In this edition

16 Fire Management
17 Welcome
18 Market Report
19 Drought Aid
22 Avoiding Indian Couch Invasion
23 Stocktake Plus App
26 Progardes Report
27 Surviving the Drought
28 Around the Northern Gulf
29 Around the Southern Gulf
30 Meat Matters
Late season action boosts bottom line

A RESEARCH project that started 20 years ago is delivering strategies for using fire to control woodland thickening on grazed savannas, and showing that late-season burning is substantially better for the bottom line.

High-value pastoral land across northern Australia’s tropical savannas is not being burned enough to combat woodland thickening, while lower value pastoral land, indigenous and conservation land is falling victim to ‘overburning’ with too many late-season wildfires.

Industry input sought for MLA’s new fire and grazing management research

Producers show lack of confidence in fire for grazing management

MEAT and Livestock Australia (MLA) is scoping the feasibility and methodology to conduct a research, development and extension (RD&E) program around fire and grazing management.

Input to the plan has been sought from pastoralists, researchers and Queensland, Northern Territory and Western Australian organisations involved in production and natural resource management RD&E.

MLA’s environment and NRM project manager, Cameron Allan, said the plan’s development was prompted by evidence of industry members’ growing lack of confidence in using fire as a pasture and woody weed management tool, despite the benefits borne out by research.

“Producers show lack of confidence in fire for grazing management because they are not seeing a compelling case for the use of fire and, if improved information is needed to assist a decision on the use of fire, we want to work with all stakeholders to make that information available,” Cameron said.

The consultation process sought to recognise who is already working on vegetation management using fires and what they are doing, and map out a more collective approach to add value to what is already under way. “Recognising who else is working in this space and gaps that need to be filled to present a compelling case for producers will help determine where MLA should invest,” Cameron said.

Cameron Allan, Meat and Livestock Australia, (02) 9381 1204, cameron.allan@mla.com.au

Woodland strategy 20 years in the making

These are among the findings of a long-term research project in the Northern Territory’s Victoria River District, which is providing insights into the use of fire in grazed savannas.

The fire experiment on Victoria River Research Station (known as ‘Kidman Springs’) was established with MLA-funding in the 1990s to assess the impact of fire management on woody cover and pasture condition. The experiment was replicated on grassed and black soil sites, with experimental plots burnt early or late in the dry season every two, four or six years. The experimental plots were compared with unburnt controls.

NT Department of Primary Industry and Fisheries senior rangeland scientist Dr Robyn Cowley said the project was providing clear evidence for optimal fire regimes in grazed savannas, and was relevant to producers from Townsville across to the Kimberley.

“Four-yearly late dry season fires were the most effective for managing woody cover while maintaining pasture-condition,” Robyn said.

“Two-yearly fires should be avoided, unless required to promote rapid change in woody cover, because of the damaging effects on pasture condition. While early fires are recommended on conservation land to reduce damaging late-season fire frequency and extent, on grazed pastoral land early fire was associated with destitute pasture condition, probably due to the longer exposure to post-fire grazing on early burnt sites.”

THE BUSINESS OF BURNING

Economic modelling of a commercial cattle station found four-yearly fires improved animal production and enterprise profits, with late dry season fire providing the greatest benefits.

There was an opportunity cost of implementing early-season fire (as recommended for carbon and biodiversity outcomes) of $85/km2 compared to burning later in the year. “If you burn late in the dry season, you don’t have to burn the whole paddock,” Robyn said.

“You just burn a quarter of the paddock and you can leave the animals in there to graze the other three-quarters. “It’s not long then before the wet season starts, and next year you can burn another quarter. This is known as rotational burning.”


KIDMAN SPRINGS FIRE EXPERIMENT

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Average annual profit</th>
<th>Number of years with a burn</th>
<th>Percentages</th>
<th>Livestock gains</th>
<th>Live weight gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>No fire</td>
<td>$817,637</td>
<td>6</td>
<td>60/40</td>
<td>0.5</td>
<td>20</td>
</tr>
<tr>
<td>Early burn</td>
<td>$893,254</td>
<td>6</td>
<td>80/20</td>
<td>0.5</td>
<td>20</td>
</tr>
<tr>
<td>Late Burn</td>
<td>$226,407</td>
<td>4</td>
<td>100/0</td>
<td>0.5</td>
<td>20</td>
</tr>
</tbody>
</table>

The production implications of fire on property.

FINDINGS ON RED SOIL

● Four-yearly and early fires suppressed perennial grass yield and promoted annuals and herbs.
● Four-yearly late fire managed woody cover.

FINDINGS ON BLACK SOIL

● Two-yearly or early burns reduced total yield and perennial grass yield, and increased annual grass yield and the percentage of legumes. Four-yearly early or late fire managed woody cover.

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Percentages</th>
<th>Stocking rate (AR/ha)</th>
<th>Live weight gain (kg/ha)</th>
<th>Live weight gain (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No fire</td>
<td>50/50</td>
<td>0.5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Early burn</td>
<td>60/40</td>
<td>0.5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Late Burn</td>
<td>100/0</td>
<td>0.5</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Welcome to autumn: Northern muster!

Editorial
BEEF producers across the north have had a horror run in recent years with the live export ban, destructive bushfires, failed wet seasons and over-supplied cattle markets in 2013 resulting in poor prices at levels not seen since the 1970’s beef crash. The widespread nature of this drought has also made agistment difficult to find and very expensive. Unfortunately, the 2013-14 wet season has been another disappointment, with only very patchy rain across most areas of the state, with some lucky properties receiving isolated heavy falls. As we move into autumn, the potential to grow an average body of useable feed is rapidly disappearing, and producers need to plan ahead to reduce numbers further to match feed supplies. Out-of-season rainfall cannot be relied upon to produce a body of feed to run normal cattle numbers, as this rain only provides a brief increase in quality with green pick and herbage. Having reliable cattle water supplies has also come to the fore during this last dry year, with properties relying heavily on dams and run-off flows in serious trouble early on. Clean out and maintain dams when dry. Set up reliable tanks, with accompanying poly pipe and troughs, will improve the operation during low rainfall years. Subsidies are available to help with emergency water infrastructure for properties in low rainfall years. Subsidies are available to help with emergency water infrastructure for properties in drought-declared areas or with an IDP declaration. Having emergency water supplies and planning and reacting in a timely manner when problems occur, are all well-proven approaches in the north. Having reliable cattle water supplies has also come to the fore during this last dry year, with properties relying heavily on dams and run-off flows in serious trouble early on. Clean out and maintain dams when dry. Set up reliable tanks, with accompanying poly pipe and troughs, will improve the operation during low rainfall years. Subsidies are available to help with emergency water infrastructure for properties in drought-declared areas or with an IDP declaration. If your financial situation is not good, talk to your financial institution as soon as possible. Get in touch with the local Rural Financial Counselling Service or QRFA officer. Do not self-assess on whether you are eligible for financial assistance. You will find useful articles and contact details in this edition of the Northern muster to guide you through the coming dry season.

Sarah-Jane Wilson, Queensland regional officer, Livestock Biosecurity Network, sjwilson@lbn.org.au

Biosecurity Insight
Biosecurity is about protecting your enterprise from the introduction and spread of disease, pests and weeds. Anyone involved in livestock production must be aware of the steps they should take to establish good biosecurity. It will ensure your stock is kept healthy and that disease and pests cannot be introduced. In the Northern muster: Livestock Biosecurity Network Queensland regional officer Sarah-Jane Wilson will cover in detail what can be done on your farm to practice high standards of biosecurity. I will also provide some handy tips and suggestions.

