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NORTHERN MUSTER

Information for rural business in North Queensland

Research reveals ways to reduce calf loss

All systems go at Spyglass

IN THIS ISSUE

- Editorial
- Market Report
- Producers wanted for smart sensor stock theft trials
- Research reveals ways to reduce calf loss
- All systems go at Spyglass
- Planning ahead for Dry times
- Understanding diminishing marginal returns in a beef business
- Looking after yourself in tough times
- Rehabilitating fertile ground: the black basalt soil project
- The hidden costs to drought feeding
- \$avannaPlan-Beef\$ense nurtures NextGen producers



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Welcome to Northern muster 43

Welcome to the Autumn/Winter edition of the *Northern muster*.

As we enter winter months, it's time to take a look at how your cattle, grass and business have fared over the wet season, and importantly, how they will perform during the dry season. If you haven't received adequate rain find out whether you are eligible for drought assistance by contacting your local DAF drought co-ordinator Karl McKellar (Charters Towers), phone 4761 5153.

In other parts of our readership area, Severe Tropical Cyclone Debbie has impacted many Queensland grazing businesses, parts of the supply chain and vital infrastructure. The Department of Agriculture and Fisheries is committed to assisting industry recover. Key contacts for information and funding assistance are DAF – www.daf.qld.gov.au or 13 25 23, QRAA on www.qraa.qld.gov.au or Freecall 1 800 623 946. The website <http://www.farmerdisastersupport.org.au> has a listing of all support agencies assisting the recovery effort.

In this issue, we have loads of information on supplementation, how pregnancy testing now can help you manage calf loss, plus how new technology is assisting to prevent stock theft. A full update on the latest news and projects at the Spyglass Beef Research property is also included.

The annual Clermont Cattlemen's Challenge field day is being held on Friday May 19 at Paringa feedlot, Capella. On the day you will get the opportunity to tour the feedlot, inspect the Challenge steers and see how they weigh up.

A major field day is being held at Mt Aberdeen on May 24. This is your chance to get a look at 23 years of breeder records and to find out how you can make your breeder performance more profitable through the implementation of best practice breeder, weaner and supplementation management.

DAF is hosting pasture species identification paddock walks, understanding land condition days and create your own pasture yield photo standards workshops in May and June across the Burdekin and Fitzroy. Keep your eyes out for event details on the FutureBeef website.

We hope you enjoy issue 43 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 (www.futurebeef.com.au/resources/newsletters/) or email northernmuster@daf.qld.gov.au

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Alice Bambling, Megan Willis, Mellissa Holzwart 

Market report very mixed season for state

In late March-early April Severe Tropical Cyclone Debbie dumped a lot of rainfall south of Townsville to the northern rivers district in northern NSW and inland for several hundred kilometres. Many producers in this area will have suffered severe infrastructure damage from wind and flooding. On a positive side a lot of cattle country that has experienced a failed summer wet season has had a late boost to their pastures, the down side being that the rainfall didn't go further west in Queensland where pasture conditions are still very poor. The cyclone and flooding has caused disruption to many of our eastern seaboard meat works but the rain will have a positive influence on the market prices. Producers experiencing another poor summer had most of our abattoirs booked out for 6 to 8 weeks but this late rain across some of our best fattening country will allow producers to ease up on sales plus put a demand into the market for store cattle from drier regions across the state. The late rain might not improve fat cattle prices but it will certainly halt a rapid decline in meat works grids as we move into winter. Local Drought Committees (LDCs) are meeting this month across the state and will recommend any

changes to the status of drought declarations to the Minister for Agriculture and Fisheries.

Domestic Market

The USA is over its cattle shortage due to drought and has more high quality cuts to sell overseas plus high supplies of cheap grinding beef at home. Australian exporters have recently lost an important high quality Korean beef order to USA beef exporters.

In 2016 Australia exported 1.018 million tonnes of beef which was down 267,000 tonnes on 2015 totals. The big three markets for our product continues to be the USA, Japan and Korea which took a combined 686,000 tonnes. Other important sales include 94,000 tonnes to China, 61,000 tonnes to Indonesia, 31,300 tonnes Taiwan and 29,000 tonnes to Philippines.

