FutureBeef BEEFTALK
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Shaping up as ideal year for wet season spelling

DO YOU have plans to spell your pastures?

The ability of pastures to recover after grazing is influenced by the amount of leaf and the strength of their root system.

Continuous grazing of pastures removes the leaf, reducing the plant's ability to capture sunlight energy and further weakening the root structure.

If you constantly graze, you eventually reduce the preferred species and reduce the condition of the land.

The best time to spell pastures is after effective rainfall during the wet season, when pastures are actively growing and have an opportunity to store energy back into the roots.

Wet season spelling is a great way to encourage preferred 3P - productive, perennial and palatable - species into your paddocks.

Implementing spelling requires flexibility - if the rain is not there, then the opportunity to spell might not be there.

You need to take the chance to spell when the seasons are with you.

As you drive around a place, you usually have a rough idea of which paddocks have been pushed harder than others.

Having a conversation about spelling during a business/family meeting to discuss the specific paddock options can be beneficial.

The reality is, if you implement a spell without destocking, other paddocks may be sacrificed.

Consider the potential implications of cattle movements on the rest of the property.

Sown pastures, such as stylos, benefit from spelling during the wet season, resulting in higher yields for the following year. Picture supplied

The FORAGE Ground Cover report, which is available online at www.longpaddock.qld.gov.au/forage, can help you choose which paddocks to spell.

This tool tracks cover since the 1990s and compares your property with similar land types within your district.

Areas with a consistent downward trend over three to four years are good candidates for benefiting from a spell.

In the longer term, splitting up bigger paddocks can be advantageous to allow cattle rotation and better use of country.

But the expenses of adding fencing and additional water points must be considered.

Remove grazing pressure from paddocks while pastures are actively growing and allow seed to set before putting cattle back in. Picture supplied

For maximum results, spell during periods of active pasture growth - that is, early in the wet season - for at least six to eight weeks.

As a general rule, cattle can go back onto spelled pastures once seed has set and is starting to fall.

But keep an eye on your country, as this will vary with the season.

For severely run-down pasture, spelling for the whole wet season and successive wet seasons is often needed to improve land condition.

Northern grazing systems are built on grazing extensive areas of native perennial pasture. It is important to understand your carrying capacity and carefully assess your pasture at the end of the growing season.

Will the available feed run the current number of cattle until the end of the season?

Although important for the long-term health of pastures, wet season spelling will never make up for consistent overstocking.

To learn more, head to www.futurebeef.com.au and watch the wet season spelling video.

How do you drive herd fertility?

To maximise breeder performance, we're aiming for cows to conceive early in the mating period and for each cow to raise a weaner.

We need to be aware of a few biological realities.

There are 365 days in a year and the average Brahman pregnancy is 290 days.

The time between calving and a cow's first cycle is about 42 days.

This leaves 33 days, or 1.5 cycles, to get a cow back in calf if she is to calve every 365 days.

We are asking a lot and many cows cannot do it, so we get calving drift.

We need to manage both grazing and the cows to give them the best opportunity to get back in calf quickly. Lack of breeder body condition is the most common cause of poor breeder performance.

When cows calve at the end of the dry season, their energy requirements double but feed quality is usually low.

They face a period of weight loss and require reserves of body condition to carry them until the seasonal break occurs.

Stocking rates and grazing management are most critical to ensure cows have adequate body condition at calving and to minimise weight loss during lactation.

If cows cannot consume their potential feed intake, they will always struggle to maintain condition.

Weaning is the most powerful tool after grazing management as it immediately reduces the cow's energy requirements, providing an opportunity to recover condition.

Phosphorus deficiency reduces feed intake and supplements may be needed.

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ASF is something you need to know about

Pig risks to cattle properties

CATTLE production may be your primary focus, but if you also keep domestic pigs, hunt pigs or have feral pigs that access your land, you need to know about African swine fever - an emergency animal disease that poses a major threat to the Australian pork industry.

African swine fever is a serious disease that has decimated commercial pig populations throughout Asia.

Severe forms of the disease can result in death rates of up to 100 per cent in African swine fever-infected pig herds.

Australia is free of African swine fever and we want to keep it that way.

To increase community awareness about the disease, the Department of Agriculture and Fisheries (DAF) recently released the "African swine fever prevention and early detection" course.

This free and interactive online resource paints a detailed picture of the potential impacts of African swine fever and how to prevent, recognise and report the disease

Hosted by Animal Health Australia, the course can be accessed through its online training portal: www.tinyurl.com/4krzukvv.

Don't forget to pass the details on to anyone you know who owns or works with pigs.

