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NORTHERN MUSTER

Information for rural business in North Queensland

Beef Australia 2018 count down is on

Grazing BMP at Beef Australia 2018 and beyond

Making grazing decisions count

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Welcome to Northern muster 46

Welcome to the autumn edition of the Northern muster!

Yet another late start to the wet season has been experienced in many regions across Queensland. The recent low-pressure system resulted in some relief for those fortunate enough to receive decent falls across the north and north west. As we move through autumn, the potential to grow a decent body of feed is rapidly declining. We encourage you to consider how much feed is available and carefully match

stock numbers to that feed supply to avoid any long-term damage of pastures.

Despite good rain falling in some areas, there are still many producers experiencing the extended dry conditions. Support is still available under the Queensland Government Drought Relief Assistance Scheme (DRAS). For more information and to discuss your individual drought position, contact your local drought coordinator.

As we move into the year we look ahead to an exciting and jam-packed events calendar, headlined by the one and only Beef Australia 2018 from 6 to 12 May. To stay up-to-date with events happening near you, check out the FutureBeef events calendar at futurebeef.com.au/events.

We have welcomed back extension officers Emma Black and Rebecca Gunther from maternity leave and farewelled Megan Willis, off on maternity leave for another twelve months with her second child. We said goodbye to Lauren O'Connor from our Mackay office and Alice Bambling has relocated from Charters Towers to the Emerald office. For a full list of contact details for all available extension officers in your area visit futurebeef.com.au/contact-us.

This edition has a great selection of articles to keep you informed about a variety of topics including woodland thickening, calf mortality, sown pastures and the simple steps to complete a forage budget.

We hope you enjoy issue 46 of the Northern muster. Please contact the editorial team with any inquiries or feedback. To register to receive the online version of the Northern muster, subscribe on the FutureBeef website (futurebeef.com.au/resources/newsletters) or email northernmuster@daf.qld.gov.au.

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Alice Bambling, Megan Willis, Mellissa Holzwart and Rebecca Gunther

Beef businesses are adapting and changing

Producers running extensive beef businesses face a complex mix of seasonal, grazing management, productivity, family and financial challenges. They maintain a positive outlook for their businesses despite poor business returns, low equity and seasonal pressures dominating decision-making.

The \$avannaPlan-BeefSense program, supported by the Northern Gulf Resource Management Group and the Department of Agriculture and Fisheries, continues to provide Gulf family beef businesses the opportunity to closely examine their stocking rates, herd productivity, operational costs and profitability.

The confidential 'business health checks' involve collecting and analysing up to nine years (2009–17) of business position (equity), profit, and financial and herd performance indicators. The program is now evaluating how producers have benefited from the program over the last five years, including identifying changes in herd, grazing, financial and people management.

To date, preliminary findings show producers are remaining positive, demonstrating a will

to change, and generally looking for ways to improve their businesses.

Other preliminary findings include:

Business position

Even with buoyant cattle prices, there has been no significant debt reduction across the board. Most producers are playing catch up with any surplus being absorbed into updating plant and equipment, improving pasture and the home, and repairing infrastructure (fencing and waters).

Networking

Regardless of stage-of-life, there are real benefits in looking outside of the business for information and peer networks. Those producers who network widely are often reinvigorated and motivated to make changes within the business.

Production

Generally, there is good awareness of herd productivity and management issues. However, making changes is often constrained by lack of labour, age and stage-of-life of business owners, confidence in the outcome, and perceived instability in the market.

Land management

Some producers have made significant changes in relation to stocking-rate management and the implementation of a routine wet-season spelling system. Sending cattle on agistment to address overstocking issues on the home properties is one example.

While many producers are looking to make changes in grazing management they are surprised at how long it takes to see an improvement in land condition. Unless there is a run of good seasons as they pursue lighter stocking rates and wet-season spelling, change in condition and productivity is often too slow and motivation wanes. Generally, overgrazing is more pronounced where there is significant debt and financial pressure.

There is good awareness, and some control programs in place, in relation to the obvious land-condition issues such as weeds and erosion. However, there is less concern about the subtler impacts of set stocking and sustained heavy grazing on pasture composition and productivity.

