Northern muster
Information for rural business in North Queensland

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FutureBeef regularly runs webinars, distributes eBulletin and publishes material on its website and through social media channels, in addition to directly working with producers in training workshops, information days, demonstration sites and field days.

WEBINARS

WEBINARS are a great way to hear the latest information from anywhere in the world, plus they allow you to engage with the speakers through online polls and Q&A sessions that can be answered by the presenters or by other participants in the webinar using a computer (Mac or PC), iPad, tablet or smartphone.

To do this, you need to register for the event by going to the event's webpage and entering your contact details. A personalised email will then be sent to you; but beware this may accidentally go into your junk folder. In that message is the link you will need to click on to join the webinar at the specified time.

It is best if you join 10 minutes early in case you need to download some software like this on your device.

When the webinar commences, you watch the presentation on the screen and listen either through your device's speakers or on your telephone.

Webinars are usually free for you to attend, with the only real cost being any data usage (usually fairly minimal) if you need to phone a long-distance number (though toll-free numbers are often provided).

A recent PastureNet webinar about the Pastured Cattle Assurance System, brought to you by Queensland’s Department of Agriculture, Fisheries and Forestry.

Some relief in sight as rain returns to southern Queensland and NSW

Market report

Since our last market report we have seen some of the worst drought conditions since the 1990s with the big dry resulting in record cattle numbers hitting the markets. During May, eastern Australian states were slaughtering over 1.57 million head per week with Queensland abattoirs contributing 438,300 head. Most eastern Australian abattoirs have been booked out for up to 10 weeks ahead as the availability of droughted cattle hits supply chains and abattoirs.

But there has been a slight glimmer of hope over the past few weeks, with good rain across large areas of southern Queensland and into NSW, our dollar value falling from 113 to under 100 and cattle prices rates for best bullocks making a slight upturn.

Younger quality cattle prices are rising in southern markets and good weight for age northern cattle over 350kg are seeing better money as well. The cattle prices situation could dip again with a week or two of severe rains causing more cattle into the market across central and southern areas that have had a reasonable season and still have prime cattle for sale.

Another good recent was the recent release of a pasture-fodder cattle assurance system, or PCAS. Already, Tays Australia has announced substantial price premiums over and above grass MOS values.

There has been significant interest from producers in expanded pasture areas of the state and there is potential for this product on domestic and overseas markets.

Good news for grain producers is the first win in the PWA-branded beef competition this year with produce from Wingham Beef Exports. Throughout the past six months of record export production, our export abattoirs and other Australian international meat-marketing companies have exported 1,033,805 tonnes for the first time during the 2012-13 fiscal year.

Over the past 12 months exports have been very fortunate with the rapid development of outlets such as China and the Middle East, as traditional partners US, Japan and Korea stagnate in demand. Oz cloth reliance on Indonesia for live exports has shown the pitfalls of relying on any single market.

Domestically the first half of 2013 has been very competitive in retail with numerous supermarket discount deals. Woolworths led retailing with a $2.60c market share, followed by Coles 2.40c, butchers 2.20c, and IGA 9.5c.

First quarter 2013 feedlot turnoff was about 615,000 head, with Queensland feedlots still not at full capacity mainly due to poor economics at present.

INDONESIA

Prime Minister Rudd’s visit to Indonesia with a $60 million aid package has prompted a further

Table 1: Export figures for 2012-13 in tonnes. Japan’s export figures below 30,000 for the first time in 10 years.

<table>
<thead>
<tr>
<th>Country</th>
<th>Export Figures (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>28,000</td>
</tr>
<tr>
<td>USA</td>
<td>300,000</td>
</tr>
<tr>
<td>South Korea</td>
<td>38,000</td>
</tr>
<tr>
<td>China</td>
<td>65,500</td>
</tr>
<tr>
<td>Middle East</td>
<td>47,000</td>
</tr>
<tr>
<td>Taiwan</td>
<td>47,600</td>
</tr>
<tr>
<td>Philippines</td>
<td>27,000</td>
</tr>
<tr>
<td>Indonesia</td>
<td>32,600</td>
</tr>
<tr>
<td>Brazil</td>
<td>35,400</td>
</tr>
<tr>
<td>China (Hong Kong)</td>
<td>17,000</td>
</tr>
<tr>
<td>Malaysia</td>
<td>16,600</td>
</tr>
<tr>
<td>Indonesia (Sunda Timur)</td>
<td>12,500</td>
</tr>
<tr>
<td>Singapore</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Table 2: 2012 Australian dollar value of main export markets.

<table>
<thead>
<tr>
<th>Country</th>
<th>Export Value (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>1,010,064,067</td>
</tr>
<tr>
<td>North America</td>
<td>1,081,300,021</td>
</tr>
<tr>
<td>South Korea</td>
<td>840,350,010</td>
</tr>
<tr>
<td>Greater China</td>
<td>440,905,579</td>
</tr>
<tr>
<td>South Africa</td>
<td>328,157,203</td>
</tr>
<tr>
<td>Middle East</td>
<td>1,083,080,405</td>
</tr>
<tr>
<td>Russia</td>
<td>1,850,865,539</td>
</tr>
<tr>
<td>EU</td>
<td>814,427,990</td>
</tr>
<tr>
<td>Indonesia</td>
<td>812,225,292</td>
</tr>
</tbody>
</table>

In January 2013, US beef exporters received their second cut in the beef tariff they pay, which now gives them a 5.6c price advantage over Australia. The high US dollar and tight beef supplies in the US due to drought is helping our exporters remain competitive.

Even though Japan is our leading export destination, volumes have been falling. This year’s fall is back to 2002-3 levels when the US lost the US meat consumption. Japan’s economy is still struggling without any restrictions being lifted on US beef. They are bectiong their share of the market.

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PCAS a good news story for beef industry

THE release of the Pastured Cattle Assurance System (PCAS) is a welcome ‘good news story’ for the northern beef industry. There has been much interest in the program from producers across the state, and Toys Australia has thrown its support behind the program, offering price premiums for certified PCAS products.

The PCAS standards also include two optional modules to support claims relating to freedom from antibiotics and hormonal growth promotants. Visit www.pcasfot.com.au for more information.

We can thank a core of Queensland producers who had the vision and determination, and were in the right place to push this agenda through to fruition.

Under the Spyglass

Providing world-class infrastructure

THE Spyglass Beef Research Facility is well positioned as part of the Queensland Government's strategy to provide world-class infrastructure for beef research. Located 136km west of Townsville and holding a carrying capacity of 400 adult equivalents, the facility’s R&D program covers animal genetics, reproduction, growth, welfare, husbandry, natural resource management, and precision grazing technologies.

New developments and infrastructure are being put in place to ensure this program is efficient and provides leading research.

FUTURE DIRECTION AND PLANNING

The property-management plan covers weed control, feral animal control, subdivisions of larger paddocks, riparian areas, farm reserves, and workplace health and safety. Future planning is in place to improve mustering efficiencies by establishing an integrated sequence of lances to link all paddocks to yards. There will also be a focus on improved pasture.

