Queensland



Benefits of pregnancy testing

13 25 23 futurebeef.com.au

AS DAY length decreases and temperature drops, grass production is complete for another season.

Have you considered pregnancy testing your herd and segregating females based on foetal age? Knowing when and how many calves are expected, and separating cows into calving groups, assists with planning, paddock allocation, supplementation and mustering for branding and weaning.

It helps you determine what animals should be sold and assists pasture management to ensure your stock will have enough pasture for the dry season, while maintaining adequate residual ground cover for the seasonal break.

Cows, dry and empty, can provide immediate cash flow. They may be poor mothers or have reproductive diseases or abnormalities rendering them infertile. Their revenue can assist with covering the costs of productive stock.

identify are the 'gems' - those 2 now, they may struggle to who have weaned a calf and get back to Body Condition are back in calf in the desired Score 3 or 4 before calving.



Body Condition Score 2 (Backward store). Light tissue covering over skeleton. The backbone is clearly distinguishable as are the rear ribs.

time frame. Identify them and look after them. They are your indicator cows - if they The important group to are in Body Condition Score

Adequate body condition at calving is critical for cows to conceive at the right time again next year. Good body condition at calving enables the breeding herd to handle

reduces breeder deaths. For condition score photos see futurebeef.com.au/knowledge-centre/body-condition-score-for-beef-cattle.

the greatest need for supplementation and lowest chance of reconceiving during the following wet season, as they lose too much condi-Cows calving between tion lactating for an extenda late seasonal break and May and September have ed period in the dry season.

Segregating these cows gives you options. They can be targeted for supplementation and early weaning or sold to reduce dry season problems.

Cows that will calve late or retained empty cows require less nutritional support once their current calf is weaned. Their nutritional demands during spring will be far less than the 'gems', so supplementation to this group can be delayed, offering savings in time and money.

Benefits of pregnancy testing, foetal aging and segregating breeders into calving groups:

- Know when and how
- many calves to expect Identify poor performers/
- cows to sell
- Target supplementation to the groups who need it
- Identify productive females to look after
- Segregate cows calving out of season.

Your local beef extension officer can provide more assistance with targeted management and nutritional recommendations.

Roxanne Morgan, Beef extension officer, DAF Mackay, 07 4999 8563.

HOW MUCH PASTURE DO CENTRAL QUEENSLAND BUFFEL PASTURES PRODUCE?



THE amount of pasture that grows each year (or 'pasture growth') dictates how you manage your cattle (numbers, types and location) and the productivity of the property.

Long-term carrying capacity estimates, or the average number of animals that a property can be expected to support over 10 plus years, are critical for long-term planning and property investment. Data collected from

native pastures at over 100 sites across Queensland has been used to develop models that predict pasture productivity and carrying capacity for many grazing land types. But there is inadequate data on the growth of buffel grass pastures, the backbone of the central Queensland beef industry.

To improve our understanding of central Queensland buffel pastures, four research sites have been

established on long-term (15 plus years) buffel grass pastures in the Emerald district.

Site establishment and initial measurements were undertaken in November 2019. The research work uses the established SWIFTSYND procedure for measuring pasture growth. The research team will

collect pasture and soil data at the sites four times a year for the next two years. Pasture samples will be analysed for nitrogen content. This data will be used to calibrate pasture growth models and provide improved long-term carrying capacity information for buffel pastures in central Queensland.

The data will also be used to improve current grazing management tools and information and develop new resources. Gabrielle Penna, Scientist grazing lands, DAF, 07 3708 8455.

GATHERING DATA

Improving grazing management tools and information and developing new resources

Measuring pasture growth of buffel pastures that cover ~5.1 million hectares in Queensland, will improve our understanding of, and ability to manage, these important pastures.