Financial management and record keeping

Many producers recognise the importance of planning as well as identifying, analysing and applying strategies. Generally, record-keeping standards are improving as the benefits of

having this data become apparent. But while many producers lack the confidence to analyse financial data, they realise how important it is to improve record keeping and business management.

Debt pressures, succession strategies, inheritance and the need for productivity improvements have driven significant changes in the asset base of some businesses. Owning and operating additional properties in another district presents challenges in terms of travel and risks associated with taking on a new production system.

In summary, the \$avannaPlan-BeefSense team continues to deliver whole-of-business services to established beef producers as well as running NextGen industry mentoring programs. Two BeefSense NextGen participants will feature their respective approaches to beef business management at the Beef Australia 2018 'Grazing business resilience' seminar in Rockhampton in May.

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Northern Grazing Demonstration update

There is overwhelming evidence that breeding cattle performance is mostly driven by their body condition, which is in turn driven by nutrition; and nutrition in the rangelands is driven by land and pasture condition.

The ongoing twenty-year Wambiana Grazing Trial, near Charters Towers, has clearly demonstrated that managing the pasture feed-base is the fundamental principal to get right for sustainable beef production. The recent CashCow project also concluded that inadequate nutrition was the principal factor for poor breeder performance across northern Australia.

The new Northern Grazing Demonstration project, managed by Department of Agriculture and Fisheries (DAF), will blend the principles for good breeding and grazing management, as recommended from the recent research findings from the Wambiana and CashCow projects, to strive for high productivity while maintaining or improving land condition.

The broad principles are:

1. Manage the feed-base—avoid restricting feed intake and leave enough ground cover for a quick start to the next season.
2. Manage lactation—wean calves to conserve cow body condition.
3. Manage health and stress—provide an environment where there is adequate shelter and minimise disease risk.
4. Manage breeding—appropriate timing of calving, bull percentage and sire selection.

In partnership with four commercial beef properties in the Upper Herbert, Burdekin and Fitzroy catchments, a range of best practice grazing and breeder management will be discussed and demonstrated. The collaborating properties will offer a mob or paddock that will be monitored as part of the demonstration. These sites will be focal points for beef producers to observe and discuss best practice



Ian MacGibbon of Ametdale foresees the Northern Grazing Demonstration making a worthwhile contribution to industry.

grazing and animal management systems to improve their businesses. Animal, pasture and land condition outcomes will be demonstrated through several field and information days during the three-year project.

Upper Burdekin site(s)

The Matthews family has volunteered their properties, Christmas Creek and Blue Range, as demonstration site hosts for the Upper Burdekin region. The entire family has been a long-time advocate of evidence-based solutions based on good research. Duncan and Jillian Matthews have also committed their involvement in the Northern Beef Genomics project. Together these projects complement each other; both promoting the relationships between good land management, optimal animal productivity, environmental and business outcomes.

Managing a mix of typical Upper Burdekin land types of mostly box, ironbark and scattered alluvial country, the Matthews family encounter the similar challenges that many producers face—variable seasons, determining the best stocking rates, managing an increased density of Currant Bush (*Carissa ovata*), improving cattle performance (particularly in the younger female groups)—all while trying to keep the business profitable. It is these common industry issues that will make this an ideal demonstration site for the project.

A second Burdekin region demonstration site will be established later in 2018 in the Bowen region.



Above: Duncan and Jillian Matthews working with project staff to set up baseline measures on both Christmas Creek and Blue Range stations.



Left: Brett Blennerhassett at one of the sites on Goshen.

Fitzroy site

Ian and Penny MacGibbon have volunteered their property, Ametdale, as a demonstration site host for the Fitzroy region.

Ametdale is a breeder block producing growers and fatteners for the MacGibbon family's brigalow block. Pasture management and nutrition are key business priorities for Ametdale which consists of predominantly native pastures on moderately shallow soils. Ian and Penny manage for good ground cover to ensure that most rainfall events result in an effective growth response in the perennial grasses. Paddocks are subdivided to around 400 hectares to allow four paddock rotations, which has been valuable during the establishment of improved pasture legume 'seca stylo' and to promote the dominance of native perennials.

The cattle are mostly high-content Brahman, selected by Ian and Penny for low-cost management through the challenging environmental conditions. Molasses and urea supplementation are important for using the dry grass after winter and strategic burning is used from November to December if the season allows.