Live Export

Over the last couple months with the big wet in the Territory and the north of Western Australia a large percentage of live export activity from northern Australia has been out

of Townsville. The Indonesian market situation has been in the media nearly continuously, with Indian buffalo meat being imported to reduce domestic and wet market prices. Then there has been a temporary ban on this trade with foot and mouth disease concerns.

In further news, the four month permit system for Australian importers has now been replaced with an annual permit providing exporters with more security. It has also been announced that the 350kg average weight limit on export cattle has been increased to 450 kg, whilst this is better for the Australian producer, it may not suit Indonesian feedlotters, who have been under a lot of economic pressure with the high Australian cattle prices, and their Government persuading domestic meat retail prices.

No one is too sure where the Indonesian Government's late 2016 requirement for a percentage of the total trade from Australia, be heifers or cattle suitable for breeding is going.

Another live export development has been a shipment of southern Australian cattle to China for feeding and sale into their supermarket system.

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Producers wanted for smart sensor stock theft trials

CATTLE producers have been called on to participate in research testing smart sensor technology as a way of preventing and detecting stock theft.

In collaboration with AgForce, CQUniversity researchers are aiming to develop a new livestock monitoring system which can be used by producers and law enforcement agencies to remotely monitor animals.

The 2001–2002 National Farm Crime Survey, conducted by the Australian Institute of Criminology, found that livestock theft was the most commonly reported rural crime affecting six per cent of farms, involving 186 777 animals with an estimated annual cost of \$16 million.

However, most incidents (65 per cent) go unreported and the true cost is more likely to be closer to \$67 million a year.

Associate Professor Mark Trotter, leader of the research project, said: “stock theft can range from small incursions paring off a handful of animals from larger groups, all the way through to major criminal operations in which entire herds are mustered into portable yards and shipped out in semi-trailers.

“In all cases, the opportunity to steal is a result of the inability of the producer to constantly monitor the location and behavior of their livestock,” he said.

CQUniversity’s Precision Livestock Management team is recognised as a national leader in the use of sensor technologies to enhance animal production.


Dr Trotter will be collaborating with Professor Steve Moore from CQUniversity’s School of Engineering and Technology in adapting sensors for use on livestock; and with Dr Stuart Charters of New Zealand’s Lincoln University, who is an expert in data management and visualisation.



Associate professor Mark Trotter from CQ University

“One of the limitations of the National Livestock Identification System is that the location of an animal is only sporadically known when the tags are checked i.e. when livestock are bought, sold or moved along the production chain - animal data cannot be accessed remotely or in real-time,” Dr Trotter said.

The research group has designed a generic animal sensing platform with GPS location to monitor animal movement that we will test in stock theft simulations at AgForce’s Belmont Research Station.

CQUniversity hosted workshops with producers directly affected by stock theft to gain insights into the types of behavior, both criminal and animal, that can be recorded during stock theft, as well as provided feedback on how on-animal data could be best be relayed to these end-users in a meaningful way. 

Research reveals ways to reduce calf loss

A RECENT report costed foetal and calf loss in northern Australia at approximately \$15.5 million per year.

Professor Michael McGowan from the University of Queensland said that reducing calf loss will increase the kilograms of live weight produced per year by cow herds. This will boost profitability in north Australian beef businesses.

The Cash Cow project led by Professor McGowan confirmed that many producers consistently experience low weaning rates and, as a consequence, lower live weight production.

Calf loss rates in excess of 20 per cent were seen across north Australia. In better country the lowest achievable level was five per cent and in the northern forest, where the highest losses occurred, it was 10 per cent.

“The main reason for this was found to be under-nutrition of cows, and only occasionally infectious disease,” he said.

About two-thirds of loss is in the first two weeks after birth. Poor nutrition can affect the amount of milk a calf gets in the days after birth. This has a major impact on survival.

Professor McGowan emphasised that if cows are in poor condition or do not have the quality and quantity of feed and water that meets their needs throughout pregnancy, the calf may be born weak or the cow may not produce enough milk for the calf.

Weaner production is especially reduced when foetal and calf loss occurs.

“Analysis of data from the Beef CRC shows the annual live weight production of cows losing calves is 128 kg lower; that is, the business

ultimately has 128 kg less to sell, which is a \$400 problem”, Professor McGowan said.