Remote weather stations, tank monitors and weigh-over facilities will be established. Information will be made available via satellite and sent back to the main office, where a centralised database of all animal information will be kept. In addition to this, the cost efficiencies of these new technologies will be calculated and made available to industry.

YARDS AND MACHINERY

There is one main set of operational yards, with two new yards to be built in 2013/14 and 2014/15. The new yards have been designed to enhance staff and livestock safety and welfare by including a five-way automatic hydraulic draft, a six-way pound draft, and covered work areas in a livestock-exclusion zone, and some man gates, concrete floors, hay feeders and water. Three on-site staff members will be attending a low-stress stock-handling course to ensure skills are kept up to date.

Three ATV buggies have been purchased to restrict the use of quad bikes. A five-day safety in stock handling course will be conducted to domestic and international industry. Construction of 100mm of new and replacement fencing over the next year is planned.

PROPERTY IMPROVEMENTS

The water-holding capacity of the property has been improved by installing four 250,000-litre tanks to aid as the main water sources to the yards and accommodation facilities. Pulling and stick raking of 2000 hectares of black wattle regrowth has been completed to provide larger areas for improved grazing.

OFFICE AND QUARTERS

The main office building is operational and includes the manager’s office, an open plan office for six additional staff, a small meeting room and kitchen facilities, and high-speed internet connection is online. The visitors quarters, in the form of a two-bedroom house, have been fully self-contained.

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Drought aid on offer

Producers eligible in declared areas

DAFF lists relevant information

The Queensland Government is offering assistance to primary producers affected by drought. The new drought assistance package is at risk of being declared on May 30, 2013, and includes existing and new measures to help farming families, farm businesses and farm communities affected by drought.

As is typical of drought declared areas or with individual drought relief aid, the Queensland Government is offering assistance to producers with properties in drought declared areas or with individual drought relief aid. The government declared a new drought relief area on May 13, 2013. The Queensland Government is offering assistance to producers with properties in drought declared areas or with individual drought relief aid.

The new drought assistance package announced in May 2013 includes new and existing measures to help farming families, farm businesses and farm communities affected by drought. For all details visit the Department of Natural Resources and Mines. For more details visit www.daf.gov.qld.gov.au.

- Transport concessions and assistance for road trains: Assistance to drought-affected primary producers may be available for the payment of fees and charges. For more details, visit www.daf.gov.qld.gov.au.
- School transport assistance: Firms that provide their own fleet of road trains may be eligible for an increase in the school transport allowance. For more details on this program, visit the Department of Transport and Main Roads www.mr.qld.gov.au.
- Mental health support workshops: Queensland Health will be providing mental health and psychological support workshops across drought-affected areas. Workshops aim to enhance mental health and well-being in communities affected by drought and will provide community members and human service workers with the skills to identify, support and protect people who may be not coping during difficult times. More information on this program will be available at the Queensland Health website www.health.qld.gov.au.
- Drought Relief Assistance Scheme: ORAS provides funding subsidies on fodder and water for areas that have been drought declared and affected by drought in the previous financial year. For more details on this program, visit the Department of Primary Industries and Fisheries www.daf.gov.qld.gov.au.
- Land rent relief: Land rent relief will be frozen in the 2013/14 financial year for farm businesses in drought declared areas. For all details visit the Department of Natural Resources and Mines.

MLA guide explains new national transport rules

Queensland takes on livestock standards

All states and territories will have implemented new national standards and guidelines for livestock transport by July 2013. MLA’s new guide, Is It Fit to Load? can help producers meet the standards. Queensland implemented the new national standards in July 2013, bringing all states and territories into line. The standards were developed in consultation with government, peak industry councils, major livestock processors and the public, under the Animal Welfare and Product Integrity Taskforce. The national standards apply to all producers of livestock transported throughout the entire process and cover land transport of livestock by road, rail and vehicles on board a ship. Livestock transport begins when animals are offloaded and, concludes when they have access to water at the end of their journey. It includes loading and unloading periods before departure, loading, journey to the destination and unloading and holding times. To reflect the new standards and help producers of livestock transport, MLA’s Is It Fit to Load? publication is a practical guide to help meet these standards.


Qld to benefit from new Farm Finance Package

Relief on the way from $230m fund for debt-burdened farm businesses

QUEENSLAND’s farm and rural businesses will be the first beneficiary of the Federal Government’s Farm Finance Package (FFP) to restructure existing loans currently locked in at a high interest rate, for a five-year period.

The package will provide $210 million for Queensland farmers and rural businesses over two years to support farmers struggling with debt. Producers are asked to apply for up to a maximum of $500,000 with a variable interest rate starting at 4.5%. The starting concessional interest rate for the loans will be 5.5%, to be reviewed on a six-monthly basis with potential for variation depending on prevailing economic conditions.

Reducing debt repayments in the short term will help alleviate the financial pressure on farmers and graziers so they can focus on running their businesses and supporting their families.

There is a potential saving of $11,000 based on the maximum fixture loan amount of $500,000 over the five years using a realistic commercial finance rate of 7.5%.

After negotiations with the Federal Government, and according to the Queensland Minister for Agriculture, Fisheries and Forestry, John McVeigh, the Farm Finance Package concessional loans scheme could now be finalised to roll out to producers, supporting those with debt-serving difficulties due to the recent drought, flood, drought and flood issues.

The package will assist 100 to 150 Producers with temporary debt financing difficulties, when long-term viability of their business can be demonstrated.

The loans package in Queensland will be managed and administered through the Rural Adjustment Authority, GRA.

Loans will be made available once administrative arrangements have been finalised by the Federal and state governments.

Applications open on August 16 and close on October 31, 2013.

Applicants should initial check the terms and conditions of the Farm Finance Package to determine their eligibility. An initial assessment is not recommended, contact a GRA representative for assistance.

Olivia Fraser, Queensland Team, (07) 307 5070, olivia.fraser@pcs.qld.gov.au.

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Controlling invasive grass species

An aggressive pasture invader

THE invasive giant-rat's tail grass (Sporobolus pyramidalis/tristis) and several other Sporobolus species have become a major problem for graziers in coastal regions of Queensland for many years. Unfortunately, Sporobolus species are now being reported at an increasing number of locations throughout northern Queensland, generally in association with cattle yards and/or hay-feeding areas.

Across the Clarke’s Towers region, giant-rat’s tail grass, Sporobolus pyramidalis, and giant Parmamatt grass (S. retifolia) have both been reported over the past 10 years. Further north, landholders have noticed these plants early on and have been able to get them positively identified and controlled before they had the chance to spread.

It is important to be on the lookout for these aggressive invaders of pastures. Once established, they can quickly outcompete desirable pasture species and will be difficult and expensive to control. All four Sporobolus species are robust, perennial, tussock grasses, with heights varying between the species. Correct identification of Invading Sporobolus species is the hard part and often requires expert identification from the Queensland Herbarium.

