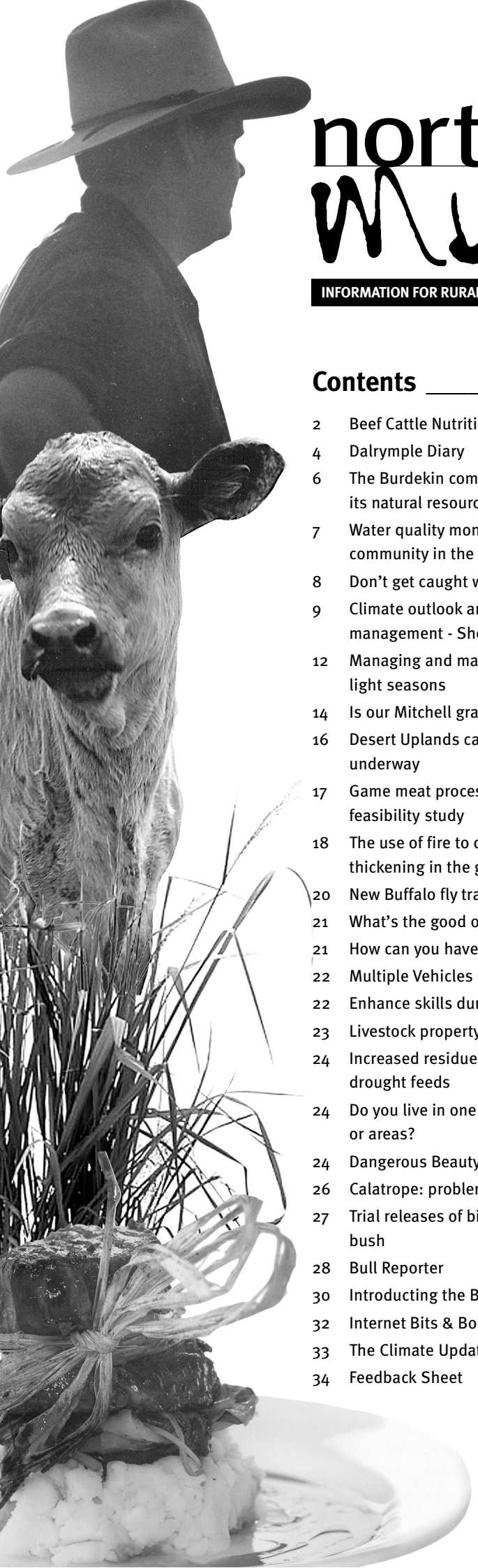

# northern Muster

Producing healthy food and quality fibre for a healthy bottom line

INFORMATION FOR RURAL BUSINESS IN NORTH QUEENSLAND Issue 1, April 2003

## Contents



Bull Reporter - page 28

## Editorial

Welcome to the newest edition of your Newsletter. We have combined 3 previous publications The Tropical Beef Bulletin, The Northern Muster and The Insufferabulletin into one with a larger circulation and Editorial team.

We have introduced a new column called "Internet Bits & Bobs" on the Internet and computers as requested from reader feedback.

Seasonal conditions in most areas are severely drought affected. This issue covers a number of drought related topics. We recommend you take a look at what stock your country can sustain until the next season.

Please take the time to fill in the Feedback Sheet on page 34 and tell us what you think.

Valuable information sources:
DPI Website (www.dpi.qld.gov.au)
DPI Call Centre: 13 25 23 (8am to 6pm weekdays)
DPI Drought Hotline 1800 825 656

We thank all contributors and advertisers for their contribution.

Enjoy the reading.

**Alan Laing**
**Editor**

Queensland Government
Department of Primary Industries

# Beef Cattle Nutrition Workshops

Cattle producers across north Queensland are encouraged to attend a 3 day Northern Nutrition Workshop which can be held in your local town.

The course consists of 5 modules covering:

Module 1
The digestive system and the nutrients required for maintenance and production.

- The digestive pathways of the main nutrients.
- Factors affecting how much feed an animal eats (its intake), and how this effects the animals performance.
- Nutrient requirements of growing cattle, cows and calves.
- Skills for producers to estimate cattle nutrient requirements depending on live weight gain required and pasture to meet target markets.

Module 2
Factors affecting pasture quality.

- Assessing pasture quality and relating this to cattle requirements
- Principals of pasture growth and subsequent animal performance

Module 3
Matching kg of pastures grown with cattle numbers that can be carried including dry season feed budget, pasture utilisation rates, grazing management plans.

Module 4
Minerals required by animals at different times of the year and diagnosing deficiencies.

Module 5
- Production Targets
- Analysing nutritional options
- Supplementation
- Understanding feed labels (what do they really contain)
- Calculating the financial viability of supplementary feeding options.

To register your interest in the nutrition workshop please contact:

**Bernie English**
**Beef Extension Officer**
**Ph: 07 40484600 Fax: 40923593,**
**QDPI, PO Box 1054, MAREEBA Q 4880**

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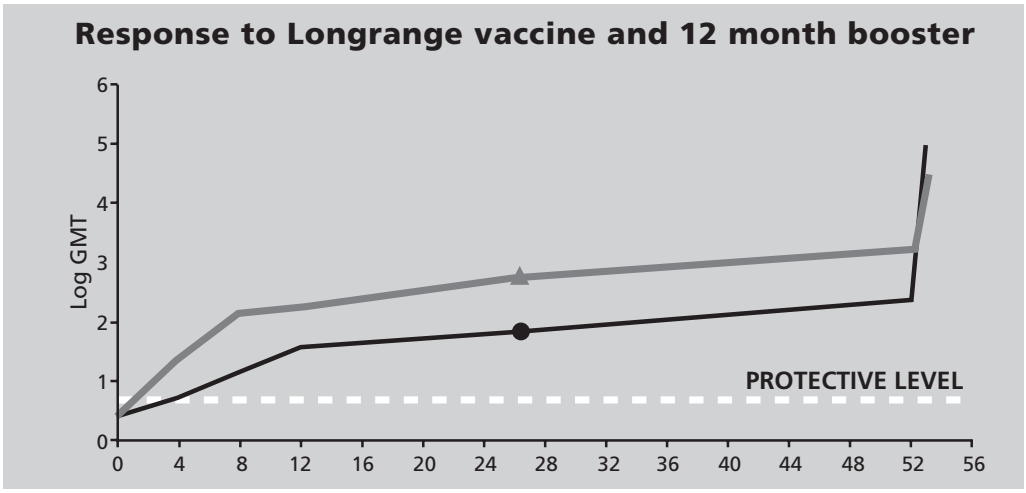


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# DALRYMPLE DIARY DALRYMPLE DIARY DALRYMPLE DIARY

### What is happening with Landcare in the Dalrymple Shire?

This column discusses actions and highlights from the twenty landcare groups, one weed group and one sub-regional natural resource management group in the Dalrymple Shire. There are 310 grazing and rural properties within these groups that fall under the umbrella of the Dalrymple Landcare Committee.

Over the last six years, Commonwealth and State Government funding initiatives have accelerated the adoption rate of conservative grazing land management by providing funds to landcare groups for fencing, stock waterpoints, land rehabilitation and weed management. Thirteen Natural Heritage Trust (NHT) projects have resulted in 1700 kilometres of riparian fencing, 600km of sub-divisional fencing, 160 new stock waterpoints, and rehabilitation of 8500 hectares of scalded, degraded land in the Dalrymple Shire. An investment of $2.6M NHT funds matched with $7.6M of grazier labour and operating expenses has achieved this. These activities have improved pasture condition, increased ground cover, and protected erodible areas and fragile river frontage and springs. All projects were completed by the end of March 2003.

The $3 million Burdekin Rangelands Reef Initiative (BRRI) resulted from the Dalrymple Landcare Committee lobbying for a co-operative effort with government to control woody weeds. This DPI State Government initiative has invested $720 000 in the Dalrymple Shire to effectively manage woody weeds from a number of headwaters in the upper Burdekin catchment, and is providing training and jobs for 16 previously unemployed people to October 2003.

Recently, six landcare groups received an additional $31, 815 funding towards rubber vine management projects from Weeds of National Significance (WONS), a Commonwealth Government initiative. There are now 16 WONS projects administered by ten landcare groups tackling rubber vine, parkinsonia, prickly acacia and parthenium throughout Dalrymple Shire to December 2003. An investment of $430 000 WONS funding matched to $2M contribution from graziers, state and local government in weed management.

### How can I tap into landcare funding to help with land, water and pest management?

There are a number of devolved grants available to groups or individual properties in the :-

- **Bowen – Broken River Catchment** for on-ground nature conservation (contact Greening Australia ph 4725 1752).
- **Desert Uplands bioregion and Lake Eyre Catchment** for on-ground nature conservation and rubber vine management (contact Desert Uplands Committee ph 46511 002).
- **Commonwealth Govt Envirofund**

Grants of up to $30 000 for community groups or individuals to carry out on-ground activities to conserve biodiversity and for sustainable use of natural resources. Applications close 5 June 2003. For more details, visit the website www.nht.gov.au

- **Proposed mega-project for the Burdekin Rangelands.**

Over the next six months, the Burdekin Rangelands Implementation Group (BRIG) will be discussing a project aimed at increasing the adoption of land management principles with landholders, potential devolved grant bodies and government agencies, etc. This community - owned and community - developed project will be in readiness for the release of NHT II in early 2004 (contact BRIG ph 4788 5530, 4754 6120).

Dalrymple Landcare Committee is in a good position to administer devolved funds for grazing land on-ground activities such as riparian fencing, stock waterpoints, land rehabilitation and adoption of management methods to retain ground cover above 40% to reduce sediment and nutrient runoff. There is a call for all Dalrymple Shire sub-catchment landcare groups to collate proposed on-ground activities from members by June 2003, so realistic project proposals can be developed later in the year.

- **Increase funding opportunities by active participation in a landcare or catchment group.**

Landcare groups are an excellent arena to discuss common natural resource issues, decide on the best path of action and source information and potential funding opportunities. Contact your local landcare group and enquire about membership or consider forming a group in your area if no group exists. Ask neighbours or members of a local association (eg. Rural Fire Brigade) if there is interest in forming a landcare group. Call a public meeting and invite a guest speaker from an existing landcare group nearby to provide information and ideas. Contact the Burdekin Dry Tropics Group (ph 4724 3544) to ask for assistance from a landcare coordinator to help a new group through the initial planning, team-building, group dynamics and project planning or to recharge an inactive landcare group. There are coordinators based at Clermont, Ayr, Townsville, Charters Towers and Barcaldine.

**Composed by: Marie Vitelli,**
**Landcare Coordinator,**
**Dalrymple Landcare Committee Inc**
**PO Box 976, Charters Towers QLD 4820 Ph 4754 6120**

## Contact us at Mt Garnet or Charters Towers

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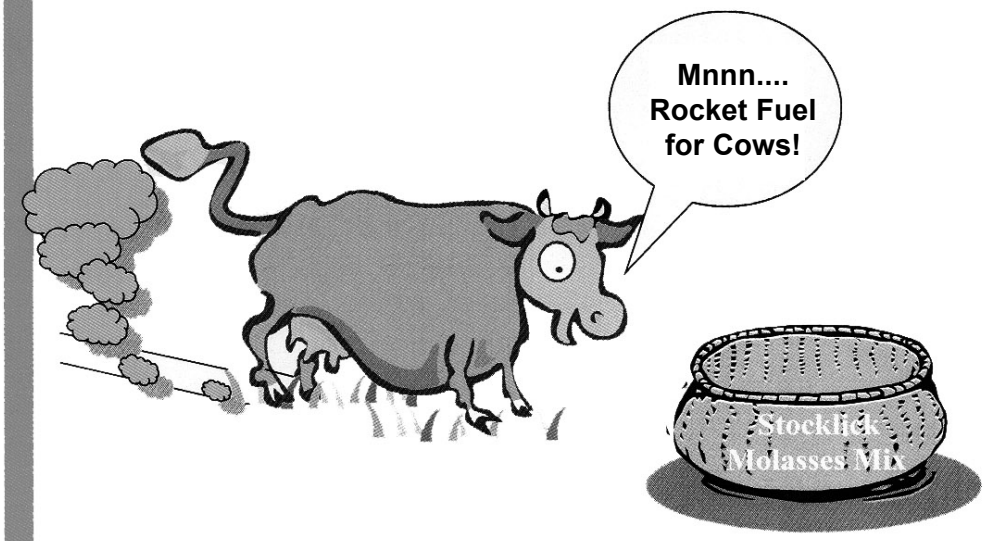


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# The Burdekin community looking after its natural resources

The Burdekin Dry Tropics Board (BDTB), a community based regional organisation, is delivering over $4 million in state and federal government funding from the National Action Plan for Salinity and Water Quality (NAPSWQ) to the Burdekin region in 2003/04. Established in 2002 and based in Townsville, the BDTB services the entire Burdekin River Catchment and the surrounding coastal areas from Townsville to Bowen.