The first step in reducing calf loss on your property is identifying the issue. This is done by regular pregnancy diagnosis to identify and segregate pregnant cows, and recording the number of cows that lactate in the following year. Pregnancy testing will allow you to identify how many breeders are conceiving and losing a calf before weaning.

“A benefit of foetal ageing as part of pregnancy testing is it will show predicted calving patterns, enabling more targeted cow nutritional management.”

The cause of calf loss needs to be identified once it has been determined there is an issue. The main reproductive diseases to be aware of are vibriosis, pestivirus, and trichomoniasis. These reproductive diseases have the greatest effect on calf loss in northern Australia. Veterinary advice should be sought on testing and controlling these diseases.

“Other factors that could be influencing calf loss on your property are predation from wild dogs, mustering around the time of calving, and common husbandry practices such as dehorning and castration,” he said.

If you think you may have a calf loss problem or would like more information, download ‘Could your herd be more productive’ from <https://futurebeef.com.au> or contact Alice Bambling on (07) 47615192.

Alice Bambling

DAF Beef Team, Charters Towers
(07) 4761 5192

alice.bambling@daf.qld.gov.au 



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All systems go at Spyglass

Improved pasture modelling of Burdekin land types.

Graziers are constantly facing the major challenge of matching stocking rate to pasture growth, particularly in northern Australia's variable climate.

The GRASP pasture and animal growth model is used to provide long-term carrying capacity (LTCC) information to assist in grazing land management decision-making.

Over the past few years, DAF scientists have been collecting rainfall, pasture and soil measurements from six fenced sites established on Spyglass to calibrate the GRASP model.

These sites cover a range of productivity from the most productive Loamy Alluvials, Box and Narrow-leaved Ironbark through to Yellowjacket and low productivity Box and Narrow-leaved Ironbark. Initial data collection has coincided with three below average wet seasons. This pasture production data will enable improved estimates of pasture productivity and LTCC to be determined for a range of land types.

For further information on this project contact:

Dr Giselle Whish
Senior Scientist
DAF Toowoomba

Where do the deer roam?

A team from Biosecurity Queensland (Tony Pople, Michael Brennan and Matt Amos) have continued to monitor the distribution and abundance of chital deer on Spyglass and some surrounding properties.

They have recorded a marked decline (more than 8 per cent) in deer abundance over 2015-16 largely influenced by drought.

Another project being undertaken by a University of Queensland student has been examining the diet of chital deer on Spyglass and Niall stations. Plant and pasture species

have been identified from rumen contents collected from deer over different seasons. On Spyglass the grass component of their diet ranges from more than 90 per cent in the wet season to 5 per cent during the dry season.

Also a new project has been developed to use radio telemetry (satellite collars and radio ear tags) to examine fawn survival and adult movement patterns on properties in the region.

Researchers have been surveying landholders with assistance from Charters Towers Regional Council to determine the history of the spread of Chital deer in the region. The overall objective is to explain the recent expansion in range and increase in abundance of Chital deer in north Queensland.

This information will allow a better understanding of behaviour, habitat use and population dynamics of Chital deer and consequently achieve better management of the deer.

For further information on these projects contact:

Tony Pople
Invasive Plants and Animals Research
Biosecurity Queensland, Brisbane
(07) 3708 8550



Wild dogs dine on deer

Preliminary investigations into the prey remains detected in wild dog scats collected within Chital deer distributions suggest wild dogs may play a positive role controlling deer population by preying on fawns.

In a current project, wild dog scats will be collected every two to three months from Spyglass and analysed for the prey remains they contain.

Although there is a wide variety of prey species discovered in scats (including rabbits, feral pigs, possums, emus) Chital deer remains (12 per cent) are only second to kangaroo and wallaby remains (40-60 per cent) in frequency of occurrence in wild dog diets. Of the 194 wild dog scats already analysed from Spyglass only three have contained cattle remains.

For further information on this project contact

Lee Allen
Senior Zoologist
Biosecurity Queensland
0447 744 333



"Wild dogs use scats (droppings) to advertise their territory and social status. They are often found along animal pads, at road intersections, gates and creek crossings where other wild dogs are most likely to encounter them".