A serious Sporobolus infestation is capable of reducing carrying capacity by up to 50 percent. Further spread of Sporobolus-dominant pastures can take up to 12 months to finish. Using heavy grazing pressure to try and manage Sporobolus pasture will generally exacerbate the problem, not solve it. These strategies result in the removal of ground cover and leave bare areas for these invasive grasses to establish and take hold.

The key to a successful level of invasion is to stop the spread, and here is some helpful tips to keep these invasive grasses at bay:

1. Take a preventative rather than a management approach — ensure property quarantine measures are in place. Retain your pastures in healthy condition, so that it is better equipped to compete with invasive species.
2. Respond to adverse seasonal conditions and subsequent desirable pasture growth by maintaining a sustainable stocking rate for your property. Overgrazed pasture is more susceptible to invade.
3. Select a widespread area on your property and a quarantine pasture you can check for weed incursions.
4. Keep a list of all areas to be used as quarantine pasture. Keep these areas regularity to check for weed incursions.
5. Deal with it at the first opportunity to prevent weed spread. Be cautious when purchasing hay and feed — always buy from a reputable merchant.
6. Use weed-hygiene declarations when purchasing or moving stock, machinery or vehicles.
7. Don’t take pasture that contains any Sporobolus species. If you spot an unnatural plant on your property, get it identified early.

Lauren Gilray, weed and pest officer, Tropical Weeds Research Centre, Charles Darwin University, 0477 773 670, laurengilray@cdcu.edu.au

Weaner struggle

BEEF businesses under enormous pressure

Tough year for weaners

In a tough year like the one we are experiencing across most of North Queensland, pulling weaners off the cow down to 100 kilograms or less can be a strategy to save breeders and reduce breeder deaths. It is usually not affordable to fully feed large numbers of weaners until the lower break of seed, so unless there is plenty of dry feed and water, selling cattle moving to agistment is the best option.

This week, beef businesses in the region are currently under enormous seasonal, drought and cash-price pressure. At times like this, producers who take on complete hand-feeding of cattle and for weaners with little available paddock roughage and significant costs to over/feed and long-term debt, often crippling the business.

With at least two weaning rounds each year, a key part of any northern beef breeder is having good weaner management and feeding systems in place. For improved and cost-effective weaner performance, several good-sized paddocks with some improved pastures are essential to properly weaner refuse, reduce bullying and ensure weaners under 120kg get a chance to go ahead.

SELECTION SAVES MONEY AND IMPROVES FEEDING PROGRAMS

ACROSS North Queensland, beef producers use a wide range of tactics to feed their weaners during their first dry season. When feeding in troughs, weaners require about 25-30cm (10-12 inches) of trough space per head.

80kg-120kg — Weaner weights are a reasonable indication of the development of the rumen and its ability to process pastures and supplements such as hay. A small weaner (80kg) has a poorly developed rumen, in addition to clean water and good hay, it requires a mustard or pelleted mix with plenty of crude protein (20 percent minimum) and energy (17 MJ/kg).

The bigger weaner (120kg) still has a developed rumen, but will cope with a cheaper pellet containing less crude protein (15 percent) and less energy (11 MJ/kg) and can also handle feeds in the TM of 44.

160kg — Once weaners are over 150kg, they will do well in a fresh paddock with plenty of room. MRR will keep weaners going forward, or dry weaner tack with ushers will minimise weight losses during a long dry season. In a tough year like this, where water may limit effective weaner supplementation, adjustable creep feeders (height or weight) may be worth trying.

This will allow light weaners (under 130kg) to access a palatable, high-protein and high-energy feed. The aim is to push these light weaners along while ensuring larger weaners only access a cheaper dry lick. It is essential to keep drafting up to weight to minimise bullying and save on feeding costs as nutritional requirements drop and weaners can better process pastures.

Check the labels on your feed bags to ensure protein and energy levels are suitable. The table (left) includes weaner weights and crude protein and energy requirements of feeds suitable to feed weaners.

WEANER NUTRITION CRUCIAL TO THE BUSINESS

Establish sufficient feed in these paddocks to handle your annual weaner crop. Weaner performance in a good early paddock will always be better than tough feed in small, ‘holed-out’ paddocks.

Supplements such as copra meal, molasses, urea mixtures and weaner feeds do a job, but at a significant cost every year.

A long-term solution involves setting aside paddocks of a suitable size for the weaners numbers you expect each year and ensuring there is good water distribution.

Weaner paddocks are often too small and heavily grazed, as they are hardy to the hoof wear and are often used to hold sale cattle. Getting your stockyard gates right and wet season pastures ready every year to flavour the better paddock and build up a good body of feed. The table shows a rough stocking rate guide for native pastures for weaners on various northern and southern Queensland and types.

Future Beef, Mareeba, Joe Kelly 0438 378 412, barnesl@bigpond.net.au

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Researchers find climate-tolerant fodder

New legumes for North Queensland

PASTURES based on native or introduced tropical grasses are often the lifeblood resource for beef growing in North Queensland. Native and carefully selected introduced grasses are well adapted to high temperatures and seasonally dry environments encountered in beef braiding and growing systems. However, productivity is often limited by seasonal rainfall and limited supply of certain soil nutrients, particularly nitrogen.

Feed quality rapidly declines as grasses transit from leaf to stem production, usually linked to rainfall. The use of legumes in pastures has the capability to lift livestock production by providing a higher quality diet to grazing animals for extended periods of the year, particularly into the dry season. The benefit comes through providing nutrients principally proteins, which improve rumen function and increase the amount of digestible nutrients.

Unlike grasses, legumes can grow, a substantial atmosphere of nitrogen and convert this to a usable form for themselves and eventually grasses. This lifts overall pasture productivity. This capacity to trap and use atmospheric nitrogen, coupled with legumes produce useful nutrients for grazing animals makes legumes, like hay, attractive as a conservation fodder. Legume hay tends to be higher protein and comparable digestibility to grasses and have the advantage of not needing to use fertiliser nitrogen to grow them.

Chosen plants must produce suitable volumes of hay and minimal intake requirements of water, pesticides, fungicides and in most cases, regrow well after cutting. They must also be easy to take (include different legumes once dried) and contain no chemicals which may interfere with animal health or growth. Lucerne is probably the best known legume species for hay in Queensland. It is well suited to hay production over multiple years and produces a high quality baled product demanded by livestock owners. However, it is well-adapted to areas with neutral to alkaline soils in dry, summer environments and attempts to produce lucerne hay in North Queensland have been of limited success.

