb about when might be the best time to buy if the season already looks promising but there are no strong indicators of future conditions, might assist in getting the best productivity, while maintaining prudent risk management.

‘Trigger points’ are calculated ‘rules of thumb’ based on historical plant growth patterns. They are times of the year – calendar dates – when the prospects of future pasture growth are high or low based on the long term record. Understanding this long term growth pattern will be useful, when combined with first hand knowledge of the current season, in deciding whether it’s time to buy or sell. Naturally, management decisions should also take into account all factors that could impact on the outcome of a decision such soil moisture, pasture type and prices etc.

The project mentioned above has analysed plant growth patterns in a number of locations in western NSW, taking into

account soil types, rainfall, temperatures, evaporation, plant species present and average grazing pressures, to provide a bi monthly estimate of the median plant growth rate.

This allows managers to pinpoint times when growth for a while after this is very likely to be slow or times following which there is historically a good chance of strong growth. These provide ‘Trigger points’ for decision making, in the absence of other indicators.

The project team is preparing to release these growth analyses along with the identified strong indicators of both good and poor seasons in a new Glove Box Guide to be available by mid 2005.

The preparation of a ‘Glove Box Guide for Climate Risk Assessment’ is well underway. The planned ‘Glove Box Guide’ will contain, among other things:

- An outline of Climate systems relevant to Australia, especially western NSW.
- Where to get climate information and what it means.
- Using historical climate data in managing climate risk
- Useful seasonal climate outlooks. What they are and when they apply.
- Trigger points for Graziers. Plant growth patterns in western NSW.

In addition to basic information on the functioning of weather and climate systems, this guide outlines the latest understanding of the application of modern seasonal risk assessment systems to the management of grazing enterprises. It is a publication intended for practical use and one that should find frequent application whenever pastoralists grapple with the climatic uncertainties that confront livestock production in western NSW.

The project ‘Improving Seasonal Forecasts for Wool Producers in Western NSW’ is supported by Land, Water and Wool – a partnership between Australian Wool Innovation Limited (AWI) and Land & Water Australia that focuses on sustainable and profitable wool production.

AussieGRASS Australian Grassland and Rangeland Assessment by Spatial Simulation

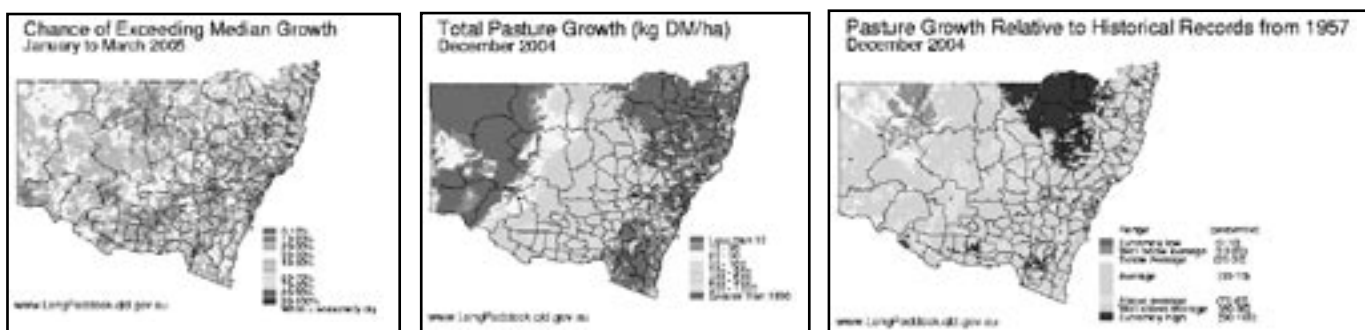
by Peter Jessop, Agronomist, NSW DPI Dareton

Those of you familiar with Rainman Software will already know about AussieGRASS. For those of you who haven't used AussieGRASS for a while or just haven't heard of it, here is a brief summary.

AussieGRASS is a project which utilises spatial simulation techniques and computer facilities to generate theme maps of total

and relative rainfall, pasture curing index, grass fire risk, total pasture growth, pasture biomass and pasture growth relative to historical records dating back to 1957. Coloured theme maps are available for every state in Australia as well as the NT. So if you are interested in making comparisons of rainfall with your pasture growth in the past or with what it may be in the future then start up your computer and have a look. It's free!

To access AussieGRASS visit the Queensland Government Long Paddock Web Site: www.longpaddock.qld.gov.au/ and follow the AussieGRASS Project heading in the Rainfall and Pasture Growth Section. Some examples of theme maps follow.



Drought feedlotting principles

by Geoff Duddy,
Livestock Officer (Sheep and Wool), NSW DPI Yanco

An estimated 61% of NSW continues to be drought declared. While State Government relief measures will assist in the short term, most wool and prime lamb producers are faced with a series of decisions relating to stock management, feeding (survival or production) and post-drought recovery. To assist producers NSW Department of Primary Industries (Agriculture) have available Agnotes DAI/39 (Drought Feeding and Managing Sheep) and DAI/42 (Feedlotting Lambs).