Herd management: Cashing in on research and technology

Two new studies commenced at Spyglass in late 2016 to determine:

1. The importance of heifer live weight to achieve high pregnancy rates, and
2. What productivity is achievable for your breeding cows.

Study 1- Heifer live weight and pregnancy

A producer demonstration site project at Mt Oweenee station highlighted the importance of heifer accumulating sufficient live weight to reach puberty. In the Mt Oweenee herd, weights of 400 plus kilograms were necessary by the end of mating to achieve high pregnancy rates.

In late 2016 a similar demonstration commenced at Spyglass using 300 No.16 heifers to monitor their growth until pregnancy testing. To assist with regular weighing's a satellite based Remote Livestock Management

System (RLMS) (otherwise known as Walk Over Weighing (WOW) unit) is being used to record weight each time animals come into water. This work will provide regular updates of heifer growth and describe how this affects pregnancy rates.



No.16 Spyglass heifers making use of the WOW

Study 2 – What is an achievable benchmark for your breeding cows?

A concept proposed by the recent Cash Cow project suggested that the average kilograms weaned per cow retained (also known as Weaner Production), should at least match that of annual yearling steer growth if grazing in the same paddocks.

Currently at Spyglass 15 No.16 indicator steers are grazing with breeders in a 4000ha paddock. Steers were weighed into the paddock in September 2016 and will be weighed again in September 2017 to record annual growth. This will be compared with the average kg weaned per cow to test the benchmark. If proven, this will be a valuable measure for beef producers to develop their own targets for achievable breeder production in their environment.

For further information on these projects contact:

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All systems go at Spyglass (cont's)

Vegnet LiDAR

Vegnet, an automated laser instrument (LiDAR), has been installed at Spyglass to monitor and help us understand the changes in the amount of leaves in the tree canopy that occur due to rainfall, drought and seasonal leaf drop. It uses a laser to scan the surrounding trees each night.

The data collected will be used to better understand the tree and shrub dynamics in this variable grazing system. It will help to fine-tune models of pasture ground cover and biomass.

Two time lapse cameras were also installed. These cameras take photos every 10 minutes both inside and outside the enclosure where the Vegnet is located. These photos will be used to look at the grassland response to rainfall and temperature, the change in grass height over time, and rate of drying to improve our models of grassland behaviour.

For more information on this project contact:

Peter Scarth
Principal Scientist
Remote Sensing Centre
Peter.scarth@dsitia.qld.gov.au



The Vegnet set up at Spyglass

Manager's update

Mayne Dam re-construction has been completed. This work was done to reinstate the dam to a functional level after an intense rainfall event in 2007 resulted in the dam wall being breached and 80pc of the wall being washed away. The dam will play a vital role in water distribution to livestock on the property.

It will contribute to the future drought-proofing of Spyglass by allowing water to be gravity fed to over 75pc of the property.

Further water improvements include increasing water points and storage. A dam site left behind from a mining site will be equipped. This will allow a further 4000 hectares to be better utilised due to better access to permanent water.

Satellite and UHF water and weather monitoring stations have been trialled on Spyglass. They have proven to be useful and cost effective tool in the management of livestock and monitoring of weather and available water.

Fencing work has continued to further subdivide paddocks as well as the clearing of boundary and internal fences. This will increase the security of smaller paddocks and mobs of stock available to meet trial requirements. Extensive black wattle and eucalypt re-growth control is being carried out.

Spyglass received 616mm of rain for the 2016 calendar year. As of the end of February Spyglass had received 265 mm of rain. This is following the 265 mm in 2015 and 357 mm in 2014.

Sean Reed
Acting Spyglass Research Facility Manager
DAF, Spyglass
(07) 4018 0182

Planning ahead for dry times

Every business should have a drought plan in place. A drought plan should be as common as a farm budget, yet too often this vital element of farm planning gets forgotten about or pushed to the back of the cupboard, never to be seen again.

So if you haven't got one, now is the time to sit down and have a think about some strategies that will better prepare your business for the next drought; and if you do already have one, pull it out and display it somewhere easy to see.