Ian and Penny are passionate about life-time learning and improving and have been involved with many industry groups to achieve their business successes to date.

Upper Herbert site

Brett and Theresa Blennerhassett of Goshen Station, Mt Garnet, are participating in both the Northern Grazing Demonstration and the Northern Beef Genomics project. Goshen is a 19 100 hectare property situated near the Kirrama Range in the Upper Herbert River catchment in north Queensland.

The country at Goshen is typical for the region, consisting of box, bloodwood and ironbark woodlands with several areas of treeless black soil plains. The property consists of mostly native grasses with black spear and kangaroo grass being the main species.

The Blennerhassett family breed, grow and supply store cattle for fattening into the family meat wholesale business, Bingil Bay Beef.

In consultation with DAF project staff, the Blennerhassett family has identified a 3500 hectare paddock for the demonstration. The focus of the demonstration site at Goshen will be on common industry issues including heifer performance and grazing land management.

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Adaptive management in action at the Wambiana Grazing Trial



At the end of 2017 steers were still in very good condition but there was very little pasture after four below average rainfall years.

Even with recent rains, much of Queensland is in the grip of long-term drought. Yet as recently as 2011, we had one of the wettest seasons in 50 years. How do we manage this huge variation between seasons, look after our country and stay profitable at the same time? The Wambiana Grazing Trial near Charters Towers was established in 1998 to answer this difficult question.

The trial compares the performance of different stocking strategies in managing for rainfall variability. Strategies vary from fixed heavy stocking (4 ha/adult equivalent (AE)) to moderate stocking (8 ha/AE) and rotational wet season spelling (8 ha/AE). There are also two flexible strategies, one with and one without wet-season spelling. Stocking rates are adjusted through the year mainly according to forage supply and, to a lesser extent, climate forecasts.

The trial has experienced a wide range of seasons over its 20 years and thrown up lots of management challenges—this year was no exception. After a few very dry years, live weight gains in the 2016–17 wet season were exceptional (166 kg per animal) and well above the trial's long-term average (115 kg per animal per year). Although the rainfall (554 mm) was below the long-term average (630 mm), it was

very well distributed. This provided a steady supply of green growth but with country still recovering from drought, did not grow a big bulk of feed for the coming dry season.

In May, at the end of the 2017 wet season, the pasture yields were very low, prompting a proactive decision to further reduce numbers in the flexible stocking treatments, which were already lightly stocked. This early decision allowed good weight gains in these treatments from June to December (Table 1) despite dry conditions and low pasture yields.

With conditions deteriorating in early December 2017, poor-condition animals were removed from the heavy stocking rate, which averted the need for drought feeding later in the dry season. Going into 2018, pasture yields were even lower—heavy stocking-rate paddocks were extremely short and low on ground cover. Animals were very lean.

Despite this, the flexible stocking strategies were still in reasonable shape as stocking rates were already low after progressively being reduced as feed supply declined over the last dry years. This demonstrates the value of reducing stocking rates early when drought approaches.

However, in the rotational spelling and moderate stocking paddocks, yields were extremely low and with ongoing drought, there was a real danger of permanent pasture damage. With some parts of the rotational spell paddocks already locked up for spelling, there was an additional risk of overgrazing the unspelled sections.

The trial's producer advisory committee was asked 'what would a typical producer with a moderately stocked property do?' The consensus was that faced with a similar situation, managers of moderately stocked country would reduce stocking rates to prevent country being degraded, rather than keeping animals until it rained. Consequently, for the first time in 20 years, the rotational and moderate treatments were completely destocked in early January and will remain so until the end of the wet season.

Trial updates will feature in future editions of Northern muster.

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Table 1: Stocking rate, average live weight gain (LWG) per animal (LWG/animal) and LWG per hectare (LWG/ha) in different treatments from July to December 2017.

Treatment	Stocking rate (ha/AE)	LWG/animal (kg) (Jun–Dec)	LWG/ha (kg/ha) (Jun–Dec)
Flexible stocking	20.6	19.5	1.0
Flexible stocking + spelling	18.0	25.0	1.7
'Heavy' stocking	5.0	-30.0	-5.9
Moderate stocking	7.9	2.5	0.3
Rotational spelling	8.0	18.0	2.2

Options to increase productivity

There are dozens of options to increase productivity on most beef properties. The key is to select those changes that maximise both financial viability and environmental sustainability.