Through the BDTB, communities are determining natural resource management issues in their region and providing the means to implement solutions. The BDTB is developing partnerships between land users, land managers, research scientists, government agencies, industry and other interest groups. These partnerships allows communities to build a comprehensive understanding of resource management issues and develop realistic action plans to guide investment in their local areas. This is a flexible, ongoing process allowing for change and updating as new information comes to hand.

Six Priority Action Projects will receive funding in 2003/2004. These priorities were identified in the Burdekin Catchment Condition Study, commissioned by the BDTB in 2002. Representatives from a wide range of government organisations, land management agencies, industry and community groups contributed to the study. The results were discussed in community workshops before the final recommendations were made.

Water quality and salinity were identified as areas of greatest concern. Key hotspots were targeted within the Bowen-Broken River Catchment, the lower Burdekin and the Belyando-Suttor sub-catchment. The study highlighted the need to assess wetlands and waterways throughout the entire catchment. The study also stressed the need for communities and stakeholders to remain informed of land management issues and involved in the decision-making process. Aboriginal traditional owners must be engaged in the process as well.

Funding directed to the Bowen-Broken River Catchment covers land management practices such as; paddock subdivision for more flexible herd management, riparian fencing, developing property management plans, subsidising training courses, making information about best management practice widely accessible, providing financial incentives to enable people to implement best management practices.

Water quality and salinity issues in the lower Burdekin are to be addressed in conjunction with a number of existing and proposed state planning activities. Funding is directed towards; producing a geohydrological map of the lower Burdekin, developing comprehensive water management models for the lower Burdekin, improving management of drainage, groundwater and water use at Giru, reducing runoff, tail water sediment and chemical loads in East Barratta Creek, assisting canegrowers through the use of COMPASS and establishing an independent landholder reference panel.

An extensive information campaign to increase awareness of dryland salinity in the Belyando-Suttor Sub-catchment is underway. Projects will assess salt storage in the soil; teach landholders to identify potential recharge and discharge areas on their properties; provide hands-on instruction about salinity management options; install groundwater monitoring bores; subsidise on-ground works to demonstrate recharge and discharge management techniques.

The BDTB is also providing funds to map and classify wetlands and riparian areas throughout the entire catchment, highlighting areas requiring remediation and those in need of protection.

Since community and stakeholder involvement is crucial to the success of these projects, a natural resource management InfoBase is under development and will be made available to communities and stakeholders. Processes to ensure comprehensive community involvement in the region's natural resource management will also be continually refined.

Traditional owner participation in the natural resource management process is underway with workshops throughout the region developing a framework to include traditional owner matters into sub-regional plans. Traditional owner cultural heritage information will also be included in a Geographic Information System.

The Priority Action Projects involve a high level of community involvement as well as support from a variety of partner organisations including: DPI, EPA, CSIRO, CVA ACTFR and GBRMPA. Community groups include representatives from shire councils, Greening Australia, landholders and other stakeholder groups.

The BDTB has also received funding to develop a regional natural resource management plan to guide further investment of funds in the region. The Plan will be developed with extensive community consultation over the next six months.

Kirk Smith, a grazier from the Charters Towers district is the BDTB Chairman, with eight other regional representatives contributing a range of skills. The BDTB administrative office is located in Townsville where Ms Dian Riseley, Executive Officer, is available to talk with you about the BDTB and its projects.

For more information:
**Phone: 07 47243544**
**email: info@burdekindrytropics.org.au**

# Water quality monitoring by the community in the Burdekin

The Board has established monitoring projects with scientific institutions, linked with on-ground projects that have a direct impact on the quality of the water flowing into the Great Barrier Reef lagoon. Establishing the water quality before and after the projects are in place will help to determine their effectiveness.

The Board is working with various scientific institutions to assist this monitoring program. There are several studies on specific sub-catchments, however there is a shortage of information relating to changes over the whole Burdekin catchment during large rainfall events.

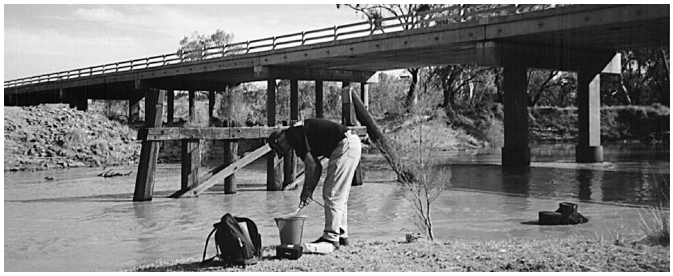
The assistance of landholders has been organised to collect water samples over a period of time following the initial stream flow from significant storm events. The aim is to collect five samples spaced throughout the flood peak. Landholder knowledge of stream behaviour in relation to upper catchment rainfall is an important consideration in the sampling process. Sampling may range from one per day to one every twelve hours. The substances targeted in the first stage of the project are suspended solids (sediment) and dissolved and particulate forms of nitrogen and phosphorus. Other parameters such as salinity will be targeted in future phases of the project.

Seven sites have been chosen for sampling in the first phase of the program. These are the Burdekin at Macrossan, the Cape River at Taemas, the Suttor at Scartwater, Belyando Crossing, the Bowen River at Myuna and the Burdekin at Home Hill. Other sites on the Bogie River and upper Burdekin may be included in the next few months.

Jon Brodie of the Australian Centre for Tropical Freshwater Research (ACTFR) and David Wood, the Burdekin Dry Tropics Community Support Officer recently delivered water-sampling kits to landholders and provided instructions on the collection and storage of samples. Staff of the Burdekin Dry Tropics Board will collect the samples for physical and chemical analysis by ACTFR.

The Burdekin Dry Tropics Board is very appreciative of the participation by landholders in the sampling program, as travel can be extremely difficult during flood periods. The results of the sampling will give us a better understanding of the seasonal processes taking place in the Burdekin Catchment that affect water quality and better inform us in how we can more sustainably manage our land.

**David Wood, Burdekin Dry Tropics Board**
**Phone 4724 3544 Fax 4724 3577**



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Cloncurry Show, June 13 & 14
Richmond Field Days, June 20 & 21
Mt Isa Show, June 20 & 21
Emerald Ag Grow, July 10 to 12
Dawin Show, July 24 to 26
Charters Towers Show, July 28 & 29
Forsayth Turnout, August 3
Corfield Races, August 9
Prairie Races, August 16
Sedan Dip Races, August 30
ICPA Conference, Cunnamulla, Sept 11 & 12
Ewan Races, September 26 & 27

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**Contact our Development Officer, Hilary Grant**

**Ph 07 47871433**
**Fax 07 47873049**
**Email promotions@allsouls.qld.edu.au**

# Don't get caught without enough grass

We all saw some bare paddocks across north Queensland last dry season. Many pastures are still barely recovering as most districts only received rain in January 2003. We could be heading for another bad year because native pastures have had to regrow from such a low base.

About the only feasible management tool we have in these situations, is our capacity to manage stock numbers to account for the feed available. The most likely time to adjust numbers is at the first muster. At this time, cattle are in the best condition for the year, paddock feed is at it's maximum. Cattle are being mustered anyway so you don't have to pay for another muster just to lighten off.

Given our distinct wet and dry seasons we know that whatever grass we have in April, then that's it for the year. The chances of getting decent rain and growing conditions between April and October are near zero. The table below shows the total rainfall expected from the beginning of April to the end of October in 7 years out of 10.

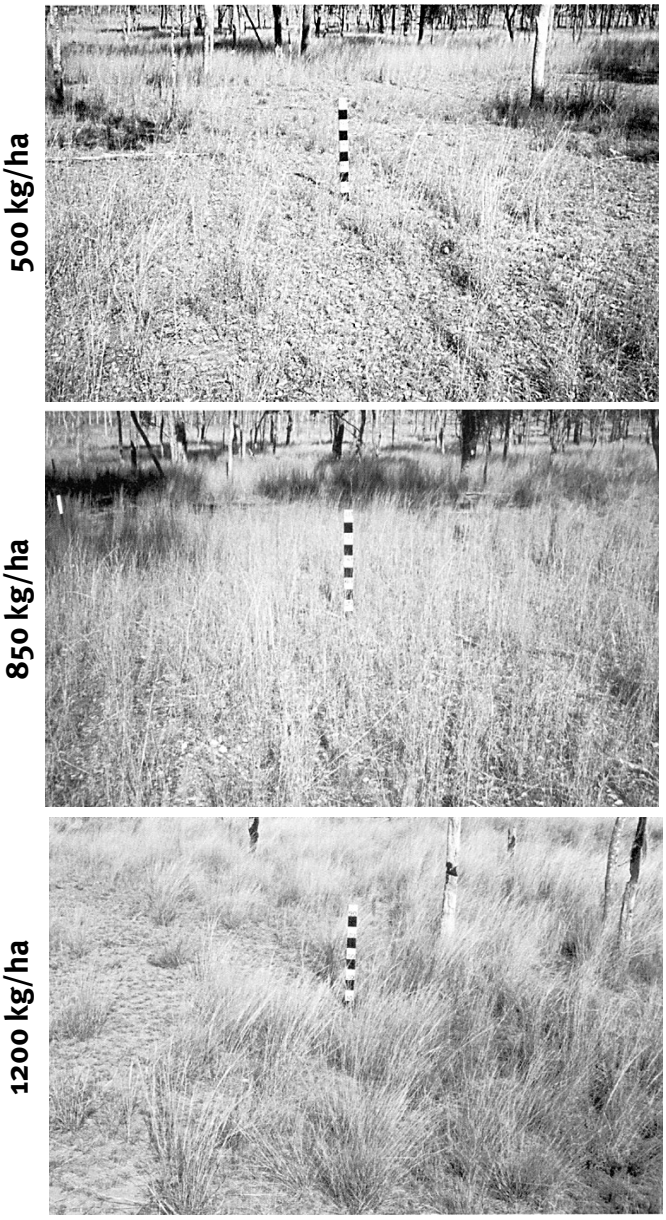
| District | Rainfall (mm) |
|---|---|
| Greenvale | 55 |
| Oak Park | 55 |
| Einasleigh | 35 |
| Mt Garnet | 77 |
| Mt Surprise | 80 |
| Georgetown | 30 |
| Croydon | 26 |

We know that after an average sort of wet season the good basalt soils and frontage country will grow around 2500 kg/ha of pasture compared to 1500kg on granites and less than 1000kg on the Croydon sandy forest country. This wet already promises to be a short one and that will mean reduced pasture for the coming dry season.

So, how much grass have you got to see your cattle through until December? Have you decided to reduce numbers to match the pasture available?

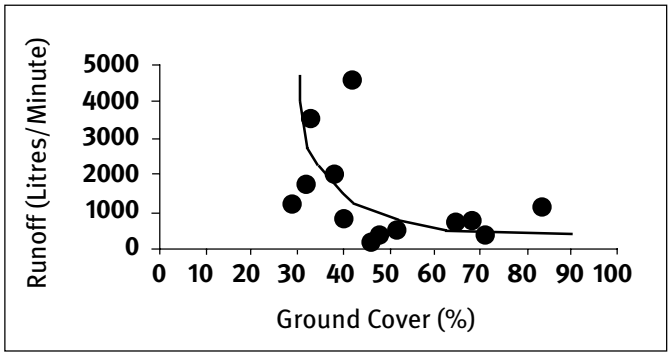
## With pasture utilization, plans start with how much grass should be left at the end of the dry season

There are a number of good reasons why a decent ground cover at the end of the dry season is a good thing. Probably the best of these is that you slow water runoff down so that rainfall has the most opportunity to infiltrate into the soil where it will help grow more grass. Since most plant nutrients are in the top 2 centimetres slowing runoff also means erosion is reduced and these




nutrients stay where they should be – on your ground to enhance pasture growth and quality.

Runoff really accelerates in tussock type grasses (like ours) when ground cover is reduced below about 40% as the graph below shows. That equates to about 600 kg/ha and so that's how much grass you should have left at the end of October or November whenever you reckon the storms will start.



### How much for the cows

A 400 kg pregnant cow will mow through about 12 kg of dry pasture per day to supply maintenance and some production. Over the 7 months from the beginning of May to the end of November therefore, each cow will eat 2560 kg of pasture.

And then there are roos and other users you can't control.

Depending on land condition at least 15% of standing pasture is lost to roos, rabbits, wallabies, trampling etc. If land condition is poor and there are a lot of annual grasses and weeds in the pasture the discount will be higher since a goodly proportion of annuals detach and blow away after winter.

In the end it comes down to mathematics.