Producers unable to finish lambs or maintain breeding stock body weights in deteriorating paddock conditions are increasingly looking to feedlot systems on-farm. The decision to feedlot must be made on economic and not emotional grounds

and to be successful a number of basic feeding and management requirements should be met.

General Principles:

- Provide 10 to 50 metres square per animal - doing so reduces energy requirements and minimises erosion of the site
- Choose a site with shade and shelter particularly if stock are bare shorn – a sheep/lambs energy requirements increase during cool, windy weather
- High fibre and salty rations and saline water will increase water requirements and intake. If possible provide an adequate supply (3–5 litres/head/day) of clean water
- Provide adequate trough space per animal.
 - Open troughs (requiring daily feeding) can be used however such systems tend to disadvantage the shy feeders within a mob, increase labour input and may increase grain waste. 10 to 15 cm of trough per animal is adequate.
 - Self feeders will reduce labour requirements and should be spread across the feedlot to allow shy feeders access to feed throughout the day. Feeders will increase ration intake,

Continued on page 14

Boer buck trial at Bushley Station

by Trudie Atkinson and Greg Curran, NSW DPI, Broken Hill



The delivery of 140 Boer bucks to Bushley Station on Saturday the 12th February will mark the start of a trial to investigate Boer buck survival and performance in pastoral areas.

Members of the Commercial Division of the Boer Goat Breeders Association of Australia (BGBAA) in conjunction with Greg Church (Bushley Station, Wilcannia) with assistance from staff at NSW DPI, Broken Hill have developed the trial over the past six months.

The trial will look at a number of issues including the optimal age to introduce bucks into pastoral areas, acclimatisation and the effect of implementing a managed joining program. The results will provide solid evidence of the influence of these factors on how well Boer bucks adapt and perform.

‘The purpose of the Commercial Division of the BGBAA is to promote goat farming utilising Boer genetics. Boer breeders would like to see an increase in the number of Boer bucks use for breeding in pastoral goat meat enterprises,’ said Laurie-Bere Streeter, Commercial Director of the BGBAA.

Greg Church said ‘I have seen the benefit of crossing Boers over my bush does; the

progeny grow and reach target sale weight faster than feral-origin goats. Overcoming the issues I currently experience with Boer bucks’ survival and performance by implementing improved management has the potential to further improve production’.

Ten Boer breeders have donated a total of 140 bucks to use in the trial. The bucks have deliberately been selected from a number of different regions and climatic zones, across NSW and southern Queensland. The bucks will range between four to twenty months of age.

The trial will be conducted in two phases. Phase one of the trial will investigate how the bucks survive and adjust to the pastoral conditions while being acclimatised in a small paddock (400 ha). An objective comparison will be made between the survivability of younger versus older bucks during this period of acclimatisation. In addition, the performance of bucks from different studs, which have been run under different climatic conditions and management regimes, will be noted to try and identify factors that affect the way the goats adjust to the pastoral environment.

The second phase of the trial will explore the impact of implementing a managed

joining program. A managed joining will be directly compared to an unmanaged joining. The managed joining will involve supplementary feeding the bucks prior to joining, joining in a small paddock (1200 ha) to increase buck/doe contact, and joining for a period of 6–8 weeks (depending on seasonal conditions). For the unmanaged joining, the buck will not be supplementary fed prior to joining and joined in a larger paddock (3237 ha)

for period of 90 days. The does will be pregnancy scanned and kidding percentage recorded.

It is hoped the trial will identify a series of ‘best practice’ management techniques that Boer breeders and pastoral producers can implement to improve the performance of Boer in pastoral areas. Regular updates will be published in the Western Division Newsletter. Two field days are planned during the course of the trial, which will provide an excellent opportunity for Boer breeder and pastoral goat producers to meet and discuss the outcomes of the trial.

Wildlife benefiting from better conditions and pest control

by Jackie Roberts, Senior Public Affairs Officer, Dept of Environment and Conservation

The Department of Environment and Conservation’s results from the latest helicopter surveys of the Gap and Coturaundee Ranges near Broken Hill, indicate the state’s only wild Yellow-footed Rock-wallaby colonies are showing signs of recovery from drought.

The colonies in Mutawintji National Park have been surveyed in different formats since 1980, but the current and most efficient, effective method involves three observers in a helicopter flying low and slow over the survey area.

The methods used and area surveyed have been consistent since 1995 and a comparison shows that after a decline between 2001 and 2003, populations have again started to increase.

Numbers at the Gap are at their highest level in more than ten years, while at Coturaundee Range, numbers appear to again be on the increase after a dramatic drop between 2001 and 2003.

