



Grassland Society of NSW Inc

Newsletter

Welcome to the first issue of the newsletter for 2013. Once again the start of the New Year was not so good for a number of our members with natural disasters such as fire, floods and devastating storms. I know that all Society members wish those in affected areas a speedy recovery.

BlazeAid is a volunteer-based organisation that works with farmers and families in rural Australia after natural disasters. The BlazeAid volunteers do a terrific job working alongside the rural communities and farmers to rebuild fences that have been damaged or destroyed. The volunteers also help to lift the spirits of farming families who are often facing their second or third flood event after years of drought, or devastating losses through bushfires.

BlazeAid is always seeking new volunteers so if you are interested please contact BlazeAid on 0418 530 471 or email at blazeaid@gmail.com

I would like to remind members that there will be no annual conference this year. The Society will, however, be holding 15 pasture updates over the next three years (5 per year) across the state focusing on relevant pasture topics. Dates for these pasture updates will be advertised when available. The annual conference will return in June/July 2014 - most likely in the north of the state.

Many of you will have attended your local show in recent months. The committees behind these events do a great job of not only putting on the show, but also in coming up with initiatives to keep interest in

the local show movement alive. The Crookwell AP&H Society ran a very successful pasture competition in 2012 of which the Grassland Society of NSW was a sponsor. A report on the pasture competition can be found on page 2.

There are a number of interesting articles in the newsletter ranging from how to make money from native pastures to principles of pasture management. Plus check out the details of two important conferences being held this year - first the Australian Grassland Symposium (page 10) and the International Grassland Congress (page 14).

Carol Harris
Editor



In this newsletter

Crookwell pasture competition a big success	2
Making money from native pastures	3
Rocks and paddock trees: biodiversity's unlikely allies	4
New hub offers youth global opportunities in agriculture	6
Research Update	8
Ingredients: Salt, Wool and Carbon - Outcome: Enhancing Soil Health ..	9
Australian Grasslands Association Symposium	10
Important principles of pasture management demonstrated within the Cicerone project's grazed farmllet experiment: some personal reflections	11
International Grassland Congress	14
From the President	15



Grassland Society
of NSW

PHOTO COMPETITION

Send in your favourite pastoral or grassland landscape photo to go into the running for a years free membership.

Email your digital photos to Carol Harris at carol.harris@dpi.nsw.gov.au
Please provide a caption and/or location of the photo.

All entries will be displayed on the Society's web page. The winning photo will appear in the December issue of the newsletter.

More details on the website
www.grasslandnsw.com.au



Crookwell Pasture Competition a Big Success

The Inaugural Crookwell AP&H Society's Pasture Competition was held on Thursday the 11th and Monday the 22nd of October 2012, with a presentation evening held after the second day.

The original second day, Tuesday 12th was snowed out with 6" – 12" falling across the district, but this seemed to work in our favour with an excellent attendance on day 2. Interested farmers and sponsors followed the judging in a bus hired for the occasion, and meals and refreshments were provided along the way. There were up to 26 people following the judging around, and the prize giving evening at the completion of day 2 attracted a crowd of about 50 people.

Twenty three paddocks were inspected on 14 properties and judged by Mike Keys (Ex NSW DPI Agronomist) and Adrian Keith (AusWest Seeds) who did a great job. Only representative sections of paddocks of 1 hectare were inspected and participants were asked to enter paddocks that could be accessed by the bus.

There were 5 categories with prizes awarded for the first and second place in each category. The categories were:

1. Older perennial grass based pasture (5 years +).
2. New perennial grass based pasture (less than 4 years).
3. Fertilised native pasture (with sub-clover).
4. Lucerne pasture (should be a pure stand).
5. Annual pasture for hay or silage.

Rod and Helena Hoare of 'Çadfor' Murray Grey stud near Binda were the most successful entrants taking out first places in categories 1 and 3.

Bruce Reynolds of Fullerton Station, Fullerton and a long time NSW Grassland Society supporter also did very well taking out first prize in the category 4 and second prize in category 5.

Other very successful entrants were Chris Collins of 'Clarelands' Wheeo, who was first in category 2, and Gary Kadwell who was first in category 5.

The supreme exhibit was awarded to Bruce Reynolds for his outstanding lucerne pasture.

At the Crookwell Show on February 10th 2013, Bruce received a perpetual trophy and a cheque for \$500 from the major sponsor ANZ, presented by Craig Croker and Andrew Treweeke from ANZ.

The aim was to run an event that would be of interest and benefit to both novices and experienced farmers alike. It was thought by the organising committee that it would be good to get some of the leading pasture managers in the district to open up their farms and share their experiences and achievements with the

broader community. It was thought that this would be a good learning opportunity for all involved.

Attending farmers and competitors who travelled on the bus were keen to see what other farmers are doing on their

properties, find out their experiences and listen to the Judge's comments. It also turned out to be a great opportunity to catch up with old friends and make new ones.

Good feedback was received from the sponsors who said that they got good value out of the event, and from participants and onlookers who were impressed by the value of the judges comments and general discussion in the paddocks and on the bus. It is the opinion of the Crookwell AP&H Society and the Pasture Competition sub-committee that overall the event was a resounding success.

Prepared by Chris Houghton on behalf of the Crookwell AP&H Society.



The winning lucerne pasture at Fullerton Station. From left to right is Julian Minehan, Bruce Reynolds, Mike Keys and Adrian Keith (AusWest Seeds) (both judges).

Making money from native pastures

EverGraze research has found native pastures grazed in rotation can provide a strategic opportunity to increase production.

Native pastures can play a profitable role in grazing systems according to EverGraze research team leader Jim Virgona.

Reporting on findings from a three-year field trial at Holbrook, NSW, Jim said there were several strategies producers could combine to improve profits from native pastures including:

- adding fertiliser to increase the legume component, thereby increasing pasture growth and quality
- grazing the fertilised pastures with higher value livestock (e.g. ewes instead of wethers)
- increasing utilisation at critical times to stay on top of the annual component, while being careful to reduce stock at critical ground cover and overstocking points.

"Seasons have a greater influence on the pasture composition than grazing management. As long as we are careful to look after our native pastures, they will be resilient and respond quickly when conditions improve," Jim said.

Jim and his EverGraze team found that the key was to integrate the management of native and introduced pastures across the farm.

They designed the Holbrook experiment to determine if the strategies listed below could be combined to increase profitability while maintaining the ground cover and perennial component of the native pastures.

Three production systems were compared (Figure 1).

1. **Separate flocks** - this represented the traditional approach of running higher-value breeding stock (for example, Merino ewes joined to terminal sires) on improved pastures (a blend of phalaris, cocksfoot and sub clover) with lower-value animals-Merino wethers-set stocked on native country.
2. **Integrated with fertiliser** - a single breeding flock (Merino ewes joined

to terminal sires) grazed across both pasture types with fertiliser applied to the native pastures made up of spear, wallaby, weeping (*Microlaena*), red and common wheat grasses with annual species such as sub clover, vulpia, barley grass, Paterson's curse and capeweed.

3. **Integrated no fertiliser** - a single breeding flock, as above, grazed across both pasture types with native pastures not fertilised.