So if you've got a 1000 ha paddock (all within 3 km of water) with 1000 kg of dry pasture at the end of April and it is in good condition we discount 15% for trampling, roos etc leaving 850kg. We need 600 kg to protect the country and make maximum use of next season's rain so that leaves only 250kg/ha we can use for our cows. Therefore we need just over 10 ha per cow (2560 kg/cow divided by 250 kg/ha of available pasture). Our paddock will safely run 98 pregnant cows from the end of April until the projected start of the next wet in the beginning of December.

Importantly you'll know that you've covered the risk of losing cows or paying big bucks for crisis supplements in the latter part of the dry season.

But what will you do if there is only 600 kg of pasture available at the end of April?

Some Northern producers have faced this situation already this year and have sold all the cattle in particular paddocks.

**Kev Shaw and Bernie English**
**DPI, Mareeba**
**Ph: 07 40484 600**

# Climate outlook and livestock management - Sheep and Cattle

Do you have enough pasture to meet the requirements of your livestock for the rest of the year?

If not, it is time to put in place strategies that make the best use of the recent rain and improve your chances of successfully surviving -until the drought breaks.

### Climate and pasture response

Western Queensland has received less than 40–60 per cent of its average summer rainfall (October to March). Almost all of this has been in the last third of the growing season, and as expected, the growth that has occurred has gone rapidly to seed with little bulk produced.

On average, the six months between the end of March and the start of October normally only produces 15 per cent of the pasture growth for the year.

Some long-lead climate models show El Niño regenerating or continuing through this winter. However, it is still too early to tell which way it will swing. If the El Niño regenerates, then winter could be dryer than average. But if El Niño breaks down winter could be wetter than average.

The next passage of the 30–50 day oscillation occurs in late March or early April and this is the key to the next potential rain.

### What next?

How long do you wait for definitive rainfall and pasture growth? When do you start to calculate the odds? The simple answer is right now.

Important considerations:

- Potential pasture production to carry through until the next summer season may be limited.
- Molasses, urea, and licks and blocks need adequate dry pasture.
- Fodder sources may remain scarce and expensive, as there will be little available until the winter crop harvest in October or November.
- Cottonseed from the April 2003 harvest may be scarce and expensive because of low plantings, restrictions on water, and the need to meet long-term contracts for processing.
- Molasses may not be readily available until mid 2003.
- Longer-term agistment may be very difficult to get.
- Carting water for stock is expensive and time consuming.
- The Australian dollar is forecast to rise to 65 cents later in the year, with an expected reduction in export prices. Each one cent rise in the dollar represents a fall to the producer of about 12 c/kg for meat and 15 c/kg clean for wool, when traded in $US.
- Know your bank's limit on what you can spend and when that is likely to cut out, so you can adjust stock numbers early while prices are still reasonable.

## Options include:

- Adjust numbers to a level you can afford to feed and can obtain feed for based on predictions of when your current feed will run out. Selling stock early, before feed supplies run out, allows you to obtain the best price possible.
- Competition for available fodder may be high, so purchase early.
- Use edible scrub such as mulga provided you have reliable machinery. Remember permits are required for fodder harvesting, from NR&tM.
- Delay or do not join until there are more positive long-term seasonal forecasts for the late pregnancy and lambing or calving periods.
- Retain high numbers and buy large quantities of feed so that you can get into production quicker after the drought. This option may hold limited prospects and be very expensive if rainfall and pasture production remain low.

## Selling stock:

- Better prices for sale stock are almost always found early when they are in better condition and there are fewer on the market. In Queensland this is usually earlier than April to June the normal time for strong indications the El Niño is breaking down.

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- Use the current green pasture to get sale stock into the best condition to obtain the best price possible.
- Sell those stock that will give the least return for the feed they will consume over the coming months should it remain dry. In sheep, this is usually lambs, weaners and older stock.
- Investigate potential markets over a wider area than normal, particularly all the eastern states as they enter their wet season.

Examples of how to make your stock more marketable include early weaning and holding stock in smaller paddocks and feeding. These allow stock to gain significant weight and improve their sale prices. It also reduces feed bills and work loads.

Letting stock walk around badly droughted pastures in search of feed can increase energy requirements by 60–100 per cent; energy that you have to supply. Once pasture becomes scarce, and the level of feeding high, it is usually cheaper and more efficient to confine them and feed a full ration.

Consider your options and make your decisions early. If you leave it too late, your stock may not be in a marketable condition or attract the best prices. They may also be too weak to transport. Remember animal welfare.

## Cost benefit analyses and climate risk

Many producers have found it useful to do a cost benefit analysis of decisions that have a climate risk factor. For example, what will I gain if I get the desired outcome from this decision? What will I lose if I do not get the desired outcome? What other options do I have?

## Climate forecasts and management decisions

The latest outlook maps and other climate information are available from www.dpi.qld.gov.au/climate or www.longpaddock.qld.gov.au

DPI drought management and feeding recommendations and drought assistance is available from www.dpi.qld.gov.au/drought.

If you are interested in how climate forecasts can be used in management decisions, useful case studies can be found at www.cvap.gov.au/mastersoftheclimate

For further information on drought management contact:

- DPI Extension staff
- DPI Call Centre 13 25 23
- Drought hotlink 1800 025 656
- DPI web site www.dpi.qld.gov.au.

Dave Jordon
QDPI, Roma Ph: 07 4622 9901
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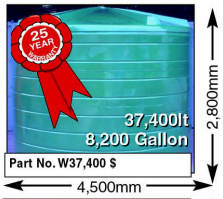

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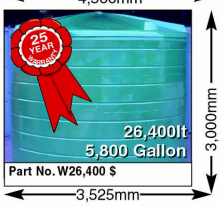

Part No. W26,400 $
3,525mm
3,000mm
x1= FREE

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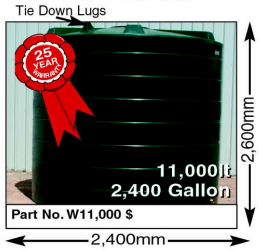

Part No. W11,000 $
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2,600mm

Part No. W8,000 $
2,400mm
2,000mm
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# Managing and marketing breeders in light seasons

The combination of a late seasonal break and below average summer rainfall following drought conditions in 2002 will result in most properties having a light body of feed. In addition breeders are generally in lighter condition than normal. Depending on the individual property situation, carrying current stock numbers through to the next wet may involve considerable risk, losses and unaffordable expense.

Pregnancy rates and breeder survival depend on body condition and without appropriate management lower pregnancy rates and late conceptions are likely to occur. Early mustering and early weaning are the most effective way to improve cow condition.

### Old Cows

Cows older than 8-10 years are more vulnerable in droughts and selling them will prevent losses and provide income. When feed is limited, it is best utilised by younger animals with a productive future.

If the markets for pregnancy tested in calf (PTIC) breeders or cows and calves are good, this may provide opportunities to quickly dispose of older cows. Mustering early and early weaning can be used to improve the condition of cows and enable earlier marketing.

### Wet Cows

Cows that wean a calf on the first round are the most productive breeders and may require no supplementation or their requirements will be markedly less than those weaned on the second round. Consequently first round weaner mothers should have priority for retention in the herd.

Segregating second round weaner mothers may be desirable to improve pasture utilisation and the efficiency of supplementation.

Cows weaned at the first round will freshen up. An appropriate pregnancy test can identify empty cows to cash in rather than carry another season.

Cows weaned at the second round and empty can be sold, if they are a survival risk, going to be costly to keep and or competing with pregnants for feed supply.

### Dry Cows

*Control Mated Herds*

In a managed, control mated herd, these are likely to be on their first miss. Pregnancy testing can be used to

- Tighten the calving pattern and retain cows which will calve at the optimum time
- Identify cows for a well-earned cash flow

If they are cows calving every second year, they need cashing in.

*Continuously Mated Herds*

Cows, which are dry on the first round, are less productive because they will produce lighter weaners and many will not wean a calf in the current year. Because dry cows are relatively easy to handle and invariably in good order they are the ideal group to select sale cattle from.

Pregnancy testing this group is an efficient means of establishing management groups and selecting sale animals. Time of calving is the major factor determining a cow's survival risk.

Table 1 provides an example of how cows at different stages of pregnancy can be grouped for management.

*Table 1. Management groups and expected calving dates for cows at different stages of pregnancy on 1 April*

| Group | Pregnancy status (months) | Calving date |
|---|---|---|
| 1 | 1.5 | Dec 7 |
| | 2 | Nov 9 |
| | 3 | Oct 10 |
| 2 | 4 | Sep 8 |
| | 5 | Aug 9 |
| | 6 | Jul 10 |
| 3 | 7 | Jun 9 |
| | 8 | May 9 |
| | 9 | Apr 8 |

Empty cows are definite passengers and obvious culls.

### Group 1 - Cows 1 - 3 Months Pregnant

These cows will calve at the optimum time of year and require less supplementation than other groups. Consequently, it is better to retain them over higher cost and risk animals.

This group will contain some less productive animals, which conceive late and or fail to raise a calf. If they have previously failed to wean a calf then they should go at the pregnancy test. Culling animals that fail to wean a calf removes passengers and generates cash.

An alternative approach with this group is to sell them because they can provide sales with no impact on the current years weaning. In a poor season however, the risk of retaining out of season calvers over Group 1 animals must be carefully considered.

### Group 2 - Cows 4 - 6 Months Pregnant

These are out of season calvers. This group will not wean a calf in the current year unless radical weaning is undertaken. By paddocking them separately the calves can be branded at the end of the second round, to avoid large cleanskin weaners in the following year.

These animals are most at risk under poor seasonal conditions, as they will lactate for the longest period

during the dry season and this should be considered when allocating paddocks and planning supplementation.

Depending on pasture supply and the availability of finance and labour to feed this group, it may be best to sell some or all of these animals so as to avoid losses and minimise costs. Agistment is a possibility but it is important to consider that these animals will still be the most risky group.

### Group 3 - Cows 7 - 9 Months Pregnant

This is also a group of out of season calvers. However, they can be weaned during the second round and earlier weaning can be undertaken, to reduce the stress on these cows.

Under poor seasonal conditions, they are a high-risk group, with potentially large inputs for supplementation or hand feeding. They may be better off sold, particularly if the market is strong.

### Rejoining Strategy and Bull Management

Removing bulls from dry pregnancy tested cows enables them to be rejoined in December to ensure they have the opportunity to reconceive at the optimum time.

The program in combination with breeder sales frees up bulls and provides the opportunity to cull more bulls.

### Recommendation

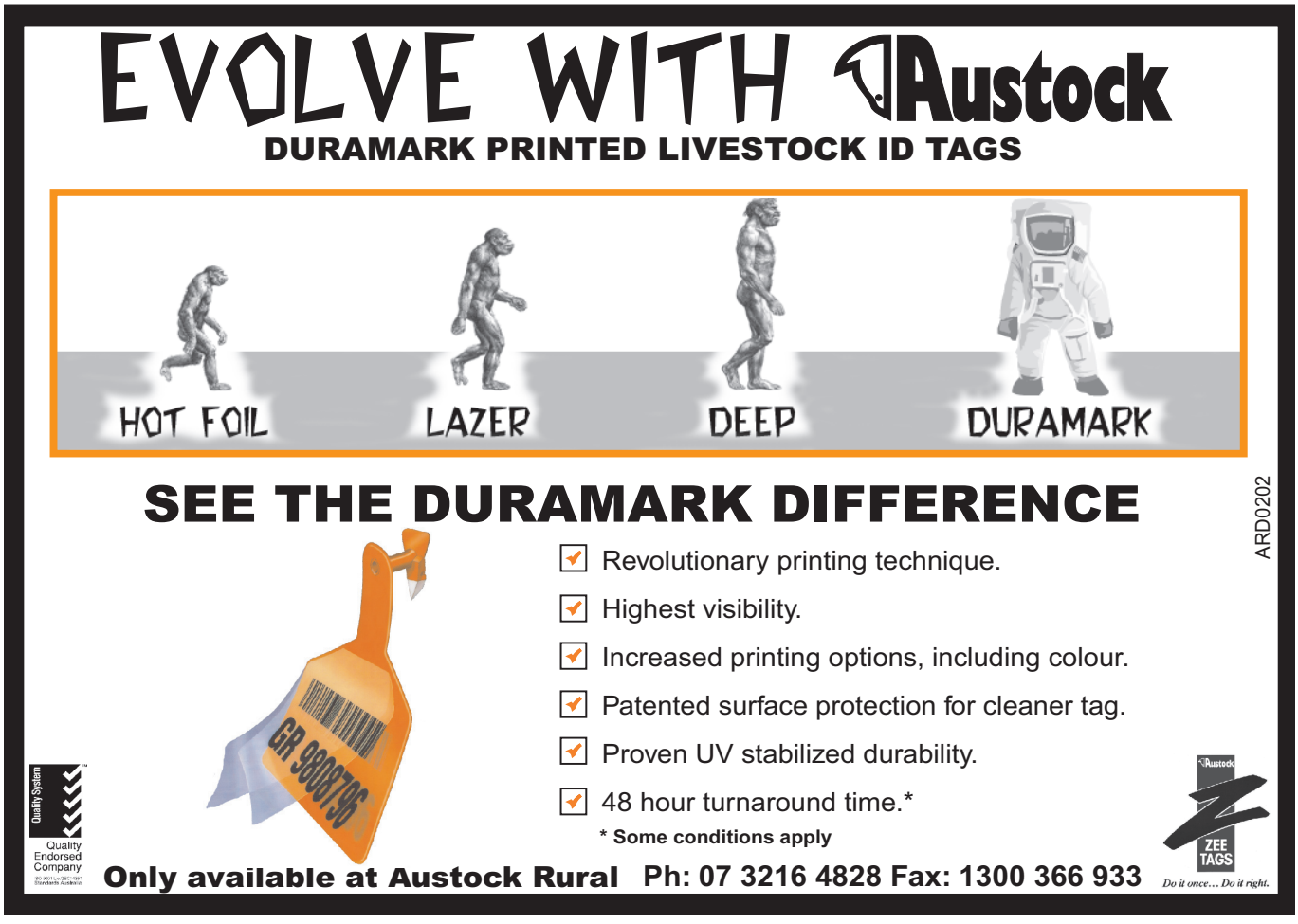
Segregating breeders on the basis of lactation and pregnancy status is a valuable strategy because it enables more effective use of pasture and supplements. High risk and cost, or less productive animals can be identified for sale.