To start, please go to the LBN website at www.lbn.org.au and download the Farm Biosecurity Plan Checklist to benchmark your current practices, under the ‘On-Farm Plan’ tab. In each edition I can assist you to build a farm biosecurity plan one step at a time, providing a training module and template to create a working plan for your own livestock property.

Sarah-Jane Wilson, Queensland regional officer, Livestock Biosecurity Network, sjwilson@lbn.org.au

Planning all part of minimising biosecurity risks on-property
Everyone working in the beef and sheep industries has a role
PART of my role with the Livestock Biosecurity Network (LBN) is to encourage the uptake of on-farm biosecurity planning and practices.
Although not all livestock producers have a farm biosecurity plan in place, almost everyone has their own unique farm plan or a system to manage exposure to biosecurity risk (an example of such would be a quality assurance system).
Farm biosecurity is about protecting your enterprise from the introduction and spread of disease, pests and weeds. Essentially you can break farm biosecurity down into three basic components: what comes onto the farm; what you do with it when it is on the farm; and what goes off the farm.
Everyone working in the beef and sheep industries has a role in biosecurity. LBN promotes the seven priority areas of biosecurity, set out in the National Biosecurity Reference Manual for grazing livestock production. The key priority areas describe the actions required for good biosecurity: around people, vehicles and equipment, livestock, feed and water, feral animals, pests and weeds, animal health management, staff training, and waste management.
Over the next few editions of the Northern muster, Biosecurity Insight will outline these topics in detail, describing what can be done on your farm to practice high standards of biosecurity.
I will also provide some handy tips and suggestions.

TALK TO BRENT PEACOCK
• In-paddock advice on Economical Livestock Health Problems
• Proven products with Reliable Supply
• NO wide Reliable Freight Network
• Competitive Prices on the Best Products for Northern Grazier
BRENT 0400 934 156

TOWNSVILLE
PHONE (07) 4779 8799
383-385 WOOLCOCK ST NEXT TO DOO HEALTH A THEME

TALK TO GEOFF BEAumont
• For Good, Honest, Consistent and Reliable Service for all our clients is our main aim.
GEOFF 0400 870 611

HUGHENDEN
PHONE (07) 4741 1974
23-27 STANSFIELD ST

HUGHENDEN BEEF
NORTHERN RURAL CO-OP
BEEF FROM THE HEART OF QUEENSLAND

A fresh new way to do your rural business
Futurebeef.com.au

Make sure your documents are ready
Considering animal health issues prior to live export

In O ORDER to protect Australia’s long-term credibility and viability of the national live export industry, there are important animal health considerations that must be taken into account prior to exporting livestock.
Biosecurity Queensland senior inspector Rick Dunn said adequate documentation must be prepared and approved prior to exporting livestock.
‘Our aim is to demonstrate that livestock being transported have not come from a Queensland property under movement restrictions,’ he said.
Under Queensland legislation, livestock are not eligible to export if there is presence of any notifiable diseases on the property, such as bovine Johne’s disease. Importing countries have the same restrictions, and livestock from infected properties under movement restrictions will be ineligible for export to that country. It is essential livestock owners and agents check the export health requirements in consultation with exporters when intending to sell or source livestock from Queensland properties.”

Mr Dunn said that prior to moving any livestock intended for export to a country there was a legal requirement to obtain a travel permit from a biosecurity inspector. “If there is a change in the destination en route, or additional livestock need to be added or movement dates to be changed, permission must be sought from a biosecurity inspector immediately,” he said. “Any alteration to a travel permit can only be done by a biosecurity inspector. No permits will be issued after the movement has commenced.”

If you require any further information on the requirements for export livestock, visit www.daff.qld.gov.au, contact your local biosecurity inspector or call 13 25 23.

Rick Dunn, senior biosecurity inspector, 13 25 23, rick.dunn@dfat.gov.au

Disclaimer: The Queensland Government shall not be liable for technical or other errors or omissions contained herein. To the extent permitted by law, the reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using the information contained herein. Advertisements included in this edition were accepted on the understanding that they complied with the relevant provisions of the Competition and Consumer Act and with the Australian Association of National Advertisers Code of Practice. No endorsement by the Department of Agriculture, Fisheries and Forestry is intended or implied by the advertisement of any product in the Northern muster.
Drought spurs record run at Qld abattoirs

Since our last report, we have had a busy marketplace with slaughter rates for best prime cattle over $3.50/kg dressed, which resulted in the production of 2.32 million tonnes of meat in 2013, up 17% on the previous year. Numbers on feed across Australia have been continuing to grow with 2.688 million head graded by the Australian Meat and Live Stock Bureau as at the end of January. This total was for frozen product only, as last year's import ban on chilled beef had a negative effect on the domestic supply. We are currently at an 8% tariff disadvantage to US beef.

The US cattle herd has been shrinking since 2007 when widespread drought, high grain prices and poor profitability for lotfeeders. Latest estimates put the herd at 87.7 million head, a $1.85/kg for steers and $1.60/kg for beef, with 1.1 million tonnes exported. Japan 116,383 tonnes.

The strong trade with China has continued to slide since the US cleared its product from the 2003 BSE scare. Australian exports reached 400,000 tonnes in 2009, with US beef locked out of this market, but now our export volume only reached 288,000 tonnes in 2013. European Union (EU) beef quotas will be phased out over a 15-year period, but the US is unlikely to get any of this.
The Queensland drought situation at March 7, 2014, as shown in red highlighting drought-declared shires... www.longpaddock.qld.gov.au

For details on term finance concessional loans or productivity loans call 1800 623 946. The RFCS in Queensland provides services that are confidential, impartial and free.

Drought assistance available

SEVENTY per cent of Queensland is now drought-declared. A full list of drought declared shires is available at www.longpaddock.qld.gov.au

Emergency Water Infrastructure (EWI) which includes freight and EWI is $20,000. With a Drought Declaration in place, the maximum amount of rebate/subsidy an applicant can receive is $60,000. The extra $25pc only applies to EWI, is retrospective and will be automatically paid to those who have already received the 50pc Queensland Government rebate for EWI. All forms for claiming water and freight rebates are available at www.daff.qld.gov.au/environment/drought or at local DAFF offices.

For any inquiries or assistance with a Drought Management Plan, or any of the DRAS scheme subsidies, contact your local DAFF FutureBeef Extension Officer.

TRANSPORT CONCESSION AND ASSISTANCE FOR ROAD TRAINS

Assistance for drought-affected primary producers may be available for the payment of fees and permit requirements, including vehicle inspection fees, drought road train permits, pilot escorts and vehicle height limits when transporting livestock or machine baled hay. Visit www.mtr.qld.gov.au or call 13 74 68.

SCHOOL TRANSPORT ASSISTANCE SCHEME

Families that drive their children to school or connect with a school bus run may be eligible for an increase in the school transport allowance. Visit www.mtr.qld.gov.au or call 13 74 68.

FARM MANAGEMENT DEPOSITS


ELECTRICITY REBATES OR CONCESSIONS

Visit www.dews.qld.gov.au or call 13 43 87.