Grazing rotations

Jim said the phalaris pastures were subdivided into four and grazed on a two-week on, six-week off basis and the wethers were set-stocked on the native pastures at 3-5 DSE/ha.

As with any production system, grazing movements were influenced by seasonal conditions, but were made to ensure native pastures were rested frequently during summer.

During most of the experiment, ewes and lambs in the integrated production systems (i.e. 2 and 3) were moved onto the native pastures during October to increase grazing pressure on annual species and then returned to the phalaris pastures.

Having a single mob of ewes and lambs meant the spring grazing pressure in the integrated system was significantly than could be achieved in the separate system, where the stocking rate from the wethers did not vary throughout the year.

The native pastures were also utilised in early autumn to take advantage of any green feed and for a short spell mid-winter. Only during 2010 were conditions yes favourable enough for ewes (post-

weaning) to be left on native pastures until early February.

Results

"We performed a traditional statistical analysis on the gross margins using a range of price combinations for lamb and wool from the past 30 years," Jim said.

"In almost all cases there was a significant advantage to integrated grazing systems compared to the separate flock system. It was only when the ratio of wool:lamb price was high did the advantage disappear."

Jim said lambs grazing native pasture in spring grew as well as those grazing the improved phalaris pasture. This was because the native pasture had been sufficiently rested over winter to accumulate a quality feed base and because annual species were prevalent.

"Interestingly, in contrast to much of our historical data, we found the two grazing regimes did not affect the composition or ground cover of the native pastures," he said.

"We expected that set-stocking wethers in the separate flocks' production system would favour annual species, but this didn't happen."

HANDY HINTS

- Perennial species thrive when rested - timing and frequency will depend on species.
- Native species rely on a seedbank for persistence, so ensure pastures are rested adequately to give seed the opportunity to establish.
- Maximum growth of annuals occurs during early spring and, if left unchecked, could dominate the native grasses. Timely grazing can ensure a good balance between the two.

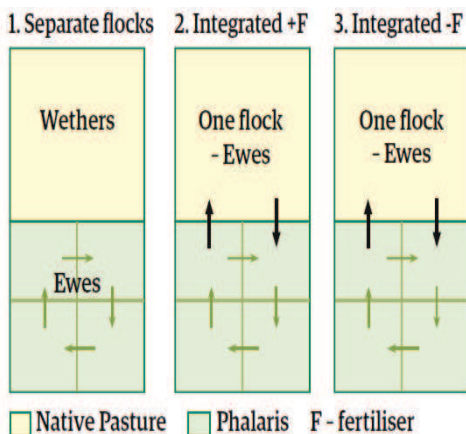


Figure 1. Treatment systems at the Holbrook site

This article was first published by Meat and Livestock Australia in their member magazine - Feedback in January/February 2013.

Rocks and paddock trees: biodiversity's unlikely allies

Michael Sabto

In Australia's high-rainfall zone, which encompasses Australia's most profitable farming areas, land uses are changing rapidly. How do they threaten biodiversity, and how can they be managed?

Australia's high-rainfall zone (HRZ) stretches from southern Queensland into South Australia, in a band that hugs the coast and extends some way inland of the Great Divide. Another pocket is found in south Western Australia.

Drive west from Sydney or Canberra, cross the Great Dividing Range, and in the foothills on the inland side you find yourself in country that has traditionally been dominated by grazing. Continue further west, and the landscape flattens out, the climate becomes drier and cropping enters the farming mix.

Historically, cropping has been confined to the drier parts of the HRZ, due to susceptibility of wheat to pathogens such as rust stripe. A significant proportion of

grazing in these areas has been on native pastures: a low-intensity form of land use. In contrast "improved pasture" grazing involves sowing exotic pasture species and fertilisation, and typically allows for a higher stocking rate. Cropping can be rotated with grazing (i.e. mixed farming), so that soil fertility depleted during cropping is partially restored during the grazing phase.

But times are changing, with significant consequences for Australian biodiversity. A recent CSIRO report - *Land use change and biodiversity in the High Rainfall Cropping Zone (HRZ)*, funded by the Grains Research and Development Corporation - confirms what many agricultural industry players here and overseas have been observing for a while: a shift to more intensive land use.

Report co-author, Saul Cunningham of CSIRO's Ecosystem Sciences, says the data show there are actually two changes going on in the landscape: both of

which are forms of "what we would call land-use intensification".

"One trend has been for what was native-grass grazing to be increasingly replaced by improved pasture (fertiliser and seeded pastures)," he says. "At the same time, (grazing is) being replaced by cropping."

These two changes can have a significant impact on biodiversity. Grasslands tend to be highly diverse ecological communities, and many grassy ecosystems are either endangered or threatened under state and federal legislation.

"If you think about the cropping case - if you put in a crop, you turn whatever was in the ground layer into one species, so that's a big change to the ecology of the landscape", says Dr Cunningham.

"And, it's very hard to go back - although in practice, it's probably more a series of steps over time: native grasslands, some improved pasture, more improved pasture, then crop."

Among the biodiversity assets being lost are scattered paddock trees - think of the familiar Australian rural landscape of grazing lands with a smattering of old eucalypts. While it is illegal and therefore unusual for farmers to remove these trees, when cropping begins around and under them, there is little opportunity for the trees to regenerate.

"They can be at risk from increased fertilisation, root disturbance, and insecticide drift. It gets harder and harder for those trees to survive in that new land use," says Dr Cunningham.

Other biodiversity assets include rocky outcrops. To farmers intending to crop, they often represent shallow soil and obstructions to machinery; but, a range of plants and animals use these outcrops.

Paul Ryan is a consultant who helps natural resource agencies, such as catchment management authorities, plan for change such as climate change and population growth.

"The shift from low-intensity land use (such as grazing of native pastures) to cropping - and now tends to be high-intensity cropping - means you get a dramatic decrease in biodiversity in a relatively short space of time," says Mr Ryan. "On my family's farm, for example,

Get more beef from your pastures

The practical tools you need to build a more profitable enterprise

The producer's manual can be downloaded by individual modules at www.mla.com.au/morebeef

Making More From Sheep

Is a best management practice program to help sheep producers do what they do, even better

The Making More From Sheep manual can be downloaded in full or by individual modules at www.makingmorefromsheep.com.au/module-index

www.mla.com.au

The gateway to all your on-farm information needs

For all the latest news, analysis and information on the red meat industry in Australia and around the world, www.mla.com.au is the place to find it.

it drove down biodiversity dramatically quickly. We lost a large number of fairly common native species off the property in a short space of time - less than 10 years."

According to Mr Ryan, large areas of the landscape are subjected to these pressures, and the loss of biodiversity may well end up being comparable to the drops in biodiversity that followed the first wave of land-clearing for sheep grazing in the nineteenth century.

"Now you're getting this second wave. And thus time, you lose not only biodiversity, but it changes the soil, the microtopography."

Among the drivers of land-use intensification identified in the CSIRO report are farmers taking up opportunities created by new wheat varieties resistant to pathogens associated with higher rainfall areas.

Mr Ryan also points to declining terms of trade for traditional agriculture and the insecurity associated with fluctuating livestock prices.