In Australia, strong border controls and nationally consistent swill-feeding laws have kept African swine fever at bay.

But if an outbreak were to occur, early detection would be critical to minimise the impacts to the agricultural industry and broader community.

Anyone who has contact with domestic or feral pigs can play an important role in preventing African swine fever introduction into Australia and ensuring it is detected quickly if an outbreak occurs.

To protect your pigs from African swine fever:

- never feed pigs meat, meat products or anything that has been in contact with meat or meat products
- do not allow feral pigs to have access to domestic pigs, their food, water or bedding
- make sure human food waste cannot be accessed by domestic and feral pigs.

If you see any signs of African swine fever infection in domestic or feral pigs, immediately report it to the Emergency Animal Disease Watch Hotline on 1800 675 888.

For more information about African swine fever go to: www.business.qld.gov.au

African Swine Fever is an emergency animal disease that poses a major threat to the Australian pork industry. Picture supplied

> Anyone who has contact with domestic or feral pigs can play an important role in preventing African swine fever introduction into Australia.

Queensland backs new lumpy skin vaccines

THE Queensland Government has partnered with Meat & Livestock Australia, the New South Wales Department of Primary Industries and US-based biotechnology company Tiba Biotech to create a world-first synthetic vaccine for lumpy skin disease (LSD).

A new mRNA vaccine would be a game changer, as the live virus vaccines currently available overseas cannot be used in Australia without affecting our disease-free status.

A new mRNA vaccine would have the advantages of being potentially safer - with capacity for rapid development and lower-cost manufacturing, helping protect jobs in Queensland's nation-leading livestock industries.

Department of Agriculture and Fisheries (DAF) scientists are also working on a second LSD vaccine project with the Queensland Alliance for Agriculture and Food Innovation (QAAFI) at the University of Queensland.

This involves a traditional protein-based vaccine with a delivery system that releases the vaccine in cattle over an extended period. This would provide an option for northern cattle, which are brought in only once a year.

Professor Tim Mahony from QAAFI's Centre for Animal Science said the team hoped to develop a prototype by the end of the year, using synthetically-produced materials.

As well as vaccines, early detection is also vital to manage biosecurity risks such as LSD.

Livestock owners are reminded of the importance of knowing what LSD looks like and reporting any suspicions early.

If your animals are showing signs of LSD, call your veterinarian and report it immediately to the Emergency Animal Disease Watch Hotline. The hotline number is 1800 675 888.

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Tropical legume trials a success in southern Qld

DESMANTHUS sown in strips has established and persisted well at Dulacca, in southern Queensland, and is starting to out-shine leucaena 12 years after sowing.

Mike and Judy Johnson sowed tropical pasture legumes leucaena and desmanthus into cultivated strips in a buffel grass paddock at Bidson near Dulacca in 2008.

The desmanthus has persisted and spread from the strips where it was sown, but the leucaena production is lagging.

Desmanthus and leucaena produce high quality feed and are persistent even in dry conditions.

Both are especially valuable when the quality of tropical grasses drops at the end of summer.

The Johnsons decided to sow an existing buffel grass paddock with strips of 'Cunningham' leucaena and 'Marc' desmanthus.

The strips were sown with leucaena in twin rows, spaced 12 metres apart, and swapped with desmanthus every 16th strip.

"We prepared the strips in the paddock by spraying out the existing grass then deep ripping and cultivating the soil," Mr Johnson said.

"We fallowed for about 15 months and planted using a leucaena planter.

"We followed that up with a post-emergence herbicide and followed the recommendations for successfully establishing leucaena."

Using strips to establish legumes - leucaena, desmanthus or many other varieties - into existing grass pastures is gaining interest among graziers who wish to improve pasture productivity but are hesitant to plough out the existing grass across the whole paddock.

Desmanthus spread further than the strip where it was planted in twin rows (photo taken in February 2021). Leucaena has died out in this part of the paddock. Picture supplied

There have been many dry and challenging years since the strips were sown at Bidson. But, during 2020-21, spring and summer rain produced plenty of pasture growth.

The desmanthus had spread wider than the strips where it was sown.

"We have seen the desmanthus in this paddock spreading into parts of the paddock where we didn't even sow it," Mr Johnson said.

In February 2021, plant counts were measured to study the distance the desmanthus had spread from the original sown strips.

Mike Johnson standing in one of the sown strips of Desmanthus. Picture supplied

Most of the desmanthus plants were found within 20 metres of the original sown strip. But scattered plants were found further away among the buffel and leucaena throughout the paddock.