Ergon Energy. For drought relief rebates or concessions visit www.ergon.com.au or call 13 10 46.

LEGAL AID QUEENSLAND

Professional service provided free to residents who cannot pay their Telstra fixed home telephone bill. Administered by national welfare organisations including Salvation Army, Smith Family Anglicare and St Vincent de Paul. Queensland Salvation Army (07) 3222 6666, New South Wales Smith Family (02) 9885 7222.

SOCIAL AND COMMUNITY SERVICES

Lifeline 13 11 14 Crisis Counselling Line 24 hours a day for individuals and families.
Salvation Army 1300 36 32 22 telephone counselling 24 hours a day, 365 days. BeyondBlue 1300 22 46 36 help with personal issues, depression or anxiety.
Relationships Australia 1300 346 277 confidential counselling and family support services.
Kids Helpline 1800 55 1600 a national 24-hour telephone counselling service for children and young people (ages 5 to 18).
Women’s Infoline 1800 177 577 free, confidential information and referral service Queensland-wide to support women.
Mensline Australia 1300 799 178 helps men with relationship issues.
Queensland Health 13 43 25 84 provides a series of mental health and psychological support workshops across drought-affected areas. Workshops aim to enhance mental health and wellbeing in communities affected by drought.
Frontier Services 1300 787 247 provides health, family, community services and pastoral support in remote Australia.
Outback Links 1300 731 349 places volunteers with rural and remote families for short periods.
The Bush Connection (07) 4639 7897 provides free confidential support including personal support, identifying options, and advocacy, in crisis situations.
Other assistance – Local doctors, clergy, hospitals or community health centres can also help.

CLIMATE AND MANAGEMENT INFORMATION

The current Queensland drought situation report, map and seasonal outlooks are at www.longpaddock.qld.gov.au/environment/drought.
DAFF 13 25 23 and FutureBeef have resources on feeding and management of livestock during drought, strategies to help cope with stress and software packages to evaluate options and assist in decision making. Email callweb@daff.qld.gov.au or visit www.daff.qld.gov.au/environment/drought/www.futurebeef.com.au/topics/nutrition

An ongoing pain in the grass

Indian couch and its two accomplices: Avoiding the slippery slope to their dominance

The good, the bad and the ugly – Chapter 2

This article is a follow-up from the article in the December 2013 edition of the Northern Muster, “Indian couch. The good, the bad and the ugly”. Two other grass species that are often mistaken for Indian couch and behave in a similar manner are Angleton grass and Sheda grass. This article applies to them as well. The identifying features of the three species, and their preferred soil types, are in the following table.

<table>
<thead>
<tr>
<th>Species</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian couch</td>
<td>Described as drought sensitive and non-return species</td>
</tr>
<tr>
<td>Angleton grass</td>
<td>Characterised as being attractive for all grazing animals, particularly where a minority of the paddock is burnt, favours Indian couch.</td>
</tr>
<tr>
<td>Sheda grass</td>
<td>Described as being more drought tolerant</td>
</tr>
</tbody>
</table>

Slippery slope to Indian couch dominance

Grazing pressure (stocking rate at the paddock scale) is the biggest driver of change in pasture composition.

Continuous heavy stocking creates spaces for Indian couch, while moderate stocking rates that are matched to carrying capacity, favour the palatable, productive perennial (3P) pasture species.

Drought plays a secondary role as it causes significant death rates in some 3P pasture species, particularly black speargrass. However, other 3P species such as the native bluegrasses (desert, Queensland and curly), golden head burs and buffel grass are drought hardy.

Indian couch is drought susceptible, but because of its massive soil seedbank and stoloniferous growth habit (runners), it makes a quicker recovery than the 3P grasses with return to good seasons.

Soil fertility also plays a secondary role, with the 3P species that produce a higher yield on the fertile soils having more tolerance of heavy grazing.

Therefore there is a greater resilience against Indian couch invasion on the fertile soils than on the marginal or lower fertility soils.

Selective grazing by cattle often provides bare areas where Indian couch can get a foothold. The patches fall into three categories:

- Patches that are created and constantly kept short by cattle.
- Land types that are preferentially grazed such as alluvial soils and black basaltic soils where they make up the majority of the paddock.
- Fire scars that are attractive for all grazing animals, particularly where a minority of the paddock is burnt, producing short sweet feed.

This selective grazing usually explains why areas of Indian couch are found in locations that are remote from water in paddocks that otherwise have appropriate stocking rates.

Continuous heavy to moderate grazing without spelling favours the expansion of Indian-couch patches.

Because paddock carrying capacity declines as the area of Indian couch expands, due to reduced pasture yields, maintaining stocking rates at their original level will cause overgrazing of the paddock which further favours Indian couch.

Stocking rates must be reduced to account for the lower yield from Indian couch to avoid the slippery slope to Indian couch dominance.

The road to recovery

Reduce stocking rates to match the current carrying capacity of the paddock. Use a forage budget at the end of the growing season to calculate a stocking rate. A rough estimate will get you into the ballpark, or use the Stocktake App which includes a forage budgeting tool on a smart-phone or tablet (www.stocktakeplus.com.au).

Contact your local FutureBeef extension officer for a property visit to assist with doing a forage budget or participate in a Stocktake workshop in your local district.

Manage grazing to retain at least 50 per cent pasture cover coming into the wet season. This will minimise infiltration and subsequent pasture growth.

Wet season spell pasture for two consecutive summers – exclude livestock from the paddock from the first rains of the summer until the pasture has seeded. This will maximise seed retention and allow the existing 3P tussocks to increase in size and vigour in both years, and provide an opportunity for seed germination and the establishment of new 3P plants in the second year.

Wet season spelling once every two years should continue as a routine management tool until recovery is well advanced. Stock moderately during each dry season to ensure that ground cover is adequate at the commencement of the next wet season.

Strategic use of fire – fire favours some 3P species such as black speargrass and reduces the incidence of non-desirable species such as wire grass. There is increased pressure on the use of fire on Indian couch, however, an observation in a railway reserve near Collinsville by a pasture scientist in the late 1970s indicated that black speargrass that was regularly burnt but not grazed, was not invaded by Indian couch from the adjoining paddock. Whether this is due to the stock exclusion or the regular burning, or a combination of the two, is open for debate.

Late spring or early summer burning after 50 millimetres of rain will give the best results.

Pre-burn stocking rates should be light to allow for the retention of sufficient fuel to carry a fire, and post-fire wet season spelling is critical. Failure to wet spell after fire will further damage the 3P species and open up more spaces for Indian couch.

Fence preferred land types into a separate paddock (where feasible) to allow the preceding management changes to work more effectively.

Trial opportunities

CHARTERS TOWERS DAAA in conjunction with the Dalrymple Landcare Committee has funding to establish a demonstration site(s) on recovering black basalt country that is in poor (C-D) condition. A letter has been sent to all owners of black basalt country in the Upper Burdekin seeking expressions of interest.

Due to industry concern about Indian couch expansion, MLA is interested in working with a group of producers to establish a producer demonstration site (PDS) to evaluate management options for Indian couch dominance on red basalt country at a commercial paddock scale.

If you are interested in either of the above opportunities, please contact the FutureBeef extension officers in Charters Towers (07) 4791 5150.
Animals to Adult Equivalents (AEs).

Carrying capacity.