The increase is attributed to improving conditions in the wallaby habitat, after an extended period of below average rainfall and a declining food resource.

Fox and goat control programs have been a large contributing factor, but despite the signs of a possible recovery from drought,

numbers of the endangered animal remain at critical levels.

Meantime pest programs right across the Broken Hill NPWS area are helping to knock feral animals out of the competition for food and shelter of many native species.

In the last twelve months more than five thousand goats and more than four hundred pigs have been removed from three parks in the Broken Hill area.

In Kinchega National Park air culling netted 117 goats and 87 pigs, resulting in current numbers being at very low levels.

Still in Kinchega, spotlight surveys are continuing at three monthly intervals, showing rabbits in very low numbers.

In the 195,000 hectare Paroo-Darling National Park, two licensed goat mustering contractors have been operating for all of 2004, removing 3,415 goats. Two air shoots during the year saw 320 pigs culled.

While at Mutawintji National Park a licensed goat muster contractor has rounded up 1656 goats over the course of the year.

Weed infestations in the Broken Hill area have been minor mainly due to the drought, although some Bathurst/Noogoora burr spot spraying has been carried out around ground tanks.



Yellow-footed rock-wallaby

growth rates and feed conversion efficiency. From 5 to 10 cm per animal of trough space is recommended

- Energy is the single greatest limiting factor during drought. Select feeds on a dry matter basis that will meet requirements for energy such as cereal grains or pellets.
- Protein requirements for growing lambs are higher than mature animals. Light lambs (15–35 kg liveweight) will require from 16 to 18% protein and 10 to 12 megajoules of energy for optimum growth rate. Cereal grain diets alone will not provide adequate protein and should be supplemented with high protein feeds/meals if available. Lambs approaching trade weight (>35kg) require less protein (from 12 to 14%) and can be generally finished on high cereal grain rations with reasonable quality hay or silage if available
- If possible introduce lambs to feed prior to weaning. Rations should be introduced slowly over a 2 to 3 week period and include (on a weight basis):
 - 1% salt (increases ration and water intake and provide sodium)
 - 1% limestone (provides calcium and helps to buffer acid levels)
 - 1–2% sodium bi-carbonate (buffers acid levels produced during fermentation of high starch feeds such as cereal grains, corn, peas etc). Bentonite (a clay) may also be used but will tend to slow gut passage and may irritate the rumen. It is not a 'true' buffer. Acid produced during grain fermentation in the gut is actively bound to the bentonite's clay surface and removed from the stomach.
 - 1–2% urea (optional, should only be used if cereal grains are low in protein). Urea is converted to ammonia within the

rumen and used to form additional protein able to be used by the animal. It is extremely toxic and should be carefully introduced.

- Provide reasonable quality hay if possible. Sheep require 10–15% crude fibre in their diet for normal rumen function and high grain rations will seldom meet requirements alone. Hay may be fed in racks or every 2nd day to feedlot lambs. Ad-lib round or square bale feeding is likely to increase hay waste and may lead to substitution of hay for grain, reducing grain intake and growth rates.
- If using by-product or agro-industry wastes consider palatability, digestibility, cost per tonne of dry matter, transport costs and the issue of chemical residues.
- Continue to monitor stock condition, growth rates and feedlot cost/benefits. If unable to achieve good growth rates or maintain breeding stock in store condition re-evaluate inputs and options available (sale, agistment, contract feeding, paddock supplementation etc)

Your local NSW Department of primary Industries (Agriculture) Sheep and Wool Advisory Officer can assist with all drought, supplementary and feedlot management inquiries.

Training survey results

Readers of the newsletter will be aware of the training survey which was inserted in the late 2004 edition. My thanks to all those who responded.

Just over 50 people responded to the survey and some valuable information was gained. The opportunity is still open for people to respond or make contact regarding the survey.

The survey was initiated as a result of the cessation of full-time training at Murrumbidgee College of Agriculture and hence the Pastoral Property Management Program. The results of the survey indicated a very low demand for future provision of the program however a number of people indicated interest in training for their son or daughter for the future.