Some hedgerows of the leucaena in this paddock had died out completely, with some plants recovering from the dry conditions with new shoots. But all had been well grazed and averaged about one metre tall.

Mr Johnson has since established additional paddocks with leucaena and desmanthus, including different leucaena varieties which seem to be performing better than Cunningham. But these are relatively young stands.

In 2011, Department of Agriculture and Fisheries (DAF) researchers conducted a study of 40 historic legume evaluation trials spanning more than 20 years since sowing.

They found desmanthus persisted at more locations than leucaena in southern and central Queensland.

This project is jointly funded by DAF and Meat & Livestock Australia.

Peer support through NB2 producer groups

Northern Breeding Business (NB2) is a Meat & Livestock Australia (MLA) initiative addressing the northern breeding herd issues of calf loss, low profitability and low adoption of proven management practices and technology.

The project has set an ambitious target to deliver $20 million per year in net benefits to 250 northern beef enterprises by 2027.

Six pilot producer groups have been established across northern Australia as part of an integrated adoption and extension program, which is supported by the Department of Agriculture and Fisheries (DAF).

These producer-led groups will provide direction and insight for expansion of the NB2 project.

Each group has a producer coordinator, who determines the focus of their interactions and chooses how and when they meet.

Producers can share ideas and participate in professional development opportunities that are relevant to them and their group.

DAF beef extension officers facilitate producer groups in Fitzroy and the Burdekin.

Formed in September 2021, the Burdekin NB2 group is made up of seven businesses representing a diverse range of land types.

These are all inter-generational families who want to improve efficiency to support their succession planning.

During the past year, they have received foundational training in feedbase, business principles and herd measurement.

For more information about the NB2 program go to: www.mla.com.au/nb2.

Grazing tactics assessed

A cattleman's view of grazing land management that pays dividends when there is attention to detail

BY **ALISON KAIN**

BRYAN Gill is a tall, quiet man with a welcoming grin and a long involvement with the central Australian pastoral industry.

His career began 40 years ago, working for legendary cattleman Ted Hayes at Undoolya Station.

Since then, he has been a stock inspector and advisory officer and now manages Old Man Plains (OMP) Research Station, just outside of Alice Springs.

He is well respected by local producers for his practical knowledge and hands-on experience.

For the past decade, Mr Gill has been responsible for the day-to-day operations of the Quality Graze project run by the Department of Industry, Tourism and Trade.

The long-term trial is investigating grazing strategies suitable for producing premium beef in a highly variable climate.

Five of the grazing strategies are stocked according to the long-term carrying capacity, with a mix of rotation and continuous grazing, and one strategy is grazed at twice the recommended pasture utilisation rate.

Mr Gill believes getting the long-term carrying capacity right has been critical to the success of the Quality Graze project.

"It has allowed for a big improvement in land condition," he said. "Because our country is now in good condition, we get good feed from very little rain. We finish off sale steers, even in dry years."

Research data shows the improvement in land condition enables OMP to grow twice as much pasture as it used to.

Stocking to the long-term carrying capacity also ensures carryover feed is available from one season to the next.

Security of forage has allowed herd numbers to remain stable for the past 12 years, despite OMP experiencing the wettest year and driest three-year period on record.

Mr Gill believes science has got the numbers right. OMP runs about 350 Droughtmaster breeders and turns off about 160 30-month-old premium steers every year.

"We don't really think about what the season will be like because we know we have enough feed for our production system, even in the dry years," he said.

"We also received really good prices when the good seasons returned because we didn't have to rebuild our herd."

If there is one thing Mr Gill could change it would be the mindset that grass left standing in the paddock is wasted.

"That leftover feed is an opportunity to improve land condition, build up reserves of feed or finish sale stock," he said.

"If we stocked up, we'd be in trouble in about three months."

Producers often worry that kangaroos will eat reserved feed, yet in Mr Gill's experience, that isn't the case.

"There might have been two or three years of higher kangaroo numbers, but they took care of themselves," he said.

"The improvement in land condition was far more useful, because with better land condition the response to rain is that much stronger - more grass and more beef."

There is one strategy in the research trial that is grazed at a rate higher than recommended. "When it gets dry, that paddock worries me," Mr Gill said.

"I've been out there on a bike, thinking it doesn't grow as much feed as it used to."

Cattle behaviour is of particular interest to Mr Gill.

As part of the experimental design, growing steers are often separated from birth-paddock companions when allocated to the different grazing strategies.

When mature animals are reunited for a month before trucking, they will re-sort themselves into groups based on their birth paddock.

