CONTENTS

Where has the rain been falling? .......................................................... 2
Message from the editor ................................................................. 3
Agistment of stock on pastoral leases .............................................. 4
Snippets from Derby – a run-down on current activities .................... 5
NABRC messages ........................................................................... 5
Date claimer for Pilbara pastoralists ................................................ 6
Mr John Cox to attend Pilbara consultation meeting in December ...... 7
Naked lady found in the Pilbara ....................................................... 8
New Opportunities for Tropical and Pastoral Agriculture Project (NOTPA) ................................................................. 9
Our station story ............................................................................ 10
Locust hatching has commenced .................................................... 11
Progress report - Young Breeder Project ....................................... 12
Lamboo Infrastructure Development Program ................................ 13
Introduction to new Executive Director, Roger O’Dwyer ............... 14
Understanding the weather - The implications of winter rain on breeder management in the Kimberley ......................... 15
Who’s BOSSS? ........................................................................... 16
The Blackall Shearers’ Cook .......................................................... 18
Bush nurse .................................................................................... 20
Mitchell grass field day in the Pilbara ........................................... 21
Update on the ‘Dynamic Savanna’ Project ................................. 22
How typical is your business? ....................................................... 24
Farewell to our Flying Vet! ............................................................... 24
Keep an eye on your black soil pastures! ....................................... 25
The Broome nutrition workshop .................................................... 25
Pilbara Indigenous Management Support Service ...................... 26
EJ Connellan Trust .......................................................................... 27
New Stock Inspector for Broome .................................................. 28
Land management – thoughts on the pastoralist’s role ................... 29
My experience at Mt Pierre Station .............................................. 30
Developing a grazing land management education package for the Kimberley .......................................................... 32
NVD/waybills – reminder ............................................................... 34
Pasture budgeting and land condition assessment – the ‘Stocktake’ program ................................................................. 35
New Northern Rangelands Landcare Coordinator ......................... 35
Improved pastures produce better weight gains and stocking rates ................................................................. 36
Cattle for live export – a reminder of pastoralist’s responsibilities .... 37
Northern Rangelands Calendar ...................................................... 38

EDITORS: Hayley Turner

Visit http://www.agric.wa.gov.au
WHERE HAS THE RAIN BEEN FALLING?

Western Australian Rainfall (mm)  1 June to 31 August 2006
Product of the National Climate Centre

Disclaimer
This material has been written for Western Australian conditions. Its availability does not imply suitability to other areas, and any interpretation or use is the responsibility of the user. Mention of product or trade names does not imply recommendation, and any omissions are unintentional. Recommendations were current at the time of preparation of the original publication.

Please check the address label on your publication. If it is incorrect or if you would like to be included on our mailing list, let us know!
MESSAGE FROM THE EDITOR

Welcome to the September 2006 issue of YOUR Northern Region Pastoral Memo. You may have noticed a slight change in the presentation style of the memo and we hope this adds value to your reading experience.

The topics covered in this edition range from the new BOSSS (Bovine Syndromic Surveillance System) to a ‘Naked Lady’ (Euphorbia tirucalli), found during a Pilbara lease inspection and everything between! Our poetry pages are a little light-on and I encourage our literary enthusiasts and artists to submit their creations so people past their front gates are also able to enjoy their talents.

I recently attended the Australian Rangelands Society conference in South Australia and on numerous occasions presenters commented on the lack of understanding by our ‘city cousins’ of the mere existence of the rangelands, let alone what it held in the way of resources, production and opportunities. What was even more frightening was that people referred to the television program ‘McLeods Daughters’ as the only education city people have of the rangelands! How scary is that?

Thankfully there are some initiatives around that are encouraging veterinary and medical students to complete a period of work experience in the rangelands as part of the practical components of their courses. Veterinary students who spent two weeks at Warrawagine in the Pilbara and medical students who spent time at Mt Pierre in the Kimberley, have provided entertaining reports of their respective experiences.

So if your heart’s racing, see the bush nurse and if you thought coral only grew in the water then you’d better check your Mitchell grass! This edition has something for everyone, so together with the various authors, I hope you enjoy the read.

Kind regards

Hayley Turner
Pastoral Memo Editor
AGISTMENT OF STOCK ON PASTORAL LEASES
By Brian Lloyd, Pastoral Project Officer, Department of Planning and Infrastructure

Current dry conditions in southern agricultural areas of the State are causing concerns in relation to preserving both stock and paddock cover. One option may be the agistment of stock from the southern agricultural areas onto pastoral leases that have experienced recent favourable seasonal conditions and in general have good condition pastures.

When considering approaches for agistment, pastoralists need to be aware that under s112 of the Land Administration Act 1997 (the Act), prior written permission of the Pastoral Lands Board is necessary. The Pastoral Lands Board, under the Act, is required to ensure that pastoral leases are managed on an ecologically sustainable basis. With this in mind, pastoralists intending to agist stock must seek approval in advance from the Board, so the effect of the proposal on the condition of the pastoral lease can be determined.

Obtaining permission is not a difficult process. All that is required is a letter to the Board providing particular details of the agistment proposal, including:

- type of stock to be agisted;
- number of animals involved;
- duration of agistment proposal;
- where on the lease agisted stock will be located; and
- any relevant management comments.

The Board’s permission to allow agistment may be conditional and it is the pastoral lessee’s responsibility to monitor the impact of additional grazing on the rangeland to ensure land degradation does not occur. Any changes to the details of the agistment that were supplied to the Board must also be advised.

Applications should be addressed to the Chairman, Pastoral Lands Board and may be e-mailed, faxed (on 9347 5009) or posted to the Board at PO Box 1575, Midland, 6936. Initial enquiries can be made to the Executive Officer of the Board (Ross McGuigan) on 9347 5126 or e-mail plb@dpi.wa.gov.au.
SNIPPETS FROM DERBY

- A RUN-DOWN ON CURRENT ACTIVITIES

By Michael Jeffery, Development Officer, Derby

The Derby team have been pretty busy, being involved in a wide range of activities both within the West and whole of the Kimberley during the first half of the year.

Activities throughout the year have included:

- on-going control of the rubber vine infestation at Willare;
- donkey control in the north Kimberley;
- stocktake pasture monitoring program demonstration to the three Kimberley LCDC groups;
- the Broome nutrition workshop;
- on-going Young Breeder work;
- general training and extension;
- Regional Beef Research Committee (RBRC) meetings;
- the wrap-up of the NIRS dung sampling project;
- the start of a new heifer trial at Anna Plains;
- obtaining funding from MLA to develop a Grazing Land Management package for the Kimberley;
- and much more!

A number of requests for activities have come across the desk from various organisations including MLA and private industries, while the general movement of cattle throughout the Kimberley and the monitoring of land condition on the pastoral leases have kept staff busy.

Peter Price, the West Kimberley District Manager has departed Derby for six months long service leave with plans to travel to Queensland and Spain. Michael Jeffery, Matt Bullard and Noel Wilson will be sharing his jobs while he is away.

NABRC MESSAGES

By Lance Coppin, NABRC Representative, Yarrie Station

There have been two North Australian Beef Research Council (NABRC) meetings so far this year, one in Toowoomba in March and one in Brisbane in June. One close to home issue was a funding proposal put forward by our local Department of Agriculture and Food representative, after positive local feedback, for Indigenous training in the Pilbara. Unfortunately this application was not successful.

Following the June meeting we attended the first of MLA’s Producer Forums held in Mundubbera, Queensland. This was a pilot forum that was regarded as a great success by the organisers and the local producers. This positive outcome means that the MLA is now focusing on running similar events right across northern Australia and is looking for feedback from the regions to assist them to develop suitable programs for different areas.
The Producer Forum is a day that provides information to local producers through a range of speakers and other facilitators, on current and future local and whole of industry issues.

The main difference between these forums and a Meat Profit day is that Producer forums are intended to deliver information tailored more specifically to each local region. MLA is hoping to receive feedback from the Pilbara that is based around the following:

- Is the Pilbara interested in the idea of holding a producer forum?
- What issues are most relevant to the region?
- What time of the year and where would be a good location to run one?
- Would holding two forums in the Pilbara be practical because of distance issues?

MLA would organise and run the event, based on our feedback. Having attended the first forum I strongly recommend supporting the idea, based on how well it was received by cattle people over east. There is more information on this that I will try to make available in the future.

The next NABRC meeting coincides with a Meat Profit day in Alice Springs in September 2006. If anyone has any views on beef research in the Pilbara in particular, or northern Australia in general, or issues relating to MLA expenditure in the north that you would like voiced, please contact me at Yarrie, (08) 9176 4954.

Cheers to all.
Lance

DATE CLAIMER FOR PILBARA PASTORALISTS

By Richard Watkins and Peter Smith, DAFWA, Karratha

The next district consultation meeting of Pilbara pastoralists and local Department of Agriculture (and Food, now) (DAFWA) staff will be held in early December 2006, possibly in Dampier. Dampier has more reasonably priced accommodation than Karratha and is more centrally located for pastoralists from the western and southern Pilbara. The last several meetings have been held in Hedland. I would welcome your thoughts on suitable alternative venues. Details of the actual date and venue will be advised later and each Pilbara pastoral business will receive a written invitation around mid November.

Mr John Cox, chairman of the North Australian Beef Research Council (NABRC), will be attending this meeting to meet local pastoralists and discuss issues of concern in the Pilbara. Lance Coppin is the Pilbara representative on this council, which is made up of representatives from Regional Beef Research committees across northern Australia. The district consultation meeting is accepted by NABRC as representing the views of Pilbara pastoralists on identifying and supporting projects to address local problems. The support of Pilbara pastoralists is critical if project proposals are to be accepted by NABRC and recommended to MLA for funding.