Some tropical legumes well adapted to some North Queensland environments (acidic soils and wet summers), show good hay crop potential. Cavalcade is a short-stemmed, adapted lucerne grown in recent years. There are also promising potential (long-lived) types. The advantage of these is that they do not need to be established each year. Alternatively, legumes more suited to areas with low rainfall and poor soils include Marenova Department of Agriculture, Fisheries and Forestry (DOAFF) and Townsville’s James Cook University (JCU) pasture researchers teamed up to compare hay production performance of promising forage pea (arachis) species and mostly released disease resistant styles (Glycine max) proved resistant to one of these species, lucerne.

Research was done at DQDFA’s research station at Walkamin, central to the seed and hay production area on the Atherton Tablelands. Small, replicated plots were grown for hay over two wet seasons using approximately eight-week production cycles. Irrigation was applied in the dry season.

While initially productive and producing high quality hay, the lucerne varieties succumbed to diseases in summer and all but died out by the end of the experiment. But the forage pea and stylo lines produced pest and disease-free summer dominant growth and were still growing vigorously by the end of the experiment.

The stylos and some forage peanuts produced more than 20 tonnes dry matter per hectare over 18 months, representing excellent yields. Importantly, the quality was high with high lignin contents (5.7-6.5%) and high crude protein (10-20%) protein digestibility (67-74%) and metabolizable energy (3.6-10.9 Megajoules) values. Overall, the stylos was comparable and forage peanut superior to lucerne. Recent research by Townsville CSIRO and Marenova DOAFF in eastern Queensland to assess the role of legumes in maize cropping demonstrated the capacity for some legumes to grow well into the dry season in similar environments to parts of northern Australia. The legumes produced high-quality feed and were suitable for heavy drilling. Key species included butterfly pea (Callithea cordata) and Cavalcade spp. and stylos. This further highlights opportunities for legume hay production in North Queensland.

Minister for Agriculture, Fisheries and Forestry John McVeigh announced 10 scholarships of $10,000 each would be available under the new program, starting in 2014.

Helping youth enter agri-industries

YOUNG people applying to a career in agriculture can apply for a $10,000 scholarship to be offered through two Queensland’s agricultural training colleges.

Minister for Agriculture, Fisheries and Forestry John McVeigh announced 10 scholarships of $10,000 each would be available under the new program, starting in 2014.

“Our agricultural industries are crying out for graduates,” Mr McVeigh said.

“The sector offers a whole range of career opportunities in cropping, livestock, horticulture, conservation and land management.”

“This generous scholarship scheme will particularly help students to secure a place in the residential training program at the Emerald Agriculture College and Longreach Pastoral College.”

“This $100,000 funding announcement from the Newman Government represents a solid investment in the future of Queensland agriculture.”

Executive director Brent Kirnane said applications were now open and would close on Monday, October 28, 2013.

“We want to help those students who are committed to the industry,” Mr Kirnane said.

“As part of their application, students will need to provide an explanation of their career plans. We’re looking for those young people who have the will and the passion to make a real contribution to Queensland agriculture.”

“Applications will be assessed by a selection panel made up of the two college directors, an education advisor from the college and an industry representative.”

“The panel will make recommendations to the college boards for their approval.”

“Successful applicants will be notified mid-November.”

To apply for the scholarship, visit www.agricolleges.edu.au (enrolments) or call 1300 808 579 or email enrolments@acc.edu.au

Minister for Agriculture, Fisheries and Forestry John McVeigh announced 10 scholarships of $10,000 each would be available under the new program, starting in 2014.

Scholarships worth $10,000

Helping youth enter agri-industries
How to grow green

Producers flock to hear message in tent

Carbon Farming Initiative explained

THE FNQ Field Days at Mareeba on May 29-30 was a huge event this year with the Carbon Farming Initiative (CFI) Tent among the highlights. Almost 400 producers sat in on presentations over the two days, hearing how to improve farm productivity through carbon farming and interacting with Natural Resource Management (NRM) staff at the adjacent tent. Northern Gulf Resource Management Group, Southern Gulf Catchments, Terrain NRM and Cook Shire Council hosted the CFI Tent covering carbon farming theory, CFI methodology and how land managers can be involved.

The program included keynote speakers Dr Christine Jones, internationally renowned soil ecologist, Ben Keogh, managing director of Australian Carbon Traders, and Alan Lauter, author of the book Carbon Gazing - The Missing Link. There were also a number of expert speakers from the Department of Agriculture, Fisheries and Forestry, local land managers and carbon businesses. All presentations were filmed for the NRMG website www.northergulf.com.au/carbonfarming.

As well as showing presentations from eminent scientists, the NRMG carbon farming workshop provided information about the nuts and bolts of the Federal Government’s Carbon Farming Initiative, relevant to North Queensland.

Why nature refuges are important

Landholder management

Nature refuges are landholder-managed conservation reserves, which occur on many grazing enterprises in northern Queensland. These areas are considered to have significant conservation values, and are established voluntarily by landholders, often through the Queensland Government’s Northern Gulf Refuges Program. Unlike other protected landscapes, they allow compatible and sustainable land use, and nature refuge agreements are tailored to suit the individual needs of the landholder.

The refuges are located in the Ein信息发布错误，故事不完整。
Forum for graziers talks management

Delegates offered expert insight

Grazier forum

MORE than 17 guest speakers addressed the North-West Graziers’ Forum in Clermont on May 20 and 21. Despite being a very busy time for the industry there was a good turn-out with 150 delegates attending on Monday and 70 on Tuesday.

Southern Gulf Catchments sustainable grazing project officer Larissa Lauder was happy with the turnout. “With everything that is going on for producers at the moment we’re very happy with the turnout and of course next year we hope to build on these numbers even more,” she said.

The topics for the forum were guided by Southern Gulf Catchments Pastoral Industry Advisory Group (PIAG) and focused on core business and management activities that could be directly influenced by managers.

Practical advice on breeder herd management was covered by Geoff Fileha, animal production coordinator for the Northern Beef Program, Meat and Livestock Australia (MLA).

“Management of the breeder herd is vital in breeding regions. If issues occur in the breeding cycle the most important thing is where the problems are occurring,” he said. Building on the herd management theme, Matthew Bokler from Nova’s International gave a hands-on presentation, dissecting an animal stomach to explain the path and digestion of a mouthful of grass from ingestion to soil.

Topics included welfare standards in transport of livestock, international market trends, results from calving tag trials in beef cattle and a very well received presentation from grazier Lindsay Allan, who explained what practices had been implemented on his properties and the outcomes of these.

PIAG chairman Charlie Hawkins said it was a successful event. “The feedback I got immediately was very positive—positive enough for us to discuss all PIAG that it may become an annual event,” he said.

Larissa Lauder, sustainable grazing project officer, Southern Gulf Catchments Ltd, (50) 6743 1888, projectofficer@southern.gcv.com.au

ABOVE: Matt Bokler fields questions from the crowd during his dissection of a digestive tract.