"The rising costs of fertiliser, labour, machinery and chemicals means that most landholders only have a couple of options if they want to continue to make a reasonable living above CPI: to get more intensive, or to get bigger."

"In reality, a lot do both: either expand or farm smarter, which means more inputs and use of available technology to increase productivity."

"Grazing, whether sheep or cattle, has been all over the place. Ewes have gone from being \$250 per head to \$100 per head, and lambs from \$160 per head to \$60-70 per head, which is not enough to make a living from. Cropping fluctuates as well, but lots of people see cropping as more secure."

Younger farmers are leading the move towards higher-intensity land use. Linda Broadhurst, another co-author of the CSIRO report, believes younger farmers are more prepared to take a risk and be more innovative.

"Farmers generally express a desire to keep biodiversity in their landscapes," Dr Broadhurst says. "They are not trying to work against biodiversity; they need information and awareness about the features that support biodiversity and keep it in the landscape."

Griffith farmer Michael Pfitzner and his wife Larissa farm the plains between Griffith and Hillston in mid New South

Wales. Over the past five years, they have moved from mixed farming enterprise to 100 per cent cropping.

"I think that most farmers are interested in conservation. We certainly want to leave the place in a better condition than what we walked into," says Mr Pfitzner.

The couple have destocked and 'locked up' a number of timber lots on their land. Trees include remnant box gums and mallee, among planted pine and other planted native species. In 2012, they a New South Wales Conservation Farmer of the Year award, presented by the Conservation Agriculture and No-Till Farming Association.

"The land title now includes these locked up areas - they now can't be used for anything else, even when the land is sold," says Mr Pfitzner. "Having these areas locked up and destocked means that there are more native grasses in those areas. We also keep introduced predators such as foxes and rabbits down to look after the native species."

Mr Pfitzner says that he did not remove some scattered paddock trees to support his controlled-traffic, zero-till, full stubble retention cropping strategy. This was made possible by developing a property vegetation plan in conjunction with the regional catchment management authority, which permitted tree removal in exchange for tree-planting offsets.

The aim of a controlled-traffic cropping system is to improve soils by avoiding random heavy machinery traffic.

"We retain stubble residues to give us a better infiltration rate for moisture and reduce compaction across paddocks' adds Mr Pfitzner. 'We also grow different crop species to improve soil structure and nutrition with minimal disturbance."

The authors of the CSIRO report would like to see farmers retain isolated paddock trees, which are key to encouraging biodiversity in the landscape.

"You can crop around them, and people do," says Dr Cunningham. "It just takes some planning. It's not always popular, in the sense that it might be easier to run your harvester in a straight line."

"While preserving these old trees, the next challenge is to find places in the landscape where new trees can regenerate, to maintain the scattered tree landscape into the long term."

"There is still fantastic biodiversity in our landscape, which Australian's

value. We can still produce crops and manage landscapes so that we can have production and biodiversity. If we recognise the features in the landscape that biodiversity depends on, such as rocky outcrops, remnant forest woodlands, and wildflowers, we can manage the whole landscape with these features in mind."

Retaining paddock trees also has the advantage of maintaining diverse land-use options. The trees that are in the way of the harvester one year are the same trees that could provide shelter for stock a few years later if the farmer wishes to return to grazing, or rotate grazing with cropping.

The economics of conservation farming are a challenge. However, this pro-biodiversity attitude gives natural resource professionals and government agencies scope to work with farmers and provide options.

Mr Ryan believes that the kind of short-term incentive schemes traditionally available to farmers to conserve on-farm biodiversity are not adequate to cope with the scale of change currently occurring. Ecological processes, he points out, are much longer and slower than the typical three-year electoral cycle that shapes incentive schemes.

"I don't see a massive benefit from small-scale incentive schemes. It has to be on a massive scale: thousands and thousands of square kilometres that need vegetation maintained."

"There is a temporal dimension as well. There is the short-term impact of the loss of the trees, and the long-term change of losing the next generation of trees, if they're not regenerating in the long-term or we're not putting trees in for secure long-term outcomes. These scattered trees probably live for 300 years in total. We need to think in at least decadal timescales."

Reprinted from ECOS Issue No 179 January 2013. Available at www.ecosmagazine.com/



New hub offers youth global opportunities in agriculture

Declining student numbers, campuses being closed and a grim outlook at a time of remarkable demand for agricultural graduates has prompted the creation of an online tool to show people what the industry really has to offer.

Australia's agricultural academic community is fighting to stave off a looming national disaster.

With numbers enrolling in agricultural studies across the country in steady decline Career Harvest - www.careerharvest.com.au - has been created to help get the industry's future back on track.

Career Harvest is an online hub showing prospective students there is a wide range of jobs, both in Australia and overseas, in which graduates within agriculture and agribusiness can make meaningful contributions.

Current challenges and opportunities available to include feeding the world's soaring population, adapting to climate change, managing the environment, operating profitable markets, managing future energy sources, and maintaining biodiversity.

A collaboration between the Australian Council of Deans of Agriculture (ACDA) and various bodies across the agriculture and educational industries, Career Harvest was founded in 2011 and relaunched in 2012.

Reframing the view

Board member Jim Gall said it is an Australian website which seeks to curb the national crisis in agricultural education by reframing how people view the industry.

Jim said Career Harvest is not an employment service, but contains "inspiring information" on more than 250 career options.

He said Australia's agricultural sector and food-dependent economy accounts for 12 per cent of the national GDP, 14 per cent of exports, 17 per cent of employment and utilises almost 60 per cent

of Australia's land mass.

"The national skills shortage issue is widespread across the industry and has been highlighted in various senate submissions over the past 12 months," Mr Gall said.

"The online hub has been developed to inspire a new generation of leaders in the food and fibre industry" he said.

"An initiative of the Australian Council of Deans of Agriculture (ACDA), redhanded Communications Group and Rimfire Resources, Career Harvest showcases what careers are available and what skills and education are required for different positions."

"Career Harvest also provides links for students to find more information about education opportunities and share testimonials from people working in their chosen careers."

New meaning

ACDA secretary Jim Pratley said the Deans were excited to see Career Harvest is providing a new meaning to careers in the food and fibre industry.

Mr Pratley said Career Harvest fills the career information void and is about the lifestyle and attitude more than the association with the industries.

He said that makes it a quite different

perspective for potential students.

"We're hoping we will see quite a dramatic shift in people's attitude to careers in the agricultural industries," Mr Pratley said.

"It's about informing them of the great and diverse opportunities which exist, that

people in the past have not been really aware of," he said.

"Career Harvest brings them up to speed with what opportunities there really are, not what are perceived to be."

"Through the recently set up National Food Plan, Australia aims to contribute to global food security."

"That will mean reducing barriers to a safe and nutritious food supply which responds to the evolving preferences and needs of all Australians and supports population health."

Research, science and innovation

"We must also support the long-term economic, environmental and social sustainability of our food supply chain and the global competitiveness and productivity growth of the food supply chain."

"Much of this will be done through research, science and innovation."



From Eden to the back of Walgett Agricom seeds are tested, trialed and proven in NSW. If you want to grow pasture for profit, choose Agricom seeds.