This is something that is currently being considered on Lorraine Station, a large Gulf property half way between Cloncurry and Burketown. With over 100 years of ownership by Lorraine Pastoral Company Pty Ltd the property has kept long-term cattle records that can be used to track changes in long-term carrying capacity and production.

Significant property development has occurred over the years at Lorraine and include many extra waters, fences, yards, and roads, as well as woodland management, irrigated silage, hay production, and the establishment of a feedlot. It is reasonable to expect that these improvements would have resulted in an increase in the overall carrying capacity. However, over the past few years the number of adult equivalents (AE) carried has been maintained. To obtain maximum production, stocking rates are determined by matching available and sustainable feed supply to cattle numbers.

There are several things that have changed slowly and are only recently becoming apparent to even long-term residents on Lorraine. These changes include:

- encroachment of native woody plants such as gidgee, coolabah, mimosa, currant bush, white wood and gutta percha onto flooded areas of black soil downs country and the alluvial red soils on the frontage country
- gradual increase of capped claypans developing on some soil types
- spread of buffel grass along frontage country.

The first two changes have reduced productive capability of the property, while the buffel grass has increased productivity.

What are the options to halt the expansion of woody encroachment and claypan areas to further lift production on Lorraine?

Firstly, with the help of Department of Agriculture and Fisheries (DAF) staff, an attempt is being made to determine the changes in the extent of encroachment and area of claypan country. Comparing the earliest available aerial photos from 1950–51 with modern-day satellite imagery will hopefully provide some objective data on the rate and direction of these changes.



Options to increase productivity: Shallow-water ponds to rehabilitate claypan country.



Gidgee encroachment onto downs country.



Buffel grass spreading along the Leichhardt River frontage country.

Once this has been determined, the costs and benefits of a range of options to address these issues will be evaluated. To date, shallow-water ponds shown in the image have been constructed on a 30 hectare area to re-establish pastures on claypan country. Large paddocks are being fenced into smaller, more manageable areas for rotational wet-season spelling to allow rejuvenation of the more desirable perennial pasture species. Trial plots of *Desmanthus Progardes* are underway with areas fenced out after seeding to allow maximum chance of establishment.

Options for managing woodland encroachment and additional sown pastures will also be assessed in more detail.

We'll keep you posted on the results in future editions of Northern muster.

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Improving your beef enterprise

It is a fair bet that most graziers would answer yes to the following questions:

- Do you want to improve breeder herd performance?
- Do you want to reduce dry-season supplementary feed costs?
- Do you want to reduce the stress on family and staff during times of drought?
- Do you want to increase the carrying capacity of your property?

By adjusting cattle numbers at the end of the pasture growing season, some of these changes can be achieved in the short-term, while others will take several years, but in all cases the business will move towards these outcomes.

Getting cattle numbers in the right ballpark is relatively simple if you are prepared to estimate pasture yields at the end of the growing season and adjust (usually reduce) cattle numbers no later than first round, and recognise that pasture growth won't be

ahead of the cattle until mid to late February in most years.

With experience, graziers should be able to get stocking rates in the ballpark intuitively without doing the mathematics—so use the forage budgeting to 'calibrate' your brain and go from there! Use VegMachine (vegmachine.net) to assess the results.

There are also a variety of tools available to estimate long-term carrying capacity, which can be used as a guide for annual stocking rates. These take into account the fertility and condition of land types, tree density, sown pastures and legumes locations, and rainfall percentile.

For more information and for assistance to use these tools please contact your local extension officer.