Process, securely storing information and producing logically guiding the user through the data entry using the land type mapping of Queensland.

Establish a rangeland monitoring site to understand what markets to target based on available pasture.

Time to make decisions about when to destock, and to lighten the load. A forage budget will also give you extra available pasture, or highlight that you may need a forage budget can assist you to either capitalise on what you have on hand. This is especially important with the break of season (mid to late January), and how much pasture you have. For example, if you are only interested in doing a forage budget, you are likely to have a bulk of fresh pasture growth, for example, mid to late January.

WHEN SHOULD I DO A FORAGE BUDGET?

When to make decisions about when to destock, and to lighten the load. A forage budget will also give you extra available pasture, or highlight that you may need a forage budget can assist you to either capitalise on what you have on hand. This is especially important with the break of season (mid to late January), and how much pasture you have. For example, if you are only interested in doing a forage budget, you are likely to have a bulk of fresh pasture growth, for example, mid to late January.

WHEN SHOULD I DO A FORAGE BUDGET?

Forage budgets are recommended for the end of the growing season (April or May), or each time livestock are moved between paddocks.

The grazing period can be days, weeks, months or a season. A dry season forage budget is usually from the end of the growing season, for example, May, to a date when you are likely to have a bulk of fresh pasture growth, for example, mid to late January.

HOW DO I CALCULATE THE FORAGE BUDGET?

Using the new FutureBeef Stocktake Plus app is guided through the process of completing a forage budget. The app has in-built support and tools to help you get the information you need about your pastures to get the answers you want, immediately, while you are still out in the paddock. Results from a forage budget within Stocktake Plus include:

● How many days your current feed will last with the number of AE's you have.

● The number of AE’s and/or current class of stock your paddock will carry to the end date.

THEN WHAT?

Forage budgets are not a ‘set and forget’ tool, you need to continue to monitor both your pastures and livestock during the grazing period to ensure you have the balance right.

This information helps plan your stocking rate strategy for that paddock and grazing period, ensuring that animal productivity is optimised and land condition is maintained or improved. More information can be found at www.stocktakeplus.com.au

How to use the Stocktake Plus app

While most have received some rain to help boost pasture growth, some areas have seen a slow or below average response from the favourable perennial grasses. Do you know how to manage this for best production outcomes?

Southern Gulf Catchments have partnered with the FutureBeef team to provide producers with information and tools to support these management decisions. Stocktake Plus is a practical workshop that gives you the skills to take home to help make critical decisions on how to manage grazing of your pastures for the best possible production results.

Two Stocktake Plus workshops have been run in Hughenden and Cloncurry in March that were well attended by graziers from the area. More will be held based on demand.

The workshop includes a demonstration of using the recently developed Stocktake Plus application (app) for smartphones and tablets which will be trialed on several properties in the Southern Gulf Catchment.

The graziers’ friend

Get real time in-paddock support with a new mobile tool

The Stocktake Plus app

GETTING the balance right between supply and demand is hard enough at the best of times without adding lack of rain. It comes when making decisions during dry times and drought, accessing any available tools and support can provide clarity when considering the next step.

The Stocktake Plus application (app) for smartphones and tablets, and the associated Stocktake Plus workshop, are such tools, now available through FutureBeef.

At the end of the wet season (March - April), it is important to consider how much pasture you have, before break of season (mid to late January), and how that pasture supply matches the animal demand you have on hand. This is especially important with the expected below average growth for many this year. Using a forage budget can assist you to either capitalise on extra available pasture, or highlight that you may need to lighten the load. A forage budget will also give you time to make decisions about when to destock, and what markets to target based on available pasture.

The Stocktake Plus app guides graziers on how to calculate sustainable stocking rates for their paddocks, based on current available pasture, and how to establish a rangefield monitoring site to understand changes in land condition.

The Stocktake Plus app:

● Helps the user identify what land type they are on, using the land type mapping of Queensland.

● Assists in monitoring grazing land condition by logically guiding the user through the data entry process, securely storing information and producing logically guiding the user through the data entry using the land type mapping of Queensland.

● Guides the user through either a basic or detailed forage budget.

● Stores rainfall records (from multiple rain gauges).

● Stores stock numbers – and converts all classes of animals to Adult Equivalents (AEs).

● Displays current stock on land condition reports and can pull current stock numbers through when calculating demand within a forage budget.

● Backs up all information securely on the internet (only accessible by the user) by syncing. Each function within the app can be used independently and maintain full functionality. For example, if you are only interested in doing a forage budget, this is possible. However if you want to link all information from stock records, through land condition and rainfall, you can do that too. The app was designed to be visual, logical and easy to use.

● One of the most vital design aspects is the ability to work without 3G/4G phone reception.

WHY FORAGE BUDGETING IS IMPORTANT

Forage budgeting is a process for balancing forage supply (existing and anticipated pasture yield) and forage demand (how much the animals will consume) over a defined period. A forage budget allows landholders to calculate objective numbers to support their decisions based on observations and experience. A forage budget can also help plan for seasonal variability in pasture quantity. For example, a forage budget may indicate that between May and January, you can carry 400 Adult Equivalents (AEs) in a particular paddock, with a certain pasture yield.

Depending on the current stock numbers this gives you the option to either buy more stock or devise a targeted sell-off plan if grass growing rain is not received by a specified date. This means you are selling your cattle earlier than those who decide to hold stock until seasonal conditions deteriorate further, and animal condition declines. You are also taking better care of your pastures.

[1] 1 AE = a 450 kilogram dry beast maintaining its liveweight.

When should I do a forage budget?

Forage budgets are recommended for the end of the growing season (April or May), or each time livestock are moved between paddocks.

The grazing period can be days, weeks, months or a season. A dry season forage budget is usually from the end of the growing season, for example, May, to a date when you are likely to have a bulk of fresh pasture growth, for example, mid to late January.

FutureBeef workshop participants taking total yield of pasture available to calculate their forage budget from using the Stocktake Plus app.

Seeking graziers to trial the app

Southern Gulf Catchments and the Cloncurry FutureBeef team are looking for producers who are keen to use the app on their property to trial the use of this technology in our region.

Please contact Emma Hegarty or Rebecca Gunther, FutureBeef team Cloncurry, on (07) 4742 1311 if you want to be involved. The trial of this new technology will help refine the app further to support graziers in the region.

Participants in the trial will be provided with training in the Stocktake Plus workshop, including how to set up and use the app, and one on one follow up on the participating properties to ensure confidence in using the app on your property.

Stocktake Plus assists land managers to monitor, calculate and report on stock numbers, land condition, short term stocking rates, and pasture yield at paddock and property scales. More information on the app can be found at www.stocktakeplus.com.au

Laraio Layard, Sustainable Grazing Project Officer Southern Gulf Catchments, (07) 4742 1368

Participants in the trial will be provided with training in the Stocktake Plus workshop, including how to set up and use the app, and one on one follow support on the participating properties to ensure confidence in using the app on your property.

Stocktake Plus assists land managers to monitor, calculate and report on stock numbers, land condition, short term stocking rates, and pasture yield at paddock and property scales. More information on the app can be found at www.stocktakeplus.com.au
Unlocking north’s seed secret

Results of Hughesden Progardes trial

Importance of sown legume persistence

NOTED previously in the Northern muster is the importance of persistence that a sown legume requires if it is to be well adapted, survive and be productive in our variable climate – including having the capacity to recover from drought.