A good drought plan should include strategies which are consistent with the goals within the grazing business. It should have key decision dates or trigger points, such as a date by which if it hasn't rained a decision will be made on aspects of the business, such as destocking.

Another example is if the summer rainfall outlook is poor, a decision will be made to source and purchase supplementary feed before prices rise and stock lose condition.

Knowing what you are going to do and when, and ensuring that you act early enough is critical when preparing for hard times.

When making decisions based on trigger points in the drought plan, there are many tools available that can assist you.

These include templates and apps for forage budgeting, market reports to gauge sale prices, cost of feeding calculators, rainfall outlooks and climate data, budgeting spreadsheets and templates and many more. The more objective your data is, the less likely the decision will be made on impulse or affected by emotions.

Another crucial aspect to drought planning and recovery is the use of an after action review process, where you review actions undertaken during the last drought.

It could be as simple as drawing up 3 columns on a sheet of paper with the headings: "What issues did I have during the drought", "What did I learn from this?" and "What will I change next time?"

A drought plan can help to alleviate the stress associated with making big decisions in response to failed seasons and can help make future decisions easier.

For further information or to discuss your options please contact your local DAF Beef Extension Officer.

Longreach: (07) 4536 8305

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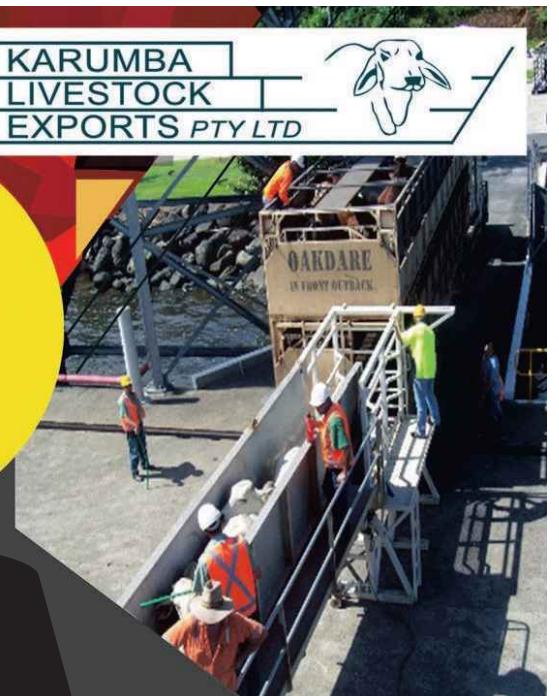
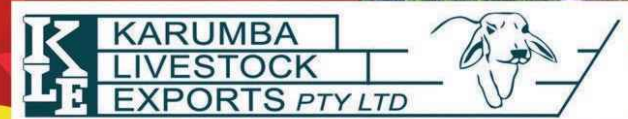


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Understanding diminishing marginal returns in a beef business

If you have ever wondered whether changing a management practice on your property is worthwhile, then understanding diminishing marginal returns in your beef business is critical.

Almost everything in life is subject to diminishing returns, from capital expenditure to gift giving, but what is diminishing marginal returns and how does it relate to a beef business?

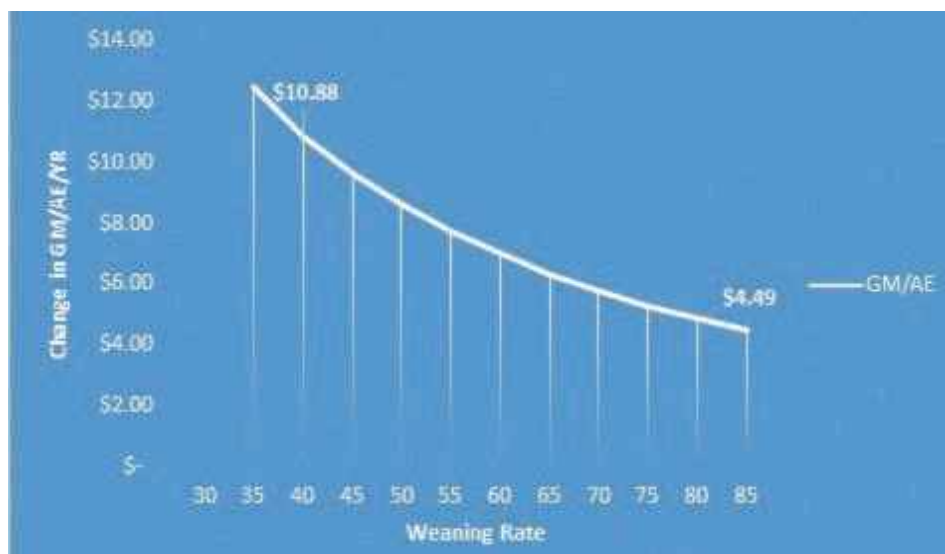
Diminishing returns relates to the fact that for any production above and beyond where you are now, it's going to cost extra effort and money to achieve and therefore will return less money per unit than the current output level. It needs to be highlighted that we are talking about per unit returns not total business returns.