For free Pasture for Profits tips and advice email info@agricom.com.au
www.agricom.com.au or 1800 051 064

MADE FOR YOUR LAND

AGRICOM
Pastures for Profits

Agricom Seed is proudly distributed by AusWest Seeds in NSW and is available from all leading pasture seed retailers.



"These endeavours are currently compromised by a significant skills shortage in both agricultural production and agribusiness in Australia."

"The June 2012 Senate Committee report, *Higher education and skills training to support agriculture and agribusiness in Australia*, said the current skills shortage poses a threat to the productivity increases necessary for the continued variability of Australia's food sector."

"Career Harvest aims to help address this skills shortage so Australia can commit to the National Food Plan objectives."

The youngest member of the Career Harvest board, emerging professional representative Casper Roxburgh said Career Harvest changes the conversation about careers in the food and fibre industry to one to which young people respond.

"Every young person is trying to figure out who they are and find their deeper purpose in life, their identity is linked to doing something that will give them that sense of deeper purpose," Casper said.

"Career Harvest shows agriculture can give that in a huge range of areas because it links those deeper reasons for why we choose to go to work in the morning with career paths and education options and with people working in those roles," he said.

Pioneering opportunity

Career Harvest independent chairman David Anthony said the website was the first of its kind to provide a comprehensive look at the many rewarding and exciting career opportunities available in agriculture.

He said agriculture provides the gateway to a huge range of career horizons and opportunities not just in the production and food and fibre security vocations but also to environmental stewardship as well as careers in sophisticated

FAST GROWING GRASS TAKES TIME



The process of bringing new seed varieties to market takes a little time. Through a rigorous process of trial and elimination, thousands are narrowed down to just one. So you can be sure that the seed in the bag is the highest quality that we can bring to you – it's worth the wait.

wrightsonseeds.com.au

research, engineering, economics and communication.

"Career Harvest provides for the first time a comprehensive map and insight into the rewarding and exciting career opportunities which can be built on in the agricultural universe."

"The site launched last month with more than 20 industry supporters demonstrating a united front to this very important issue facing the industry."

This article was first published by the Kondinin Group in Farming Ahead No 252, January 2013. Reprinted with permission

To become a Kondinin Group member and access all its information phone 1800 677 761 or email contact@kondinin.com.au

Research Update

Keeping you up-to-date with pasture and grassland research in Australia. Abstracts of recently published research papers will be reprinted as well as the citation and author details in you wish to follow up the full paper.

Evaluating the performance of endophytes in farm systems to improve farmer outcomes – a review

Errol R. Thom^{A,E}, Alison J. Popay^B, David E. Hume^C, and Lester R. Fletcher^D

^ADairyNZ, Private Bag 3221, Hamilton, New Zealand.

^BAgResearch, Ruakura Research Centre, Private Bag 3123, Hamilton, New Zealand.

^CAgResearch, Grasslands Research Centre, Private Bag 11008, Palmerston North 4442, New Zealand.

^DAgResearch, Lincoln Research Centre, Private Bag 4749, Christchurch 8140, New Zealand.

^ECorresponding author. Email: errol.thom@dairynz.co.nz

Abstract. The main plant species relied on for forage supply to grazing animals in New Zealand and south-eastern Australia is perennial ryegrass (*Lolium perenne* L.). Perennial ryegrass has evolved with a fungal endophyte (*Neotyphodium lolii*, Latch, Christensen & Samuals) that occupies intercellular spaces, and is nourished by its host.

The endophyte (referred to as standard or wild-type) provides the plant with protection from a range of insect pests by producing alkaloids, some of which are also toxic to grazing animals, causing ryegrass staggers and/or exacerbating heat stress.

Over the last 20 years naturally occurring perennial ryegrass endophytes have

been found in Europe that produce less of the alkaloids that cause animal health problems but have similar or enhanced effects as the standard endophyte on deterring insect attack on infected plants, when introduced into New Zealand and Australian-bred ryegrasses.

This review provides a summary of endophyte research in New Zealand from the perspective of insect pests, plants (particularly perennial ryegrass) and the animals grazed on ryegrass dominant pastures. The protocols used to evaluate perennial ryegrass/endophyte associations over the past 30 years are also discussed.

Future testing of new grass/endophyte associations should include the utilisation

of more environments for agronomic and entomological experiments; routinely carrying out small animal toxicology assays, and the running of short-term indoor feeding experiments with sheep and cows.

Implementation of these changes provides the minimum requirements for strengthening the evaluation of new endophyte associations so farmers using these technologies, gain optimal benefits from their adoption.

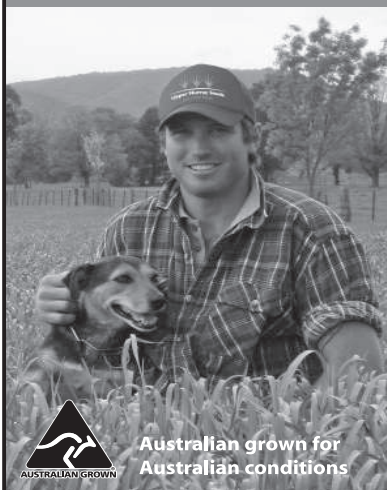
Crop and Pasture Science, 2012, 63, 927-943

www.publish.csiro.au/paper/CP12152.htm

Editors note: David Hume will be presenting a paper at the Australian Grasslands Association in Symposium in May (page 10 for details). The paper is titled "Agronomic advantages conferred by endophyte infection of perennial ryegrass and tall fescue in Australia"

Sow much better!

www.uppermurrayseeds.com.au Call for a free product guide!



Atomic
ANNUAL RYEGRASS

Blasts off after autumn sowing!
Very fast to first grazing, grows
heaps of feed and plenty of dry
matter.



Awesome
SHORT TERM RYEGRASS

Just drill it in and away it goes!
Provides an energy boost for
tired pastures and grows plenty
of late feed.

Call one of our sales
agronomists to find out how
you can sow much better.



Upper Murray Seeds
Sow much better

1014A Nowra Street, Albury NSW 2640
Tel (02) 6040 6464, Fax (02) 6040 6470

albury@uppermurrayseeds.com.au

Ingredients: Salt, Wool and Carbon - Outcome: Enhancing Soil Health

At a meeting of Australian Wool Innovation's (AWI) Wool Carbon Alliance in August 2012, Richard Chisholm from the Federal Department for Climate Change and Energy Efficiency (DCCEE) gave a presentation on issues and implementation of the Carbon Farming Initiative. During this presentation Richard commented that he was the only one in the DCCEE with an agricultural background and that there was limited opportunity for interaction with the Department of Agriculture, Fisheries and Forestry (DAFF) - and by inference a lack of appreciation of farming realities.

As acting Chairman of the meeting, I invited Richard and his colleagues to a field day at our Yass Valley property, Talaheni, undertaking to also invite DAFF officers involved in carbon policy issues. In addition, as a committed ultrafine wool grower I took the opportunity to invite Australian Superfine Wool Growers' Association (ASWGA) National President Helen Cathles and Gus Manatsa, AWI Program Manager, Environment, Climate Change and Carbon.