SIMPLIFI

Livestock Intelligence™

- Easiest way to collect a quality sample
- Vials fit in standard lab well plate (96 vials)
- Efficient and cost effective
- Available with paired NLIS and management tags

Questions? 1300 138 247 or customerservice@allflex.com.au

with the ABCD1234 (TISSUE SAMPLING UNITS)

www.allflex.com.au

M0123

Keep an eye on calves

Information for rural business in Central Queensland

The Calf Watch project aims to develop a system to remotely monitor calving and study calf loss in northern Australia.

FutureBeef

ALF loss is a major source of lost income for beef producers in northern Australia and reducing calf loss has the potential to improve weaning rates and profitability.

Previously it has been difficult to investigate the causes of calf loss as calving females and calf carcasses are hard to find in large paddocks, therefore few autopsies are able to be conducted to determine the cause of calf deaths.

A system to remotely monitor calving in extensive areas would provide great benefits for research on calf loss in northern Australia. The Calf Watch project aims to meet this need.

NT Department of Primary Industry and Resources researchers are collaborating with the University of Florida to modify an existing 'barn' system of birthing sensors (cowmonitor.com/ technology) to increase the footprint area and enable remote monitoring of calving in locations where mobile phone coverage is limited.

The system uses intra-vaginal birthing sensors that emit a UHF signal when a rapid temperature change is detected (when sensors are expelled during calving).

The signals are received by antennas in a low-power wireless-area network (LPWAN) and are transferred via the internet to servers owned by the sensor manufacturer (JMB). A calving alert is then sent and is immediately viewable on a website.

The cows are fitted with GPS tracking collars that record location every 15 minutes, enabling cows to be located at the time of an expulsion alert and the location data is viewable in real time on a website.

The Calf Watch project is being conducted at Manbulloo Station near Katherine (NT) in a 2215 hectare uncleared paddock of native pasture.

Four gateways with external antennas mounted on 12 metre high towers give adequate coverage of the paddock.

In August 2019, 189 pregnant cows were fitted with birthing sensors and GPS tracking collars, and another 10 cows were fitted with GPS collars only.

It was very dry and hot (mean maximum temperatures of around 40 degrees) during most of the October and December calving period, and the cows congregated around the single water point for most of the day before leaving in the late afternoon to graze.

This allowed daily visual checks to be made.

If calving cows could not be located using GPS data, observations were recorded when they came for water in the days after calving.

Alerts were successfully received from 85 per cent of birth sensors. However, some GPS collars stopped



13 25 23 futurebeef.com.au

A GPS collared cow with a newborn calf.

A system to remotely monitor calving would be a game changer for research into calf loss in northern Australia.

Paddock) is producing an

It is thought that GPS

tracking collars have not

improved model to be used

over the next calving season.

previously been used on this

number of cattle anywhere

in the world, so the project

is playing a valuable role in

MAMMOTH OPEN

ENDED

working and if a cow calved without a working GPS collar it was usually not possible to locate the birth site and retrieve the expelled birth sensor.

The issues with the GPS collars have been identified and the company (Smart

EASY ACCESS

developing GPS tracking collars for use on cattle in extensive situations.

Data analysis has not been completed and final calf loss figures will be determined at the first-round weaning muster in 2020. However, some initial observations are:

Bottle teats (resulting in calf death through dehydration) are a bigger problem than previously thought. The calving alerts allowed more cows to be observed shortly after birth than normally happens on northern stations. A number of cows were observed to have bottle

FARMER

FRIENDLY

teats shortly after calving, however their udders looked normal several weeks after losing their calves and so they would not be identified as having bottle teats at a muster several months later. Therefore, it is likely that cows with bottle teats can remain undetected in herds and lose multiple calves. These cows can be identified, where only pregnant cows are kept in a paddock or if pregnancy testing records are available to see if they should have raised a calf.

Queensland Government

Most cows (71pc) commenced calving during daylight hours. This goes against the common perception that calving mostly occurs at night. A high proportion of calves being born during the hottest times of day in northern Australia may contribute to calf loss. This data supports conducting research into providing shade where there is limited natural shade. The birth sites that

were able to be located were distributed evenly throughout the paddock, although there were some 'hot spots' where multiple cows calved. Heifers calving for the first time tended to calve closer to the water point than older cows. Despite the cows congregating around the water point during the day, most either walked away to calve in more private locations or did not come into the water point on the day that they calved.