Pastoralists are encouraged to plan on attending this meeting to meet John Cox and raise their issues of concern at the meeting. Consideration is also being given to organising a cattle research update day, to be held either the day before or after the consultation meeting at or around the same venue.

The Pilbara branch of the PGA usually conduct a meeting in conjunction with the consultation meeting.

Please advise of your ideas for alternative venues.
Mr John Cox is the Chairman of the North Australian Beef Research Council (NABRC). Lance Coppin is the Pilbara representative on this council with John Stoate representing the Kimberley. John is attending the December Pilbara consultation meeting to meet pastoralists and discuss issues of concern and opportunities for research in this area. As outlined below, John has broad experience in the northern cattle industry and is certainly an interesting man to talk to.

John started his working life as a jackeroo with the Scottish Australian Company in NSW in 1959, on a large scale sheep and cattle property. In the ensuing years he transferred between a number of Company properties, gaining experience with cattle, sheep, cropping and irrigation in Queensland, NSW and South Australia. This was followed by a short period as assistant manager of what was then Australia’s largest Brahman stud in the wet tropic of North Queensland.

He then took a position as project manager to start a cattle ranch in Ghana, West Africa in 1973. Six years later he returned to Australia, having started a second sheep and cattle project. He remained project director of the two projects, while also supervising up to 11 cattle stations and two irrigation farms in the Kimberley and the Northern Territory for GRM International.

In 1985, he became general manager of Colinta Holdings, a wholly owned subsidiary of MIM Holdings, operating sheep stations in Western Australia and cattle stations in the Northern Territory.

In 1989, he was appointed managing director of Stanbroke Pastoral Company, a wholly owned subsidiary of the AMP Society, until the company was sold in 2002. During this time, Stanbroke grew from an asset base of about $100m to a value of $490m when first sold in October 2001 and finally at $690m when re-sold in May 2002. Cattle numbers grew from 300,000 head in 1989 to 500,000 in 2001 on 27 stations in the NT and Queensland; a 15,000 head feedlot and a 60,000 head weekly throughput abattoir just west of Brisbane. By this time Stanbroke was an integrated beef supply chain with its own brand of traceable beef servicing both the Australian and international markets.

Stanbroke employed over 300 staff on its properties; was a Registered Training Organisation; had achieved ISO 14000 environmental management accreditation on six properties with the roll-out planned for the remaining ones; and was involved in major research projects in beef production in northern Australia.

John now continues his involvement with the industry generally through directorships and in particular, research and development, through his position as Chairman of the North Australian Beef Research Council.

He was awarded the Centenary Medal in 2001 for services to the pastoral industry and was inducted into the Hall of Fame of the International Stockman’s Education Foundation, Houston, Texas, USA in 2006 for services to the international cattle and beef industry.
NAKED LADY FOUND IN THE PILBARA

By Andrew Longbottom, Biosecurity Officer, Karratha

_Euphorbia tirucalli_, commonly known as Naked lady, pencil plant/tree or naked lady cactus has been found in the Pilbara, east of Hedland. Two plants, both about 3 metres tall, were found in an old quarry.

_Euphorbia tirucalli_ is not a true cactus, but it looks similar to cactus plants. It has a white latex type of sap which is very caustic and we are concerned that these plants have spread, posing a risk to livestock.

In drought conditions livestock will eat these plants. The irritant diterpenoids will cause a very severe and often fatal gastroenteritis. Both cattle and horses can be at risk.

For humans the sap can cause temporary blindness if it gets into the eyes. It can also cause blistering of the skin.

Currently this is the only recorded site for these plants on the mainland within the State. The only other place that they have been recorded in WA is on Cockatoo Island.

Pastoralists are reminded to watch out for any strange cactus-like plants or unfamiliar weeds, and report these to the local Department of Agriculture and Food office.

Most weeds are escaped garden plants and are often quite toxic. Also any unexplained stock deaths are also worth reporting and an attempt at finding the cause will be undertaken.
NEW OPPORTUNITIES FOR TROPICAL AND PASTORAL AGRICULTURE PROJECT (NOTPA)

By Chris Ham, Project Manager, Broome

The NOTPA project is a new initiative funded by the Department of Agriculture and Food, Western Australian (DAFWA). The project area covers both the West Kimberley and the Pilbara. Commencing on 30 January 2006, the NOTPA project is funded up to June 2009. The aim of NOTPA is to work with stakeholders to identify and develop a range of sustainable agricultural/horticultural production options that will contribute to sustainable regional agricultural production.

The project team has been researching the information about the history of sustainable agriculture production systems in the two regions, what and where there is new potential. This is a necessary step in finding out the positive and the negative lessons learnt from history which provides valuable guidance for the future.

At the same time the team is gradually establishing contact with stakeholders who are interested in participating or contributing to the project. The team wants to find out what these people are doing now and what plans they have for the future. The project will be targeting those stakeholders involved in the pastoral, horticultural or agriculture industries in these regions.

The concept underpinning NOTPA is that several (possibly 3 to 5) key examples of emerging opportunities are identified, supported and developed to fruition and most importantly documented within the timeframe of the project. A major component will be to encourage other business people to follow the progress of the key examples through site visits, information products to see whether these can be developed in their own situation.

The team is investigating a couple of options such as growing fodder on pastoral leases and a range of native plant industries. We are sure that there are many other possibilities out there and would like to hear from people who have ideas for diversified production systems on their land or for their community.

Development requires careful consideration of what is possible within the current land tenure and proposals must satisfy and meet the necessary approval processes. This can be a complex, costly and time consuming. The NOTPA team plans to spend time in understanding the process, the application forms and what information needs to be provided to ensure timely decisions are made. NOTPA plans to extend this information to regional businesses by assisting with the planning and development of a sustainable, viable business case.

Those wishing to find out more about NOTPA can contact the project team.

Chris Ham – Project Manager
DAFWA – Broome
Phone: (08) 9194 1424
Mobile: 0427 085 110
cham@agric.wa.gov.au

Nadine Schiller
DAFWA – Kununurra
Phone: (08) 9166 4009
Sat: 0420 104 832
nschiller@agric.wa.gov.au

Francis Bright
DAFWA – Kununurra
Phone: (08) 9166 4016
f.bright@agric.wa.gov.au
**OUR STATION STORY**

*By Roshni Vyas and Marion Vince, Veterinary Students, Murdoch University*

Perched up high in the truck with our bags and swags behind us, dinner from the roadhouse on our knees, we knew we were on our way to somewhere different.

Two vet students from the suburbs; we hadn’t been anywhere more north than Scarborough beach. Now we were headed to Warrawagine Station in the Pilbara, pretty much more in the middle of nowhere than we had ever been before.

We had been told of the red sandy vastness of the 1 million acre property managed by Robin Mills, and we’d definitely heard stories about the man-shy clean skin cattle that are mustered there.

But it wasn’t until we woke up at 5.30 a.m. on our first morning (admittedly a little on the groggy side) and saw the silent silhouette of a windmill against the vast morning sky, that we realised just how remote this place was.

We met the crew at brekky; a bunch of tanned, white-teethed grinning faces that we got to know over our two-week stay. These boys have the amazing ability to work and live together and not kill or seriously maim each other in the process.

We were to discover that to be out mustering is what being out here was really all about.

Mornings started when the generator roared/spluttered into life, cutting through the silence in the air; a silence you don’t get in Perth. We climbed straight out of our swags and to the fire, to warm up our hands and get in that first cup of Bushells before the day began.

Out in the buggy we were each ‘chauffeured’ around with one of the boys. Although a lot of the time was spent waiting for the mob to come along, when they did there was no messing around.

Down the creek the cattle came, the chopper swept overhead with amazing skill and agility almost as if it were remote control, motorbikes wove speedily after break-aways whilst dodging anthills and the buggies zoomed over spinifex and small trees with us holding onto our seats. One thing was for sure, these Warrawagine boys knew their cattle. It was amazing how calmly they could hold the mob together (most of the time), especially considering the flat open nature of the country.

During one wild muster we had our own buggy to zoom around in, and we were very proud we didn’t get bogged even once! As for our mustering capabilities…well, let’s just say it was a skill we were still developing!

After a long day it was truly rewarding when we finally had the cattle pausing at the opening to the yards. Here it could go one way or the other, but as the first pointed horn crossed through the gap we watched with relief as the rest of the mob followed. In a mad rush the dust would fly up around the yards as everyone jumped off their bikes to close them in.

By the end of the day it didn’t matter if you were a pale-skinned city slicker, we had the best looking natural fake tan you could get. The only problem was it washed off in the shower that night.

The next job was processing the cattle through the yards we had hopefully set up sturdily the day before. We learnt it was a good idea to pay attention as you pushed the cattle up, which were a bit more energetic than the lazy old cows we have at uni. We spent much of our time jumping up on the rails to dodge frisky micky bulls. Although sometimes you would stand your ground and hope you were calling his bluff.
There is not enough room here to tell of all we learnt and all we experienced during our two weeks at Warrawagine. We were able to get a bit bloody and dissect our own cow and camel, and castrate a micky bull, which was a lot of fun from the ‘vetty’ side of things. However, best of all, we learnt about the importance of good cattle handling and herd management, aspects which are often the most important and are often overlooked in the lecture theatre.