The visit took place on 17th September on a fine spring day and started with a brief run down and farm tour concentrating on management issues which had led to Talaheni receiving the 2011 National Carbon Cocky award. This was in recognition in part for achieving better than carbon-neutral farming outcome from an operation that includes a self-replacing ultrafine wool flock, small Angus cattle herd and farm forestry.

Issues discussed included reclamation of extensive saline affected flats by tree planting on adjacent high recharge ridges which has seen not only a lowering of the watertable, but also an increase in soil carbon on the flats from 0.7 per cent (October 1980) to 2.8 per cent (October 2011). More telling from a production perspective, carrying capacity has risen over the same period from around 2 DSE/ha to an average over the past eight years of 17 DSE/ha- a period that included the near driest (2006) and wettest (2011) periods experienced at Talaheni in the past thirty years.



Michael Jeffery (right), John Ive (centre) and other members of Soil for Life team during visit to Talaheni participating in the measurement of groundwater from one of the network of piezometers on Talaheni

A letter was subsequently received from DAFF Minister Joe Ludwig which stated in part, "when I am next able to visit the region, my office will contact Mr Ive to arrange a visit at a time that suits".

Coinciding with these developments, Talaheni was selected by the Soils for Life Program as one of 19 farm case studies to promote the Program's cause. Soils for Life is chaired by former Governor General Michael Jeffery who, with members of the Program had previously visited Talaheni on 15th August 2012. Further to this, Michael Jeffery was recently appointed National Advocate for Soil Health by the Prime Minister. As part of the program to promote the Soils for Life cause and provide a forum for outlining the role of National Advocate for Soil Health an all day field day is to be held at Talaheni in May.

Attendance will be by invitation as the organisers seek to engage politicians and bureaucrats with a role in local and national soil health issues.

The particular soil health theme for the day will be managing dryland salinity. There will be landholder and resource agency presentations and an on-farm tour focusing on the integrated management on the different landscape elements to address the dryland salinity issues.

*Prepared by John Ive
Talaheni, Yass Valley*

USEFUL WEBSITES

AWI Wool Carbon Alliance
www.wool.com/Grow_Environment_Carbon.htm

Carbon Farming Initiative
www.climatechange.gov.au/cfi

Australian Superfine Wool Growers Association
www.aswga.com/index.htm

National Carbon Cocky Awards
www.carboncoalition.com.au

National Advocate for Soil Health
www.daff.gov.au/natural-resources/soils/advocate-for-soil-health

Previous articles on Talaheni

www.dpi.nsw.gov.au/aboutus/resources/periodicals/agriculture-today/december-2012/fresh-water-payoff-from-20years-groundwork

grasslandnsw.com.au/news/wp-content/uploads/2008/07/lve-and-lve-2007.pdf

Australian Grasslands Association Pasture Research Symposium

Perennial Grasses in Pasture Production Systems

15th & 16th May, 2013

University House,
Australian National University Canberra

This Symposium will set the agenda for investment in perennial grasses in pasture production systems R, D & E in Australia and will provide a forum for researchers to interact, exchange ideas, and debate how to take the next quantum leap in perennial grasses research.

Program includes;

- * A review of perennial grasses in pasture production systems
- * Pasture persistence – advances, traits and an analysis of the costs of pasture persistence
- * Quality & feed value in animal production systems - forage value indexes, animal-plant interactions & toxicoses
- * Developments & innovations in perennial grass breeding - a review of past & current developments, international perspectives, valuing genetic gains, new technologies & information
- * Developments & innovations in perennial grass agronomy & management - application of scientific principles, use of warm-season grasses including in winter-rainfall zones.
- * Opportunities and roles for perennial grasses in a changing climate - traits for adaptation to stress
- * Where will the next quantum leap in perennial grass research come from?
- * A panel feedback and discussion session where highlights from the symposium will be captured through audience participation.

FOR REGISTRATION DETAILS GO to - www.australiangrasslands.org.au



GRASSLAND SOCIETY OF NSW



Important principles of pasture management demonstrated within the Cicerone Project's grazed farmlet experiment: some personal reflections

Jim Scott

School of Environmental and Rural Science, University of New England, Armidale, NSW, 2351.

Abstract: The Cicerone Project conducted a grazed farmlet experiment at a moderate scale (53 ha per farmlet) from July 2000 to December 2006 on the Northern Tablelands of NSW to investigate the influence of increased pasture inputs and intensive rotational grazing compared to a typical management system with moderate inputs and a flexible rotational grazing regime. This paper is a personal reflection on the evidence gathered about pastures and their effects on animal and farmlet performance over the experimental period.

The most influential management factor, which affected farmlet productivity, was the sowing of pastures while increasing soil phosphorus and sulfur levels. This allowed the maintenance of higher levels of sown perennial grasses and a significant increase in legume content, which together, lifted stocking rate by more than 40%. Although intensive rotational grazing resulted in significant improvements in the control of intestinal worms in sheep and maintained sown perennial grasses quite well, it showed an increase in warm season grasses and had similar low levels of legume and stocking rate compared to the typical farmlet.

Some of the important principles discussed include: how to maintain adequate desirable species, the importance of pasture renovation and soil fertility, the need for perennial pastures to persist over decades, the critical levels of green herbage necessary for both animals and pastures, allowing grazing animals sufficient choice in their diet and the need for better management at the individual paddock level.

Introduction

Whilst much has been learned about pasture management in the high rainfall zone of Australia over recent decades, the practice of managing pastures still suffers from the fact that the grazing animal gets more attention than the pasture. As the animal is the direct source of livestock products and therefore income, it is logical that the focus be on the animals and their health. However, it is acknowledged by scientists and livestock producers alike that the dominant driver of animal growth is the amount and quality of feed they are able to consume, especially when grazing pastures. Thus, it makes good sense to reflect on how we can improve pasture management and, where possible, to

highlight some key principles to guide that management.

A grazed farmlet experiment was conducted by the Cicerone Project on the Northern Tablelands of NSW from July 2000 to December 2006 to investigate how different management systems compare in their profitability and sustainability. Many of the results referred to here come from a series of 24 papers, which are to be published late in 2012 as a Special Issue of the journal *Animal Production Science* (volume 52). As it is not feasible to summarise all of the results in this short conference paper, an attempt will be made to discuss some important principles of pasture management that were reinforced by the experiment. Nevertheless, it is anticipated that key results will be displayed during the Conference.

The Cicerone farmlet experiment

The decision to conduct a grazed farmlet trial of different management approaches arose from a survey of Northern Tablelands graziers by Kaine *et al.* (2012) who found that their most important problems were: (a) the difficulty of maintaining a sufficient, high quality feed supply that can maintain breeding ewes in 3 score condition, especially through pregnancy and dry seasons, without the need for excessive amounts of expensive supplementary feed and (b) the management of intestinal worm parasites in sheep.