BELOW: Introducing new producers to PIAG, which advises Southern Gulf Catchments on industry priorities and guides strategy, projects and investment.
Gulf-Tableland team looks at latest research

Field day focus at Nardoo Station

ABOU 140 people from Queensland’s Gulf of Carpentaria and the Barkly Tableland attended a field day at Nardoo Station on July 24 to learn about the latest research and trial developments on caltrop (rubber bush).

Attendees included land managers, shire council representatives, Landcare groups and rural service providers.

Discussions highlighted that while caltrop was a major issue for beef producers, it also had a massive impact on the Gulf of Carpentaria coastline. This has become a key concern for traditional owners due to its impact on biodiversity and cultural practices.

At the field day, Charles Darwin University PhD candidate Enoch Menga presented research being done on the ecology of caltrop, focussing on the invasive potential of the weed and factors affecting distribution. Understanding the plant’s ecology such as seed longevity is essential to develop effective control measures.

Shane Campbell, Department of Agriculture, Fisheries and Forestry principal scientist at the Queensland Tropical Weeds Research Centre, outlined the methods and early results from their trials into various chemical controls. This included a visit to the trial site and a demonstration of some of the specific techniques now available.

Out in the field, attendees were shown the broad-scale chemical control work being undertaken by Peter and Ann Woollett of Nardoo Station in partnership with Dow AgroSciences. Aerial application of Granstar pellets has been trialled with varying application rates over large tracts of the property. Ken Springall from Dow AgroSciences explained: “The Granstar treatment demonstrates a commercial option which gives land managers some hope in controlling this expanding pest.”

Billy Jackson, from the Carpentaria Land Council Aboriginal Corporation, provided insight into the impacts of Caltrop on the coastline and small islands within the Southern Gulf of Carpentaria.

“We have witnessed sea turtles during the nesting periods being excluded by a wall of dense caltrop along the high-tide line,” Billy said.

“When we are out on the water during sea trials we have seen sea birds falling in the water and at times, the seas fall as high as snow.”

Ann Woollett of Nardoo Station said it was “an everyday productive day”. People out there have a problem that stretches from beaches to beef and it is quite an eye opener how much an impact it is having on northern Australia.

The day was described as a success by neutron Wilson from Barkly Landcare. “Rubber bush is one of the greatest threats to our landscape on the Barkly. For years we’ve been frustrated by the lack of reliable advice on how to tackle such a complex and seemingly uncontrollable weed.”

“Field day has given us hope that real progress is being made in understanding rubber bush and most encouragingly, that there are now tools under development that we can take back to Barkly pastoralists.”

A key outcome of the field day was the formation of a working group comprising growers, natural resource management and Landcare groups, traditional owner representatives and Biosecurity Queensland to guide a regional and whole-of-disciplinary approach to a common goal; controlling the impact of caltrop across the Gulf of Carpentaria and Barkly Tableland.

CONTACT: sustainable grazing project officer, Southern Gulf Cottonfarmers Limited, (07) 4743 1888, or email: projectsupport@barklylandcare.com.au

Management key to taking heat out of station fire risks

Lord family tackles burning issue

WHEN Queensland graziers, James and Marjorie Lord bought May Downs in 1988, the land was bare and hilly. James was concerned with water movement and runoff. The property needed improvements to make it economically and environmentally sustainable.

Fires were an issue and the rain was too infrequent for them to be managed as much as possible. But the pastem improvements meant fire management remained an issue.

“We’ve improved our grazing practices and now need to learn to manage the fuel we have created. Buffel and blue grass are now well established. We need to manage the fire risk so we don’t lose it,” James said.

A Property Development Plan (PDP) in place at May Downs since 1997 helped James develop optimum grazing with rotational grazing and spelling of country for even grazing. But fire exclusion proved impossible. May Downs is regularly threatened by wildfires at the worst time of year when the grasses have dried off, leaving it at a lower level of supply and rainfall. If May Downs is affected by fire it will take much longer to recover.

Management key to taking heat out of station fire risks

The need for better forecasting will be addressed in the Lord’s Fire Management Plan. The Fire Management Plan will address fire management issues across all northern pasture zones. – Source: www.firemanagement.com.au

LEFT: James and Marjorie Lord. Owner, May Downs, a 2,400-ha. irrigating property near Mount Isa.

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McKinlay Shire Beef Challenge

THE McKinlay Shire Beef Challenge cattle were fed for 105 days at the Mort and Co Grassdale Feedlot, outside Dalby. All 12 head were processed at the Kilcoy Pastoral Company’s abattoir on July 16, 2013.

The remaining animals were too light to meet McKinlay’s weight specifications and were processed through Teg Australia’s Dimmore plant on July 18. Beef challenge secretary Rachael French, from Eddington Station, made the trip south with Department of Agriculture, Fisheries and Forestry FutureBeef officers, Emma Hargre and Rebecca Gunther, to be on the kill floor at Dimmore.

Information was collected to enable the carcass feedback data to be analysed to provide producers with some detailed feedback on how their animals graded and performed.

Craig Price, manager of livestock procurement at Kilcoy Pastoral Company, gave the three visitors a comprehensive tour of the plant and was more than happy to answer any questions asked.

Early the following morning, Craig was again on hand to show Rachael, Emma and Rebecca through the chiller to inspect the challenge carcasses and observe the collection of the carcass data.

The trio then travelled west to Dalby for a guided tour of Mort and Co Grassdale Feedlot. Ben Maher, private client manager, showed the group through the 34,000-head facility, feed mill, automated induction shed and impressive staff offices and facilities.

The group were able to see the 17 lightest animals that were still awaiting dispatch at Dimmore. They were all in excellent condition and had certainly gained weight during their time at Grassdale.

Cameras, pen and paper were at the ready throughout the short trip, which Rachael described as “an absolutely fabulous experience for me and I was so glad I could com on behalf of the group”.

Many of the photos, videos and notes taken over the trip will be reported back to the McKinlay Shire Beef Challenge Group at the September 26-28-dried day.

All liveweight, carcass and financial data will be presented to the group at the dried day as well. A full summary of the 12 day results will be published in the December issue of the Northern muster.

Richmond Shire Beef Challenge: It was reported in the previous challenge update that the group had decided to weigh the March 21 weight day to continue feeding the dry lick recipes to group two (production lick) and group three (30 per cent) animals, and begin feeding group one (no lick) animals 30 per cent in their new water yard, once constructed. Due to group members’ commitments to their own beef businesses, the new water yard and trough were not able to be installed until June. Despite the dry season, the pasture quality remained sufficient for animal production, with positive weight gain across the mob of 0.55kg/head/day recorded at the May 16 weigh day (see table). This result was a pleasant surprise to all.

Keeping the limited forage supply in mind, the group agreed to weigh the animals in another month and make a decision about their futures.

At the June 14 weigh day, the mob averaged 485 kg and was losing weight at an average of 0.11 kg/head/day. The producers decided to send the animals to Smirthfield Feedlot near Proston where the steer will spend 100 days on feed, as they were not yet

Up close and personal

Mort & Co was proud to host McKinlay Shire Beef Challenge cattle for 100 days at its Grassdale Feedlot near Dalby.