It was the best two weeks we could’ve hoped for, and while the red dirt will eventually wash out of our ears, we will never forget our time at Warrawagine and the great team of people that live and work there.

A big thanks to everyone at the station who showed us such a good time!

**Locust hatching has commenced**

By Simon Merewether, Incident Coordinator, Australian Plague Locust Campaign

The first locust hatchings for the season were reported to the Department over the weekend of 26-27 August.

Hatchings were reported in the Moora area, and are in line with the Department’s predictions for early season emergence in some regions. It is expected that the bulk of the insects will emerge in this area over the next two weeks.

The Department’s spraying program will target areas where high density swarms are expected to form. Farmers outside these target areas are responsible for undertaking their own spraying programs. Although the season has been very dry in some areas, it will still be important for farmers to undertake their own control programs to protect any pasture or crops they have from locust damage.

The Department has a well coordinated control management plan in place and staff are continuing ground monitoring and tracking the hatching patterns.

The Department is asking farmers to begin surveying their properties and look out for any emerging locusts, which will only be about the size of a small ant but will hop when disturbed.

Any sightings need to be reported to their local Department office or to 1800 084 881.

It is also important that farmers return their updated property information to the Department.

Hatchings are likely to commence in other areas soon and will vary across the State according to climatic conditions and other environmental factors. Egg bed monitoring by DAFWA will continue across the State. The Department will continue to work closely with landholders and communities to ensure the management program proceeds smoothly.


This information includes industry and community information, locust status reports, frequently asked questions, Department contacts, media releases and where to go for health and pesticide related information.

Advice and information on health related issues is available by contacting the WA Department of Health’s Pesticide Safety Unit on 9383 4244.
The young breeder project is progressing well and continuing to meet project milestones. One of the tasks of this project was to document the actual performance of heifers and young breeders in the Pilbara under current management systems. This part of the project is being achieved on four Pilbara stations with the support of cooperating pastoralists.

Information collected so far has provided some understanding of the growth, reproduction and survival of heifers and young breeders in the Pilbara, from weaning until their first conception.

At one site, a group of 229 heifers weaned during 2004 were identified and weighed in November 2004. These heifers have been run as a group since that time. Bulls were introduced into the group in early 2005. It is hoped to keep this group together until they wean their first calves, to provide an opportunity to collect further information on the reproductive performance of lactating young breeders.

This group of heifers were weighed and pregnancy tested in August 2005 and again in July 2006. A summary of the information collected at these musters is shown in Table 1.

This information indicates that the heifers have all reached puberty with 96% either lactating or pregnant. A combination of the pregnancy test information from August 2005 and the lactation records of July 2006 indicate that some 75 head (37%) of these heifers conceived in the year following weaning with about half of these conceptions occurring early in the year and recorded pregnant in August 2005.

Only 10 of the 75 (13%) females lactating in July 2006 had reconceived at the time of testing. Based on the liveweight and body condition of the lactating females, it could reasonably be expected that a considerable number were early in calf but not yet detectably pregnant at the time of testing.

Only three head of the heifers originally tagged in November 2004 have failed to turn up at any subsequent musters. This reflects high mustering efficiency and a low disappearance (death) rate in this age group of cattle during these seasons on this station.

Summary

The information collected at this and the other monitoring sites is providing information not previously available, on the performance of heifers and young breeders in the Pilbara. This information will be useful in developing and evaluating management systems likely to improve the productivity of young breeders in northern rangeland herds.
LAMBOO INFRASTRUCTURE DEVELOPMENT PROGRAM

By Russell Shaw, Project Manager, Derby

Across Australia the agriculture sector is facing increasing difficulties in finding staff. The labour force available to industry is dwindling for a diversity of reasons. In particular, the pastoral industry has geography and distance from major population centres as an additional challenge in recruiting staff. Aboriginal owned and run pastoral leases are not immune from the challenge of finding staff.

Partly as a solution to staffing difficulties, but also in an endeavour to efficiently and economically operate a pastoral business, Bob McConachy (DAFWA) and Robin Yeeda (Lamboo Station) have initiated an infrastructure development program on Lamboo Station that addresses the issues of effective management and staff shortages.

In conjunction with paddock realignments to take advantage of land type, current water points and planned water points, Bob and Robin have designed a set of ‘spear’ trap yards that are easily laid out, easy to build, and require less material and time in construction than traditional trap yards; significantly reducing construction costs and labour input.

Initially the management approach is being implemented and trialled on approximately 100,000 hectares of Lamboo; the remainder of Lamboo is currently sub-leased. All of the paddocks on the north side of Lamboo not sub-leased will be fitted with the spear design and a rotational grazing regime will be established with the cattle trapping themselves from paddock to paddock as the spears are set. Additionally, laneways will be built to move cattle into yards for drafting, animal husbandry and trucking of sale cattle.

The system of self-mustering will be augmented by the installation of solar driven submersibles away from the Great Northern Highway and windmills along and in the vicinity of the highway. Previous submersibles close to the highway have been stolen.

The anticipated benefits of the system are:

- Cattle effectively self-muster, decreasing the pastoral business reliance on mustering contractors, reducing operational costs by up 30%.
- Effective and timely management of a herd of 1500 cattle by one man.
- Effective herd management allows the introduction of bulls to achieve uniform calving times and calving under optimal seasonal conditions.
- Herd management produces quieter temperament in herd via improved handling and improved bloodlines.
- Intensive herd management facilitating an improvement in bloodlines, no mickey bulls in herd, should improve market access and prices.
- Cattle with quieter temperaments do not put as much stress on infrastructure or on manpower during mustering, thus reducing maintenance costs to infrastructure and animal loss while mustering.
- The Lamboo design solves a problem known to exist within the cell/rotational grazing concept whereby cattle tend to anticipate a move into the next paddock and congregate around gateways waiting for the move to occur, rather than continue to feed out in their current paddock. This design allows the cattle to be moved from paddock to paddock as they come in to drink rather than mobbing up near gateways.
- Prevents animals from ‘jamming’ in the outset spear when it is closed, preventing injury and death that is associated with traditional designs.
• Encourages animals to leave the watering area relatively quickly.
• Will be used to ‘train’ cattle not accustomed to approaching water points through spears.

**Introduction to New Executive Director, Roger O’Dwyer**

Mr O’Dwyer is the Executive Director for Industry and Rural Services. He has worked in a wide range of roles in the Australian Primary Industry sector. Immediately prior to returning to the Department of Agriculture and Food he was a Principal Policy Officer in the Strategic Policy Group of the Queensland Department of Primary Industries. The main focus was on strategies to accelerate the rate of growth of primary industry. Previous to that he was Director of the Pastoral Division of the Northern Territory Department of Primary Industry. Responsibility included the agriculture and animal health areas, in addition to the pastoral industry. He has also worked as a rural consultant, in rural finance with Rural Adjustment in Western Australia and the Agricultural Bank of Tasmania, as well as a period lecturing in farm business management at Muresk Institute. Prior to leaving Western Australia he was Executive Director of the Industry Resource Protection Program in what was then Agriculture Western Australia.

In his current position Mr O’Dwyer has overall responsibility for strategic direction of the three main industry sectors of grains, animals and horticulture. Identification of new directions and evaluation of current projects are important functions in setting the strategic direction. The core outcome is improved productive capacity and profitability of Western Australia’s agri-industry. He is also responsible for the regional delivery of services provided by the Department.
Beef production in the Kimberley is greatly influenced by the length and timing of the wet season. The combination of two ‘abnormal’ seasons has major implications for the Kimberley breeding herd for the next three to five years. The impact of a poor wet season and winter rain in 2005 is currently affecting many West Kimberley properties, and will do so for a number of years.

Most Kimberley cows normally calve in the late dry season and early wet, conceiving during the late wet and then calving again the next year. However, the combination of the poor wet season in 2004/05 and the winter rain in 2005 has dramatically altered the calving pattern of the West Kimberley breeding herd.

The poor 2004/05 wet season resulted in most cows being in very poor condition at the end of the normal wet season, and consequently not cycling or getting back into calf. Some herds were recording less than 20% of mature breeders being pregnant. Early musters weaned many of the bigger calves with many cows not having the pressure of feeding a calf in the middle of the year. The rain in May/June 2005 provided a large amount of high quality feed for these cows and many began cycling and got pregnant by July, when the feed quality began to fall again. For many cows still feeding calves however, the rainfall was too late to get them into body condition good enough to get pregnant.

The results of the 2005 winter rain is being seen this year, with many young calves on the ground in February and March, just as the mustering season began, making management decisions on what to do with the calves very difficult. The late calving has also resulted in many cows not getting back into calf this year, as they have had insufficient time to regain body weight and get over the stress of calving before the wet finished.

What are the implications for the following years?

Some serious decisions have to be made in order to get most of the cows back into a normal calving period and pattern. The longer the calves are kept on the cows this year, the poorer the cows will be at the start of the 2006/07 wet season, and the longer the cows will need before they will get pregnant. There are serious concerns that many of the cows which got pregnant last June/August, will continue to calve out of season for the rest of their lives, or miss a calving within the next one to two years as they try to carry a calf through the dry.

The best way to prevent the cows losing too much condition over the dry, and therefore risk not getting a calf next year, is to wean the calves as early as possible. The downside of that is the calves will need special care and feeding as they are so young.