If a legume is persistent it implies that:
- It is tolerant of grazing.
- Has longevity.
- Has disease and insect resistance.
- Has a suitable flowering and seed maturity time to cope with our sometimes short and variable wet seasons.
- Has adequate seed production and hardseededness for seed soil reserves.

Here we report on the importance of adequate seed production, hardseededness, and, particularly, for seed soil reserves.

During hardseededness and to germinate, the seed coat needs to break down hardseededness and to germinate, the seed coat needs to be ruptured so it can take up water and gases and start the germination process.

Typically, Desmanthus seeds will have a low germination percentage unless the seed coat is treated either by artificial means, such as scarification (done before planting and resulting in a high germination percentage), or, when in the soil, the hard seed coat breaks down via natural environmental conditions and agents such as wetting and drying, fluctuating soil temperatures, soil bacteria and fungi.

In nature, even under ideal conditions, not all Desmanthus or similar seeds germinate. Some remain dormant in the soil and germinate in subsequent years. The soil seed bank consists of all viable seeds present on the soil, or in soil that is a component of the ground cover.

The soil seed bank can be transient, whereby seeds germinate soon after they were produced from the mother plant, or persistent, whereby seeds are dormant remaining in the soil for long periods, until germination. Persistent seeds are an important adaptation to uncertain, alternating environmental conditions.

During the current drought, a Progardes legume trial plot near Hughesden was studied with a focus on determining the soil seed bank of Progardes. The site was sown in 2010 and slowly established to be a good stand of the legume. A considerable amount of seed was produced on the grazed plants that naturally entered the soil seed bank over time prior to the drought.

The 2013 rainfall at Hughesden totalled 129.6 millimetres, about one quarter of the average annual of 492mm. In February 2014, prior to receiving any substantial rain, the plants were considerably stressed by drought, but had a population of 3.7 plants/square metre with a frequency of 66 per cent.

Towards the end of 13, 15 soil cores (7 centimetres wide x 5cm deep) were taken at random across the 2.5 hectare Progardes trial plot.

The resulting soil cores were sieved to recover any Progardes seeds.

This found 6,349 seeds/sqm across the plot in the top five centimetres of the soil seed bank. In a subsequent germination test of these recovered seeds, 43pc germinated.

This study at Hughesden confirms that in normal seasons:
- Progardes Desmanthus produces abundant seeds so that a large soil seed bank can accumulate over time.
- A good percentage of those seeds are available to germinate.

Phosphorus supplementation regimes explored in latest research at Gayndah

Clear trends emerging from preliminary findings

A MAJOR experiment at Brian Pastures Research Station near Gayndah is evaluating better ways to get breeders to eat phosphorus (P). For the past seven months, 40 heifers have been individually fed to evaluate a new P supplementation strategy.

Project leader Dr David McNeill explained that even though the experiment will not finish until April, some clear trends are already emerging.

About 70 per cent of the grazing land in northern Australia is P deficient, and the expense of P supplementation is a huge issue for profitability. Australia is P deficient, and the expense of P supplementation is a huge issue for profitability. Emerging trends show that after four months on the high P diet the pre-loaded heifers gained an extra approximately 45kg in live weight by calving.

There was no difference between the high P and low P diets throughout pregnancy and lactation.

Calf data is yet to be finalised but current trends indicate that heifers will gain 50pc more here than heifers fed low P.

According to the expectation of P storage, the high P diet proved to be superior to the ‘pre-loading’ strategy. The heifers fed low P in pregnancy but high P in lactation produced 30pc more milk than those fed the low P diet throughout, indicating the value of P supplementation in pregnancy and lactation.

During lactation, P supplementation allowed the heifers to continue to grow their own bodies as well as produce extra milk.

Faeces, urine, blood and milk samples are taken fortnightly to determine mobilisation of P in the body and P outputs.

Phosphorus inputs measured through weekly feed intakes.

Preliminary findings

The high P and low P groups had a difference of approximately 45kg in live weight by calving.

- Addition of Kynophos improved appetite dramatically.
- There was no difference between the high P and low P groups in calf birth weights, indicating the extra nutrition in pregnancy helped the high P heifers to continue to grow their own bodies and to produce more milk than the low P heifers.

According to the expectation of P storage, the heifers fed high P in pregnancy but low P in lactation produced 30pc more milk than those fed low P throughout pregnancy and lactation.

- The ‘current advice’ strategy still proved to be the best in pregnancy, with the high P diet producing more milk than either the low P diet or ‘pre-loading’ strategy.

The research team for this experiment includes Dr Llorenç Castells Domingo (UQ) and Kerry Goodwin (DAFF) at Pastures Research Station, supported by Dr David McNeill, Dr Rob Dixon, Dr Mary Fletcher, and Dr Lisa Kidd (UQ). Thanks to MLA, DAFF and UQ (School of Veterinary Science and QAAFI) for funding this project.

Dr David McNeill, University of Queensland, d.mcneill@uq.edu.au
Gathering facts to manage drought

AS the drought continues across large regions of Australia, producers are reminded that ongoing decision-making and honest assessment of their situation remain crucial.

MLA research and development co-ordinator for Northern Beef, Geoff Niethe, suggests that a rational decision-making approach is the best way to tackle what can appear to be an insurmountable mountain.

“The key is to have as much information as possible, and if you don’t have all the facts, know where to seek advice,” he said.

A list of focus areas for drought management decision-making has been developed by Geoff Niethe and MLA consultant Desiree Jackson:

● Water: Assess the quantity and demand for water. Water intake varies considerably depending on temperature, class of cattle and moisture content of feed but, on average, on budget on 400 head/day/day. If surface water can be tarped and stock are forced to water at a trough, the water will last longer and it stops bogging.

● Feed: Producers who are retaining stock need to comprehend the feed value and dollar contribution of pastures and all supplements purchased. Even if you have fed, as if matures, it loses its nutritive value during the dry season, regardless of the amount of feed on offer.

DO A FORAGE BUDGET

Determine how long the pasture will last with the cattle you have now and which mobs get preference. Determine the pasture composition – the previous dry year has undoubtedly caused damage to pasture when feed became depleted through heavy grazing.

Get an indication of diet quality by facetal near infrared spectroscopy (NIRS) analyses. NIRS analyses will help ensure supplementation is judiciously targeted. It is difficult to determine how much green feed stock can access when it is limited.

PRIORITISE TURNOFF

If you haven’t got the financial resources to feed energy supplements for another year, consider your options. Collect as much data on your breeders (pregnancy status, age, condition score) and aim to retain a nucleus of breeders that are four to nine years of age and that will calve in their ‘normal’ calving window. These are the most productive animals and will be a springboard for recovery.

DETERMINE ORDER

Identify in what order groups of cattle will be sold and work on a contingency plan – take into account which animals have the highest nutritional requirements and which are the biggest drought risks.

On the pregnancy test muster, identify breeders that are likely to calve during the dry season and consider selling them.

EARLY WEANING

Radical weaning (down to 60kg at or 10 weeks of age) is the best supplement to give a lactating breeder cow. The calves will need quality energy and protein, but it’s much cheaper to feed the calf than the cow.

HIT THE GRID

Ascertain what the delays are in getting stock slaughtered with your preferred abattoir. Then check the slaughter grid and also availability of feedlot space.