Contact Tim Schatz, Principal livestock research officer, NT DPIR Berrimah, 08 899 92332.



33

FREE CALL 1800 088 080

17 Phoebe Crescent, Bundaberg QLD 4670 mchughsteel.com.au

P 07 4153 6588 F 07 4153 6981 E info@mchughsteel.com.au



Queensland





13 25 23 futurebeef.com.au

Field studies continue into pasture attack

pasture dieback has caused significant productivity losses over recent years. Rain has improved pasture conditions, but dieback is still present where seen previously and in new locations. Due to its impact, Department of Agriculture and Fisheries has a program to help graziers.

Characterisation of the condition across the state, is important. This has been valuable to determine the impacts of dieback, map its location and to better understand factors that might predispose pastures to attack. This work indicates that millions of hectares may be affected, causing significant economic impacts.

Diagnostic research into the causes of dieback contininvestigating whether fungi, bacteria, viruses, insects or a combination of these, are management options to recauses. At this stage it is unlikely dieback is caused by

AS MOST readers will know, fungal organisms. A range of Station, Gayndah and have fungi have been detected in the field but have not caused plant death in multiple investigations. DAF is investigating the potential involvement of viruses, bacteria or phytoplasmas.

The role pasture mealybug may have in dieback is a focus of DAF research. For mealybug to be the direct cause of dieback, infested plants must express the full cycle of symptoms - leaf yellowing and or reddening, stunted growth, early senescence and death. Several grass species infested with mealybugs in controlled glasshouse experiments (in the absence of other pathogenic organisms) showed dieback-like symptoms but failed to die. This indicates ues. The scientific team are mealybugs are not the direct or sole cause of dieback.

Field trials investigating store productivity continue at Brian Pastures Research

demonstrated that sowing legumes (annual or perennial) into affected paddocks can restore forage availability. Annual forages such as sorghum or oats have not been affected by dieback. Results indicate variation in grass species' tolerance to dieback, however, it is uncertain if any are resistant. In February 2020, a new field site was planted near Kalbar, southern Queensland with 26 different grass species.

The DAF pasture dieback project will continue to seek answers to the many unanswered questions. We have close working relationships with organisations undercomplementary taking research, including MLA (and partners), University of Queensland, Central Queensland University, and Fitzroy Basin Association.

Contact Nick Brazier, Pasture agronomist, DAF Rockhampton, 07 4843 2631.



Dead buffel grass due to dieback in the foreground. Note the unaffected broadleaf plants in this area.



DAF staff undertaking soil and plant sampling during March 2020 for pasture dieback research.

Get beef industry information

your beef industry information? That's what we want to know!

to find out where you go to find reliable and relevant sources of best practice information for the beef industrv.

And then why you think these are good sources of

WHERE do you go to find information i.e. why do you trust them?

By filling out the survey, it will help us improve what Why? Because we are keen we do. It will also allow us to work out how we should best get our information out to vou.

To give use your feedback we would love it if you filled in this brief five question survey.

Type this link into your web browser https://www. surveymonkey.com/r/ CC3LF8H to fill out the short survey to give us your thoughts.

It should take no more than five minutes to complete but would really help us out. Thanks very much for your time and feedback - it is much appreciated!



matters from across the country.

Find commercial and stud stock all in one place!

livestockconnect.com.au

Make the connection

VFS CONNECT





Queensland Government

tional requirements, wethers

can be run on country which

might be unproductive for

Traditionally wethers are

shorn once every 12 months,

shortening this period can

Producers are reminded

to consider the market, in-

creased shearing costs and

labour availability associated

with more frequent shear-

ings, if unsure seek advice

Several years of very

challenging seasonal condi-

tions have had a significant

impact on Australian sheep numbers and wool produc-

tion, but sheep numbers in

Queensland are now slowly

ewes and lambs."

boost cash flow.

from your broker.