Sale priority groupings are as follows

- Old cows
- Empty dry cows
- Dry cows calving July to September
- Dry cows calving April to June
- Dry cows calving October to December
- First round weaner mothers which fail to reconceive
- Second round weaner mothers which fail to reconceive

Cull retained pregnant cows that fail to wean a calf, as they are less productive.

**Mick Sullivan**
**Senior Beef Cattle Extension Officer**
**DPI, Mount Isa**
**Ph: (07) 47472 030**



# Is our Mitchell grass in danger?

Appropriate management of Mitchell grass under the current dry conditions is critical for its long-term survival.

In cases where short green pick is providing much welcome relief to graziers struggling to keep feed up to their stock, there may be a hidden danger for Mitchell grass survival.

DPI Senior Scientist David Phelps, said Mitchell grass plants are most susceptible to over-grazing when re-shooting from the base. "Whilst it may be the best sheep feed available, it is also the time when Mitchell grass is attempting to renew valuable carbohydrate and nutrient reserves ready for the next dry spell" said Mr Phelps.

"Damage from over-grazing to plants now will drain the longer term productivity and survival of Mitchell grass. It is important that the short term benefits are weighed up against the long term costs – grazing out all of the green pick now will mean a longer recovery time for the Mitchell grass when the drought does break."

Recent inquiries to the DPI at Longreach have asked why there is a lack of response in Mitchell grass following the latest storm rain.

According to Mr Phelps, there are a number of possible reasons, one is people's perception of 'significant rainfall'; the other is the stubble height of the plants themselves.

He said if there has been 25 to 50 mm of rain, and there was still no response with a good retention of stubble (at least 10 cm residual height), then the soil was probably so dry that even a couple of inches has failed to wet it up sufficiently.

"Under normal conditions, a response would be expected from along the stems and some pick growing from the base would be evident."

"If, however, retention of stubble was less than 5 cm residual height, then at least 75 to 100 mm of rain is needed to stimulate significant growth from the base of the plant. There may be a bit of green leaf at the base, but more rain will be needed to stimulate growth of new stems and produce much bulk."

"If people are seeing no response even after 75 to 100 mm rain, then my best guess is that the soil had become so dry that it really needs a good soak to wet it up" said Mr Phelps.

"It is also possible that the storms have fallen too quickly and a lot of water has run off rather than soaked in. This will especially be the case if there was little stubble retained at the time of the rain falling. Dams which have filled quickly would be evidence of this."

"Really heavy clay soils – and especially the ashy soils – always need a good soak of 75-100 mm to produce much response. These soils dry out so strongly that they need much more rain to wet them up than the lighter soils do." Mr Phelps said.

He said it is also possible that isolated areas of Mitchell grass have died out from moisture stress, old age or fungal attacks to the crown of the plant. "If you can pull out a Mitchell grass stem and the enlarged rhizome at the base is easily crushed, then that part of the plant was dead – quite possibly from fungal attack" said Mr Phelps. Mitchell grass plants can live for 20 to 30 years, but it is not known just how long they can survive severe drought conditions.

Areas of buffel grass have also been reported as dead. While buffel grass is generally very drought tolerant, it will not survive extended dry periods and areas will die out as a result of moisture stress. However, buffel grass normally has good soil seed reserves and will regenerate from seed if conditions are suitable.

Mr Phelps said tricky situations arise where storms have fallen only in parts of paddocks. Good practical solutions in these cases are difficult, however, it is imperative to allow only very light stock numbers on the green pick. It is important to keep in mind that stock numbers should be calculated relevant to the area of green since this is the area that will be selectively grazed whilst the rest of the paddock remains relatively ungrazed. A rule of thumb would be "if the grass is growing faster than animals can eat it" then numbers are about right, but if "they are eating it faster than the grass can grow" then numbers are too high and there is likely to be some longer term damage.

He said it is also worth noting that overgrazing with sheep, as opposed to cattle, is more likely to do damage to the short green pick of Mitchell grass. This is mainly because the cattle are not as efficient at accessing the last little bit of leaf that the Mitchell grass plant is using to renew valuable carbohydrate and nutrient reserves in the roots.

Mr Phelps said kangaroo damage to Mitchell grass pastures is very likely at present. Kangaroos are so mobile that they can follow the storms and graze the short green feed almost exclusively. Large numbers of Kangaroos are difficult to manage practically. It is recommended that advice be sought from the Environmental Protection Agency for advice on controlling kangaroos.

Carefully considered grazing strategies at this time will do much towards ensuring the long-term health of your Mitchell grass pastures. Some follow-up rain would also make the task at hand a great deal easier!

**David Phelps, Jenny Milson**
**DPI Longreach**
**Ph: (07) 46584400.**

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# Desert Uplands carrying capacity study underway

A research project to assess the safe carrying capacity of cattle grazing enterprises within Queensland's Desert Uplands promises to deliver paddock by paddock information to ensure long term industry sustainability.

Department of Primary Industries rangelands scientist, Paul Jones and Grazing Land Management extension officer Jillian Aisthorpe, will work from Emerald to undertake the on-property calibration work in consultation with regional landholders.

Mr Jones said the Desert Uplands covered some 75,000 square kilometres in a region bounded by Alpha, Blackall, Barcaldine, Pentland, Charters Towers and Clermont.

The two-year Safe Carrying Capacity (SCC) project launched this year was being funded through the Tropical Savannas Cooperative Research Centre. Similar SCC work had also begun in the State's northern Gulf country and the Northern Territory's Victoria River Downs region.

Mr Jones said a method for developing SCC based on climate and soil types had been successfully implemented in southwest Queensland using a computer model called GRASP.

"This model accounts for plant ecology and soils when predicting pasture growth under particular climatic conditions," Mr Jones said.

"It will be a useful on-property management tool to provide landholders with realistic estimates of areas required to support a sustainable livestock business," he said.

Mr Jones said the Desert Uplands represented a key bioregion as much of the woodland was intact and provided a corridor between the western grasslands and the eastern woodlands.

"In some areas there has been a loss of perennial grasses and obvious soil erosion. This decline in land condition has been linked to overly optimistic assessments of long-term 'safe' carrying capacity. It is envisaged the SCC project will encourage sustainable management practices and facilitate property build up as many of the current individual holdings are deemed to be unviable.

"By June 2005, case studies will be in place to using the SCC procedure for property management and business planning. Workshops and field days will be held to evaluate and demonstrate the benefits of implementing SCC project management practices," Mr Jones said.

**Paul Jones**
**Rangelands Scientist, Emerald**
**Ph 4983 7415**

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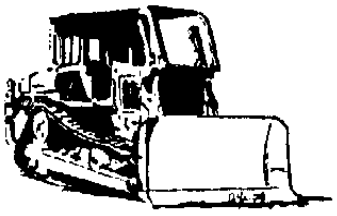

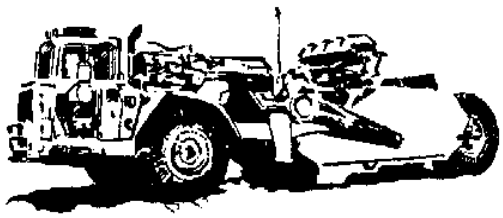

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# Game meat processing facility feasibility study

"Wild Boar" branded, locally processed feral pig meat could be the latest export from Cape York, according to a feasibility study just published.

The report, commissioned by the Cape York Weeds and Feral Animals Project, an NHT project sponsored by the Cook Shire Council explores the commercial exploitation of feral pigs on Cape York as part of an overall control program.

It's estimated that the feral pig population of Cape York is between 2.5 and 5 million.

"We've got the product, we believe the markets are out there, we've got the workforce, are we able to put together a package that will see the sustainable commercial harvesting of feral pigs on Cape York?" Cape York Weeds and Feral Animals Project manager, Peter James said.

Feral pig meat is marketed internationally as "Wild Boar" meat.

According to the report, over the past decade there has been a steady rise in demand for the game meat overseas, mainly European Union countries rising at a rate of 3.1 per cent a year, with an expected 14,600 tonnes of Wild Boar meat to be exported from Australia during 2003.

The main European countries where the product is exported are Germany, France and Netherlands, but Mr James believes there are many countries where the product could be exported especially in the Asia-Pacific rim.

The report concluded that the commercial harvest and processing of feral pigs into table ready wild boar meat is commercially viable with quite good returns for the investor.

"It would be good all round for the Cape with pastoralists pleased to see the number of feral pigs reduced, possibilities for employment for indigenous communities, good for the environment and also provide regular monitoring of the feral pig population for possible incursions of exotic diseases." Mr James said.

"The report will be tabled at the forth-coming Cairns meeting of the Cape York Peninsula Pest Advisory Committee for them to discuss and recommendations on how the issue could be progressed.

"This is just the beginning of the exercise. A number of agencies, including three State Government Departments, Aurukun and Cook Shire Councils contributed financially to the report and will need to review its contents and make comments," Mr James said.


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# The use of fire to control woody thickening in the Gulf

Many land types in the Gulf region have experienced increases in woody vegetation cover in recent decades. This thickening in the cover of trees and shrubs such as eucalypts, wattles, tea-tree, yellow wood, gutta-percha and breadfruit has significantly reduced pasture production and made cattle management more difficult. It has been estimated that at least 60% of the north has thickened to the extent where it is reducing carrying capacity.

The reduction in effective carrying capacity has implications for property viability. In addition, attempts to maintain stock numbers, as carrying capacity decreases, risks land degradation. These changes have probably resulted from a combination of the effects of grazing, changes in fire regimes and climatic conditions. The strategic use of fire has the potential to reduce woody vegetation cover and help recover pasture production.

This issue is currently being investigated in the Gulf Fire Project jointly funded by DPI, CSIRO and MLA. The project will develop and test recommendations for the use of fire for managing woody vegetation in the gulf savannas through a collaborative effort between landholders and scientists from CSIRO and DPI. It is being conducted under the umbrella of the Tropical Savannas CRC and has strong links with the Northern Gulf Resource Management Group (NGRMG).

## Mt Garnet fire trial

The Mt Garnet Landcare group is currently conducting a similar project looking at fire to control woody thickening. The trial, which commenced in 1999, is being carried out on three local properties and all sites have now had two burns. The results have been variable at the three sites but all have indicated a reversal in the tree thickening trend and a resultant improvement in land condition. At all sites the understorey has been opened up by a reduction in height and in the case of wattles, the death of trees greater than 3 metres. This structural change has promoted an improvement in ground cover helping restore the desirable tree/grass balance of an open woodland.

## Gulf fire project

Three regions, Georgetown, Croydon and Normanton are involved in the Gulf Fire Project. Each region has a steering group that oversees the project in their area. The steering group includes graziers, CSIRO, DPI, NGRMG and Rural Fires.