Usually the critical carcass weight is 200kg (or about 380-400kg liveweight if they are non-pregnant).

If you have empty breeder cows that are currently about 520-530kg, then even if feed prices are $350/tome (i.e. 35c/kg), 50 days on feed should get you above a 180kg carcass weight.

NITROGEN

If you are lucky enough to have mulga and are feeding a supplement, make sure there is a source of sulphur in your loose lick block which is also providing much-needed nitrogen. Mulga is high in tannins and binds with sulphur as well as protein, making it largely unavailable to the animal for digestion.

You will get more benefit from your lick if the nitrogen sulphur ratio is balanced.

Geoff Niethe, MLA, 0428 772 746, g.niethe@mla.com.au

RESOURCES


Forage budgeting

● Visit www.stockstackers.com.au to learn about and download the free forage budgeting app to your smart phone or tablet.

● Alternatively, search ‘forage budgeting’ in YouTube to find a number of short instructional videos that will help you create your own budget.

Crisis and dry-season management


● www.symbolinsalience.com

● Special needs

● A national guide to describing and managing beef cattle in low body condition at www.mla.com.au/lbc

Transport

● To access cattle for transportation download Is it fit to load? at www.mla.com.au/Hotload

Face-to-face support

● To talk to your local livestock management consultant or FutureBeef extension officer.

FutureBeef Team, Mareeba and Cloncurry.

146 063. Southern Gulf – Emma Hegarty 0467 808 340, eneggett@mla.com.au

162 2130. Northern Gulf – Joe Rolfe, 0427 378 412, Bernie English, 0427 146 063, Geoff Niethe, MLA, 0428 772 746, g.niethe@mla.com.au

futurebeef.com.au

Know your stuff

Make informed decisions for survival during dry periods

Improving the viability of your beef business through SavannaPlan-BeefSense

Project puts graziers on right track

The current seasonal, debt and cost/pric pressure pressures across the northern beef industry are overwhelming for many families. The DAFF FutureBeef Team, Northern Gulf Resource Management Group, Southern Gulf Cattlemen and Agribusiness Consultants (Alison Larant and Ian Maclean) have joined forces to help producers identify and overcome key financial, herd and grazing management constraints through the SavannaPlan-BeefSense project.

SavannaPlan-BeefSense is delivered on-property by a team who understand all aspects of running a beef business from breeder productivity, and stocking rates, through to cash flow, budgeting, debt management and marketing.

It is designed to help Gulf cattle producers tackle their current production and financial challenges by focusing on issues that improve the viability of their particular business.

SavannaPlan concentrates on hard and land management, with participants receiving a detailed property map and one-on-one support from the FutureBeef team to identify and discuss key issues.

Previous participants have worked through herd and land management after major fires, improving breeder productivity, additional infrastructure, wet-season spelling and stocking rate adjustments.

BeefSense assesses the current financial position and undertakes a financial review to identify and implement specific financial and business strategies to improve their position.

● Develop simple and useful herd, business and grazing management systems.

The delivery team has a genuine interest in the industry and the well-being of the people in it.

● Improved and increase their understanding of the positive steps being made by the beef industry.

● Business financial analysis, and identification of issues and options for improvement (both production and financial).

● Finance-related – applications for further finance, renegotiation of existing facilities and rates, refinancing.

● Past and future economic analysis of herd performance, with partial budgeting and options, or what ‘if’ testing.

● Support for succession/mediation process.

● Support for government applications (for both assistance measures and traversing red tape).

FutureBeef Team, Mareeba and Cloncurry.

Northern muster

Know your stuff

Make informed decisions for survival during dry periods

Improving the viability of your beef business through SavannaPlan-BeefSense

Project puts graziers on right track

The current seasonal, debt and cost/pric pressure pressures across the northern beef industry are overwhelming for many families. The DAFF FutureBeef Team, Northern Gulf Resource Management Group, Southern Gulf Cattlemen and Agribusiness Consultants (Alison Larant and Ian Maclean) have joined forces to help producers identify and overcome key financial, herd and grazing management constraints through the SavannaPlan-BeefSense project.

SavannaPlan-BeefSense is delivered on-property by a team who understand all aspects of running a beef business from breeder productivity, and stocking rates, through to cash flow, budgeting, debt management and marketing.

It is designed to help Gulf cattle producers tackle their current production and financial challenges by focusing on issues that improve the viability of their particular business.

SavannaPlan concentrates on hard and land management, with participants receiving a detailed property map and one-on-one support from the FutureBeef team to identify and discuss key issues.

Previous participants have worked through herd and land management after major fires, improving breeder productivity, additional infrastructure, wet-season spelling and stocking rate adjustments.

BeefSense assesses the current financial position and undertakes a financial review to identify and implement specific financial and business strategies to improve their position.

● Develop simple and useful herd, business and grazing management systems.

The delivery team has a genuine interest in the industry and the well-being of the people in it.

● Improved and increase their understanding of the positive steps being made by the beef industry.

● Business financial analysis, and identification of issues and options for improvement (both production and financial).

● Finance-related – applications for further finance, renegotiation of existing facilities and rates, refinancing.

● Past and future economic analysis of herd performance, with partial budgeting and options, or what ‘if’ testing.

● Support for succession/mediation process.

● Support for government applications (for both assistance measures and traversing red tape).

FutureBeef Team, Mareeba and Cloncurry.

FutureBeef Team, Mareeba and Cloncurry.

futurebeef.com.au

24 April 2014 | NGR | FUTURE BEEF NORTHERN MUSTER 27
Research pioneers on carbon values

Soil’s role in beef business

EVER wondered what role soil carbon plays in an extensive grazing beef business?
In partnership with the Commonwealth Department of Agriculture and Northern Gulf Resource Management Group, the far North and North West DAFF FutureBeef team has been working with three properties under the second round of the Climate Clever Beef (CCB) project.

One aspect the project is identifying, is the potential soil carbon has within extensive grazing systems, in terms of carbon trading, and the influence management practices have on soil carbon levels. The project highlights and documents the land resources, land condition, production systems and business performance of each property.

Demonstration property, Karma Waters, is located near the Mitchell River and was purchased in 1991 by Alan and Karen Pedersen. The Pedersens are working to improve land and pasture condition, breeder mortality and weaning rate.

Ongoing pasture and stocking rate monitoring, wet season spelling and over sowing significant areas with stylos has greatly improved pasture productivity and feed quality.

Under the CCB project, two sites on the same land type, but under different management strategies, were identified and studied. The purpose of the study was to compare soil carbon accumulation between two sites, one in good condition with stylo legume pastures while the second site was continuously grazed without Stylos.

Twelve soil samples across each one hectare site were taken at depths of 0-10cm and 10-30cm. It was presumed that the site in good condition with improved pastures would have a higher capacity to store carbon.

However, the soil sample analyses indicated the following:

- Stored Carbon (t/ha) – There was no significant difference between the two sites at either depth.
  - Nitrogen (t/ha) – There was a significant difference between the two sites at 10-30cm, with the site with no stylos present considerably lower. There was no significant difference between two sites at 0-10cm.
  - Carbon/Nitrogen – There was a significant difference between sites at the tower (10-30cm) depth with the site with stylo having a higher carbon to nitrogen ratio than the no stylos site.
  - Carbon/Nitrogen ratio is a ratio of the mass of carbon to the mass of nitrogen in the soil.