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Try the following simple forage budgeting method:

Steps	Worked example
1. Print photo yield standards that are relevant for your property. (futurebeef.com.au/knowledge-centre/pasture-photo-standards)	
2. Estimate pasture yield (kg/ha) in the selected paddock between 0.5 to 3.0 km from water. Only include feed that has grown during the current wet season.	2500 kg/ha
3. Decide what percentage of the pasture consists of good feed (include the 3P species, palatable annuals and Indian couch).	2000 kg/ha (80% of 2500 kg/ha)
4. Budget on allowing cattle to eat 25% of the good feed (kg/ha). This is the pasture supply.	500 kg/ha (25% of 2000 kg/ha)
5. Estimate number of days from today to the first of February 2018—the graze period.	270 days (1 May to 1 Feb 2018)
6. Calculate what one AE (adult equivalent) will eat over the graze period at a rate of 10 kg/day. This is the animal demand for pasture.	2700 kg (270 days x 10 kg/day)
7. Calculate the number of hectares required to provide this amount of feed for each AE for the graze period, that is, the stocking rate (ha/AE) (demand ÷ supply)	5.4 ha/AE (2700 kg/AE ÷ 500 kg/ha)
8. Paddock area	1800 ha
9. Cattle numbers to go into paddock (paddock area ÷ stocking rate)	333 AEs (1800 ha ÷ 5.4 ha/AE)

Notes

- 1.0 AE = a 450 kg LW dry and empty beast at maintenance. To convert AEs to cattle classes contact your local beef extension officer.
- Starting yields need to exceed 1200 kg/ha for tussock grass pastures and 900 kg/ha for Indian couch pastures to ensure that residual pasture on-hand at the end of the dry exceeds minimums of 800 kg/ha for tussock grasses and 600 kg/ha for Indian couch pastures.
- Vary the utilisation rate depending on the fertility of the land type in the paddock (e.g. 15 to 20% for low fertility country, 25% for moderate fertility country and 30% for high fertility country).



Making grazing decisions count

Understanding the different types of decisions made within a grazing business and what influences these decisions were two of the topics Cam Nicholson from Nicon Rural Services presented at recent workshops in western Queensland.

Cam, who works closely with mixed farming and grazing businesses in southern Australia, outlined the importance of acknowledging decision-making as a skill rather than something that just happens.

As many of the decisions being made in grazing business in northern Australia are either complicated or complex, getting to the 'right' decision should not be the goal of decision-making because it's often only hindsight that tells us if we made the right decision. However, understanding the components of a 'good' decision can help ease the angst that can sneak into decision-making.

A good decision is an informed decision and means you have:

- appreciated the consequences of various actions
- the least regret if a decision does not go to plan
- increased the chances of a favourable outcome.

It is interesting to note that the decision you make today may well be different to the decision you make tomorrow. Circumstances change, things go wrong, variables are altered, and so what worked today, could be obsolete tomorrow.

Research is demonstrating that decision-making is not rational nor methodically thought through. There are three key areas which influence our decisions—the head, the heart and the gut (or intuition).

The influence of head, heart and gut on decision-making depends upon the:

- **type** of decision required
- relevant **information** available
- **time** we have to make the decision
- **risk** involved
- **personality** of the decision maker.

Over the next few issues of the Northern muster, each of the above influences will be covered in more detail. In this issue the focus will be on the **type of decision** required.

Broadly, there are three main categories that grazing business decisions fall into—simple, complicated and complex. Each type of decision has its own characteristics and therefore needs to be approached in a particular way.

Simple decisions are the easiest; there are few variables and a clear right or wrong answer can be determined. For example, deciding what botulism vaccine dose to give breeders requires looking at the label recommendation and vaccinating accordingly.

When there are a number of variables involved and the relationship between these variables is clear and well documented, this decision is known as a **complicated decision**. It may take a bit more time or some thinking to get to the 'right' answer. For example, considering a botulism vaccination program.

Complex decisions are when a number of complicated decisions begin interacting with each other and the variables are difficult to quantify. For example, deciding on a restocking strategy is a classic complex decision. Although it is possible to determine an optimal number of animals using modelling or foraging budgeting tools such as StockTake, there are many variables which may not have been taken into account, such as infrastructure, labour requirements, climate, price forecasts, enterprise mix to mitigate price risk, impact on cash flow and net worth.

Understanding the type of decision you are dealing with allows you to consider the role your head, heart and gut will have in coming to a decision. As a general rule of thumb, as a decision becomes more complex, the heart and the gut begin to have a greater role in informing the decision. Logical analysis from the head is fine for simple decisions.

Understanding how your head, heart and gut informs decision-making is an important first step in making grazing decisions count. Being able to recognise how these influences impact other business members' decision making is essential; not only for the grazing business but more importantly for the health of these relationships.