The graph below shows an example of a breeding and finishing operation and the change in gross margin from each additional 5 per cent weaning rate.

From this example, it can be seen that going from 35 per cent weaning rate to 40 per cent rate is worth an additional \$10.88 in gross margin per adult equivalent (AE).

However, going from 80 per cent to 85 per cent weaning rate is only worth an additional \$4.49 in gross margin per adult equivalent. It is not necessary to be caught up in the exact amounts shown here, as both the rate at which returns diminish (i.e. the slope of the curve) and the dollar amount will be different for every business.

So how does this impact a decision in your beef business on whether to adopt a new management practice, or a new technology? Simply, it lets you know if that change will be profitable or not.



The effect of weaning rate on a business's gross margin

Let's take a scenario where a wonderful supplementary feed comes to the market at a cost of \$8 per adult equivalent. By using this new product, you have been promised that your weaning rate will improve by five per cent.

Knowing what the marginal return is for improvement in weaning rate shows that if you are operating at 80 per cent and therefore will achieve 85 per cent weaning, you will only get a \$4.49/AE benefit.

Therefore, at a cost of \$8/AE, it doesn't make a lot of sense. Alternatively, if you are operating at 35 per cent and will achieve 40 per cent, your business will be better off by \$10.88 / AE and therefore spending \$8/AE to achieve this does make sense (your business is better off by \$2.88/AE).

This is however a simplistic illustration, as herd dynamics change with large changes in weaning rates, price and markets change.

If you are interested in learning more about the business side of your beef business, Queensland's Department of Agriculture and Fisheries (DAF) is taking expressions of interest for running the "Business of Beef" workshops. The "Business of Beef" workshops are funded by the Department of Environment and Heritage Protection through the Grazing BMP Support and Extension project".

To register your interest, obtain more information, or request one-on-one extension for your beef business, please contact:

Holly Reid
DAF Beef Economist
Charters Towers
(07) 4761 5156
holly.reid@daf.qld.gov.au 

Looking after yourself in tough times

Resilience and determination are a natural part of rural life, however it is important to acknowledge that there may be times when ongoing hurdles, like drought, make it that bit harder to 'get back on the horse'.

Difficult climatic conditions, financial and emotional stress, and the hard work and long hours put into running a family-owned business, can place enormous pressure on affected farming families.

These pressures can impact your mental health and wellbeing leading to symptoms of anxiety, depression and other health related issues.

The Royal Flying Doctor Service (RFDS) Drought Wellbeing Service offers free counselling and support to people living and working in areas impacted by drought. The program has clinical counsellors specifically trained to help people with a range of issues including:

- Sleep difficulties
- Physical effects such as headaches and muscle tension
- Anxiety and depression
- Stress management
- Grief and loss
- Relationship issues
- Self-esteem
- Work related issues
- Alcohol and gambling
- Building resilience through change.

If you, a friend or loved one would like to chat with one of the RFDS Drought Wellbeing Service counsellors please call (07) 3852 7544 or contact your local officer using the details below.

Townsville Region
Cath Walker - (07) 4775 3111
Mount Isa Region
Georgina Woods - (07) 4743 2800
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Rehabilitating fertile ground: the black basalt soil project

Black basaltic soils cover 230,000 hectares in the Dalrymple Shire. These are some of the most fertile and heavy carrying country in North Queensland.