The results showing no significant difference between the two sites for soil carbon may indicate that increasing carbon storage in extensive rangelands is a very useful method in difficult to access areas.

Introducing improved pastures, implementing wet season spelling, reducing herd mortality rate, increasing your weaning rate and lightly stocking your country will improve your land condition, herd productivity and overall business.

Olivia Pisani, FutureBeef Team, Mareeba, (07) 4048 4882, olivia.pisani@daff.qld.gov.au

Splattergun targets weeds at Mount Surprise

Collaboration leads to trials for controlling rubber vine

IN EARLY March, collaboration between the Department of Agriculture, Fisheries and Forestry’s Biosecurity Queensland agency and the Northern Gulf Resource Management Group’s Regional Landcare Facilitator has led to the implementation of splattergun trials for controlling rubber vine at Whitewater Station near Mt Surprise.

The splatter gun technique is new to the area and has been proven effective against tindana, belfyche bush and slant weed.

A significant feature of the innovative technique is that it is a concentrated herbicide approach with relatively low water requirements, compared with full foliage application techniques, and the plant only requires a strategic splash.

This can have a significant impact on improving time efficiency of application by the very fact that you do not need to fully cover the targeted weed plant’s foliage.

The splatter gun used in the trial will be utilising a gas-assisted gun from a five litre knapsack which is a very useful method in difficult to access sites.

This technique has evolved to larger scale applications for some weeds where commercial operators have adapted the technique to larger spray units which have proven effective.

Share Campbell of Biosecurity Queensland with Tom Saunders of Whitewater Station, Mt Surprise, in front of rubber vine at the proposed trial on Whitewater Station.

The full program and registration forms are available by contacting Teressa Ford of Northern Gulf Resource Management Group, (07) 4062 1330.

Learning about behaviour styles is one of the sessions that will be available at Resourcing Women of the North in May.

Range of resources at fingertips of northern women

Women unite at Mt Surprise event

WOMEN of the Northern Gulf Region have a fantastic opportunity to meet at Mt Surprise on April 29 and 30 to celebrate their strengths and empower themselves with knowledge and resources to address the challenges they face living and working in the remote north.

The Resourcing Women of the North (RWOTN) event will bring together women from Mt Surprise, Eungella, Forsayth, Georgetown, Croydon, Chillagoe and beyond for two days of good food, friendships and great speakers.

Some of the topics to be covered include using social media to promote your business and industry, plant identification and pasture monitoring, new apps relevant to the pastoral industry, dealing with stress and energy efficiency audits.

There will be trade displays with the latest information on natural resource management, Landcare, health care and grazing land management. There will also be an opportunity to learn new skills such as photography and mosaics.

Childcare is available for remote families.

The highlight will be a Rural Industries Research and Development Corporation Dinner with guest speakers – rural women Catherine Marriott and Teressa Ford.

The workshop has been made possible through funding from the Queensland Government Gambling Community Benefit Fund and support of partners Northern Gulf Resource Management Group, Gulf Horizons Foundation, Queensland Department of Agriculture and Forestry, Mental Health Involvement Training Group. Queensland, Gulf Savannah Development, Rural Industries Resource and Development Corporation, Bunnings, Royal Flying Doctor Services, Savannah Regional Health, Frontier Services and CBC Lawyers.

The program and registration forms are available by contacting Teressa Ford of Northern Gulf Resource Management Group, (07) 4062 1330.

There will be more updates on the progress of the trial in future Northern muster editions.

Men’s mental health

ANDREW Taylor, Regional Landcare Facilitator, Northern Gulf NRM, (07) 4067 1300.
Give your grass a fighting chance

Control emerging weeds now

Simple steps can help minimise costs

Drought often pushes weed management down the priority list. However, it is also the time when new infestations may occur particularly through stock feed, cattle movements and earthmoving equipment.

Give your grass a fighting chance during the recovery period by staying on top of weed management. Simple, practical steps taken now can help minimise the costs and burden further down the track:

- Ask for a weed vendor declaration from the feed supplier or at least familiarise yourself with potential weed species from the area of origin and keep records of where the feed has come from.
- This will act as an important reference in identifying unknown plants.
- Feed stock in a confined area such as a holding paddock, layaway or corner of a paddock, away from drainage lines, so if an outbreak does occur, access can be easily restricted.
- Monitor feed out areas regularly and be suspicious of any unfamiliar plants.
- Many weeds prefer areas which are bare or disturbed e.g. roadsides, cattle pads, cattle camps and watering points.
- Keep a particularly close eye on these.
- Use the weed identification skills of the Department of Agriculture, Fisheries and Forestry or Southern Gulf Catchments staff.
- Clean vehicles and trailers used to cart feed after deliveries in a designated area which can be easily and regularly monitored.
- If a weed is identified, act on it while it is in low density, or as a single location.
- When relocating from outside the property, be aware of weeds from the area cattle were agisted or purchased from.
- Spell the cattle in a contained area such as a holding paddock for a period of at least seven days to allow weed seeds to pass out of their digestive system, then monitor and treat any weed outbreaks.
- If bringing in contractors to desilt or build dams, ask for a weed hygiene declaration or ask them to wash their vehicles and machinery prior to coming onto your property.
- Weeds cost Queensland an estimated $600 million every year and just five weed species cost Queensland $50 million* every year in lost production and control costs.
- All five species are found in the Southern Gulf region – parthenium, rubber vine, prickly acacia, mesquite and parkinsonia.

- For more information and help to control weeds on your property contact SGC or your local Biosecurity office. For more information on Weed Hydraulic Declarations go to: http://www.daf.qld.gov.au/clients/remote-past-animals.aspx/weeds/preventing-weed-spread/legal-requirements/ weed-hygiene-declaration

- Altered fire regimes
- Loss of production through reduced quality and quantity of pastures and carrying capacity
- Changes to native pasture composition and ground cover leading to erosion
- Reduced health of riparian vegetation which may lead to erosion and reduced water quality
- Altered fire regimes
- Toxity to stock and people
- Increased management costs for mustering, infrastructure maintenance and weed control
- Refuge for feral animals

- Parthenium weed is a declared Class 2 Pest Plant that reduces pasture productivity.
- Normally germinates in spring and early summer and dies around autumn
- A vigorous species that colonises weak pastures with sparse ground cover
- Reduces pasture production potential

- Giant Rat’s Tail Grass S. pyramidalis and S. natans
- Declared Class 2 Pest Plant:
- Capable of producing up to 65,000 seeds/sq m/year with initial seed viability of about 90 per cent
- Grows to 1.7 metres tall with a seed head of up to 45cm long and 3cm wide
- Invasive grass that reduces pasture productivity

Weeds to watch out for

- POTENTIAL species will depend on where the feed was sourced and machinery previously worked. If in doubt, ask.
- PARTHENIUM WEED PARTHENIUM HYSTERO- PHORUS L.
- Declared Class 2 Pest Plant:
  - May reach a height of 2 metres
  - Leaves are pale green, deeply lobed and covered with fine soft hairs
  - Small creamy white flowers occur on the tips of the stems
  - Normally germinates in spring and early summer and dies around autumn
  - A vigorous species that colonises weak pastures with sparse ground cover
  - Reduces pasture production potential

A fresh new way to do your rural business

Our aim is to give you the best service and competitive prices with Rural Merchandise

GEORGE WATKIN
MOBILE: 0419 728 814
EMAIL: georgewatkin@ruralco.com.au

JODIE STOCKHAM
MOBILE 0428 398 020
EMAIL: jstockham@ruralco.com.au

TOWNSVILLE
PHONE (07) 4779 8799
385 385 WOOLCOCK ST
(NEXT TO 2GO HEALTH & FITNESS)

HUGHENDEN
PHONE (07) 4741 1974
23-27 STANFORD ST

futurebeef.com.au

Southern Gulf Catchments Limited

Work on Federal Government’s discussion papers

SOUTHERN Gulf Catchments Limited (SGC) has been invited to comment on the Federal Government’s NRM priorities list and will be providing input back to the government on these issues.