In the next issue of the Northern Muster, we will explore how the personality of the decision maker/s can impact decision-making. *Farm decision-making* produced by the Grains Research and Development Corporation has more information.

Special thanks to Cam Nicholson, Nicon Rural Services and the Grain and Graze Program (grainandgraze3.com.au)—a project funded through Grains Research and Development Corporation.

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Could an exotic disease outbreak happen in northern Australia?

When working with producers we commonly discuss the risk of disease entering northern Australia. Many producers feel that the risk in the north is lower than the south but the opposite is actually the case. Northern Australia has its own key biosecurity challenges and risks.

The **proximity** of northern Australia to neighbouring countries poses a risk of incursion of pests and diseases into the north by currents and tides, wind dispersion (particularly in the wet season) and international vessels.

Bird migration is a common occurrence for large tracts of northern Australia and migratory birds can carry exotic pests and diseases from overseas.

There's an increased risk from a **larger array of pests** that can act as vectors for transmission of diseases—particularly during wet weather.

The wider range of **feral animals** than in the south, makes it easier for diseases to impact one or many of the feral animal species in the area.

Livestock in this region regularly **travel across much larger distances** so if a disease incursion was to occur in northern Australia, it could spread quicker across a wider area.

While **extensive grazing** is actually northern Australia's greatest strength as it lowers contact between livestock, the challenge is the ability

to closely monitor stock for signs of unusual disease, which can result in costly delays while diseases are transmitted.

The **huge distances to vet and laboratory facilities** can delay incursion detection.

International air and sea ports in northern Australia are a known pathway for the potential introduction of harmful exotic pests and diseases.

The Australian Government proactively protects our borders and it has a team specifically working on the risks unique to northern Australia. But not all risks can be stopped at borders or before entry. Therefore, it is important

that industry and producers also have strong biosecurity systems in place in the event of something entering the country. This is where producers' biosecurity planning becomes critical.

If you would like more information about the biosecurity risks in northern Australia and how you may be able to strengthen biosecurity on your property, please don't hesitate to get in touch with the Livestock Biosecurity Network.

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Desmanthus persisting despite dry times

Peter Quinn from Essex Station at

Middlemount has been producing grassfed beef for more than 35 years and along with his wife and family, run an 8000-head crossbred breeding and fattening operation. The operation covers four Grazing BMP-accredited properties in central Queensland. A breeder block—Taemas—is located south of Charters Towers.

Mr Quinn has been experimenting with the use of sown pastures for many years. He has had positive experiences using the productive and drought-tolerant perennial legume Desmanthus.

'We found that over a long period of time (15–18 years) and under the same grazing pressures, Desmanthus and Butterfly Pea, were by far the most persistent species on the right land types. From that experience, we knew that Desmanthus was persistent and tough enough to get through drought and survive in our country,' Mr Quinn said.

He was excited by the prospects of the improved lines of Desmanthus in the form of a new variety, Progardes, which he first learnt about at Beef Australia 2012.

At Essex, Mr Quinn has recently commenced the establishment of Progardes in trial plots on Brigalow/Blackbutt duplex clays, harder-setting

Brigalow clays, and cracking melon-hole Brigalow clay soils. Approximately 1215 ha has been planted at Taemas, on country that ranges from Blackwood/Bauhinia duplex soils to Blackwood/Gidgee cracking clays.

'At Taemas, in preparation for planting, we grazed the paddocks and then blade-ploughed the country from August through to November, planting a range of grasses and Butterfly Pea. We then aerial seeded it with Progardes at 3 kg/ha in mid-December,' he said.

Mr Quinn estimates that the cost of establishing the sown pastures at Taemas was \$235/ha (see Table 1). This figure does not include aerial seeding or machinery capital costs.

Table 1 Sown pasture establishment costs at Taemas (per hectare).

Establishment	Per hectare costs
Blade ploughing	\$99
Grass and Butterfly Pea seed	\$52
Progardes seed	\$84
Total	\$235

'The blade ploughing cost of \$99/ha is simply consumables and does not include purchasing the machine and plough, any interest payable or servicing,' Mr Quinn said.



Completed blade ploughing in Blackwood country at Taemas.