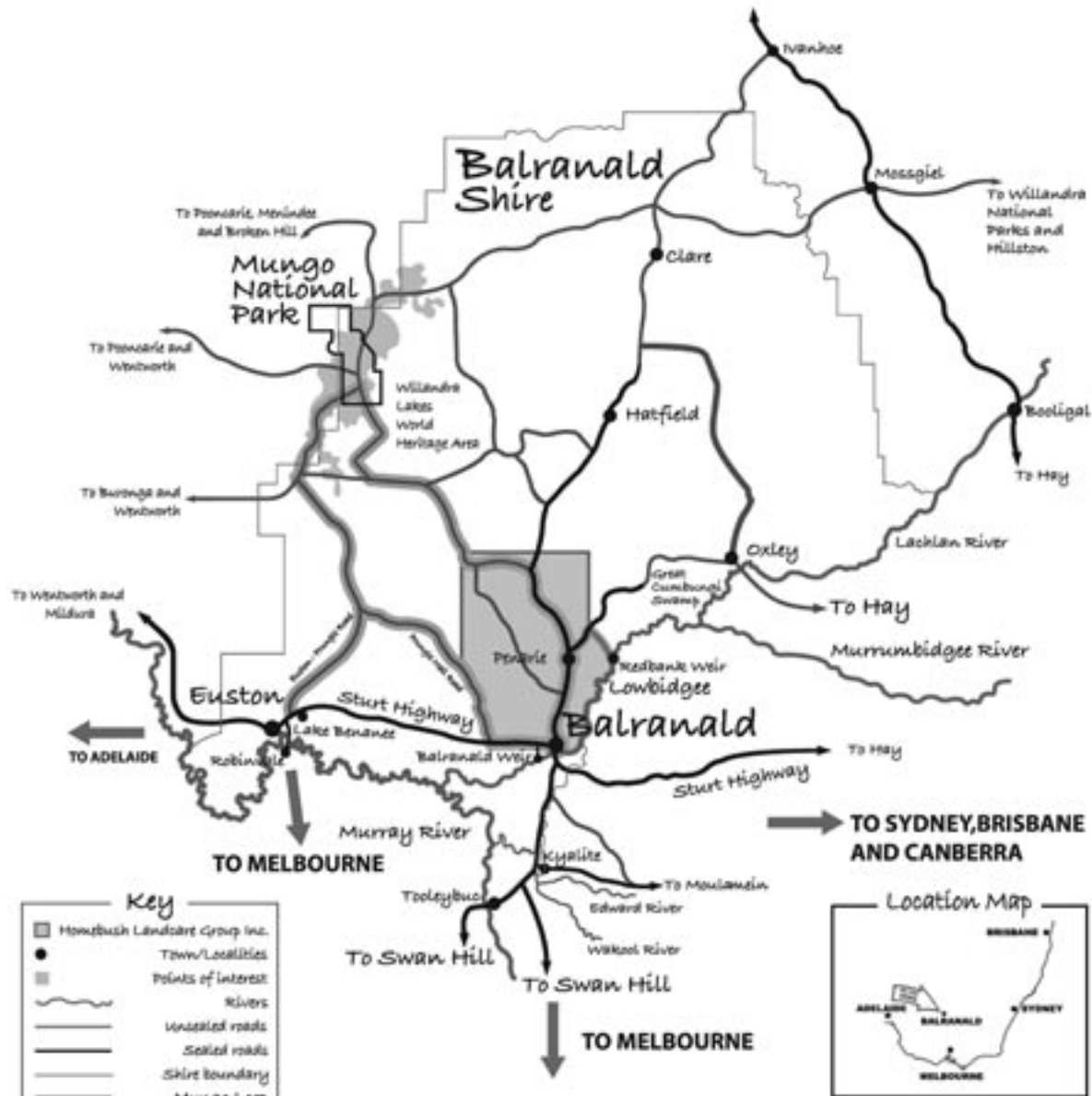
Those who have responded will be contacted on an individual basis to assist with assessment of options. Some have already been contacted.

I therefore leave the opportunity open for people who may have missed the survey and have an interest in training of young people for work in the Western Division to contact me now or in the future. My thanks to all those who assisted with the survey.

AC Archer
Principal Murrumbidgee College of
Agriculture and Principal CB Alexander
Agricultural College, 'Tocal'
Ph: 4939 8888 Fax: 4939 8919
Mobile: 0427 202 948
Email: cameron.archer@agric.nsw.gov.au

MUNGO LOOP

(Balranald to Mungo National Park Touring Route)



An initiative of the Homebush Landcare Group Inc. The **Mungo Loop** within Balranald Shire has been developed to help visitors read the landscape and interpret the local heritage en-route* between Balranald and Mungo National Park. The **Mungo Loop** is a touring route for independent motorists, particularly those traveling from the south or east through Balranald to Mungo National Park. Motorists heading to or coming from the west can exit or enter the Loop from Euston or Wentworth. Please note that three quarters of the Loop of approximately 320 kilometres of roads includes good unsealed roads that may be closed to traffic as a result of bad weather conditions.

*Please ask for a copy of the Outback Touring Guide at the Balranald visitor centre.
 Free call 1800 444 043 - Telephone: (03) 5020 1599 - Email: infocentre@balranald.nsw.gov.au
 The Mungo Loop project is sponsored by The Homebush Landcare Group Inc., Balranald Shire Council, West 2000 Plus, and Euston Bowling & Recreation Club Ltd.



Homebush Landcare Group Inc.
 OUTBACK TOURING GUIDE

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To the Landholder



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