The other important consideration for the breeding herd, as well as the turnoff animals, is the time (or age) at which animals will reach normal sale and breeding weights. With many of this year’s calves being born during the late wet season or after the wet, they have not had the benefit of the high quality feed most calves get during normal seasons. For the heifers, this may mean they don’t reach calving weights until 2½ years old, compared to the normal two years, while the steer turnoff may also be delayed by three to six months, if not for a full wet season.

Careful consideration is needed in both cow and weaner management to overcome what could be a very difficult period for the West Kimberley breeder herd, and highlights the impact one season can have on the lifetime performance of cattle in the extensive areas.
WHO’S BOSSS?

By Matthew Bullard, District Veterinary Officer, Broome

What is BOSSS?

BOSSS stands for ‘Bovine Syndromic Surveillance System’ and is a free website which contains information on many exotic and endemic (common) diseases of cattle as well as educational material on diseases and health problems; their signs and symptoms with techniques for their diagnosis in the on-property/self help situation including conducting post-mortems, the taking of samples and where to go for help.

Remote area cattle producers are being urged to use this new web-based tool to help them compile histories of their herd’s health status and to diagnose suspicious diseases.

Listed below are a series of frequently asked questions on the BOSSS system to illustrate the usefulness of the system

Who developed BOSSS?

BOSSS is being supported throughout Australia by an institutional alliance that includes State departments of primary industries and the Australian Biosecurity CRC for Emerging Infectious Diseases. Producer bodies have also indicated their support for the system.

What use is it to you, the cattle owner?

BOSSS provides immediate access to expert help in a disease situation. No more waiting for somebody to ring you back! All the information you need and the means to ‘get the ball rolling’ quickly and minimise any delay, especially in the event of a possible exotic outbreak and help remote area producers to be more effective in defending the nation against disease and pest risks.

Similarly, the system will allow producers to be better informed when describing the disease symptoms to a veterinarian located elsewhere.

Is it easy to use?

BOSSS on-line is very easy to use with (very) basic computer skills. Little or no writing is required, all the information is clearly presented and all the user has to do is make a choice and tick a box. Just follow the prompts.

How does it help vets?

The system helps your local veterinarian at arms length, providing him or her with more information and reducing time intervals to achieving a diagnosis.

The website acts as a confidential database to help animal health authorities like DAFWA to study disease trends that are reported via the BOSSS website and this information is vital when managing biosecurity threats.

DAFWA Biosecurity veterinary and research staff can use the data inputted by graziers to monitor trends across the entire State or from interstate.
Is the data confidential?
Data is collected on a confidential basis without linking the results of monitoring and evaluation to any individual property or producer.

What sort of info is available on the BOSSS website?
The BOSSS website provides access to disease distribution maps, a disease symptom picture library and a post-mortem guide that will assist producers in collecting information and who to contact.

Does it give a disease diagnosis?
Yes and no – The information inputted by the producer is analysed and compared with that stored in the BOSSS database to identify diseases that may be the cause. The diagnosis is tentative because confirmation can only come from a field investigation by a veterinarian or stock inspector.

Can the site provide extra advice from a human?
Yes – The BOSSS site provides links to experts such as veterinarians and an on-line discussion forum allowing cattle owners to e-mail other producers or experts to seek advice and opinions. BOSSS’s objective is to facilitate contact between producers and experts, wherever they may be located.

Does BOSSS replace the need for calling a vet when a sick animal is found?
No – Producers should still ‘Look, Check, and Ask their Local Vet’ or contact their DAFWA Biosecurity officer when they find unusual symptoms of disease or pest. BOSSS will strongly encourage users to do this if there is any risk of an exotic disease or pest.

How do I register for BOSSS?
To register as a BOSSS user or find out more about the system, producers must call the DAFWA information line on 1300 136 016 or talk to their regional DAFWA Biosecurity inspector or veterinarian.

How many producers are needed?
5-10 producers per region (north and west) but there is no upper limit.

Can hands-on training be provided?
Producers are to be trained in post-mortem techniques, digital camera use and BOSSS use.

IMPORTANT – The BOSSS does not replace the need for a cattle owner with sick animals to phone a vet or an inspector. In fact, livestock owners have a legal responsibility to notify a vet or the Department of Agriculture and Food Western Australia of the presence of stock with the symptoms of ‘notifiable’ diseases.

Remember – ‘Look, Check, and Ask a Vet’ or call your local DAFWA office, the DAFWA info line on 1300 136 016 or the National Disease Watch Hotline on 1800 675 888.
The Blackall Shearers’ Cook

The Shearers’ Cook has always been
A creature of distinction,
A breed of true eccentrics
Facing near extinction.

Many spring to mind
In those sheds of yesterday,
The battlers and the vagrants
Who returned to join the fray.

In corrugated kitchens
Where days rolled into weeks,
On lonely outback stations
Stocked by mobs of burly sheep.

Many spring to mind
But of particular notoriety,
Was Old Frank White from Blackall
A stranger to sobriety.

Always partial to a nip
When the work day had begun,
Lemon essence, gin and metho
Followed up by bootleg rum.

Mealtimes could be hit and miss
Depending on the state,
Of Old Frank in the kitchen
Three parts cut by 10 past 8.

He’d put coffee in the milo
And porridge on the toast,
Spaghetti in the biscuits
And nutmeg on the roast.

You’d find pickles in the pikelets
Junket in the stew,
And curry in the custard
Just to name a few.

When the bell rang on the board
For smoko and a spell,
What Old Frank would deliver
Was often hard to tell.

Depending on the bender
Which would sometimes last for days,
The tucker would appear
In a 1000 different ways.

But the tempers on the board
Started getting pretty frayed,
When Frank ran out of billy tea
A week from cut-out day.
A strike was promptly threatened
As discontentment spread,
And complaints and accusations
Flowed freely through the shed.

But the boss man stood his ground
Despite the teams’ unrest,
“Times are tough and cooks are few
So give Old Frank a rest.”

But as fate would sometimes have it
Matters moved from bad to worse,
And as history did unfold
It seemed that Frank was truly cursed.

Cut out came too early
The count out pens were clear,
The wool bales clearly stencilled
For another passing year.

As the boss man neared the kitchen
Frank was nowhere to be found,
Only seven empty King Browns
Remained upon the ground.

And then a rumbling sound
Was heard from further out,
“I think he’s in the outhouse.”
The rousie gave the shout.

The site was not a pretty one -
Dressed in only threadbare duds,
Frank was on the dunny
Drinking beer and peeling spuds.

The Boss man stared in disbelief
And cried with great dismay,
“I’ll never see the humble spud
In quite the same old way.”

“You’re fired Frank you mangy cur,
Strewth and strike me pink!”
“I can only bloody hope
They never landed in the drink.”

Well Frank was off - he bolted
With the Boss man close in tow,
And what befell the poor old cook
We’ll never really know.

But in history Frank will go down
As a legend of bushlore,
The Blackall shearers’ cook
Sent packing in the raw!

By Lara Jensen 2006
Have you received via e-mail, the article “How to survive a heart attack alone”?

It sounded almost too easy to be true and not heard of before this. I did some checking with those who should know. It is not a recommended procedure and is not condoned by medical authorities.

**A HEART ATTACK** occurs when there is a blockage in the arteries that may reduce or cut off the blood supply to a portion of the heart muscles.

**Signs and symptoms are:**
- Pain or discomfort in the centre of the chest – may be severe and vice-like – radiating to the arms, neck and jaw.
- Anxiety, confusion or distress.
- Nausea and/or vomiting.
- Shortness of breath.
- Pale, cold and clammy skin.
- Shock may occur.
- Sometimes collapse and no pulse.

**What to do:**
- Check response, breathing and pulse – keep person calm and try to keep yourself calm.
- If conscious sit the person up.
- If pulse is weak and rapid or the person is light-headed, place on side if preferred – call for medical help.
- If unconscious place on side and call for medical help.
- When/if person unconscious, if able commence CPR – Cardio/Pulmonary Resuscitation.

**ANGINA - Not to be confused with a heart attack**

**ANGINA** is due to narrowing of the coronary arteries. If someone has angina they should carry medication with them.

**Signs and symptoms are:**
- Pain or discomfort in the centre of the chest which may move up the neck and jaw and down either arm, though more commonly the left.
- Onset of pain can be from exercise or emotional stress and is eased by rest and/or medication.

**What to do:**
- Place person in sitting position.
- Loosen clothing at neck, chest and waist.
- If person has tablets, tell her/him to place tablet under tongue – read label for dosage and giving directions if person is unable to do this.
- Pain should ease in 10 minutes – if not it may indicate a heart attack.

**CHEST PAINS** may also be confused with indigestion and stress/anxiety attacks.

"Doctor Doctor, I have a serious problem. I can never remember what I just said."
"When did you first notice this problem?"
"What problem?"
Establishing Mitchell grass and other native species in extensive grazing situations was the focus of the De Grey Mitchell grass field day held at De Grey Station in June.

The De Grey LCDC group, in conjunction with the Pastoralists and Graziers Association (PGA), secured funding through the Exchange Incentive Fund (EIF) to bring David Phelps, a Mitchell grass expert from Longreach in Queensland, to the East Pilbara.

The day consisted of a De Grey LCDC meeting followed by an extensive field tour of De Grey Station, whereby pastoralists present utilised the opportunity to direct questions to grazing lands scientist David Phelps about the best ways to maintain Mitchell grass through grazing and burning.