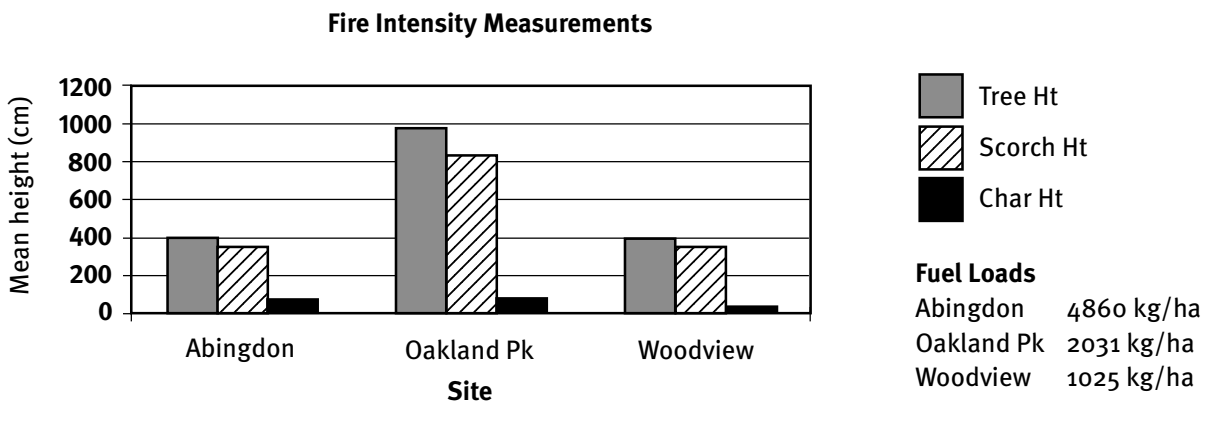
The strategy being tested is to use hot, late dry season burns to target key woody species identified by the steering group. Species being targeted are breadfruit (*Gardenia vilhelmii*), gutta percha (*Excoecaria parvifolia*), yellow woods (*Terminalia* spp), eucalypts and acacias.

Each of the three regions has a core site where detailed measurements of the impact of fire on woody species are being taken. The three core sites, Abingdon Downs (Georgetown), Oakland Park (Croydon) and Woodview (Normanton) have all recently had their first burn. Initial results have been encouraging but point to the need for follow-up fires.

Grazing management is an integral component of the project. At each of the core sites light grazing and/or spelling was used before the fires to build up fuel loads and will be used after the fires to enhance the recovery of preferred pasture species.

A number of satellite sites will also be established in each region. A range of fire treatments will be tested at these sites although they will be less intensively monitored than the core sites. If you would like more information about this project contact:

**Jim Kernot**
**Mareeba Department of Primary Industries**
**Ph: 4048 4600**



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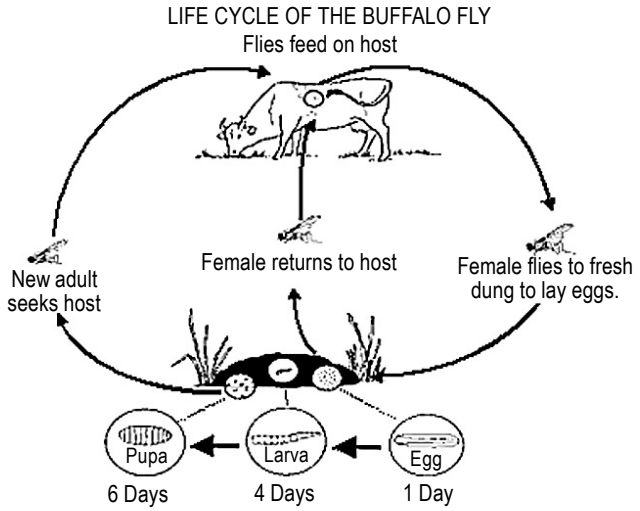
# New Buffalo fly trap

Preliminary research into non-insecticidal control of buffalo fly has produced some very encouraging results. Commercial evaluation of a novel walk through trap is being carried out on 5 properties in Queensland's 'buffalo fly belt'.

### The pest

The buffalo fly breeds only in fresh cattle dung and egg laying is completed a few minutes after the dung is produced.




*Larvae hatch in less than 24 hours and move constantly through the dung, feeding only on fluids. In summer, adult flies emerge within 2 weeks, and begin to breed 3 or 4 days later. Such fast development allows the fly to build its populations rapidly when conditions are favorable.*

### Its Impact

Buffalo fly are recognised as a major parasite of beef cattle in Queensland. Most of the production loss is because of reduced grazing time due to fly worry. Generally cattle can tolerate a low level of buffalo fly infestation (estimated to be around 200 flies per animal) without significant production loss.

It is estimated that cattle producers spend $4 - 6 million annually on chemicals alone to control buffalo fly. This costs the Australian beef industry at least $20 – 30M each year (up to $30 per head) in lost production and treatment costs.

### The weapon

Walk through fly traps are not as new as you may think. The first traps were designed in the US during the 1930's to control Horn fly. After the war, DDT and other pesticides emerged and were a favoured control method. It was not until the last 10-15 years, that things have done a full circle and the non insecticidal methods are being revived due to consumers perception of chemical use and fly resistance to many pesticides.

Further development of the original walk through concept, and application of new principles, a simple, relatively cheap *'tunnel trap'* has been developed and tested with very encouraging results. Unlike previous walk through traps, this design does not rely on brushes and flappers to remove the flies - but rather changes in sunlight! By exploiting the fly's behaviour, this simple trap utilises the contrast in light as the animal walks into the tunnel. Flies lift off as the beast enters, follow the animal into the tunnel and are attracted to the light coming through side windows. The flies 'escape' through the windows only to become trapped in the cages.

**Early research suggests 60-80% reduction in fly numbers is achievable**

### Industry evaluation project

DPI, with MLA support, is testing this trap under various grazing systems. Evaluation sites are located in the Charters Towers, Mackay, Rockhampton, Burnett and Moreton districts. Field days are planned for all of these locations.

For further information on the tunnel trap (including plans) contact:
**Dave Smith**
**DPI Charters Towers**
**Ph 07 4754 6110 or**
**DPI Call Centre, Ph 13 25 23**
**Non Queensland Residents Ph: 07 34404 6999**

# What's the good oil for backrubbers?

"Recent label directions for the use of Supona®, a cattle buffalo fly control product have changed." announced Rick Webster, Principal Veterinary Officer. 'Sump oil' has been deleted as a carrier for the chemical in backrubbers. Mr Webster said, "This is because of concerns that potentially cancer causing chemicals formed by high temperature combustion engines are in the sump oil." "Therefore, the use of sump oil is NOT consistent with Australia's 'Clean and Green' marketing position."

Clean unused mineral oils are recommended. One Queensland lubricant supplier has specially formulated a mineral oil product for use in backrubbers. DPI officers have observed the use of a product on three properties throughout the State reportedly without problems. The supplier is preparing to publicly release and promote the product to the industry in the near future.

Recycled engine oils are not recommended as the recycling process may not remove the carcinogenic chemicals. Furthermore, vegetable oils can no longer be recommended as an alternative. Some are overly palatable to cattle and may encourage more self and mutual grooming that would lead to the increased ingestion of the chemical. Such chemical absorption may poison stock or at least increase the chemical residue level within the animal. There are also reports that some vegetable oils may spontaneously ignite or degenerate into gluggy, unusable compounds.

**Rick Webster**
**Principal Veterinary Officer**
**Brisbane Ph. 07 3239 3528**

# How can you have a say in MLA research?

The answer is through the North Queensland Beef Research Committee (NQBRC). Greg Brown from Meadowbank Station is the chair and committee members Tom Mann, Roger Landsberg, Tony Allingham, Les Cox, John Bethel, Chris Hughes, Lee Fitzpatrick, David Coates, Bob Shepherd and secretary Jim Kernot. But what is the role of the NQBRC and how does it have a say in MLA decisions?

Meat and Livestock Australia is a producer owned company that funds marketing initiatives and research and development to increase the profitability of the red meat industry. MLA's Northern Beef Program (NBP) works with the beef industry in northern Australia to evaluate and fund on-property research and development. Current R&D initiatives in the area of production and resource management include the Northern Nutrition training package, Breedplan, Ecograze, the Grazing Land Management package and NIRS.

MLA staff manage the Northern Beef Program with input from the chairs of the ten Regional Beef Research Committees across northern Australia. Five of these committees are in Queensland, three are in the NT and two in the north of Western Australia.

These Regional Beef Research Committees play a role in identifying problems and needs that could be solved by research, development, extension, education and training. They also assess the relative importance of these needs and the potential benefits to the region. Further they monitor the progress of research and helped disseminate results as well as liaising with R&D organisations.

So if you want to have a say in where your levy dollars are spent by MLA on Research, contact any of the NQBRC members listed above.

**Jim Kernot**
**DPI Mareeba**
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**What are they?**
A Multiple Vehicle Certificate is a form that allows several movements of stock on one waybill. They are not a dedicated form nor are they required to be of a set format or design. A notebook entry is as legal as the Multiple Vehicle Certificate developed by the DPI.

**When are they be used?**
They may be used when two or more trucks are used in the one lift of stock, or if the one truck does multiple journeys to carry the one lift.

**Why can I use them?**
These forms are provided for under provisions in the *Stock Act 1915*.
Specifically the Act states: -

- A drover may convey stock on a single waybill by 2 or more vehicles or journeys
- All stock must leave the same starting point within a period of 24 hours
- The waybill must be completed before the last of the stock leave the starting point.

In addition, the driver of the truck (drover) must carry in that vehicle a "certificate" signed by the drover or person in charge of the travelling stock.

This certificate must state: -

- The number of stock on the vehicle
- The waybill number relating to the movement
- The origin and destination that appears on the waybill

EXAMPLE 1.
Tony the dairy farmer has 15 cull cows to travel to the saleyard. His truck carries only 8 and two loads are required. As he is doing the job on the one afternoon he writes out a waybill covering the whole consignment and takes this waybill on the first journey with a note in his notebook that he has 8 head of cows travelling to X saleyard from Y property covered by waybill number Z and signed by him.

He delivers this waybill with the consignment of cattle and returns home for the second load. He repeats the notation in his notebook and delivers the final consignment within 24 hours and with one waybill at the saleyard covering all his cattle in the consignment.

EXAMPLE 2.
Queensland Bigstations Pty Ltd have 1200 steers to go to a clearing dip enroute to a company feedlot.

Bluntlines Transport is the carrier and the station truck will carry the stragglers. All trucks carry a "consignment note" (or copy) and the last truck carries the waybill. The station owned truck, if it does not have a formal Consignment note, must carry some signed document which records the number of cattle on that truck as well as origin, destination and waybill number.

It is common practice for most livestock transport companies to complete a Consignment Note and be signed prior to departure by the person in charge. This consignment note is generally printed with the trucking company details and often in triplicate. Providing it has details including the **number of stock on board,** the **point of departure** and **destination** and the **waybill number,** it is all that is legally required of the truck driver and the station.

**How can this be so?**
The Stock Act is all about disease management. The system of permits (required for some movements such as to a tick clearing dip to cross into the Tick Free Area) and waybills (for all movements of cattle, sheep, goats and sometimes horses) is to prevent the spread of disease and to provide an accurate record of livestock movements in case trace back is required.

Therefore the need for one waybill for the one consignment makes sense. It is not the intention of the legislation to make unwanted paper trails. Consignment Certificates provide all the details an inspector requires if the movement is intercepted or at least the means to determine origin and hence ownership.

If copies of the Certificate are required, or more explanation needed, please contact your local Stock Inspector.

**Dan Hogarth**
**Stock Inspector**
**Mareeba , Ph 07 4048 4624**

# Enhance skills during tough times

More than 5,540 producers from across Queensland, accessed FarmBis financial support to participate in training activities in the first six months of this financial year, according to Lisa Erhart, FarmBis Regional Coordinator for the Central Queensland Region.

"This number of participants is significant considering the tough times that are being faced by our rural industryies across the State. These producers were able to recognise that FarmBis provides a means of assisting them to get back in control of their business, even during the dry times."

"I have found that producers are willing to explore future plans, options and improve skills even during adversity,

whilst maintaining their focus on day-to-day challenges. This is evident from the number of participants who have undertaken training," Lisa said.

FarmBis provides producers with a regional network service that locates relevant training to suit their business enterprise and skill needs. This enables participants to identify what they need to learn, receive the training and then apply the skills and techniques in their business.

"Our eight FarmBis Network Coordinators provide a service directly to the producer. They will sit down with you and discuss your needs and learning activities available for the current situation, and assist in determining where you want your business to be in the future," she said.

To assist in dealing with the adverse conditions, including drought and drought recovery, FarmBis in Queensland recently increased the assistance level available to farmers undertaking specific training.

Learning categories including strategic planning and business risk management, project or whole farm planning, natural resource planning, development and change management, including personal development, stress and time management, negotiation and conflict resolution, and financial risk management, now attract financial support of 85% of the eligible training costs.

"While increased subsidy levels make the training affordable during these tough times, skills need to be continuously updated and enhanced to maintain competitiveness, and this should not be dependent upon favourable or poor weather conditions. If you are not completely happy with your current business outcomes and profit, then avenues for improvement should be investigated," Miss Erhart said.