Wethers offer more flexibility

TRADITIONALLY, Merino wethers were seen as a sideline addition to wool growing enterprises, which are predominantly focused on ewes and lambs.

Today, wool and sheepmeat prices combined with improved exclusion fencing make wethers an attractive prospect in their own right.

Extension officer with the Queensland Department of Agriculture and Fisheries, Jed Sommerfield, said benefits of purchasing and retaining wethers include income from a wool clip at least once a year and flexibility in dry times.

"They provide an easy back door option if the season turns dry. High wool and stable mutton prices offer flexibility to your business, providing an easy sell option and allowing you to reduce total grazing pressure and maintain ground cover. Ground which will have an improved response from your country when the rain returns," he said.

The lower maintenance aspect of a wether flock is also appealing, and an ap- tive prospect, the profitabili-



Several years of very challenging seasonal conditions have had a significant impact on Australian sheep numbers and wool production.

shearings before selling into the mutton market can provide a low input, high return tained strength in previous investment.

While currently an attracproach including multiple ty of trading wethers is close- in the form of coronavirus,

ly linked to wool returns.

"Wool prices have mainyears, and continue to provide high yields, despite global economic headwinds

Brexit and the US-China trade dispute," Mr Sommerfield said.

"At present, 20-micron wool is fetching roughly 1500 cents a kilogram clean.

mand for sheepmeat, driven largely by a drought reduced flock, buying, shearing and selling wethers can be an

attractive enterprise.

"With a lower constant your property, contact us at "Add to this the high de- plain of energy and nutri- www.leadingsheep.com.au.

DEVELOP A DEEP UNDERSTANDING OF YOUR BUSINESS' GROSS MARGINS



WITH national flock numbers greatly reduced by prolonged drought, widespread recent rainfall has resulted in high demand and high prices for sheep

On top of this, data from the NSW Department of **Primary Industries indicates** standard sheep enterprise gross margins increased on average by about \$5.50 in 2018, to roughly \$50/ DSE, or \$500/hectare, at a stocking rate of 10 DSE/ha.

While average stocking rates in western Queensland are slightly lower, sheep are still a very appealing option for producers looking to restock.

Extension officer with the Queensland Department of Agriculture and Fisheries, Jed Sommerfield, said producers considering purchasing sheep are encouraged to calculate achievable gross margins for their enterprise. "Current price and sea-

sonal conditions, combined with the increased implementation of exclusion fencing across sheep production regions in western Queensland, means sheep are an attractive option for producers at the moment," Mr Sommerfield said.

"Despite this, it's important people are thorough in their planning before deciding to buy. Factors like available feed and associated stocking rates, lambing percentages, growth rates,

wool and sheepmeat prices all need to be considered.

"On top of this, costs like purchase price, animal husbandry and shearing costs should be factored into any calculation.

"To be accurate, gross margin calculations need to be specific to each individual property and business."

To assist you in calculating your gross margins, contact leadingsheep@daf. gld.gov.au for confidential help.

starting to rise. "Adapting your enterprise

to become drought resilient is essential to long-term sustainability and profitability," Mr Sommerfield said.

"Purchasing, shearing and selling Merino wethers can be easier to manage and provide high returns and business flexibility."

If you need more information about running sheep on

LEAP INTO SHEEP Webinar launched for industry newcomers

- Producers looking to get into sheep can learn from Australia's leading industry experts, via a new webinar series.
- Leading Sheep's new 10 part 'H Series' webinar program features information across sheep and wool production topics. Register at leadingsheep.com.au.

[WESTERHAM] *CONCRETE PRODUCTS *

Includes all Feed Bunks, Feedlot Water Troughs, Long Troughs T&C apply. Expires 31/5/20



SALES & ENQUIRIES • 07 4691 0279 • DISCOVER MORE AT WWW.WESTERham.com.au