The twenty-four vendors involved were able to experience first hand the benefits of being a Mort & Co Private Client, receiving comprehensive feed and slaughter feedback.

This information can assist them to assess their cattle’s performance, benchmark for continuous improvement and plan ahead with greater confidence.

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For more info visit www.futurebeef.com.au
Quality of the cuts

Seaming cuts give more consistent quality

Seaming a whole rump

BUYING your own meat at the local butchers is becoming more expensive and consumers are often looking for ways to get better value. Quite often, further value from purchasing whole primals (for example rump, cube roll, blade) can be captured by seaming out the muscles and serving them up individually, allowing a more consistent quality to the product being served.

This is due to the variation in eating quality between muscles (sub-primals) within a primal. Through the Meat Standards Australia (MSA) program and eating quality principles it has been determined that there are variable eating qualities of individual muscles within a primal.

In addition to a more consistent eating quality, many benefits can be gained from muscle seaming, including:

- Muscles or sub-primals can be sold at their highest eating quality
- Better value for customers
- More consistent portion size control
- More consistent eating quality

The rump is a good example of a primal with variable eating qualities. Eating quality variation can be reduced by seaming the rump into sub-primals as seen in the diagram.

Seaming a whole rump down into sub-primals (Illustration above) allows for a more consistent eating quality experience.

The table lists the recommended cooking methods of the sub-primals in order of what will provide the highest eating quality to the lowest eating quality experience. MSA 5 star is the best eating quality typically seen in restaurants. This was determined by using the MSA grading system to provide an eating quality score for each muscle (sub-prim) using different cooking methods.

Eating quality scores are out of 100 and reflect the eating experience that will be provided by that particular cut of meat using a particular cooking method. The score then enables the meat to be placed into a grading system (1-5 — upgrade: 4-6 — MSA 5 star: 65-75 — MSA 4 star: 75-100 — MSA 3 star).

In addition to a more consistent eating quality, many benefits can be gained from muscle seaming.

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Students test skills

Laying strong foundations for industry

MORE THAN 120 students recently attended the 24th Australian Intercollegiate Meat Judging (ICMJ) competition in Wagga Wagga, representing nine Australian universities and five international teams from the United States, Japan, South Korea, Indonesia and Pakistan.

They were competing for the inaugural Ray McDonald Shield, sponsored by Meat & Livestock Australia, which this year will make its way to Korea. The objective of ICMJ is to lay strong foundations for agricultural industries by educating and inspiring enthusiastic graduates into a range of diverse careers in the meat and livestock sector.

In the competition, the students judge beef, lamb and pork carcasses, beef and pork primal cuts, and identify wholesale beef primals, and beef, lamb and pork retail cuts. The judging of carcasses is based on trimmings, marbling quality and muscle size, which affect the retail yield of the carcass, which drives profitability, while quality is assessed by traits such as marbling, which is important for improving eating quality. The annual five-day event is now far more than just a competition, said ICMJ chairman and Kerr Wee Ltd Feeders general manager Brad Robinson. “We use this week to further the education of university graduates about the end product of a supply chain, as many can get through a whole degree without seeing inside a beef, lamb or pork processing plant.”

Dictionary-based Future Beef extension officer Emma Hegarty is one of the committee members who organised the annual event, taking the top 10 students from the competition to a five-day Meat Standards Australia training course in Brisbane, where they will receive a comprehensive introduction to the Australian meat-processing sector. During this program, Emma will select five students to coach as the Australian National Meat Judging Team, to be part of a tour of the US in January 2014 where they will compete in three judging contests.

Coles production general manager Allister Watson told delegates at the Coles Presentation Awards dinner that it is great to see so much enthusiasm and support for an integral part of the industry. “Graduates of this program are vital to the industry, helping to deliver the high-quality meat that we put on our shelves for our customers,” he said.

Right: Students judging beef butch class, primarily for yield, at Teyes Australia, Wagga Wagga, processing plant.

Delegates of the five-day event heard from many inspiring and challenging presenters, including Troy Setter, the chief operating officer of the Australian Agricultural Company. He said: “The people who can articulate the economic values of decisions they are making can relate production with the economics plus safety and have a holistic view of the whole of the supply chain and are very valuable for our industry.”

Korean State University took out the 2013 ICMJ competition by one point over the home team from Charles Sturt University in Wagga Wagga, out of a possible 5000 points. In the largest and closest competition in the history of the event, Adelaide University came a very close third, only 11 points behind CSU Wagga Wagga. Adelaide University college senior lecturer in meat science, Dr Tom Carr, said the university should be proud of the result.

The 2013 ICMJ competition involved: Murdoch University, New Zealand, Toorak Agricultural College, University of Melbourne, University of Adelaide, Charles Sturt University in Wagga Wagga, Charles Sturt University in Orange, University of Sydney, University of Queensland, Kansas State University (US), Japan team, South Korean team, Pakistani team and Indonesian industry officials.


More cattle producers will be able to cash in on MSA premiums following recent changes to the grading system’s transport protocols.

More producers to cash in on MSA changes

WITH MORE THAN 32,000 producers and 77 brands now signed up to Meat Standards Australia (MSA), the program continues to evolve with new research findings and changing customer requirements.

One recent development is a change to MSA transport protocols. More cattle producers will be able to cash in on MSA premiums following recent changes to the grading system transport protocols.

Following a MLA funded study into the impacts of transport on eating quality, the MSA Pathways Committee has recommended the removal of the required day before transport slaughter protocols be extended to 26 hours (with a minimum of 24 hours in transport) of the trial period of 12 months.

MLA program manager, eating quality R&D, Dr Alex Bald said the updated protocol for MLA-eligible stock would have a significant impact on northern cattle producers, as well as giving southern producers more choice of protocols.

“Increased opportunity now exists for producers to target the MSA premiums,” he said.

Dr Bald said the outcomes showed management at home had more impact on an animal’s ability to grade MSA and achieve a premium than the distance travelled, time in transit or opportunities to rest feed and water. “A clear outcome of the transport trial was the importance of pre-trip stock management in being able to realise those markets through MSA compliance.”

The study involved three Central Queensland properties that transported 343 steers (18 to 36 months, 496kg to 750kg), off pasture. The steers were divided into two lots and sent on four different roads (including a U-shaped route) and the trial lasted 24 hours.

Researchers found that extending the transport time from 12 to 24 hours had no detrimental effect on eating quality and, similarly, there was no noticeable change in the dressing out percentage from the 12-hour rest break.

Also said all animals were tested for rib fat, ultimate pH and Hedonic Evaluation of the carcasses meeting MSA specifications. Of those that failed, about 30pc were excluded for high meat colour (grater than three) and the remaining 10pc for pH and rib fat non-compliance. “This outcome was of concern due to its commercial ramifications; however, the good news is the experiment showed best practice stock management and pre-trip preparation can have a huge impact on carcass performance,” he said.