The trial set out to compare three different management systems of interest to Cicerone members on three farmlets, each of 53 ha. The three systems were: a typical system (farmlet B) with a moderate level of soil fertility with 8 paddocks which were grazed using a flexible rotational system based on the assessment of pastures and livestock, similar to the ProGraze approach (Bell and Allan 2000); a higher input system (farmlet A) with a high rate of pasture renovation and higher soil fertility but with the same number of paddocks and grazing management as farmlet B; and a third farmlet (C) with the same soil fertility as farmlet B but intensive rotational grazing over its 37 paddocks. Stocking rate was treated as an emergent property of each system. As noted by Morley and Spedding (1968),

if stocking rates are allowed to vary in experiments, it is necessary to take a 'whole farm' approach when evaluating such systems.

Discussion of results in relation to some principles of pasture management

Maintaining an adequate proportion of desirable species in a pasture.

The changes in botanical composition among the farmlets have been described in detail by Shakhane *et al.* (2012b). As the level of sown perennial grasses (SPG) rose on farmlet A compared to the typical farmlet (B), the proportion of warm season grasses (WSG) declined; over time, these changes were driven mostly by increased soil P and pasture renovation. In contrast, whilst farmlet C (intensive rotational grazing) retained most of its SPG, it showed a similar increase in WSG compared to that on farmlet B. Farmlet C also demonstrated much improved intestinal worm control (Colvin *et al.* 2008). The higher soil P levels on farmlet A also increased the level of cool season species, legumes and herbs on that farmlet. By the end of the trial, pastures on the typical farmlet (B) had become degraded, with an increased number of thistles and evidence of more 'patch' grazing where sheep heavily grazed parts of paddocks and left other parts virtually untouched (Shakhane *et al.* 2012b). Also, low levels of legume on farmlets B and C meant that both had low nitrogen inputs, thus limiting the protein content of pastures with consequences for the production of the protein products such as meat and wool. In spite of these findings, farmlet B showed the best cash flow results, as it spent less on capital and maintenance. But the question remains, what would have happened over a longer period of time and some above-average rainfall years? This question is addressed below under 'optimising profitability'.

Farmlet productivity was enhanced by pasture renovation and soil fertility.

Pasture renovation, combined with increases in soil fertility, were confirmed as having a substantial positive effect on animal production per head and per hectare (Hinch *et al.* 2012) and hence

farmlet productivity. Of course, this higher productivity came at a cost of pasture renovation as well as increased levels of fertiliser (Scott *et al.* 2012b). In contrast, intensive rotational grazing did not lift overall productivity compared to typical management.

Need to maintain perennial pastures for decades.

The detailed economic and modelling analyses conducted as part of the trial demonstrated clearly that the renovated pastures need to be maintained for many years (Behrendt *et al.* 2012a). Using data from the farmlet experiment, the modelling showed that a rate of pasture renovation of 4% produced optimal economic outcomes over the long-term (Behrendt *et al.* 2006). This means that, if renovation investments are to be optimised, pastures need to be maintained for some 25 years! The evidence suggests that this can be best achieved by ensuring a strong legume presence (which is aided by adequate soil fertility), combined with persistent perennial grasses, by careful grazing management and by adjusting the stocking rate to avoid over-exploitation of the pasture (Sanford *et al.* 2003).

Assessing pasture growth and utilisation is difficult.

The trial showed how difficult it is to accurately measure pasture growth (Shakhane *et al.* 2012a), especially in the below-average rainfall years, which were,

experienced (Behrendt *et al.* 2012b). When pasture growth is slow, it is even more challenging for a grazier to be able to know the current pasture growth rate or accurately measure the level of pasture utilisation. Thus, it is important that graziers have a high level of competency in estimating herbage mass levels using visual techniques such as those practised in ProGraze courses. The satellite images, which were used to assess the potential pasture growth rate over the entire area of the farmlets (Donald *et al.* 2012), found significant differences in potential pasture growth between farmlets. This technology has great promise as a means of cost-effectively providing evidence of green herbage mass and growth rate in a practical and timely fashion, thus greatly improving a grazier's capacity to more proactively adjust stocking rate.

Achieving a balance between animal and pasture needs is difficult.

Matching the conflicting needs of pastures and animals is known to be challenging (Chapman *et al.* 2007). In this whole-farmlet experiment, even with considerable resources, it was difficult to have timely measurements of all of the essential information about pasture supply and animal demand across all paddocks and all grazing mobs (Shakhane *et al.* 2012c). Again, it is even more difficult in commercial grazing enterprises where much less information is available. Further

development of regular remote sensing and automated livestock weighing may allow more timely assessments of the balance between the pasture supply and livestock demand to facilitate improved management of paddocks and mobs leading to more profitable grazing enterprises.

Maintaining critical levels of green herbage is essential for a number of reasons.

The issue of how much green herbage to maintain on the

farmlets was an area of considerable controversy between the researchers and the producer members of the Cicerone Board. Whilst most of the producers wanted to increase stock numbers whenever green feed was obvious, the researchers wanted to accumulate green herbage to 1000 kg DM/ha before increasing stock numbers. The end result was that, too often, the levels of green herbage mass on the farmlets reached levels below 500 kg DM/ha (Shakhane *et al.* 2012a). The published literature reports a number of critical levels of green herbage, which are important not only for the animal but also for the pasture. For example, reproductive ewes require 1000 to 1500 kg DM/ha of green herbage from late pregnancy to lactation. Secondly, the amount of green herbage and its height has consequences for intestinal parasite management. Thirdly, if one desires pastures to grow near to their potential growth rate for any given level of light, temperature, soil moisture and soil nutrients, it is crucial that there be enough functional green leaf to photosynthesise adequately; this can be between 1500 and 2500 kg DM/ha (Bluett *et al.* 1998). Finally, it is essential that pasture plants are not grazed too frequently or harshly if they are to persist, especially when plants are regrowing following grazing during dry spring periods (Boschma and Scott 2000).

Winter production demands temperate species and adequate soil nitrogen.

Animal nutrition during winter, which usually involves the increasing demands of pregnancy, relies on an adequate supply of green leaf, either from current growth or from autumn-saved pasture. In either case, temperate species are needed for this purpose as warm season grasses become frosted and do not grow during winter conditions (Cook *et al.* 1978). These species were most apparent on farmlet A which benefited from more pasture renovation and higher soil fertility, leading to higher levels of legume, which in turn resulted in higher soil nitrogen (Guppy *et al.* 2012) which again, in turn, enhances pasture growth under cold conditions.

For high animal production, the animal must be offered dietary choice.

High rates of animal production depend on high levels of pasture herbage mass and quality. Under conditions of relatively low stocking densities (on farmlets A and B), animals were better able to choose their diet than when very high stock densities were used (as on farmlet C) (Hinch *et al.* 2012). When there was high



Like most people on the land, you'll need an overwhelming reason to change your fertiliser. And now there is one.

With the introduction of Wengfu to the Australian market in 2010, a change really should be on your agenda.

Wengfu is now well established here and in over 20 countries around the world. We recently invested over \$30 million to research and development, resulting in a superior product range specifically suited to pastures and cropping.

Wengfu Pasture King and Wengfu Slam can give you an edge in crop and pasture quality that's cost effective and is totally reliable in terms of supply, you'll quickly become a convert to Wengfu.