As a result of their high fertility, the black basalt soils are often in poor condition. This is largely due to watering point location and grazing preference.

Livestock preference for grazing the black soils creates a problem within any paddock where black basalt country is the minority land type.

Land condition is rated using an ABCD framework with A being best and D being very poor condition. The current estimate is that 75,000 - 80,000 hectares of black basalt country is in C or D condition.

Land in C and D condition does not have the same rainfall infiltration and lacks the preferred perennial pasture species. It will not respond to rainfall to produce the same body of feed as land in B or A condition.

Black basalt country in A condition could be stocked at 1 AE to 5 hectares whereas D condition can only sustainably support 1 AE to 20 hectares. This highlights the clear importance of maintaining good land condition. The issue that needs to be resolved is how to best improve small areas of black basalt land already in C or D condition within large red basalt paddocks.

The project:

A project team, led by Kate Brown, Department of Agriculture and Fisheries (DAF), Townsville, and in partnership with Dalrymple Landcare Committee (DLC) was set up in February 2014. The aim was to establish a producer demonstration site to explore the management options and economic benefits of restoring black basalt from D condition within red basalt paddocks.

The first producer group meeting was held in September 2014 where producers provided input into the design and methods of the demonstration. Technical input was provided by a variety of specialists within that field.

In February 2016 a suitable site was selected on Basalt River (formerly known as Tara) Station. The 70ha site has varying densities of surface basalt rock ranging from stone-free, light stone, moderate stone, to solid lava.

Seedbed preparation likewise varied depending on the density of stone; with stone-free and light stone areas being cultivated with an offset disc plow, moderately rocky areas cultivated with a three tined ripper, and heavy stone areas cultivated with a crocodile seeder.

The largest proportion of the site was offset disc plowed. Some areas were too stony to be cultivated. The site was fenced with a standard three barbed cattle fence to manage grazing. Soil tests revealed that soil sulphur was low, therefore 15kg/ha of prilled elemental sulphur was applied with the seed.

Seed proved difficult to source which is common during a run of drought years. The site was sown with a mixture of:

5 legumes: Milgarra Butterfly pea, Burgundy bean, Cavalcade Centro, Progardes Desmanthus and Caatinga Stylo, and

9 grasses: Bambatsii Panic, Katambora Rhodes, Bisset bluegrass, Reclaimer Rhodes, Sabi grass, Floren bluegrass, Keppel couch, Swann Forest bluegrass, Callide Rhodes and Nixon Sabi Grass.



Monitoring site in December prior to cultivation and sowing



The site paddock approximately 7 weeks after sowing

In the week before Christmas 2016, all seed was mixed and broadcast using a fertilizer spreader, then lightly rolled with a tyre roller. As most seed was coated and some was not, the seeding rate as bare seed equivalent was 9.6kg/ha for legumes and 6.3kg/ha for grasses. This rate is high, commercial seeding rates would be approximately 1/3 of what was sown at this site.

Since sowing, 250mm of rain has fallen on the site, with the last growing rain received in the middle of February. The strike was good, but it was difficult to identify the individual species present as a lot of annuals emerged simultaneously.

A series of single species 8x10m plots were sown so that visitors to the site can readily identify the range of sown pasture plants. An adjacent 13ha area of red basalt country was also cultivated and sown with a mixture of Seca, Amiga & Siran stylos.

The site will be monitored for 3-5 years and a variety of extension activities held along the way. We welcome any producers from the district who wish to be part of the ongoing

producer group activities. Depending on the time taken to establish a good stand of pasture, a field-day will be held in autumn this year or in 2018. DAF and DLC sincerely thank the Lyons family of Basalt River for hosting the demonstration site and doing much of the work to make it a reality. DLC also gratefully acknowledges the support of the project by Heritage Seeds, Selected Seeds, Agrimix and Progressive Seeds.

If you would like more information please contact

Bob Shepherd
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The hidden costs to drought feeding

Unfortunately, drought fodder can lead to the introduction of weeds.

Be Aware!