On the tour the three species of Mitchell grass that grow in the Pilbara region (Barley, Hoop and Curly) were identified on the property. A fourth species, Bull Mitchell prefers wetter conditions and has not been found in the Pilbara. Discussion followed on the growing conditions that the four species favour. All three Mitchell grass species suited to growing conditions in the Pilbara were located in heavier clay soil types on De Grey, particularly along drainage lines, or where water tends to pond for short periods. Bohemia trees indicated such drainage lines on De Grey.

Questions surrounding the ways in which native pasture growth cycles can be best aligned with grazing management decisions in the Pilbara to achieve and sustain good pasture growth rates, dominated the discussion in the paddock.

Mitchell grass species cope well with droughts as a result of their deep root system and by maintaining reserves of starch in rhizomes at the base of tussocks. These reserves are used to promote new growth following 25-75 mm of rainfall.

Mitchell grass has a tendency to die out over time if it is neither grazed, nor burnt, which subsequently results in lower plant density and yield. Continued overgrazing results in reduced Mitchell grass density with plant survival reduced under high grazing pressure. High grazing pressure is detrimental to Mitchell grass because of the combined stresses of heavy grazing and drought, which inevitably leads to the death of a large proportion of Mitchell grass plants.

Mitchell grass plants are most susceptible to over-grazing when re-shooting from the base, a time when they are renewing valuable carbohydrate and nutrient reserves ready for the next dry spell. It is critical stock numbers are reduced during this growth period as damage from over-grazing to plants at this stage will adversely effect the longer term productivity and survival of Mitchell grass.

An early wet season spell to allow Mitchell grass plants to start growing and replenish their carbohydrate reserves is essential in ensuring the best growth results are achieved.
It was reinforced throughout the field day, that carefully considered grazing strategies following an extended drought will do much towards ensuring the long term health of Mitchell grass pastures. Light grazing pressure should be maintained until effective follow-up rain has fallen.

There was also much discussion surrounding effective ways to re-establish Mitchell grass pastures. For extensive grazing situations in the Pilbara, utilising techniques such as aerial broadcast of Mitchell grass seed would be the most practical technique, however mechanical sowing to get good contact between seed and soil was advisable where possible. Recommended commercial sowing rates are 1-2 kg seed per ha, but rates as high as 10-15 kg of seed per hectare may ensure better results when establishing trial areas.

The field day was valuable in giving pastoralists access to considerable specialised knowledge on Mitchell grass and quantifying whether or not it is a species they would like to establish in addition to other native species.

---

**Mitchell Grass Fact File**

- Mitchell grasses were first discovered near Bourke in NSW by the explorer Sir Thomas Mitchell in 1835.
- Mitchell grasses are long-lived grasses that grow in clay soils as tussocks of 5 cm to 50 cm in diameter.
- The four Mitchell grass species are:
  1. Hoop Mitchell grass (*Astrebla elymoides*)
  2. Curly Mitchell grass (*Astrebla lappacea*)
  3. Barley Mitchell grass (*Astrebla pectinata*)
  4. Bull Mitchell grass (*Astrebla squarrose*)
- Only Hoop, Curly and Barley Mitchell grass are present in the Pilbara.
- Mitchell grass grows only in northern Australia where summer rainfall is dominant, with an average rainfall of 250 mm - 550 mm.
- Individual Mitchell grass plants can live for 20 to 30 years and mature plants produce new seedlings once or twice over this period.

---

**Update on the ‘Dynamic Savanna’ Project**

*By Andrew Craig, Research Officer, Kununurra*

Two researchers based in Cairns with the James Cook University (JCU), Prof. David Gillieson and Mr Les Searle, recently visited the Kimberley to carry out collaborative field work with DAFWA rangeland officers, as part of the ‘Dynamic Savanna’ Project. This two-year project of the Tropical Savannas CRC (TS-CRC) encompasses work across Queensland, the Northern Territory and Western Australia and aims to ‘...increase the ability of land managers and policy makers to make informed decisions regarding the management of woody vegetation dynamics in the savannas of northern Australia’. There is a need for better information on the nature and extent of woody vegetation change, and on how to manage the structure of vegetation on pastoral country.
Increasing densities of shrubs and trees in some areas are of serious concern to the pastoral industry, mainly because such ‘woody thickening’ can affect both pasture growth and mustering costs (see September 2005 Northern Pastoral Memo). In contrast, other areas subject to aggressive fire regimes may be suffering losses of woody vegetation that are undesirable, potentially causing biodiversity losses as well as the release of greenhouse gases to the atmosphere.

With assistance from Bob McCartney (Derby District Office) and myself, the researchers collected vegetation data that included the heights of tree and shrub layers, basal area of trunks and stems, canopy cover and pasture condition, from sites on five cattle properties in the North, East and West Kimberley. The sites encompassed a variety of soil and vegetation types. In each case, photographs were taken and data collected at 30-36 points over a grid pattern covering at least 150 hectares. One of the planned uses of the data collected is to develop a robust method for determining change in woody vegetation from aerial photography and satellite imagery. Some of the aerial photography that will be looked at for comparison purposes goes back to the 1940s.

During the field trip the opportunity was taken to re-photograph a number of landscape views recorded by CSIRO scientists in the 1950s. This proved to be quite challenging as the original photo-point locations were known only approximately. The GPS coordinates we now have should make the job much easier in another 50 years time!

A publication on the project’s work is planned for late in 2007, probably in a style similar to that of the TS-CRC’s successful ‘Savanna Burning’ book. We also plan to provide specific feedback to the stations where we did our work during the course of the project.

In most cases we were able to catch up at least briefly with the managers of the cooperating properties and this gave us the opportunity to outline the project and, importantly, to record valuable local observations. We are most grateful for the assistance provided to us and would certainly welcome further input from any managers out there with an interest in the subject of woody vegetation change.

Further information on the project, and contact details, are available on the Dynamic Savanna website:

http://savanna.ntu.edu.au/research/projects/the_dynamic_savanna

As a local point of contact, please ring Andrew Craig, Kununurra, phone (08) 9166 4015.
**How Typical is Your Business?**

*By Francis Bright, Regional Economist, Kununurra*

Obtaining baseline data on a business in the northern pastoral region can be useful in measuring the impact of change. Various Department of Agriculture and Food (DAFWA) and North Australian Beef Research Council (NABRC) projects will potentially influence the productivity and financial performance of businesses that adopt project outputs. Baseline data helps in measuring change and the potential benefits of growers adopting the results of research.

There is going to be a large amount of variation because the number of properties surveyed is quite small each year compared to the number of pastoral businesses in the Kimberley and Pilbara. There is also going to be changes across the years due to general industry trends, and seasonal conditions. But the information in the table does indicate the value of an ‘average’ cattle production unit as well as the value of the pastoral industry to regional economies in tropical Western Australia.

<table>
<thead>
<tr>
<th>2004/5 financial year</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area managed</td>
<td>2780 sq km</td>
</tr>
<tr>
<td>Cattle numbers</td>
<td>8262</td>
</tr>
<tr>
<td>Cattle purchased</td>
<td>25</td>
</tr>
<tr>
<td>Cattle sold</td>
<td>2745</td>
</tr>
<tr>
<td>Value of sales</td>
<td>$1.5 million</td>
</tr>
<tr>
<td>Total cash costs</td>
<td>$1.0 million</td>
</tr>
<tr>
<td>Total farm value</td>
<td>$9.2 million</td>
</tr>
<tr>
<td>Total farm debt</td>
<td>$0.5 million</td>
</tr>
<tr>
<td>Average equity</td>
<td>92.5%</td>
</tr>
<tr>
<td>Return on assets</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Farewell to Our Flying Vet!**

Eight years after joining the Department, Ben Madin, veterinary officer in Broome, has recently left and is pursuing a number of different directions. Ben has been providing assistance in trial analysis and developing information systems for public and private enterprise, and has recently joined AusVet Animal Health Services as a consultant. He is also providing support for the Bovine Syndromic Surveillance System, which some pastoralists are involved in (see the BOSSS article written by Matthew Bullard).

In between, he is enjoying remaining in the North West, and has recently extended his house, and spent some more time with his family, and is looking at enrolling in a PhD. Whilst no longer with the government, he is still happy to answer any questions about pastoral animal health, and other issues with which he was involved whilst with the Department where appropriate.

Department of Agriculture and Food staff would like to wish Ben all the best in his new endeavours and thank him for his hard work and dedication while working for the Department. Those of you who have been privileged to work beside Ben, whether it be in the cattle crush or as a passenger on one of his flights, would have learnt at least 10 new things by the end of the day...one of which us mere mortals would be lucky to remember and be able to pass on to someone else! Ben was an asset to the Department and will be greatly missed.
KEEP AN EYE ON YOUR BLACK SOIL PASTURES!

By Andrew Craig, Research Officer, Kununurra and Matthew Bullard, Veterinary Officer, Broome

In 1994, a fungus growing mainly on Mitchell Grasses (*Astrebla* spp.), was found to be responsible for cattle deaths on two stations in the southern East Kimberley and two in the Victoria River district. The first deaths were noticed in April 1994 and they continued until rains arrived in late November. In all, more than 500 deaths were suspected to have resulted from the intake of infected forage, and thousands of animals were affected to some degree. As part of its life cycle the fungus produces white, dry coral-like structures on the grass stems, loosely termed ‘corals’ (see photo). Elsewhere, similar infections were also found on curly blue grass (*Dichanthium fecundum*) and Flinders grass (*Iseilema* sp.). The main symptoms observed in cattle that died were the onset of blindness, and rapid death thereafter – hence the term ‘black soil blindness’.