Through FarmBis, producers can access up to $10,000 per farming enterprise for Individual training. In addition, if producers prefer to undertake training in a group environment, up to $60,000 is available per group per financial year.

For further information on the full range of learning categories available in Financial Management, General Business Management, Natural Resource Management, Human Capital Management and Marketing, Contact Lisa Erhart FarmBis Regional Coordinator on (07) 4926 1219 or Brisbane Freecall 1800 337 709 or visit www.farmbis.gov.au.

**FarmBis Regional Network:**

**Yvon Wigley**
**Brisbane/Gold Coast**
**Freecall 1800 337 709**

**Lisa Erhart**
**Rockhampton/Emerald**
**(07) 4926 1219**

**Leila Muller**
**Wide Bay/Sunshine Coast**
**(07) 4126 8214**

**Kynan Gooding**
**Eastern Downs/North Coast**
**(07) 5462 8665**

**Hugh Brown**
**Western Downs**
**(07) 4622 8755**

**Sue Stirton**
**Western Queensland**
**(07) 4656 4777**

**Allan Wall**
**Cape/Charters Towers**
**(07) 4096 8112**

**Les Cox**
**Sarina/Ingham**
**(07) 4782 0188**

For Further Comment:

**Yvon Wigley**
**Project Manager**
**FarmBis Regional Network**
**(07) 3238 4848**

**Miriam Hardy**
**State Coordinator**
**FarmBis Program**
**(07) 3239 3235**

# Livestock property registrations changed

More livestock owners are now required to register their properties with the Department of Primary Industries to assist measures required to control the spread of animal diseases.

DPI stock inspector Ted Vinson, Charters Towers, said while it was previously a requirement for cattle properties to be registered, the Stock Identification Regulations had been changed to include more animal species.

As well as cattle properties, the current requirement is for every property to be registered that has one pig or more, or 11 head or more of sheep, goats or camelids (a member of the camel family such as llama and alpaca).

Mr Vinson said the change was necessary to aid accurate and speedy tracing of the location and movement of these animals during serious disease outbreaks.

"We need to know where these species of stock are depastured or kept and of their movements," he said.

Mr Vinson said property owners who had these species and who did not have their property registered with the DPI should do so as soon as possible.

Livestock owners should also familiarise themselves with regulations for livestock movement, Mr Vinson said.

He said the necessary registration forms and more information on livestock ownership were available from DPI offices or the DPI Call Centre on 13 25 23. The forms should be completed accurately and returned to the DPI.

"There is no cost for property registration," he said.

**Ted Vinson**
**Stock Inspector**
**Charters Towers**
**Ph 47546104**

# Increased residue testing due from drought feeds

When drought conditions prevail, livestock producers look at alternative and novel feeds for livestock. Some of these feeds will have been treated with Agri-Vet Chemicals and, potentially, may lead to livestock residue concerns, which can threaten Australian access to key overseas markets. Risk assessments of by-product feeds indicate that the risk of residues from these feed sources should be low provided the users of such feeds have appropriate risk management strategies in place.

Of critical importance is the proper use of Commodity Vendor Declaration for by-product feeds and National Vendor Declaration (NVD) for cattle consigned to slaughter so that risks can be effectively managed at different points in the supply chain.

A targeted testing strategy has been established to detect any new residue violations brought about by the drought feeding of any unusual feeds. At slaughter, both targeted testing of stock from high risk areas and random testing of all cattle will be undertaken.

In addition, AUSMEAT will conduct property audits of the accuracy of NVDs, with particular emphasis on the answers to questions relating to stock feed and pasture treatments (Q4 and Q7) of the declaration. It is imperative that stockowners use the current edition of the NVD (9th Edition) and correctly answer all questions.

**Lyle Torenbeek**
**District Inspector**
**Bowen Ph: 47641000**

# Do you live in one of the following Shires or areas??

Balonne, Jericho, Longreach, Booringa, Peak Downs, Tambo, Bulloo, Aramac, Winton, Bungil, Barcaldine, Belyando, Murweh, Barcoo, Bowen, Paroo, Blackall, Broadsound, Quilpie, Boulia, Mackay, Warroo, Diamantina, Mirani, Bauhinia, Ilfracombe, Whitsunday, Emerald, Isisford, Douglas, Mt Louisa-Mt St John-Bohle, Kelso, Kirwan, Thuringowa, Burdekin, Hitchinbrook, Townsville, Cairns Barrron, Cairns Trinity, Flinders, Croydon, Etheridge, Herberton, Atherton, Mareeba, Dalrymple, Richmond, McKinlay, Cloncurry and Mt Isa

If so, you may be eligible for the **New Drought Assistance Package !!!**

This assistance can be backdated and includes:

1. **Interim Income Support** from December 9, 2002 to June 9, 2003

2. **Interest rate relief** – up to 50% interest rate subsidy on additional borrowings after December 9, 2002 and before June 9, 2003

Do not **self assess !! Centrelink staff can help you apply. Call Centrelink on 13 23 16**

**Joe Rolfe**
**Kairi Research Station**
**PO Box 27, Kairi Q 4872**
**ph 07 4091 8724 fax 07 4095 8258**
**email Joe.Rolfe@dpi.qld.gov.au**

# Dangerous Beauty

The Department of Natural Resources and Mines is asking the public to be on the lookout for a lily-like plant which has the potential to choke waterways throughout the region.

Land Protection Officer, Steve Matheson, said *Limnocharis flavis* was an attractive, flowering plant with an extremely aggressive nature, and had been declared a Category P1 weed under the Rural Lands Protection Act.

"The trouble with Limnocharis is that it's so good looking," Mr Matheson said.

"It's an upright water plant with bright green lily shaped leaves that grow to one metre in height, and it has spikes of yellow flowers, each of which are up to 3cm across."

"People tend to think it's a lily, and plant it without knowing it's declared," he said.

"Unfortunately, it multiplies with immense speed and has the capacity to choke out native plants, and turn water bodies stagnant."

Mr Matheson said a small quantity of the weed had recently been found in lily ponds at Townsville's Anderson Park.

"We've had to act quickly because each plant can produce up to 1 million seeds a year, and those seeds can be spread in water flows and mud," he said.

"Although warm dry days favour germination, Limnocharis will even grow on the banks of waterbodies if there is enough moisture, and after the recent rain that's a real possibility."

"The last big infestation was at Black River last year. We'd inspected the property in mid February and couldn't find any signs of Limnocharis, but when we went back in April, we removed 240 kilograms of the plant."

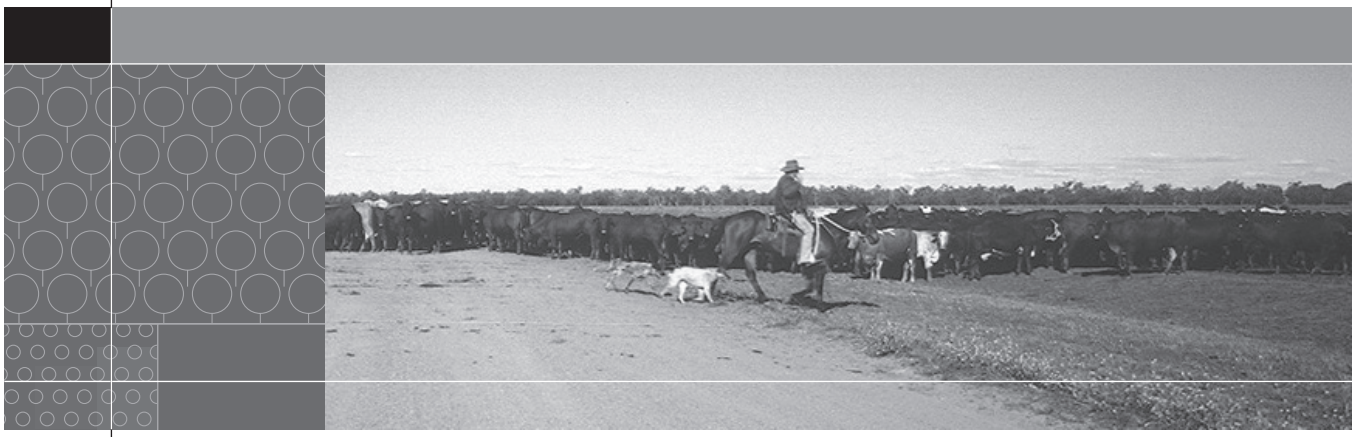
"The owner of the property was amazed at how quickly it had spread and moved into her neighbour's dam."

Mr Matheson said that as Limnocharis tended to spread rapidly from both seed and plant parts, removed weeds should not be dumped or disposed of in an uncontrolled manner.

"The best course of action if you see any of these plants is to contact your local council, or a Land Protection Officer from the Department of Natural Resources and Mines immediately."

**Steve Matheson**
**Land Protection Officer, Bowen, Ph: (07) 4761 4000**

# A growing understanding of your Agribusiness



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|---|---|---|---|
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| Peter Anderson | Atherton | **(07) 4095 7904** | **Mobile 0418 753 764** |
| Ron Newman | Atherton | **(07) 4095 7914** | |
| Phil Hudson | Hughenden | **(07) 4741 1820** | **Mobile 0427 599 059** |
| Bob Hardy | Cloncurry | **(07) 4742 1551** | **Mobile 0427 172 557** |
| Anne-Marie Cooke | Cloncurry | **(07) 4742 2527** | |

National

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# Calotrope: problem weed of the future

Calotrope, *Calotropis procera* is known by a number of names in Australia. These include Rubber bush, Rubber Tree, Kapok Tree, King's Crown, Cabbage Tree, and Giant milkweed. The name changes from one district to the next. To add to the confusion, some of these names are used for completely different weeds in different regions.

Calotrope is a native of arid regions of Asia and Africa. It arrived in Australia in the 1930s and has spread rapidly. It prevails in the hot tropics and can survive and spread in the driest seasons, establishing itself on land which has been disturbed by mining, flooding, drought, overgrazing or construction work.

Calotrope has relatively few, large round leaves, the size and shape of cows' ears. The leaves are a dull, greenish grey, coated with a waxy bloom, and are restricted to the ends of the branches. The branches themselves are brown when young, but become corky and take on an ash grey colour with age.

The plant grows rapidly, reaching more than a metre in the first season. At maturity it has the appearance of a small tree, between 3 and 5 metres in height with few branches, and around 3 to 5 stems. The stems are 40 to 130 mm in diameter when mature.

Towards the end of the second growing season, bunches of attractive white flowers with purple tips appear at the ends of each branch. Thereafter flower production seems to be almost continuous.

Fruiting pods are mango like in appearance. They are thin-skinned and mostly full of air. The seeds are produced along a central structure. The seeds are initially white maturing to dark brown once mature; the pod splits releasing about 300 seeds. The seeds have a tuft of hair at one end, which aids in wind dispersal.

Calotrope is a member of the milkweed family. It is called this because, when injured, produces a latex that resembles milk. This protects the plant and heals the wound. The latex is very bitter to taste and is toxic. While it has reportedly caused livestock deaths in some countries, only a few deaths have been recorded in Queensland. Anecdotal evidence suggests that cattle, which have grazed on Calotrope leaves, survive if they are not stressed following its ingestion.

Once established, Calotrope puts down a very deep tap-root, which ensures that it will survive the harshest of conditions. In fact, once established, very few plants appear to die naturally in the absence of good pasture cover. It also out-competes native and useful pasture plants, rapidly covering areas, which would otherwise support grazing. Once thickets occur, mustering becomes difficult and access to watering points reduced.

Calotrope is on the increase, and has spread rapidly through many parts of Northern Queensland, as well as the Northern Territory, and South and Western Australia. While there have been no recent audits, estimates suggest the weed infests tens of thousands of hectares There are anecdotal accounts of infestations increasing in area by 250% over a five-year period. If these are true, and Calotrope is not controlled, vast areas of Australia may be irreversibly inundated.

NR&M's Tropical Weed Research Centre at Charters Towers is conducting trials in Georgetown (in Northern Queensland) to assess the effectiveness of several herbicides at varying rates, using different application methods. NR&M, in conjunction with the Australian Agricultural Company, is also planning aerial application trials in the Gregory River area later in the year.

Of course, herbicides only play one role in the containment and ultimate control of this weed. Pasture management practices in the form of effective spelling and mechanical control are also essential tools to reduce the risk of further Calotrope spread. Evidence from the Northern Territory suggests that reduced stocking rates and well maintained competitive pastures are able to reduce the spread and invasiveness of Calotrope, and, in some situations, out-compete established Calotrope.

NR&M Weed Scientist, Peter Wilkinson, has recently found a disease on Calotrope and, in conjunction with DPI, identified it as a fungal pathogen not previously reported in Australia. The effectiveness of this disease is not known at present, however if it does not harm native or useful plants, it may be useful as a mycoherbicide.