'We are relatively happy with the establishment on some of the lighter soils. Some of the heavier soils are a mixed bag of results with some patches of brilliant response and others not so good. With the seasons and amount of rainfall these areas have received since establishment, I believe it is an exceptional result.'

Mr Quinn believes that the success of pasture establishment is dependent on grazing management—not only in the first year but long-term. Mr Quinn uses rotational grazing to ensure good establishment of sown pasture.

'We have found that a well-managed rotational system is by far the most productive and sustainable grazing system when it comes to the establishment and ongoing management of these legumes. Establishment is steadily improving and we have seen mature plants put large seed crops on to the ground a number of times,' he said.




Response to planting at Taemas as of January 2018.

'Fencing to land and soil type, as well as good water distribution in a paddock, makes managing the pastures a lot easier. It makes our ability to shift the cattle at the right time more achievable without flogging out one part of the paddock, usually close to water or on the sweeter country, and wasting feed in another part.'

Sown pastures can offer flexibility in your beef enterprise and can provide solutions for land degradation problems. However, you need to carefully consider the benefits and be aware of some of the risks and costs. For further information about sown pasture establishment visit the FutureBeef website (futurebeef.com.au) or contact your local FutureBeef extension officer.

For further information about Progardes visit progardes.com.au.

To speak to Peter about his experiences, email pbquinn@bigpond.com. 

Beef Australia 2018 count down is on

With less than three weeks until Beef Australia 2018 (6 to 12 May) kicks off in Rockhampton, it isn't too late to grab a ticket and join the nation's premier beef expo.

The Queensland Government is a principal partner of Beef Australia 2018 as part of its commitment to work together to build a sustainable beef industry in Queensland.

It will have a large presence in the Sidney Kidman Pavilion, where ten agencies, including the Department of Agriculture and Fisheries, will provide a one-stop-shop for all things beef.

At the Beef Australia 2018 Seminar Series, the Queensland Government will provide updates on the latest research, extension and development work being conducted by industry-leading teams of beef experts from across the state.

Hear about the latest innovative projects that are geared towards a more productive, profitable and resilient beef industry. Seminars will cover a wide range of topics including:

- economics of beef production systems
- climate forecasts and models
- phosphorus for grazing cattle
- Next Gen programs for young producers
- work-place health and safety
- legume establishment

- agricultural education
- industry investment outlooks
- grazing management
- preventing plant poisoning
- parasite control in cattle.

The seminar presenters will be available for more information throughout the week at the Queensland Government display. You can also meet beef extension officers and see what the many Queensland Government projects and programs can offer beef businesses.

Other Queensland Government agencies in attendance are:

- Transport and Main Roads
- Office of Industrial Relations

- Natural Resources, Mines and Energy
- Environment and Science
- State Development, Manufacturing, Infrastructure and Planning
- Local Government, Racing and Multicultural Affairs
- Trade and Investment Queensland
- Queensland Agricultural Training Colleges
- Queensland Rural and Industry Development Authority.

To find out more about the Queensland Government presence and seminars program, visit qld.gov.au/sustainablebeef.

To purchase your seminar tickets, visit beefaustralia.com.au/tickets.



Grazing BMP at Beef Australia 2018 and beyond

The **Grazing BMP** (best management practices) program continues to make headway across Queensland and will showcase its success at this year's Beef Australia 2018 expo in Rockhampton from the 6 to 12 May. The property tour program is always popular and this year will feature three Grazing BMP-accredited businesses.

The first property tour begins on Monday 7 May and will showcase Barfield Station at Banana, home to Rob and Melinee Leather. The Leathers are strong supporters of the program—becoming accredited in 2015—and consistently support grazer peer learning by hosting producer groups and sharing their passion for growing a stronger beef industry.

Steve and Claire Farmer of SC Droughtmasters at Mt Elsa will provide visitors the opportunity to discuss the benefits of performance recording. SC Droughtmasters is an industry leader in using a variety of genetic selection tools and herd-recording practices. Becoming Grazing BMP-accredited in 2016, Steve and Claire have since featured in a bull selection FutureBeef video.

Belmont Station is the third BMP-accredited property on the tour program. Located 37 km north of Rockhampton on the Fitzroy River, the 3260 ha property is owned and managed by AgForce Queensland and delivers a unique, collaborative approach by providing a working cattle station with a focus on research and education.