Fortunately, little was has been seen or heard of this organism since 1997 when it was last reported, this time in the Kununurra area, on Mitchell grass and blue grass. However, officers of the Department of Agriculture and Food recently noticed corals on Mitchell grass tussocks while working on one of the originally affected properties, which had received well above average rainfall during the last wet season. No cattle deaths have been reported thus far, but pastoralists should be on the look-out for anything unusual, particularly on black soil country. Should paddocks be found to be carrying significant numbers of corals, it would be prudent to move stock.

If you need further information or come across any unexpected stock deaths, please contact the District Veterinary Officer, Matthew Bullard, on (08) 9194 1400.

THE BROOME NUTRITION WORKSHOP

By Michael Jeffery, Development Officer, Derby

Nineteen participants from Sturt Creek to Anna Plains attended the three day EdgeNetwork nutrition workshop in Broome during April.

Topics covered included:

• the animal’s digestive tract, (what do all those bits do)?;
• major and minor limiting nutrients – which ones are really important and cost effective at supplying?;
• the energy and protein requirements of different classes of cattle – why is timely weaning one of the best methods of nutritional management of the herd?;
• understanding pasture quality and quantity during different times of the year – how do we match pasture nutrient supply with animal nutrient demand?;
• the importance of minerals and their supply and interactions; and
• developing a supplementation program to meet the animal’s needs for the production level asked – just how useful are your current supplement strategies?

Both agency staff and pastoralists went away from the course with a greater understanding of animal needs and pasture supply, with changes in a number of properties’ management and supplementation programs resulting from attending the workshop.

Future workshops can be organised and delivered on an as-need basis. The cost of the course is approximately $1600 per business for the first person and $800 for the second person, with Farmbis rebates of 50%.

For more information, contact Michael Jeffery at the Derby office on 9191 0352.

---

**Pilbara Indigenous Management Support Service**

*By Andrew Longbottom, Biosecurity Officer, Karratha*

The Department of Agriculture and Food Western Australia (DAFWA) has begun a four-year project to help with the running and maintenance of indigenous pastoral leaseholds in the Pilbara region of Western Australia in order to:

• increase the profitability and sustainability of Indigenous pastoral businesses by assisting proprietors, managers and other station employees to –
• improve animal husbandry, herd management and livestock marketing;
• establish effective business management and planning systems, including by taking up new communications and information technology;
• identify - and assist landholders to pursue - alternative land uses and/or diversification options, so as to maximise sustainable land use opportunities and long-term economic benefits, especially for properties of limited pastoral potential;
• create durable links between the clients of the service and other Government agencies, non-government organisations and private service providers, and draw upon the resources and expertise of such other bodies to implement the service itself; and
• adopt, develop and promote innovative approaches to agricultural extension for the client group in relation both to animal production and rangeland ecology.

This position will be based at the Department’s office in Karratha and the service will be provided by Andrew Longbottom.
Financial support from The EJ Connellan Trust recently enabled Chris Henggeler of Kachana Pastoral Company to attend a two-week soil-biochemistry course hosted jointly by Soil Foodweb Inc. and Southern Cross University in Lismore, NSW.

“Knowledge about the Soil Food Web may well prove to be a key element in our being able to deal with challenges like: Climate change, carbon sequestration, safeguarding water resources and providing wholesome food for future generations on a sustainable basis.

“I would like to extend our sincere appreciation and thanks to the EJ Connellan Trust for sponsoring a significant portion of my travel costs, thus enabling me to further my education and understanding in Natural Resource Management.

“We desperately need to complement our practical skills and experience with up-to-date scientific knowledge, if we wish to make the responsibilities of Natural Resource Management attractive to the next generation. Handing over deteriorating resources with an explanation of what went wrong is simply not good enough; we need to offer our heirs direction and a way forward that offers hope and reward.

“Private agriculture has come under much pressure in recent years. We face challenges like genetic contamination, water-shortages, peak oil and shifting market forces… It is exciting to know there are scientifically sound and safe options to address all of these issues.

“The support by the EJ Connellan Trust not only enabled me to directly access cutting-edge scientific information, it also enabled me to mix with other forward thinking people from other parts of the country. I believe the value of this experience to be ongoing.”

The EJ Connellan Trust, provides a range of assistance to people living in remote areas. There is individual assistance for people with special education needs, and there’s the actual award itself. The Trust was the brainchild of E.J. Connellan (EJ) who established Connellan Airways in 1939.
Please find out more about the trust on the website:

For more detailed information about Soil Foodweb Inc. please visit their website:

Part of the soil-biochemistry course entailed presenting a paper on soil food-web structure and function in a chosen landscape. Chris chose a sub-catchment typical for northern Australian rangelands. His paper can be viewed on the following web-page:
or it can be found at www.kachana.com under the section ‘Environmental Management - Papers & Presentations’.

---

**NEW STOCK INSPECTOR FOR BROOME**

*By Maree Glasby, Stock Inspector, Broome*

Hello everyone.

In late April this year, I took up the position of Stock Inspector in Broome. So far I have been kept busy doing the tick inspections for cattle going south of Broome and working on the eradication of Rubber Vine. I’ve also been working with Veterinary Officer, Matt Bullard, learning how to bleed cattle and conduct post-mortems. I have also managed to get out and visit a few properties in the Broome region to introduce myself and discuss the NLIS and other current issues with pastoralists.

I grew up in Gympie, Queensland, where my family operates two small beef cattle properties. After finishing my schooling in Gympie, I attended Emerald Agricultural College in Queensland, where I completed a Diploma in Beef Production. On leaving college I commenced work in the Northern Territory, and have spent the last two years working on stations in the Fitzroy Crossing area.

So far Broome has proved a great place to live, with its wonderful beaches and laid back lifestyle. I look forward to meeting you all in the future.

*My contact details are:*

Maree Glasby

Department of Agriculture and Food WA
27 Hunter Street
PO Box 5502
CABLE BEACH 6726 WA

Phone: (08) 9194 1400
Fax: (08) 9192 2946
LAND MANAGEMENT - THOUGHTS ON THE PASTORALIST’S ROLE

By Bob McCartney, Technical Officer, Derby

The other day a bloke bailed me up in the local supermarket. He had concerns about the country being ruined. The old timers had told him that they remembered the rivers containing deep pandanus-lined pools, where now there were only wide, sand-filled channels that didn’t run all year round.

His solution: “Get rid of the cattle; they are causing the problem”.

I had been over much of the country he was talking about over the previous few weeks and it appeared to me that most of the pasture degradation seen had been caused by uncontrolled fires. I also noticed other areas that hadn’t been either grazed or burnt for many years – the grass there was rank and unproductive.

The problem isn’t so much the cattle or the fire in themselves but the inadequate management of these factors, which can leave ground bare. The first storms can then wash away large amounts of valuable topsoil into the rivers.

Sometimes it may be feral cattle on Crown land or in nature reserves lacking any effective management that are causing the problem. Even in areas where they are meant to be, if cattle aren’t well managed they will frequently graze preferred patches down to bare ground before moving on to another patch.

Fires lit at the wrong time will burn too hot and too far, damaging large areas.

On the other hand, if all burning is prevented, the grass will get rank and fuel loads will build up. In which case a lightning strike or accidental fire may also produce a destructive fire. As is often the case in natural resource management, finding the right balance is the challenge.

On most well-run cattle stations, stock can be controlled by fencing or water placement to protect fragile areas. Cattle should be moved around to allow periodic spelling of country, and with a herd of the right size, normal turn-off and culling should prevent serious overgrazing. In droughts, cattle numbers should be reduced in a timely way, maybe by agistment elsewhere, to prevent long-term damage to pastures that can otherwise occur.

Before white settlement, Aboriginal people managed extensive areas of country with fire, often with the aim of producing good habitat for the animals they hunted. The skills they had proved invaluable to pastoralists in northern Australia. Sadly, these skills have been, to a large extent, lost since the 1960s, with changes in the way stations are operated.

Patchy burning early in the dry season can be used to rejuvenate grasslands, but grazing afterwards needs to be carefully controlled (or where possible delayed) to allow enough time for recovery. Where only small patches are burnt along tracks, congregation of stock can occur, resulting in the formation of degraded patches.

FESA coordinates aerial burning on pastoral leases, working in with Department of Environment and Conservation (DEC) which has responsibility for conservation lands and Unallocated Crown Land (UCL). Often the aim of aerial burning is to create broad low-fuel buffers designed to stop major fires later in the season. Of course, many stations do their own preventive burning early in the dry.
Strategic burning along tracks can be used to create low-fuel strips that may be effective as firebreaks (depending on their width and completeness). They also allow for safe back-burning should this be needed to control a later wildfire.

Finally, going back to my mate in the supermarket – I’d say that without pastoralists much of the Kimberley would be unmanaged and we would end up with worse problems with fire and feral animals than we now have. Certainly, where fire is concerned, the whole community needs to take responsibility for good management so that our wonderful land is left in a worthwhile state to pass on to the next generation.

MY EXPERIENCE AT Mt PIERRE STATION

By Katrina Heggie (medical student from Notre Dame University)

In August of this year, 79 second-year medical students from Notre Dame University in Perth visited the Northern Rangelands and were given community placements for a week. The community placements were arranged to give students remote and rural experience. Two of the students, Katrina Heggie and Phil Argy, were given placement on Mt Pierre Station, 100 km east of Fitzroy Crossing. Mt Pierre Station is managed by Louie and Marion Dolby, who run approximately 7000 head of Brahman and Brahman cross cattle. The station encompasses a large portion of the Devonian Reef, with the homestead situated within the Galeru community. On departure from the Kimberley, the students were asked to give an account of their week at the Notre Dame presentation evening held Monday 4 September in Derby. Here is the story of Katrina Heggie’s experience at Mt Pierre Station.