- Regularly check locations where fodder has been transported, stored and fed out for weed germination.
- Monitor around watering points and stock holding yards for new weeds.
- If you find any unfamiliar weeds, have them identified early.
- Identify whether unfamiliar weeds are toxic to stock.
- Seek weed identification from your regional networks or photograph new weed species and email the photograph to Queensland Herbarium@qld.gov.au.
- If required, collect a specimen according to the instructions given on the Queensland Herbarium website <https://www.qld.gov.au/environment/plants-animals/plants/herbarium/>.
- Treat problem weeds before they become established and produce seed.

Know which plants are toxic and look out for symptoms.

- Some weeds are toxic (especially when flowering and seeding), especially if stock are confined to these weeds only.
- Nitrate poisoning symptoms in livestock include weakness, spasms, staggers, diarrhoea and death.
- Sulphur poisoning causes polioencephalomalacia (PEM). Other symptoms can include staggers, goitre sensitisation.

Stop weedy grasses establishing from contaminated fodder.

For more information on Drought Fodder Weed Identification, a project funded through the Australian Government National Landcare Programme, contact AgForce Qld on 07 3236 3100 or email agforce@agforceqld.org.au or the Weed Spotters Network Qld on 07 3896 9323.

Landholders should keep an eye out for the Best practice guide which will include fodder weed identification and will be available from AgForce by May 2017.

Marie Vitelli
AgForce Weeds Policy Officer
(07) 3236 3100

\$avannaPlan-BeefSense nurtures NextGen producers

FOLLOWING on from three years of \$avannaPlan-BeefSense, the project team has expanded its whole-of-business approach to focus on the next generation (NextGen) of young beef producers.

Having identified the need for early intervention, a tailored NextGen mentoring program has been developed by the \$avannaPlan-BeefSense team, Northern Gulf Resource Management Group (NGRMG) and AgForce, to accelerate adoption of improved land, cattle and business management practices across the Gulf.

The \$avannaPlan-BeefSense project team (DAF Beef Team, NGRMG and Agribusiness Consultant Alison Larard) deliver confidential on-property services focusing on all aspects of running a profitable beef business from breeder productivity and stocking rates, through to cash flow budgeting, debt management and marketing.

Where many consultants generally offer advice within their field of expertise, \$avannaPlan-BeefSense pools the knowledge of beef industry professionals experienced in the financial, succession, herd and grazing aspects of northern cattle businesses.

The NextGen program is focused on transferring the knowledge of successful producers to the next generation (mentees), deliberately linking mentees to producers who successfully manage the same seasonal, financial, herd and grazing management constraints.

In addition to experience gleaned from leading producers, the mentees also network with a range of industry experts in grazing land management, production (animal nutrition, pasture management and improvements), marketing, business skills, wealth management and personal communication and development.

The \$avannaPlan-BeefSense project team used a competitive application and selection process to choose thirty-four mentees (aged 18 - 35 years) from across the Gulf to participate in the NextGen program. Each mentee has tailored their learning program based on personal goals and motivation and to expand their knowledge across particular aspects of the beef business and associated supply chains.

Mentees identified the following topics, in order of importance, as future learning goals: business management and accounting systems, breeder management, stocking rates and carrying capacity, breeder nutrition, genetics and breeding programs, weaner nutrition/management, wet season spelling, and land condition and land condition decline across the industry.

The \$avannaPlan-BeefSense delivery team has supported the mentee learning programs through customised on-property services, group forums and webinars. Workshops and tailored training activities include:



Participants from the NextGen Business Mentoring Program spent two days at Wambiana Station, Charters Towers learning about grazing land management and building business resilience.

- "Building business resilience and managing for a variable climate" workshop at Wambiana Station,
- Succession planning webinar,
- Microsoft Excel training workshops to improve record keeping and general understanding of the finances and business position,
- Herd nutrition and grazing land management workshops,
- InnerBoss Foundations Course including personal development and communication skills,
- Breeder management workshops with Ian Braithwaite,
- Advanced Microsoft Excel training workshops,
- Central Queensland study tour.

If you are interested in being involved in future programs or would like further information please contact the Department of Agriculture and Fisheries (DAF) Beef Team at Mareeba on (07) 4048 4600.



After identifying stocking rates and carrying capacity as key areas to learn more about to progress their businesses forward, mentees inspected the Wambiana Grazing Trial and discussed results with Peter O'Reagain, DAF Charters Towers.



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