Unfortunately, development of reliable biocontrol methods takes time, and more conventional control measures should be employed until then.

A minor use permit PER4299 (http://permits.apvma.gov.au/PER4299.PDF) is available for the control of Calotrope in Queensland and is valid until 31 March 2004. The permit allows three herbicides Access® (for basal bark and cut stump application), Arsenal® (for foliar application) and Brushoff® (for foliar application) to be used for the control of Calotrope. Please read the permit prior to the application of any of these herbicides.

In the mean time, landowners should maintain good pasture coverage and mechanically uproot the plant or apply registered herbicides for the control of their Calotrope problem.

**Peter Wilkinson, Weed Scientist**
**Tropical Weed Research Centre**
**Charters Towers**
**Phone 47870619**

# Trial releases of biocontrol bellyache bush

The first shipment of a new biological control agent, the bellyache bush jewel bug, *Agonosoma trilineatum,* was received at the Tropical Weeds Research Centre, Charters Towers in early March. This followed the completion of quarantine host testing at CSIRO's Brisbane laboratories.

*Bellyache bush (Jatropha gossypiifolia)*

A small colony of the insect is now established at the research centre and it is anticipated that the first trial releases could commence as early as June this year. More widespread distribution of the insect will occur by 2004.

Jewel bug is a sucking insect, which originates from South America and feeds exclusively on the flowers and fruits of the bellyache bush. It is the first biological control agent approved for field release as part of a collaborative project between the CRC for Australian Weeds Management, Queensland Department of Natural Resources and Mines, and the Northern Territory Department of Infrastructure, Planning and Environment.

Bellyache bush was introduced to Australia as an ornamental in the late 1800's and has since spread widely, becoming a serious weed of northern Australia. It invades rangelands, particularly riparian zones, forming dense thickets that out-compete more useful species, reducing productivity and hindering mustering. All parts of the plant are highly toxic and stock losses in Dalrymple Shire have been attributed to it.

The largest infestation of bellyache bush in Queensland is presently located along the Burdekin River and its tributaries, from north of Charters Towers right to the ocean. Other substantial infestations occur on sections of the Walsh, Palmer and Gregory Rivers and tributaries of the Flinders River. The Northern Territory also has some very large infestations, particularly in the Katherine Region, as does the Kimberly area in Western Australia.

Once sufficient numbers of insects have been reared from the initial colony, controlled releases will firstly be undertaken by researchers at specific sites along the Burdekin River. The intention is to first identify the best release strategies that will maximise the chance of insects becoming established. This will involve comparing multiple releases at some sites against single releases of large numbers at other sites. Once the best release strategies have been determined, releases will be made at all known major infestations. At this stage community members, departmental staff and local government weeds officers may be called on to help distribute the insects.

It is hoped that this sucking bug will be just the first of a number of insects to be brought in to help control bellyache bush. If it successfully establishes in the field, and reaches high population levels, feeding of both adults and nymphs on fruits of bellyache bush could disrupt seed set, thereby reducing seed production and the spread of this noxious weed.

For further information contact:

**Cathy Lockett**
**NR&M Entomologist**
**Charters Towers**
**Ph: (07) 4787 0613**

# Bull Reporter

A new approach to bull fertility and reporting in Australia will be available to the Australian cattle industry from the Australian Association of Cattle Veterinarians (AACV) from May 2003. The system includes:

- A publication *"Evaluating and reporting bull fertility"* outlines the standards to be used. This book will be available for sale to any interested people.
- A computer program called *"Bull Reporter"* for cattle vets and associated fertility labs for handling data and producing reports.

The system emanated from a July 2002 Bull Fertility conference for cattle vets in Darwin.

The new system has been developed using feedback on needs from vets, bull breeders/vendors, and bull buyers/users.

The primary objective is to have an affordable, accurate reporting system with an easy-to read format that is the same across the nation.

In view of the common law ruling that a bull sold as a breeding bull should be able to breed (Supreme Court of NSW, Decision Common Law Division, No 1356 1971), breeders/vendors of bulls want a system that provides assurance that bulls have a high probability of being fertile at the point of sale.

Buyers/users of bulls also want the same assurance.

Vets want a system that meets industry needs, is consistent with their own professional opinions, enables them to produce business-linked reports, and enables electronic storage of data.

All stakeholders want a system that suits bull transactions, purchase and claim of insurance, and routine screening of herd bulls.

Reaching the major milestone of a system that "suits all the people all the time" has been quite a challenge because cattle vets have to apply an incomplete and "grey" science, simply because it's biology, when commercial business is looking for "black and white" answers. A further challenge is that cattle vets are required to assess function, but cannot do this directly, and only have indicators to judge it.

Therefore, an important new concept of Bull Reporter is that it is a report of whether a bull meets a set of standards for 5 bull fertility components, rather than attempting to define whether a bull is fertile/sound or not. The standards have been selected as those indicating a bull has a high probability, but not a guarantee, of being fertile.

***Scrotum*** - Scrotal circumference in cm where testes shape is within normal range. Reference standards are available.

***Physical*** - Within the constraints of a standard examination, there is no evidence of any general physical condition or of a physical condition of the reproductive tract indicating sub-fertility or infertility.

***Semen*** - Crush-side assessment indicates that the sample is within normal range for fertile bulls and is suitable for laboratory evaluation.

***Morphology*** - High-magnification microscopy by accredited persons of preserved sperm shows minimum proportions have shape (morphology) indicating normal function.

***Serving*** - The bull is able to serve normally as demonstrated in a standard test and shows no evidence of fertility-limiting defects.

The summary report will indicate:

| | |
|---|---|
| ✓ | For this component, the bull met fertility standards as published by the Australian Association of Cattle Veterinarians |
| ✖ | The bull did not meet the standards for this fertility component |
| **P** | For "Motility" and "Morphology": The samples taken do not meet full standards but indicate that the bull is very likely to be fertile under natural mating. The client should seek advice from their cattle vet. |
| **na** | Not applicable, eg, Certificate not required to indicate status for this fertility component |
| **nt** | This fertility component was not fully tested/evaluated |

It is hoped that this new system will facilitate the adoption of more advanced bull-management practices, thus accelerating genetic improvement. At the same time it is hoped that it will greatly diminish the incidence of costly disagreements following transactions where bulls have subsequently been found to be sub-fertile (not part of the usual sale conditions for bulls in Australia) or infertile.

**Geoffry Fordyce**
**Bull Subcommittee Chair (AACV)**
**Principal Scientist, Department of Primary Industries**
**Ph: +61 7 4754 6123 Em: geoffry.fordyce@dpi.qld.gov.au**

***The centrepiece of the new system is a summary report on five indicative components of bull fertility***

| Bull Number/name | Age Yr:Mn | Scrotum | Physical | Semen | Morphology | Serving |
|---|---|---|---|---|---|---|
| AACV Top of the Rack | 2.02 | **37.0** | ✓ | ✓ | ✓ | ✓ |

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Queensland Government
Department of Primary Industries

# Introducting the CRC for Cattle and Meat Quality

The Cooperative Research Centre (CRC) for the Cattle and Beef Industry (Meat Quality) was formed in July 1993. The CRC's role is to carry out research on meat quality to enhance the domestic and international competitiveness of the Australian beef industry. The CRC is a federally funded research program made up of four core parties (NSW Agriculture, CSIRO, University of New England and Queensland DPI) with significant contributions from the beef industry themselves through individuals, companies and Meat & Livestock Australia.

The CRC was able to draw together the many different sectors of the beef industry from seedstock breeders to consumers to identify and investigate those issues that would have the most significant impacts on the quality of Australian beef. Through this high level of integration, researchers and industry were able to approach issues from an integrated approach enabling all the confusing factors to be identified and addressed. It also allowed projects to be undertaken on a large scale giving greater accuracies to the results whilst working in a commercial environment and dealing with droughts and low prices. The result is outcomes that will enable beef producers to position themselves to maintain their domestic and international competitiveness.

The CRC integrated research program had four objectives:

1. Identify and resolve the key meat science issues that constrain Australia's ability to meet domestic and export market specifications for meat quality, at least cost.
2. Develop molecular and quantitative genetic technologies to breed cattle suited to new markets.
3. Design novel feeding and management strategies to meet meat quality objectives in Australia's difficult environments.
4. Address and resolve major constraints to intensive beef production by eliminating health and welfare concerns and reducing environmental pollution.

The outcomes from the CRC for the Cattle and Beef Industry are many. The centre of the CRC program was a comprehensive progeny testing programs for meat quality traits. This involved genetically recorded breeds in a straight and crossbreeding programs comparing cattle raised in northern and southern areas. Progeny were recorded from birth through to slaughter with taste test panels conducted on the carcases effectively linking the animal from conception to consumption. This data base has been invaluable in understanding the interactions of genetics, environment, nutrition and post slaughter influences on the many aspects of beef.

Some of the major outcomes have been:

- Development of Estimated Breeding Values (EBV's) for carcase traits enabling genetic selection for traits
- Development of the Meat standards Australia program in conjunction with Meat and Livestock Australia. This program integrates all the different aspects of the beef production chain to guarantee the eating quality of beef and has been recognised as world leading.
- Development of an understanding of critical weights for animals and the impact of poor nutrition on later life performance
- Development of EBV's for temperament
- Development of a understanding of the impact of environment and management on feedlot performance
- Development of Net Feed Efficiency EBV's enabling the selection of animals who use feed more efficiently for weight gain.

The effectiveness of the CRC will really only be measured by the level of awareness that industry develops of the results. This is the stage that we are at now. The analysis of the results is almost all complete and sponsors have had access to the data for the required period of time.

Now is the opportunity for the rest of the industry to develop an understanding of the information and incorporate it into your own management programs. If you want to ensure the efficiency of production then you need to know the details of this information so you can apply it. The world is getting smaller and the competition greater, can you afford not to know?

The program addresses both northern and temperate beef industry sectors and grass and grain fed production systems. The CRC has initiated the development of new postgraduate diploma and certificate education programs aimed at the meat industry.

The genetics program established genetic correlations between grass and grainfed productivity and product quality and genetic variability in feed conversion efficiency.

Molecular genetics developed gene markers for key meat quality traits.

The growth and nutrition research produced strategies for different cattle genotypes that optimise feed efficiency and maximise the production of specified carcase traits.

Carcase and detailed meat quality assessment were important; emphasis was given to measuring, as well as predicting, marbling and peripheral fat in the carcase.

New methods for predicting carcase and meat quality were developed in live animals to speed up genetic manipulation and enable slaughter of cattle at the correct stage of development.

Most serious respiratory disease problems of feedlot cattle, *Pasteurella hemolytica* and pestivirus. Vaccines were developed and allowed studies of the interactions of animal health, stress and nutrition in different genotypes to be unravelled.

Techniques to boost the immune competence of young cattle were developed together with behaviour studies to eliminate stress.

Feedlot waste management was addressed by this CRC's strategic science on nutrient cycling, soil and water pollution to complement MRC-funded projects in this field to provide the basis for a sustainable feedlot sector.

Improved knowledge levels and skills supplying a high-quality specified, value-added product destined largely for the discerning, middle income groups in Asia, Australasia and North America.

This CRC achieved collaboration that has not occurred since the time of Federation.

The CRC succeeded in getting animal geneticist, meat scientists and ruminant nutritionists to work together to achieve the common goal of meat quality excellence.

The CRC's close involvement in cattle trading and production issues (drought and low prices) has won added respect from industry. Beef sectors accept our outcomes because they have been forged in a realistic commercial environment.

Exhaustive consultation between scientists and beef industry sectors.

There was genuine integration because the core project (that is, the genetic and nutritional manipulation of cattle of known pedigree to achieve meat science outcomes) required an interdisciplinary approach.

Priority setting meant that if the work could be addressed by one Core party alone, then it was not compatible with the CRC philosophy.

Cooperating cattle breeders and breed societies worked with scientists to design the breeding programs. Northern cattle interests donated 1,000 Brahman cows to make one project possible.

The CRC has carried out the world's largest progeny-test program for carcase and beef quality traits and their other genetically related traits such as growth.

The straight breeding project is a within-breed progeny test involving seven breeds. Progeny testing is an expensive business because it involves:

- Generation of pedigree progeny;
- Purchase of progeny by CRC:
- Transport to grow-out properties;
- Management and agistment costs during grow out;
- Grain versus grass finishing;
- Transport to abattoirs;
- Slaughter costs and retrieval of carcase sub-samples;
- Laboratory measurement and taste panel assessment of meat samples;
- Collation, analysis and reporting results.

It has estimated that the CRC has spent nearly $32 million on this process.

All CRC purebred and crossbred cattle were finished on grass or grain to achieve target weights approximating those of the existing domestic, Korean and Japanese markets.

A parallel development in molecular genetics in 1992 provided the opportunity to pursue gene markers and candidate genes for beef quality traits.