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BEEF CRC fertility project covers 3500 bulls

ABOVE: A MLA-funded Beef CRC project gives producers a cost-effective solution to make genetic and economic gains across their entire herd.

The project evaluated bulls from birth to 24 months of age for fertility, to assess heritability and correlation to female reproduction traits.

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The project evaluated bulls from birth to 24 months of age for fertility, to assess heritability and correlation to female reproduction traits.
Fertility drives profit

Improving fertility to increase financial gains

**SUMMARY**

Recent research has shown that female reproduction traits in tropical genetics are heritable and that genetic progress can be made through selection of sires.

- Use balance of traits in selection (fertility, growth, and conformation).
- Selections for these traits will not compromise tropical adaptability.
- Female fertility can be improved through genetics from the sire selected.

- Use bulls with above 70% normal sperm at 12 months for genetic improvement in the progeny and for those bulls that are either single sire mated or used for semen collection for processing.
- Sire total EBV (larger, more positive) and days to calving EBV (some breeders shorter, more negative) are available for identifying superior genetics for fertility.

- Phenotypically, bulls should have above average sexual size at 12 months and again at pre-mating. BEBSE for the weight of bull within breed.
- Regardless of whether you have sourced bulls out of the paddock or the sale ring, the need for some objectivity in selection remains the same.
- Remember, the bull put in the herd today drives the direction of that herd and your profitability well into the future (potentially 14-15 years).

- Economic traits such as growth and conformation will be the best in the progeny.

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Tick fever threat

Risk increases with bigger cattle movements

DROUGHT over much of Queensland has resulted in large numbers of cattle moving from tick-free areas into tick-infested areas, due to little or no feed.

In addition to the many routine logistical issues, this has also provided some challenges in the control of tick fever. Currently, the BCG vaccine offers the only predictable protection against the disease.

Susceptible cattle will be at risk of ‘field infection’ if exposed to cattle ticks before solid immunity has developed.

The lag period between vaccination and development of immunity to tick fever organisms is eight weeks.

If there are routine annual movements into known tick areas then vaccination can be planned to be effective.

However, this is sometimes not possible when feed supply is short. Cattle are often taken in the circumstances as calved cattle before the property of origin or on arrival at the destination.

In these circumstances, the main risk comes from babesiosis, which is transmitted by the larval ticks picked up in the paddock.

Without immunity to babesiosis, it can develop within three to four weeks of vaccination. These cattle should be monitored for at least three to four weeks after arrival at the new property for clinical signs of tick fever, such as fever, anaemia, red urine or general signs of ill health.

The quicker the diagnosis and treatment of tick fever, the better the chances of recovery.

The spread of anaplasmosis is mainly by the male tick moving from infected carrier animals, so if it is not possible to vaccinate at least eight weeks prior to movement the risk of anaplasmosis may be reduced by keeping. Introduced cattle should be isolated from other mobs, at least while immunity is developing.

The risk of tick fever also depends on the age and breed of cattle which should be taken into consideration when deciding the movement and tick fever control strategies for the mob.

Young cattle (calves up to nine or 10 months of age) are quite resistant to both babesiosis and anaplasmosis. Brahman (Bos indicus) are quite resistant to both babesiosis and anaplasmosis. Bos Taurus types are the most susceptible to both babesiosis - Bos Taurus crosses sit in the middle.

Regardless, all cattle coming to the tick areas should be given a tick fever vaccination. Ideally eight weeks before movement. If this is not possible, it is still better to vaccinate just three to four weeks ahead of movement than not vaccinate at all.

These mobs should then be isolated on arrival for another month for the risk of infection to be substantially reduced.

Seek advice on tick control in these circumstances. Ticks can develop substantial burdens when first exposed to cattle tick.
Bull selection season looms

Moving herds ahead with genetic improvement

WITH spring bull sales fast approaching, now is the time for producers to assess their production goals, evaluate their herd and identify which genetics will move their business forward.

Christian Duff from the Tropical and Southern Beef Technology Services said bulls bought this year would have a long-term influence on a cattle producer’s bottom line.

“If you approach bull buying as an opportunity to take the herd forward through genetic improvement, you will put the business in a stronger position to combat the cost-price squeeze and gain productivity and profitability,” Christian said.

Whether you breed Brahman in the Northern Territory for the export steer market, or Herefords in Victoria for domestic trade, industry resources such as Breedplan Estimated Breeding Values (EBVs) and selection indexes provide you with powerful information.

Christian compared the genetic variation across money-making traits between 2011-drop bulls in the top and bottom 10 percent of their breed (based on EBV and index percentile bands).

“Bulls from the top 10pc of Herefords for weight traits will have progeny that could weigh significantly more at 200, 400 and 600 days (7.5kg, 12kg and 18kg heavier on average), compared to the progeny of bulls at the bottom 10pc of the breed,” he said.

“The top selection indexing bulls could also return more in different production systems, potentially earning an additional $18.50 per cow joined for supermarkert production systems, $20 for grassfed steer, $25.50 for grainfed steer and $22 for EU system.”

“Progeny from Brahman bulls in the top 10pc of breed for the weight traits could, on average, be 8kg, 11kg and 20.5kg heavier at 200, 400 and 600 days respectively. The top 10pc for fertility traits could potentially produce daughters that have higher conception rates and calve earlier, and the top indexing bulls will return on average $15 more per cow joined for Japan ox production systems and $12.50 more for live export systems.”

SELECTING THE RIGHT BULL FOR THE JOB

Christian suggested evaluating all the genetic information available from cattle breed societies and individual seedstock producers (pedigrees, EBVs and selection indexes are available online or on-the-jo with the INSolutions app), incorporating your cattle-assessment skills and aligning with a progressive bull breeder.

“If you buy a tractor, you expect the machinery dealer to be knowledgeable about the vehicle’s features. Similarly, your seedstock producer should be able to explain the information they provide on their bulls, so you can identify bulls with high genetic merit to suit your production system,” he said.

Market information and on-farm production measurements can also refine your genetic shopping list.

“Use processor feedback to identify the traits to invest in, such as weight for age or fat cover, so your cattle can better meet market specifications,” Christian said.

“Regularly and objectively measure your on-farm production points such as weaning percentages and percentage of unassisted calvings. If an area is identified that can be improved to lift profitability, there is a good chance that genetics through selecting the right bulls can help.”

REGIONAL FOCUS

Commercial producers can select from a wide menu of traits when buying bulls: weight, calving ease, docility, fertility, and the list goes on.

The combination of traits that will deliver optimum results varies across production systems, with producers in different regions emphasising specific traits.

You will put the business in a stronger position to combat the cost-price squeeze and gain productivity and profitability.

“Female reproduction is an important profit driver across all regions; however, it is particularly critical in the northern production systems,” Christian said.