I was incredibly nervous before I went to Mt Pierre Station. Not having any significant experience with Indigenous people and being billeted with Phil, who somewhat fitted in with his long hair, beard ‘rough’ image, I was wondering how long it would be before I said something stupid or culturally inappropriate after all our intensive training by Notre Dame.

I soon realised I had nothing to worry about. Phil and I were dropped off at the turn-off to Mt Pierre Station, approximately 100 km outside Fitzroy Crossing. We were picked up by Marion Dolby and Shian, her 16-year-old daughter. After the 12 km ride into the centre of the half million hectares, with incredible scenery and the sun setting, we arrived at the community ‘Galeru’ where the Dolby and Shaw family reside.
After seeing the house and talking to Louie and Marion for only a few minutes, we felt immediately welcome and at home. In fact, Phil felt so welcome he pulled out his guitar and began to sing after only five minutes.

The following morning, after the boys and Phil had risen at 5 a.m. and I had awoken a little later (a few hours), Phil and I were on the truck to the yard, to learn the art of mustering Braham cattle. On the way there, we grabbed a big hunk of meat from the fridge and whacked it on the ute, which I later discovered was morning tea.

My first significant experience was watching a bull being dehorned, which was quite graphic. Following that, we watched drafting of the cattle which, much to my embarrassment, took me half a day to work out how they were being separated. It was not by colour or size, or if they have a lump on their back or if they have horns. For a while, I had a theory that the crazy bulls go in one paddock. But the real method for separating was heifers, weaners and steers.

I’m not exactly a bull-whisperer but I learnt some interesting techniques for making a bull or cow turn in the direction I want and also how to avoid being charged at. Drafting took a long time. The bulls just kept on coming and after collapsing in a heap at the end of the day, Marion told me they do this for six months a year. They are hard workers.

What was so wonderful about Mt Pierre was the Aboriginal community that ran the station. I was amazed by the strong sense of family. Living in one house with several other houses surrounding, all being family, I thought how great it was to be able to walk to your son’s house or visit the grandchildren. Also, being able to eat together and having family coming and going all the time. I’ve resolved to move all my family into one community when I return home.

The next day we went into Fitzroy crossing with Shian, the daughter, and had a look around, which is where we discovered the family actually extends around the whole of the Fitzroy Valley and we could drop into any of the various communities to visit family such as Uncle Lawrie and the grandparents. I have to mention I did my first 360° in a 4WD going slightly too fast on a dirt track. It left Phil feeling a little uneasy and Shian laughing. I apologise to the Dolby family for my lack of skills!

The next day Phil and I were introduced to the concept of a ‘killer’. This involved finding a suitable cow, shooting it, skinning it, chopping it up and eating it after being cooked. This is definitely not for the faint-hearted. During this event, Phil turned to me and said, “I think I’m becoming a vegetarian”. But don’t think Phil is a softy. We were both well and truly into the killer, arm deep in cow, cutting till our hearts content, thanks to the fine teaching by Uncle Lawrie, who later told us we were naturals. At the end of the day Phil and I felt like true bushmen, covered in blood and dirt and we headed to the gorge for a swim.

All we had heard about throughout the week was the gorge. This amazing gorge on their property, they had joked, was their “backyard swimming pool”. You can imagine, Phil and I were keen to get in there after our killer experience. We walked to the gorge, which was a nice creek. Before jumping in the water, we completed the ritual we’d been warned about of rubbing our armpits with a rock while telling the spirits our name and where we were from.

On our final day, Shian and I went horse-riding to the gorge and after we arrived at the creek, she looked at me funnily and said, “This isn’t the gorge!”. The sun was setting and, remembering that the previous visit with Phil to the creek was nice but not remarkable or spectacular, I attempted to speed up my horse to the real gorge.

Exactly as I imagined, there was an incredible rock formation, 20 m high pouring down on either side of the river, which was described as the ‘snake’s body’ in the dreamtime. As this was our last night, I returned promptly with Shian to inform Phil of my discovery.
Some of the station lessons I have learnt so far:

1. There are five food groups: Meat, meat, meat, meat and meat.
2. All parts of a cow can be cooked and eaten except the stomach, which is much better raw.
3. Dugong is a tasty food.
4. No matter how salty your food is, you can always add salt.
5. Tea cools you down more than cold water on a 30° day.
6. All children on a station learn to ride before they walk.
7. Frogs are a standard in all bathrooms.
8. Talking nicely to a Brahm bull does not stop it charging.
9. If you begin to swerve, driving fast on a dirt track in a 4WD, do NOT brake.
10. If it’s not spectacular, it’s not a gorge.

All-in-all the experience at Mt Pierre Station or, I think more appropriate, ‘Galeru’ community, was one of a kind as we were able to understand station life, yet be part of the Dolby’s and part of their culture. Being so welcomed and relaxed and feeling a part of their family, and being able to swim in their sanctuary and roam their land, I feel that I have gained more than I could have hoped. I would like to thank the Shaw and Dolby family for letting us into their life for a short time.

DEVELOPING A GRAZING LAND MANAGEMENT EDUCATION PACKAGE FOR THE KIMBERLEY

By Michael Jeffery, Development Officer, Derby

With the focus of agricultural policy makers firmly fixed on sustainable production, there is a need to develop education packages which provide information to managers about natural resources which allow them to make informed decisions on the use of these natural resources.

A series of Grazing Land Management (GLM) packages have been developed for various land systems across northern and central Australia and have been adopted by the grazing industry and other land managers as a benchmark of management for many grazing properties.

Meat and Livestock Australia (MLA) has provided $100,000 funding to DAFWA to develop a GLM package for the Kimberley. This project will run from July 2006 to September 2007 when the first of the workshops will be delivered in the Kimberley.

Local relevance

These packages are developed using local and regional information and knowledge relating to the local land systems, pasture communities and climatic conditions to ensure relevant management options are covered. While the fundamental principles of land management are similar through each of the packages, each package is stand-alone and tailored to the management of specific land and pasture systems within each region.
Package format

Learning modules
The format for each of the GLM packages is based on a series of modules including:
1. Welcome and introduction
2. Understanding the grazing system
3. Managing grazing
4. Managing with fire
5. Managing non-native pasture species
6. Managing tree-grass balance
7. Managing weeds
These modules can be modified to include areas which are specific to the location.

Stylised property
The overall program is based on the development of a local stylised property which is essentially undeveloped but over-utilised. The group will be required to make decisions throughout each of the modules on the management of this property. Using the processes and considerations involved in managing this stylised property, management plans for actual individual properties are then developed.

Steering group
Industry and key stakeholder involvement within the project is essential from the start to the end (development to delivery). An industry-based steering group is required to ensure good local input as to the issues, land types, management decisions, etc. required to make the package relevant. The involvement of other key stakeholders including Department of Environment and Conservation (DEC) ensures critical aspects such as conservation and heritage aspects are adequately covered.

Assumptions
A number of fundamental assumptions are used within the package to ensure local accuracy. These include the relationships between tree/grass production; fire and pasture production and rainfall and grass production, and critically, the economic relationship between land condition and animal production.
Modelling of the pasture growth relationships is done using the GRASP model while the economic modelling is done using the herd budgeting Breedcow/Dynama model.
The development, delivery and follow-up of the packages involves a number of steps including:
1. Determination of the need and support of the industry for the package(s).
2. Establishment of number of packages to be developed – based on major land and/or pasture systems.
3. Establishing steering group(s).
4. Collection and collation of local pasture and cattle production data.
5. Modification of existing packages using local data within modules of local significance.
6. Trial presentation to steering group.
7. Review and adjustments to package information.
8. Delivery of package to producer groups.
9. Follow-up assistance with local property implementation of package material including property mapping, infrastructure placement, pasture monitoring, etc.
**THE CHALLENGE FOR THE KIMBERLEY - YOUR CHANCE TO HAVE INPUT.**

Given the size and variations in soil types, pasture communities and climate throughout the Kimberley, more than one package is needed to cover the entire Kimberley region, and the development of at least a second package is planned in the future.

Pastoralists and other land managers are encouraged to register to be on the Steering Committee to ensure this first package is as relevant and useful as possible and will be accepted by the wider grazing community.

If you wish to be part of the development of this package, please contact Michael Jeffery (9191 0352), DAFWA, Derby for more information.

---

**NVD/WAYBILLS - REMINDER**

*By Andrew Longbottom, Biosecurity Officer, Karratha*

It is a legal requirement to provide a waybill with each consignment of cattle, and a commercial requirement that the correct National Vendor Declaration (NVD) is supplied.

The Edition 1 combined NVD/waybill, as supplied by the Livestock Production Assurance (LPA) program, is the current version.

It is a concern of livestock carriers that some pastoralists are either not providing NVDs with consignments of cattle, not completing them correctly, or providing out-of-date NVDs that were issued by the Department of Agriculture a few years ago and are no longer wanted by buyers.

Buyers who require correctly completed LPA NVD/waybills will not be able to bid on those lines of cattle presented without the correct documentation. This may result in less competition on those cattle at saleyards, and hence lower prices.

To present cattle in the best possible saleable condition to maximise returns, correctly completed, up-to-date documentation needs to be provided by the owner/manager at the time of consignment.

Transport operators and agents **CANNOT** alter existing documentation, and are not responsible for providing it.