The various papers include:
- 2030 Vision for Developing Northern Australia
- Emissions Reduction Fund – Green Paper
- Environmental Protection and Biodiversity Conservation – response to threatening process
- Agricultural Competitiveness Issues Paper
- Green Army Program, Draft Statement of Requirements

Key notes will be formulated by CEO, Bob Wilson, on each of the above papers in consultation with:
- SGC members, board directors and stakeholders
- Rangers Alliance
- National NRM Working Group
- Regional Groups Collective (Qld)
- Pastoral Industry Advisory Group

The opportunity to provide comment is welcomed by SGC, as it allows us to represent key members and stakeholders within our region and put forward comment for consideration by the government.

By contributing to the development of these important papers, SGC hope to have input into long term government policies and work closely with the federal government to make informed decisions for future NRM initiatives in our region.

Southern Gulf Catchments Limited board chairman Brian Abernethy, Southern Gulf Catchments CEO Bob Wilson, (07) 4743 1888, ceo@southerngulf.com.au

AROUND THE SOUTHERN GULF
Students take on the States

Meat-judging team impresses

THE Australian national meat-judging team arrived home from the United States with an impressive line-up of awards from three meat-judging contests, and some experiences that would make any university student envious.

The enthusiastic students making up the team included Hamish Irvine from University of Sydney, Frederick Broughton from University of New England, Nick van den Berg from University of Adelaide, and Tammy Heir from Sturt University, Wagga Wagga.

Individual award highlights included Nick van den Berg placed as the fourth and fifth highest individual at the National Western (Denver) and South Western competition (Fort Worth) respectively. Laura Kemmis achieved fourth and fifth overall, and won the category for judging placings.

Australians placed nothing less than fifth place in all categories of all of their contests. They were placed third overall, and won the category for judging placings at the National Western in Denver, Colorado.

Individual award highlights included Nick van den Berg placed as the fourth and seventh highest overall individual at the National Western (Denver) and South Western competition (Fort Worth) respectively. Laura Kemmis achieved fourth and fifth highest individual in beef judging at both of these contests. Tammy, Fred and Hamish were also successful in securing a great display of ribbons over a number of categories.

“The students this year were a great group who worked very hard,” Australian coach Emma Hegarty said.

“They put a lot of effort into everything we did — whether it was long training sessions in the abattoir or representing their country at the many industry visits and tours we did.”

Demi Lollback of Meat & Livestock Australia, who assisted in the coaching role, was overwhelmed by the extent of the tour itinerary.

“As my first year in this role, this was a trip of a lifetime. The students have just had a very exclusive insight into the US industry that not many people ever get to do,” she said.

Aside from the contests, the team spent a month covering nearly 10,000km across 10 states visiting industry organisations.

The trip gave the students a complete paddock-to-plate insight from ranch and feedlot visits, to processing tours of beef, pork and lamb facilities, including the three major US packers — JBS, Tyson and Cargill.

Other tour visits included the National Cattlemen’s Beef Association, meat science faculties of seven major universities, as well as meeting with Global Animal Products in Amarillo, who provided the team with a personal flight over their feedlots.

Nick van den Berg was very impressed with the visit to the USDA Meat Animal Research Centre (MARC) in Nebraska.

“The research centre runs 7000 breeding cows, 3000 ewes and produces 700 litters of pigs a year. The variety and integration of their research projects had myself and the whole team astounded at the work being undertaken,” he said.

The Australian team will be guests at the 2014 Australian Inter-collegiate Meat Judging program to be held in Wagga Wagga on July 6 to 13, inspiring the next intake of meat-judging enthusiasts.

The trip will be the 25th anniversary of the meat-judging contest in Australia. Meat & Livestock Australia and Australian Meat Processors Corporation were the major sponsors of the Australian team.

Richmond Beef Challenge cattle

**Liveweight results**

At the July 2012 weigh day, the official start weight for each Richmond Beef Challenge animal was recorded, with the mob of 89 head averaging 341kg.

The cattle gained at 0.19 kilograms per day (kg/d) through to November, and 0.53kg/d over the lacklustre wet season through to end of March 2013.

In the previous challenge, the cattle gained 0.62kg/d over the similar November 2011 to March 2012 wet season period.

The cattle continued to gain weight through to May 2013, but began to lose weight thereafter. When leaving the paddock for the feedlot in late July, the mob averaged 454kg, or had put on an average of 0.29kg/d over the 300-day grassfed period.

In the feedlot, the mob performed at an average of 2.05kg/d/ with an individual animal gaining 3.56kg/d.

When the cattle left for the abattoir, the mob was placed on an average 290kg/hd over the 488-day combined grass and grainfed phases of the challenge, at an average rate of 0.59kg/d.

In comparison, the previous challenge cattle put on 219kg at an average rate of 0.60kg/d over 345 days.

It has been very interesting to compare the performance of similar animals in the same paddock over two very different seasons.

**Carcase results**

The Shire Beef Challenge cattle were sent to abattoirs in Kilcoy in mid-November last year, where MSA data was collected and used to assess the carcase attributes for each individual steer. This was following on from the steers being fed in Smithfield feedlot, Proston, for 100 days.

All of the cattle met Meat Standards Australia (MSA) specifications, which are pH < 5.7, meat colour – 1B to 3; rib fat minimum of 3mm. This was a fantastic result, given that the steers went through a drier than normal wet season and a very dry start to 2013.

While the cattle had MSA data collected on them, it was for a learning exercise only, and none of the steers was marketed as MSA product.

The P8 fat ranged from 8 to 31mm, with an average 15mm across the mob. Only two head received a discount for having greater than 26mm.

There were no dark cutters in the mob and fat colour was white across all bodies. Oculisation was good, with the highest score being a 200, which equals an approximate physiological age of 30 months. Marbling scores were quite low for the mob, with the average carcase only showing slight matting in the rib eye.

An interesting fact to note from the data collected was the average hump height of 122mm, but ranging up to 230mm. Hump height is used to measure the tropical breed content of the animal.

The steers were placed into boning groups (BG) ranging from 4 to 14 on a 1 to 19 scale (BG 1 being the best).

The data showed as that the boning group increased (and eating quality decreased), the rib fat decreased, hump height increased and the MSA eating quality score decreased significantly.

The average price received was $3.73/kg dressed, ranging from $3.55 to $3.80. These prices were for 100-day grainfed product, non-MSA.

To learn more about the MSA grading system and for assistance with interpreting MSA feedback data, visit www.msa.com.au/Marketingbeef-and-lamb/Meat-Standards-Australia/MSAabeef.