“Northern producers should identify bulls that will genetically produce more fertile daughters through shorter days to calving EBVs.”

Southern producers tend to put more weighting on calving ease, both direct and in daughters, because heifers across this region are usually expected to calve down as two-year-olds (up to a year younger than in the north).

Temperament is high on genetic shopping lists for all producers as, when combined with the right management, it benefits worker safety, animal welfare, feedlot performance and meat quality.

“Breeders favouring in southern Australia, such as Limousins and Angus, are publishing EBVs for docility, which is a heritable genetic trait,” Christian said. “In the north, bulls tend to use the objective measurement of docility, being flight time.”

Different markets also affect regional selections.

Some southern production systems might put a higher weighting on the marbling trait (intramuscular fat EBV) in bull selection, whereas it may be a trait of lower importance for tropical breeds.

Looking ahead, Christian said taking advantage of genetic variation for feed efficiency in the grazing herd was still the ‘holy grail’ for most production systems, as feed intake in the cow herd was a significant enterprise cost.

Breedplan produces trial net feed intake EBVs for several breeds that describe genetic variation in feed efficiency in young cattle and in steers in the feedlot situation. Ongoing research for Breedplan is aiming to produce EBVs that specifically target genetic variation in cow-fed efficiency.

GOING SHOPPING?

A checklist for bull buyers:

● Select the right breed for your enterprise and identify bull breeders whose management systems and objectives align with yours.

● Choose the selection indexes within your breed of choice that is most relevant to your production system – but still consider EBV traits you want to improve in your herd.

● Use this information to identify and rank bulls. Your budget and bidding competition will influence your purchases, so producing a relatively broad list of bulls is essential.

● While doing your homework, take into account additional information such as pedigrees (for genetic diversity), genetic condition (select status and horn/poll status).

● In conjunction with this information, when at the sale, make visual assessments of your target bulls for general structure and temperament.

● Home in on other objective tools such as bull breeding soundness evaluation (BBSE) results. This may be available before the sale.

● Bought some bulls? Ensure your investments remain functional. Consider conducting a BBSE annually to ensure your sires can perform for the upcoming joining season and pass on their high-merit genetics.

● Reassess your bull team each year and identify sires that need to be replaced. Keeping a bull for longer reduces the cost per calf, but you might miss out on genetic progress from younger bulls of higher genetic merit.

Download MLA’s Tips and Tools: Buying better bulls at www.mla.com.au/bulls

Christian Duff, (02) 6773 2472, christian.duff@meat.gov.au, www.icks.ueni.edu.au

LEFT: Female reproduction is an important profit driver across all regions.

ABOVE: Producers line up to examine semen motility under a microscope as part of a BBSE on a herd bull.

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<thead>
<tr>
<th>Nutritional Analysis</th>
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<tr>
<td>Protein</td>
<td>38.2%</td>
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<td>Crude Fat (Recovery)</td>
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<td>1.2%</td>
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<tr>
<td>Sodium</td>
<td>0.3%</td>
</tr>
<tr>
<td>Acids</td>
<td>1.4%</td>
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</tbody>
</table>

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Fixed-time AI boosts herd fertility

ARTIFICIAL insemination has huge potential for improving the fertility and profitability of Northern Australian beef herds, delivering better results at a reasonable price.

Reputed beef production veterinarian Ian Brathwaite said cattle fertility rates across the north were declining due to a number of factors.

"One reason is that poor genetic selection has caused inherent infertility in these herds," Dr Brathwaite said.

"For cash-flow reasons some producers are holding on to sub-fertile cows and heifers that are late to calve or fail to re-breed. Later calving cows raise tighter weight-warriors and increase the spread of genetically sub-fertile progeny."

He said this contributed to a downward spiral in fertility within the herd and to declining profitability.

"A second reason for a drop in herd fertility is the use of late-maturing breeds over later maturing, Brahman females," he said.

Dr Brathwaite said the solution was to identify the top performing females within the herd and mate them to elite bulls.

Rather than selecting bulls purely on phenotype, sires need to have balanced estimated breeding values (EBVs) for growth, reproduction and structural soundness.

"These sires should be selected from proven cows with a history of high fertility and by that I mean 'low days to calving' EBVs and 'fertility,' " he said.

Breeds should also undergo a breeding soundness examination to check structural soundness and evaluate semen, including a semen morphology examination.

"CNC research has shown that bulls with greater than 70 percent normal semen morphology breed fertile daughters with a shorter lactational amenorrhea period, which is the period from calving to commencement of cycling," Dr Brathwaite said.

Advances in AI: what, why

Calving traits link to genetic selection

Get first-calver heifers cycling earlier: "If we can get first-calve heifers cycling a little earlier they have more chance of getting back in call in the next 12 months and this is exciting in terms of turning herd fertility around."

He said fixed-time artificial insemination (FTAI) was proving to be a viable solution for increasing the spread of elite male and female genetics and improving herd fertility.

The Bayer BiSynch FTAI program includes the insertion of a flexible progesterone-releasing device, Cue-Mate, which synchronises oestrus and allows heifers to be inseminated without oestrus detection.

Recent Bayer studies showed that after ovulation synchronisation, FTAI and exposure to bulls, up to 78 percent of Bos Indicus heifers and 65 percent of Bos Taurus heifers could conceive with the first two oestrous cycles of the mating season.

This resulted in higher calves at weaning and heifers calving earlier in the season, allowing more time to re-synchronize and improving the ability of females to achieve an inter-calving interval of 12 months. When deciding which AI program to use, producers needed to weigh up the trade-off between labour and drug synchronisation costs, Dr Brathwaite said.

While the drug costs will be slightly higher with fixed-time AI, less labour is needed. You are able to inseminate 100 percent of the heifers in the program and achieve good results at a fairly reasonable cost," he said.

Lower doses of progesterone increase synchronisation success: Cue-Mate is the only progesterone-releasing device with detachable silicone pods. This means lower progesterone doses can be delivered to Brahman heifers, enhancing the success of the synchronisation.

The Cue-Mate devices are easy to use and very cost-effective because the detachable silicone allows for reuse up to three times in heifer AI programs and replacement pods are readily available.

Bayer joins with breeding centre

Maximising genetic potential

BAYER has teamed up with Darling Downs-based artificial breeding centre Genomix to maximise the performance of Australia's beef herds.

Genomix owners, Bruce and Jenny Arkins, use and promote Bayer products because of exceptional results from Bayer fertility regulators in clients’ FTAI programs. The Bayer BiSynch FTAI program includes inserting a flexible progesterone-releasing device Cue-Mate, which synchronises oestrus and allows heifers to be inseminated without oestrus detection.

Studies by Bayer have shown that by employing ovulation synchronisation, FTAI and exposure to bulls, up to 78 percent of Bos Indicus heifers and 65 percent of Bos Taurus heifers were able to conceive within the first two oestrous cycles of the mating season (more in main story left)."