Change to Wengfu this season and enjoy an efficient advantage.



www.wengfuastralia.com
Call 1300 936 438

quality pasture across entire paddocks, as on farmlet A, animals grazed those paddocks relatively evenly. However, on farmlet B, the lower quality pasture led to more uneven grazing with substantial proportions of paddocks rarely grazed. In the case of farmlet C, with its high stock densities, animals competed intensely and thereby selected a lower quality diet; the result was even utilisation of the paddock but low per head production. With intensive rotational grazing, the options for increasing dietary choice are to either reduce the stocking rate or shorten the graze period by creating more paddocks.

The paddock is the unit of management.

As shown convincingly by this trial, it is the paddock, which is the crucial unit of management – for soil fertility, pasture species and animal management. If graziers find that their pasture resources are holding back their farm's production, then the key is to manage these resources, one paddock at a time. As part of this management, it is vital that regular soil testing be carried out on each paddock to allow any fertility constraints to be overcome as cost effectively as possible (Guppy *et al.* 2012).

Optimising profitability, cash-flow and net worth required modelling to estimate returns over the long-term.

Although farmlet A had the highest gross margins, its cash flow was inferior to farmlets B and C (Scott *et al.* 2012b) due to the rapid development of pastures and soil fertility. In terms of cash flow, farmlet C was intermediate between farmlet B (highest) and farmlet A (lowest). These results were affected by the drier than normal conditions during the trial and the artificially high rate of pasture renovation on farmlet A. Modelling of farm financial performance using longer term climatic records, with farmlet data scaled up to a commercial farm scale, revealed that the farmlet A strategy had the potential to be more profitable over the long-term than farmlet B, but with a higher level of risk (Scott *et al.* 2012a).

Acknowledgements

The contribution of all collaborators to this multi-disciplinary project is gratefully acknowledged. In particular, the research carried out by Karl Behrendt, Alison Colvin, Fiona Scott and Libuseng Shakhane was essential to the success of the trial. The efforts of the Cicerone management team of Caroline Gaden and Justin Hoad and of the members of the Cicerone Board are also gratefully acknowledged. The project

was generously supported financially by Australian Wool Innovation, the Australian Sheep CRC and the University of New England. The substantial in-kind contributions of the University of New England, NSW Department of Primary Industries, NSW TAFE and CSIRO are also greatly appreciated.

References

- Behrendt K, Cacho O, Scott JM, Jones R (2006) Methodology for assessing optimal rates of pasture improvement in the high rainfall temperate pasture zone. *Australian Journal of Experimental Agriculture* 46, 845-849.
- Behrendt K, Cacho O, Scott JM, Jones R (2012a) Optimising pasture and grazing management decisions on the Cicerone Project farmlets over variable time horizons. *Animal Production Science* 52, (in press).
- Behrendt K, Scott JM, Mackay D (2012b) Assessing the climate experienced during the Cicerone farmlet experiment against the climatic record. *Animal Production Science* 52, (in press).
- Bell AK, Allan CJ (2000) PROGRAZE - an extension package in grazing and pasture management. *Australian Journal of Experimental Agriculture* 40, 325-330.
- Bluett SJ, Matthew C, Bishop-Hurley GJ, Haslett SJ, Hodgson J (1998) The relationship between herbage mass and pasture accumulation rate in winter. *New Zealand Journal of Agricultural Research* 41, 299-305.
- Boschma SP, Scott JM (2000) Measuring and predicting the consequences of drought for a range of perennial grasses on the Northern Tablelands of New South Wales. *Australian Journal of Experimental Agriculture* 40, 285-297.
- Chapman DF, Parsons AJ, Cosgrove GP, Barker DJ, Marotti DM, Venning KJ, Rutter SM, Hill J, Thompson AN (2007) Impacts of spatial patterns in pasture on animal grazing behavior, intake, and performance. *Crop Science* 47, 399-415.
- Colvin AF, Walkden-Brown SW, Knox MR, Scott JM (2008) Intensive rotational grazing assists control of gastrointestinal nematodosis of sheep in a cool temperate environment with summer-dominant rainfall. *Veterinary Parasitology* 153, 108-120.
- Cook SJ, Blair GJ, Lazenby A (1978) Pasture degeneration. II. The importance of superphosphate, nitrogen and grazing management. *Australian Journal of Agricultural Research* 29, 19-29.
- Donald GE, Scott JM, Vickery PJ (2012) Satellite derived evidence of whole farmlet and paddock responses to management and climate. *Animal Production Science* 52, (in press).
- Guppy CN, Scott JM, Edwards E, Blair GJ (2012) Whole-farm management of soil nutrients drives productive grazing systems: the Cicerone farmlet experiment confirms earlier research. *Animal Production Science* 52, (in press).
- Hinch GN, Hoad J, Lollback M, Marchant RS, Colvin AF, Scott JM, Mackay D (2012) Livestock weights in response to three whole-farmlet management systems. *Animal Production Science* 52, (in press).
- Kaine G, Doyle B, Sutherland H, Scott JM (2012) An analysis of the management practices and research needs of graziers in the New England region of New South Wales. *Animal Production Science* 52, (this issue).
- Morley FHW, Spedding CRW (1968) Agricultural systems and grazing experiments. *Herbage Abstracts* 38, 279-287.
- Sanford P, Cullen BR, Dowling PM, Chapman DF, Garden DL, Lodge GM, Andrew MH, Quigley PE, Murphy SR, King WM, Johnston WH, Kemp DR (2003) SGS Pasture Theme: effect of climate, soil factors and management on pasture production and stability across the high rainfall zone of southern Australia. *Australian Journal of Experimental Agriculture* 43, 945-959.
- Scott F, Cacho O, Scott JM (2012a) Economic risk analysis of livestock management system options. *Animal Production Science* 52, (in press).
- Scott F, Scott JM, Cacho O (2012b) Whole farm returns show true profitability of three different livestock management systems. *Animal Production Science* 52, (in press).
- Shakhane LM, Mulcahy C, Scott JM, Hinch GN, Mackay D (2012a) Pasture herbage mass, quality and growth in response to three whole-farmlet management systems. *Animal Production Science* 52, (in press).
- Shakhane LM, Murison RD, Mulcahy C, Scott JM, Hinch GN, Mackay D, Morrow A (2012b) Changes in botanical composition on three farmlets subjected to different pasture and grazing management strategies. *Animal Production Science* 52, (in press).
- Shakhane LM, Scott JM, Lord CJ, Hinch GN (2012c) Matching the supply of pasture with the demand of grazing livestock. *Animal Production Science* 52, (in press).

This paper was reprinted from the Australian Society of Agronomy website from the 2012 conference - "Capturing Opportunities and Overcoming Obstacles in Australian Agronomy" held in Armidale in October 2012.