A third area of endeavour chosen by the CRC was to expand Australian research on the efficiency of feed utilization, providing long-term improvement in the economy of beef production in pasture and grain-fed environments.

CRC results will be provided in future Editions of the Northern Muster.

We encourage readers to let us know your higher priority topics, and we will endeavour to cover them first. –

**Editor.**

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# Internet Bits & Bobs

In this issue, I thought I'd have a look at the world of Australian online butchers. Queenslanders were well represented: cutting and delivering meat online with the best of them. We have organic, mobile and urban and even Asian door-to-door delivery. On the other hand, Australia was distinctly lacking in ethnic butchers who could deliver meat prepared to strict religious standards. Maybe there's an opening ...

## Online butcher

A group of Central Qld beef producers developed a system to electronically deliver carcase feedback to individual beef producers. The growers have since developed a branded product BlueGum and are marketing it through their online butcher shop Paddock-to-Plate.

www.paddocktoplate.com.au

## Beef cuts on the wall

Have you always wanted a bovine primal cuts poster? Look no further than the AUS-MEAT website for an array of cows stripped to their cuts and presented in full gloss colour. Of course you can also find and purchase many other items related to the National Industry Standards for Meat Production and Processing.


www.ausmeat.com.au

## Halal Butcher

Sultan Halal Meat Butcher is the only Halal butcher advertising online, but as yet have not developed a retail online sales and delivery point for their product.

www.sultanmeat.com.au

## Kosher Slaughter

Kosher slaughter and further post-processing handling of meat and poultry must meet a number of very specific Jewish religious requirements. As hard as I tried I could not find an online Kosher butcher in Australia. Opportunity knocks! And to find out more about what is involved.

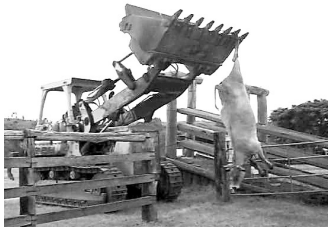
www.grandin.com/ritual/rec.ritual.slaughter.html

## Organic Beef

Jervoise station has an online ordering system that will deliver organic beef to your door.

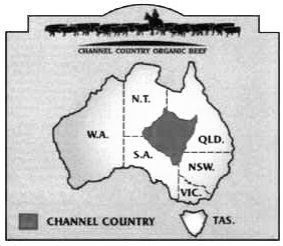
www.users.bigpond.com/jervoise/organicbeef.htm

## Mobile Butchery



"Hi, I'm Kevin. I'm the local mobile Butcher for the South Burnett district Queensland Australia. So come on give us a go and if u mention this site u will get a $20 discount." Says Kevin the only mobile Butcher online in Queensland.

www.geocities.com/bigkev2us/butchery.html




## Japanese Beef

OBE is a Channel country company with more than 30 producer members. The majority of their business is conducted using Internet communications. Within the same 24 hour period, a client in Asia may request an order of OBE Beef by email to their regular exporter. The Business Manager and Board of OBE arrange specifications, logistics and supply and then request our processor partner, Stockyard Beef, to negotiate the contract on our behalf. OBE then arranges the supply of cattle within 14 days.

www.obebeef.com.au

JoAnn Resing
Rural Information Specialist, DPI
Townsville
Ph 07 4722 2662

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# The Climate Update – March 2003

Well it looks like there may be some good news in sight for all those who are still drought affected. The El Niño pattern has measurably weakened during February and ongoing changes through March to date in both the atmosphere and the Pacific Ocean suggest that the pattern is breaking down. Indications are however, that it will linger to autumn when the climate pattern goes into a period of transition and predicting what the coming climate year (2003 – 2004) is a little trickier at this stage.

The majority of Global Climate Model forecasts currently available from around the world (as summarised by the Bureau of Meteorology) are suggesting that out to October 2003 the critical region of the Pacific Ocean called Nino 3 which is an indicator of the changes seen during an El Niño or La Niña pattern will be neutral. This would suggest a normal rainfall for the remainder of 2003 beyond autumn. However, the changes in the Pacific region do not entirely influence our rainfall in north Queensland with effects from other systems including the monsoon and the latitude of the high pressure belt across central Australia also having an impact.

There was widespread rain in February across most of Queensland with falls in excess of 2000mm on the peninsular and south east coastal strip. The highest rainfall to 28th March was recorded on the Peninsular north of Coen with falls of about 200mm along the coastal ranges and across to the Gulf south of Coen.

Rainfall for the past 12 months has been well below average for all of north Queensland and across the state with some areas near Princess Charlotte Bay the driest on record (see map). More rainfall maps are on the web at: http://www.bom.gov.au/climate/austmaps/

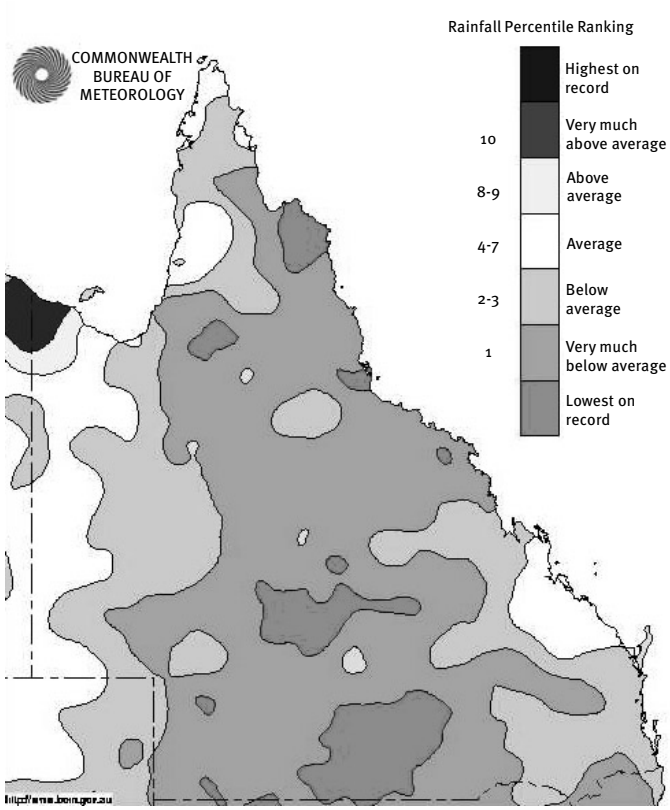
Probabilities of above median rainfall for the Townsville – Cooktown coastal regions and across to the Gulf for the next three months (April – June) based on a consistently negative phase of the SOI for March / April are close to the long- term average. The northern Peninsular south to Princess Charlotte Bay has a 20-30% chance of receiving above median rainfall. The latest forecast map for rainfall along with further information on Sea Surface Temperature etc. can be found on the DPI/DNR Long Paddock web-site at http://www.longpaddock.qld.gov.au/

The Madden–Julian Oscillation or 40 day wave is a band of low atmospheric pressure which originates in the eastern Indian Ocean of the coast of central Africa and travels eastward every 30 to 50 days. As it passes it decreases atmospheric pressure intensifying existing low pressure systems and sometimes kick starting a cyclone. It's last passage brought some widespread though patchy rain in mid February. It is next expected in early to mid April – so hopefully we have had some more rain by the time you read this. The latest on the MJO can be found on the Bureau of Meteorology site: http://www.bom.gov.au/climate/tropnote/tropnote.shtml

Free fortnightly climate updates are available from the Queensland Centre for Climate Applications via email or fax. If you would like to subscribe to this service please contact

**Jacqueline Balston**
**Ph 07 4044 1619**
**Dave McRae**
**Ph 07 4688 1459**

## Queensland Rainfall Deciles
1 March 2002 to 28 February 2003

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# Northern Muster Feedback ..... 'We want you to have your say'

Please spend a minute to let us know if Northern Muster meets your expectations.

- Which of the following best describes you? ❑ Beef producer ❑ Agribusiness outlet ❑ Education ❑ Other .....
- Do you find *Northern Muster* useful? ❑ Yes ❑ No
- **Drought feeding experiences:** The recent drought was long and widespread resulting in cattle being fed for much longer than normal and in many cases feeds not normally used. This gave everyone valuable experience in feeding some 'new' feeds and problems associated with long term feeding that should not be lost. Please share your experiences with us by answering the questionnaire below and returning it to the *Northern Muster* team. If you have any additional comments, add an extra page with comments. We will collate this information and publish it in future editions of *Northern Muster.*

## Breeders

| What did you feed? | How did you feed? | How often? | How much? |
|---|---|---|---|
| ☐ Grain | ☐ On the ground | ☐ Daily | For example |
| ☐ Hay | ☐ In troughs | ☐ Every second day | .....kg/head/day or |
| ☐ Silage | ☐ In hay or grain feeders | ☐ Twice a week | kg/head/.....days |
| ☐ Crop | ☐ Other | ☐ Once a week | |
| ☐ Lick block | ..... | ☐ Other | ..... |
| ☐ Home brew | ..... | ..... | ..... |
| ☐ Fortified molasses | ..... | ..... | ..... |
| ☐ Other | ..... | ..... | ..... |

| Condition score | How did you feed? | Condition of paddock feed |
|---|---|---|
| ☐ Very poor | ☐ Maintained weight | ..... |
| ☐ Poor store | ☐ Lost weight | ..... |
| ☐ Store | ☐ Gained weight | ..... |
| ☐ Forward store | ☐ Died | ..... |

## Weaners

| What did you feed? | How did you feed? | How often? | How much? |
|---|---|---|---|
| ☐ Grain | ☐ On the ground | ☐ Daily | For example |
| ☐ Hay | ☐ In troughs | ☐ Every second day | .....kg/head/day or |
| ☐ Silage | ☐ In hay or grain feeders | ☐ Twice a week | kg/head/.....days |
| ☐ Crop | ☐ Other | ☐ Once a week | |
| ☐ Lick block | ..... | ☐ Other | ..... |
| ☐ Home brew | ..... | ..... | ..... |
| ☐ Fortified molasses | ..... | ..... | ..... |
| ☐ Other | ..... | ..... | ..... |

| Condition score | How did you feed? | Condition of paddock feed |
|---|---|---|
| ☐ Very poor | ☐ Maintained weight | ..... |
| ☐ Poor store | ☐ Lost weight | ..... |
| ☐ Store | ☐ Gained weight | ..... |
| ☐ Forward store | ☐ Died | ..... |

**What would you like to see in future issues of Northern Muster?**.....

.....

.....

**Change my address and/or add me to the mailing list?**

Address: .....

Shire: ..... Property number: .....No. of cattle:.....

Phone: ..... Fax: ..... Email: .....

**Please send your replies to: Editor Northern Muster, DPI, PO Box 591, AYR 4807 or Fax 07 4783 3193**

HOW ARE YOUR CATTLE ?

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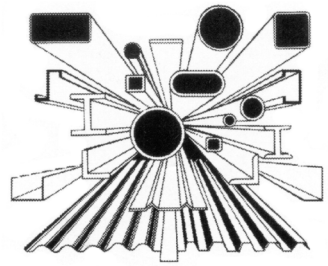
***Deals in Steel***

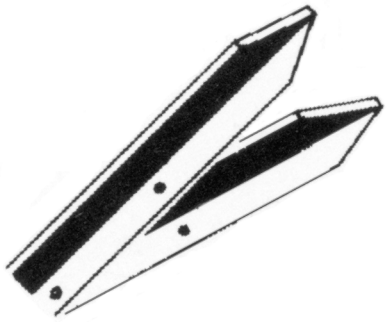


## SALE ON NOW!

### NEW PAINTED RHS

| | |
|---|---|
| 25 x 25 x 1.6 x 6.5mtr | $ 12.00 |
| 25 x 25 x 2.0 x 6.5mtr | $ 13.20 |
| 30 x 30 x 2.0 x 8.0mtr | $ 19.80 |
| 40 x 40 x 2.5 x 8.0mtr | $33.00 |
| 40 x 40 x 3.0 x 8.0mtr | $38.60 |
| 50 x 50 x 3.0 x 8.0mtr | $48.00 |
| 75 x 75 x 4.0 x 8.0mtr | $85.00 |
| 100 x 50 x 3.0 x 8.0mtr | $70.00 |

All prices include GST ex our yard in Mareeba.
Phone the Team: Ken, Jeni, Brian and Miles on 4092 3000.



### OTHER PRODUCTS

| | |
|---|---|
| Barb 1.57ht 500mtr | $44.00ea |
| Barb 1.80ht 500mtr | $48.93ea |
| 180cm (6') Black posts | $ 3.41ea |
| Goat &sheep panels 2100 x 1300 | $42.00 |

Sale ends
30/04/03
(while stocks last)

METALCORP STEEL
*Deals in Steel*

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Mason Streets
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Fax: (07) 4092 3292