NVD/waybill books are readily available from LPA by dialling 1800 683 111. Choose ‘3’ on the menu if not already registered with LPA, and ‘2’ to order new books if registered. You will need your PIC number (tail tag number) and your credit card details handy. These books are $27.50 for a book of 20.

It is recommended that you order a sufficient supply of NVD/waybill books before they are needed.

*Ensure your cattle attract the best competition possible to maximise returns, and make life easier for all those concerned with marketing your cattle properly.*
NEW NORTHERN RANGELANDS LANDCARE COORDINATOR

By Alex Maslen, Northern Rangelands Landcare Coordinator, PGA

Hello everyone! My name is Alex Maslen and I have just taken over the reins from Lara Jensen as Northern Rangelands Landcare Coordinator.

I grew up in the Gascoyne region on Mardathuna Station and have spent the past three years working back in the area. Over this time I have maintained close contact with the pastoral industry and am well aware of the current issues facing pastoralists, particularly with regards to land tenure and land management.

My new position as Northern Rangelands Landcare Coordinator is hosted by the Pastoralists and Graziers Association to ensure a viable basis for industry involvement in the integration of sustainable pastoral enterprises and the management of natural resources. I will be working to keep pastoralists informed of what is going on in relation to the development of NRM and Landcare initiatives. This could include information on projects pastoralists would like to be involved in or the availability of funding to carry out management tasks.

I will also be a conduit for information to and from the Commonwealth and State Governments to regional and community groups to relay information to the Government regarding pastoralists’ views on NRM matters.

I will report and update the details of activities undertaken in different regions that might be of interest and applicable to your pastoral businesses in the Kimberley and Pilbara. My position is designed to promote sustainable pastoral management and encourage pastoralists to become involved in Landcare projects. I look forward to working with and learning from pastoralists, their accumulated experience and knowledge of the land.

PASTURE BUDGETING AND LAND CONDITION ASSESSMENT – THE ‘STOCKTAKE’ PROGRAM

By Michael Jeffery, Development Officer, Derby

With funding from the National Landcare Program and support from PGA, Jillian Aisthorpe, Department of Primary Industries and Fisheries (DPIF), demonstrated the pasture budgeting and land condition assessment package, ‘Stocktake’ to three LCDC meetings in April. Thirty of these packages are now available for distribution to people who attended these meetings.

The package is being used to monitor the pastures on a number of properties where work is being carried out by the Department. This package provides a simple method of allowing pasture budgeting for short-term carrying capacity assessment, as well as documenting seasonal and yearly changes in land condition, pasture composition and management history within a land system, paddock and whole property basis.

For more information on how to set up the monitoring sites, assess the pastures and use the package, contact Michael Jeffery or Sarah Whyatt at the Derby office.
knowledge of country types, land systems and environmental practices as well as helping to develop new Landcare projects in the northern pastoral region.

A key focus area of the position is to promote the good work being undertaken by groups in the region and raise the awareness amongst the wider community about the sustainable management practices that are being employed by pastoralists. This will be achieved by maintaining close links with print and media associates and linking them with key players in the industry.

Through maintaining close links with pastoralists and organisations in the northern rangelands, it is my aim to assist and coordinate the development and implementation of new projects and initiatives in both the Kimberley and Pilbara to ensure the region is proactive and on the front foot when it comes to submitting project proposals. Successful applications will deliver funding for works that will not only provide outcomes of benefit to the state of natural resources but also to the businesses operating in the rangelands.

I can be contacted at Pastoral House in Belmont. I am looking forward to meeting with those from the Kimberley and Pilbara and being informed of any events in the region to enable me to get out of the office and beyond the 26th parallel.

**Contact details:**

Alex Maslen, Northern Rangelands Landcare Coordinator
1ST Floor Pastoral House
277 Great Eastern Highway
BELMONT WA 6104
Phone: (08) 9479 4599
E-mail: alexm@pgaofwa.org.au

**Improved Pastures Produce Better Weight Gains and Stocking Rates**

*By Peter Bagley, Canning Agricultural Services, Broome*

Increasing weight gain in young cattle has always been difficult in pastoral production systems in Northern Australia. Native pastures provide limited opportunities for growing or finishing young cattle, such as weaners, or for holding or growing out animals suitable for export or sale even when good quality native pastures have been spelled or saved. This lack of production is for a variety of issues but primarily is due to the low production (dry matter/hectare) and nutritive value of native pastures.

One solution to the problem that has been well researched and proven in other pastoral production systems in Northern Australia, is the introduction of suitable improved pasture grasses and legumes into controlled and well managed selected areas. Stocking rates of one animal equivalent to each hectare, (higher for younger cattle), and weight gains of up to 500 grams/hd/day have been recorded in areas of the Northern Territory.

Peter Bagley of Canning Agricultural Services based in Broome has been independently researching the use of improved pastures and is interested in collating information and producer experiences of improving the growth rate of young cattle in the Kimberley.

Peter can be contacted on 9193 7066 or via e-mail on canningag@bigpond.com.
Managers producing cattle for live export should be aware that there are strict specifications for the types of cattle that can be exported live from Australia. The Australian Standards for the Export of Livestock describe various requirements that must be met for the selection and preparation of livestock before export and their management during the journey.

An important ongoing problem for livestock exporters is horned cattle. Polled cattle are preferred. However, where horned cattle are presented for export, the horns must be only 12 cm or less in length and blunt (section 1.15). If tipped or dehorned, the wounds must be healed.

Among the rejection criteria for cattle (section 1.7) are:

- Untipped sharp horns.
- Horns longer than 12 cm.
- Bleeding horn stumps.

Another problem is heavyweight animals. Cattle must have an individual liveweight of more than 200 kg and less than 650 kg unless exporters have prior written approval from the relevant Australian Government agency (section 1.9) for cattle outside this weight range.

It is also important to ensure that animals comply with the ‘Is it fit to load?’ booklet when loaded for transport.

Animals that don’t meet the export standards cannot be exported, and failure to comply with the ‘Is it fit to load?’ booklet carries a risk of prosecution under the Animal Welfare Act.

Given the value of the live export market to the northern cattle industry, it is important that these issues are addressed. If pastoralists are keen to realise the maximum return for their export cattle, it is in their interest to present cattle that meet the Australian Standards as well as the exporter’s requirements. Failure to do this can result in cattle not being accepted or seriously discounted prices on the mob.

In North Queensland five years ago, only cattle without horns (polled or dehorned) were purchased for live export. It was not a case of discounts, it was a case of no sale. Pastoralists with a history of presenting acceptable cattle are likely to continue to enjoy the best prices and become the ‘preferred suppliers’ for exporters.

A copy of the export standards can be accessed on the website below:

### Northern Rangelands Calendar

<table>
<thead>
<tr>
<th>WHAT'S ON</th>
<th>WHEN</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>October</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First day of school - Term 4</td>
<td>Tuesday 17th</td>
<td>Peter Matison - 9193 3333</td>
</tr>
<tr>
<td>Derby Corporate Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halls Creek Picnic Races</td>
<td>Saturday 21st</td>
<td></td>
</tr>
<tr>
<td>North Kimberley LCDC Meeting</td>
<td>TBA</td>
<td>Sarah Whyatt - 9191 0354</td>
</tr>
<tr>
<td>West Kimberley LCDC Meeting</td>
<td>TBA</td>
<td>Sarah Whyatt - 9191 0354</td>
</tr>
<tr>
<td>Pilbara ZCA Meeting - Yarraloola Station</td>
<td>Friday 27th</td>
<td>Richard Watkins - 9144 2065</td>
</tr>
<tr>
<td>Harvey Dickson's Rodeo (Boyup Brook)</td>
<td>Saturday 28th</td>
<td>Richard Barron - (08) 9447 2566</td>
</tr>
<tr>
<td><strong>November</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guy Fawkes Fireworks Night - Dampier</td>
<td>Saturday 4th</td>
<td>Tanya - 0417 189 071</td>
</tr>
<tr>
<td>Melbourne Cup Day</td>
<td>Tuesday 7th</td>
<td></td>
</tr>
<tr>
<td>Kimberley ZCA Meeting - Broome</td>
<td>Wednesday 15th</td>
<td>Noel Wilson - 9166 4000</td>
</tr>
<tr>
<td>Mango Festival - Broome</td>
<td>Friday 24th</td>
<td>9192 1140</td>
</tr>
<tr>
<td><strong>December</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilbara District Consultation Meeting (Dampier?)</td>
<td>Early Dec. TBA</td>
<td>Richard Watkins - 9144 2065</td>
</tr>
<tr>
<td>Last day of school - Term 4</td>
<td>Friday 8th</td>
<td></td>
</tr>
<tr>
<td>Christmas Eve</td>
<td>Saturday 24th</td>
<td></td>
</tr>
<tr>
<td>Christmas Day</td>
<td>Monday 25th</td>
<td>Father Christmas - South Pole</td>
</tr>
<tr>
<td>Boxing Day</td>
<td>Tuesday 26th</td>
<td></td>
</tr>
<tr>
<td>New Year's Eve</td>
<td>Sunday 31st</td>
<td></td>
</tr>
<tr>
<td><strong>2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>January</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia Day</td>
<td>Friday 26th</td>
<td></td>
</tr>
<tr>
<td><strong>February</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>March</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grazing for Profit (Knotts Crossing Resort, Katherine)</td>
<td>21st - 28th</td>
<td>Toni Allen - 1800 356 004</td>
</tr>
</tbody>
</table>