For more papers from the conference go to www.regional.org.au/au/asa/2012/index.htm

22nd International Grassland Congress

Revitalising grasslands to sustain our communities - Sydney 15-19 September 2013

A grassland celebration – head to Sydney in September

Few people properly ponder the importance of grass. Aside from horticulture, there is hardly a food, drink or sport that does not have some link back to a species in grass family. Some grasses are used as crops (wheat, rice, corn, sorghum, barley, oats), with some as building materials (bamboo, thatching) and household items (mats, brooms). Some species are part of native and improved pasture communities grazed by wild and domesticated animals (fields, steppes, veldts, prairies, pampas, plains) and other grasses are prized as turf species (for golf, athletics, cricket, football, erosion control banks). Grasslands are used for the production of animals, the safe collection of clean water, the preservation of biodiversity and the well-being of humans.

So, grasslands are far more than just grass; 40% of the world's land surface comprises multi-purpose grazing lands, ranging from intensive to extensive, and one billion people directly depend upon them for their livelihoods.

For Australian scientists, farmers and policy makers, the 22nd International Grassland Congress, to be held in

Sydney on September 15-19 2013, is a once in a generation event, one that will bring together leading grassland people from temperate and tropical countries around the world. Participants will have a choice of 220 spoken papers and 500+ written papers/posters to review, exchange and discuss. Hence all attendees will gain several new ideas that will help them understand and manage their own grasslands. As well as the papers presented, the professional and social interactions with other individuals are an important part of what make these events so special.

In Australia, grasslands R&D has been in a slow patch for some time and similar situations exist around the world. As well as the usual focus on innovation, the core objective at the Sydney IGC is on 'revitalisation', both in terms of our knowledge and our grassland professions. A special effort has been made to attract early career researchers and provide them with opportunities to present their ideas, to meet with potential mentors and to promote discussion about current and future issues that are relevant to the sustainable utilisation of the world's grasslands. Of the prominent scientists,

advisers and farmers who will attend, many are on the cusp of retirement, and we want to foster their interaction with, and support of, the 'electronic generation' in solving problems.

The organising committee is also very keen for the 22nd International Grassland Congress to appeal to farmers and other managers of grassland resources. Farmers have always been part of the IGCs and there will be a special session devoted to discussing issues that farmers consider important. Farmers are welcome to participate in the tours and events before and after the Congress, too. Everything is on the IGC website www.igc2013.com.

Don't miss this opportunity to celebrate the world's grasslands. The contacts you make are enriching and lasting, and the information gained is always valuable.

**For more information and
REGISTRATION details go to**

www.igc2013.com

Would you like to attend the IGC in September?

Why not apply for a Grassland Society of NSW travel grant?



Travel Grants are open to financial members of the Society with at least two years of continuous membership prior to the date of application - funding is available to attend conferences or other activities associated with grassland science. The committee are particularly interested in applications from our producer members.

More details can be found on the website (www.grasslandnsw.com.au) under the membership tab or by contacting the Secretary (secretary@grasslandnsw.com.au)

From the President

Seasonal conditions vary across the state, but many areas are experiencing good, early autumn rain that is very welcome to livestock and cropping producers.

Floods in the northern rivers and nearby areas have caused major problems for dairy farmers who do not need extra costs. We sympathise with our milk producer members who have enough challenges without flood complications. Some coastal beef producers have also been severely affected by this major flood and our thoughts go to them as well.

Members will be aware that your Society sent letters to the Premier, Minister for Primary Industries and other rural based politicians late last year voicing our concerns for the current restructure of the DPI. In particular we raised concerns with the major changes to the extension arm of DPI. We received a reply from the

Premier who passed the letter on to the DPI minister for a response. We recently also heard from the Minister, her reply in full can be found in a "Members Only" section on the Society's website - www.grasslandnsw.com.au

Elsewhere in this newsletter is a reminder that the Society is offering travel grants to members who would like to attend the International Grassland Congress (IGC) to be held in Sydney in September. We would particularly welcome an application from producer members interested in attending this major event in the agricultural calendar. The by-laws governing financial travel grants are available on the internet site or from the secretary.

As we will not be having our usual conference this year, to make room for the IGC, the opportunity exists for a member to take up this offer and

attend what promises to be a stimulating conference.

Your society is currently busy seeking funds for several regional meetings, later in the year. At this stage, we are confident of running pasture updates, similar to last year, as we take on the increasingly important role of technology transfer.

Best wishes to all members,

Mick Duncan.
President.



THE LAND



**Loyal,
hardworking
and always
there when
you need us...**

SUBSCRIBE NOW! 1300 131 095

Disclaimer

While every effort is made to publish accurate information the Grassland Society of NSW does not accept responsibility for statements made or opinion expressed in this newsletter.

Inclusion of an advertisement in this publication does not necessarily imply an endorsement of the company or product of the Grassland Society of NSW.

The Grassland Society of NSW Inc is a unique blend of people with a common interest in developing our most important resource - our Grasslands

The Grassland Society of NSW was formed in March 1985. The Society now has approx 500 members and associates, 75% of whom are farmers and graziers. The balance of membership is made up of agricultural scientists, farm advisers, consultants, and or executives or representatives of organisations concerned with fertilisers, seeds, chemicals and machinery.

The aims of the Society are to advance the investigation of problems affecting grassland husbandry and to encourage the adoption into practice of results of research and practical experience. The Society holds an annual conference, publishes a quarterly newsletter, holds field days and is establishing regional branches throughout the state.

Membership is open to any person or company interested in grassland management and the aims of the Society. For membership details go to www.grasslandnsw.com.au or contact the Secretary at secretary@grasslandnsw.com.au or at PO Box 471 Orange 2800

Office Bearers of the Grassland Society of NSW - 2011-2012

State Executive

Mick Duncan (President)
Lester McCormick (Vice President)
Janelle Witschi (Secretary)
Frank McRae (Treasurer)
John Coughlan (Immediate Past President)
Carol Harris (Editor)

Committee: Hugh Dove, Keith Garlick, David Harbison, Cathy Waters, John Ive, Hayley Rutherford, Jim Laycock, Warwick Wheatley

Branch Representatives

Loretta Serafin (North West Slopes)
John Coughlan (Central)
Hugh Dove (Southern Tablelands)
Mick Duncan (Northern Tablelands)
Cathy Waters (Central West Slopes and Plains)
Hayley Rutherford & Nathan Ferguson (South Western Slopes & Riverina)

If you are interested in reactivating an old branch or forming a new branch please contact the Secretary at secretary@grasslandnsw.com.au or by mail at PO Box 471 Orange NSW 2800

Grassland Society of NSW News



Next Newsletter: The second issue of the newsletter for 2013 will be circulated in June. If you wish to submit an article, short item, letter to the Editor or photo for the second issue please send your contribution to the Editor - Carol Harris at carol.harris@dpi.nsw.gov.au or DPI NSW 444 Strathbogie Road Glen Innes 2370. The deadline for submitting contributions for the next newsletter is May 18 2013.



New Members: Welcome to new member Greg Brooke, Wellington.



Electronic newsletter: Don't forget you can receive the Grassland Society of NSW newsletter electronically. Just email your details to Janelle (secretary@grasslandnsw.com.au) and you will be added to the list. Next newsletter you will receive an email notification with a link to the newsletter on the website.

Grassland Society of NSW - PO BOX 471 Orange NSW 2800, www.grasslandnsw.com.au

This publication is prepared by the Grassland Society of NSW Inc and printed by GK Craig Printers, Orange on recycled paper