At the Beef Australia 2018 seminars there will also be Grazing BMP guest speakers focused on sustainability:

Nicole Johnson-Hoffman, Chief Sustainability Officer, Senior Vice President OSI Group LLC and President Global Roundtable for Sustainable Beef, will present on beef sustainability and how Australian beef fits into the global supply chain.

James Bentley, Manager Natural Value, Corporate Responsibility NAB, will explain 'natural capital' and why it is important to the finance sector, what NAB is doing to ensure natural capital informs banking decisions and what this means for graziers and the future of Grazing BMP.

Grazing BMP-accredited producers invited to networking event


Accredited producers across Queensland will be invited to a BMP networking event to be held in Charters Towers on Wednesday 6 June.

This will be the first event of its kind, recognising the commitment of this growing group of producers who are prepared to open their business to third-party scrutiny of management practices.

The event aims to develop stronger connections between accredited businesses and identify opportunities to work together to further their commitment to environmental sustainability and animal welfare.

Discussion will also focus on adding value to the Grazing BMP certification, both in the marketplace and along the supply chain.

Guest speakers at the event is the Hughes family paddock-to-plate enterprise, Rangeland's Quality Meats. The Hughes use BMP certification to underpin their product and demonstrate their commitment to best practice directly to their customers. They will share their insights into sustainable and profitable production.

For more information about the Grazing BMP program please contact Jo Gangemi, Grazing BMP coordinator DAF Burdekin on 0477 345 843, Lisa Hutchinson Grazing BMP coordinator NQ Dry Tropics on 0427 594 192 or Cass Heal, Grazing BMP coordinator with AgForce on (07) 3236 3100. 



Cass Heal (AgForce), Lisa Hutchinson (NQ Dry Tropics), Jo Gangemi (DAF)

Calf Alive symposium a resounding success

More than one hundred and forty people from Queensland, the Northern Territory and New South Wales attended the inaugural 'Calf Alive' symposium in November 2017 at Capella in Central Queensland.

Specialist speakers from Australia, the United States of America and Indonesia, inspired some excellent discussions and delivered the most up-to-date knowledge about the causes of calf loss—a worldwide problem.

Calf wastage, that is, calf loss from pregnancy through to weaning, is a bigger problem than you might think. Michael McGowan, project leader of the recent CashCow project, says that 'high numbers of beef producers in northern Australia experience calf wastage above achievable levels on a regular basis'. The project showed that 25 per cent of breeding mobs in the northern forested region of the study area had calf wastage of more than 19 per cent. These results highlight the opportunity to develop and implement practical solutions that haven't yet been systematically evaluated in northern Australia.

The key messages from the symposium are:

- Calf loss is a major problem across northern Australia—each calf lost reduces business income by more than \$400.
- Many risk factors for calf wastage in northern Australia have been identified and the main ones relate to nutrition, disease and the environment.
- Body condition and nutrition of the cow during pregnancy and early lactation have a profound effect on calf viability and milk delivery.
- Any factor reducing colostrum intake in the first eight hours post-partum or milk intake in the first days of life, threatens calf survival.
- Dystocia (calving difficulty) has a big impact on calf survival. It is most common in calving two-year-olds and is affected by genetics and nutrition.
- Infectious disease can be a problem, particularly in more intensive systems.



Industry members gathered at the Calf Alive symposium.

Accurate diagnosis and appropriate treatment is important.

- Effective predator control requires a sound understanding of fauna ecology. Research to explore solutions to predators will be as complex as the problems.
- Potential solutions include managing the feed base, lactation, health, stress and breeding.
- Good information to define the problems and professional advice are necessary to reveal causes of calf loss and determine solutions for specific situations.
- The pathway to reducing calf-loss is difficult and complex, but if approached systematically, there are solutions available.

Professor McGowan said the value of addressing the calf loss issue shouldn't be underestimated.

'A five per cent reduction in calf-loss in a herd size of 3000 adult equivalents would increase annual live weight production by at least 20 tonnes and earnings before interest and tax by \$25 000,' he said.

Future research in the field of calf wastage, particularly testing management options, is planned. These project proposals are currently under consideration with Meat & Livestock Australia.

The presentations from the Calf Alive symposium are available on the FutureBeef website (futurebeef.com.au).

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