Mr Gill actively incorporates this knowledge into the production system by allowing stock time in the yards to find their companions.

"They will often come through the race in numerical order according to their ear tag," he said.

"They probably travel with less stress and arrive in better condition when they are travelling with their mates."

Mr Gill is very proud of the OMP cattle.

He said they had a solid reputation for good temperament and great beef.

Selecting for temperament is important, but weaner training, low-stress stock handling techniques and understanding cattle behaviour is where the real work is done.

Sale steers get an extra 'practice run' through the yards when final pre-trucking weights are recorded.

"When it comes to trucking day, they just walk up: heads down, taking their time, one after the other onto the truck. No jiggers, no yelling," Mr Gill said.

Stressed cattle don't tend to produce high-quality beef, so he works hard to keep the herd happy.

Mr Gill is retiring this year but, like all good cattlemen, he is still thinking about how he might tweak the Quality Graze production system.

"I'd like to try spelling some of the continuously-grazed paddocks to see if we can improve land condition further," he said.

"We could also improve some of our yards to reduce cattle stress a bit more."

For more information, visit www.futurebeef.com.au and search for 'grazing management'.

Bryan Gill, the manager at Old Man Plains Research Station, near Alice Springs, says grass left standing in the paddock is not wasted but an opportunity to improve land.

> We get good feed from very little rain.

Strike fly risk this summer

QUEENSLAND sheep and wool producers are being encouraged to keep flystrike top of mind as La Nina weather conditions persist.

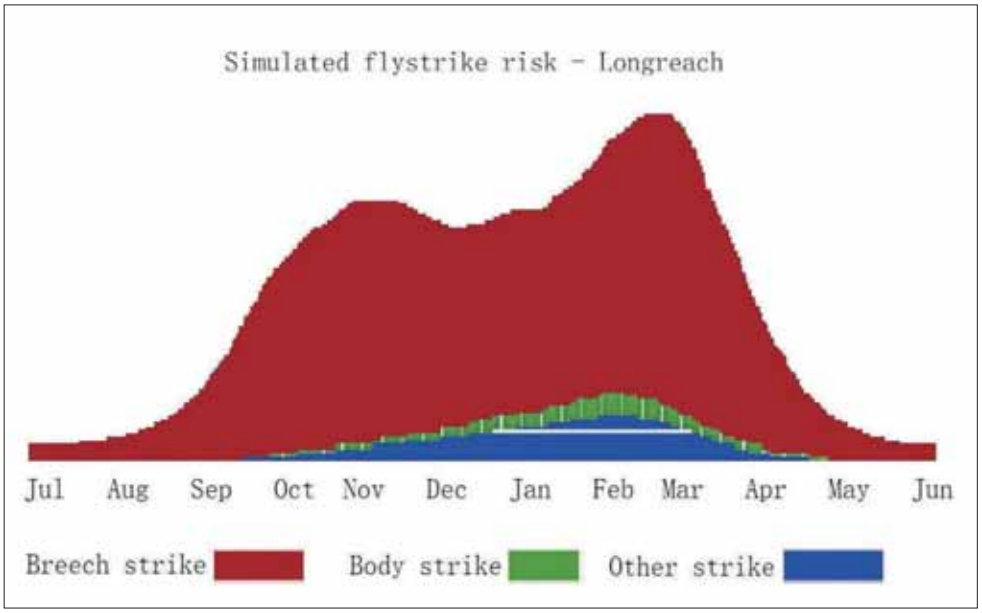
Regular and consistent rainfall that keeps the skin moist for more than two days and temperatures between 17°C and 36°C favour the proliferation of blowfly populations.

Department of Agriculture and Fisheries (DAF) extension officer, Millie Nicholls, said that with the warm, wet conditions forecast for coming months, the risk of flystrike continues to be elevated.

"Now is the time to review your flystrike mitigation plan and to assess strategies and chemical options, considering recent usage records and ensuring you have access to those chemicals if the need arises," she said.

"Development and use of an integrated flystrike management program helps you identify well-timed, strategic activities that minimise the need for treatment.

"Tools like Flystrike Risk Simulator - which can be found under Flystrike Quick Tools on flyboss.com.au - can assess the effectiveness of your current flystrike management practice."



A graph showing historical flystrike risk in the Longreach area using Flystrike Quick Tools Risk Simulator. Picture PIRSA

Ms Nicholls said modifying the timing of shearing or crutching and chemical treatment by a couple of weeks can have significant implications to the protection of your flock in high-risk periods.

She said strategic shearing and crutching, correct tail length, paddock selection, worm management to reduce scouring, applying preventative chemicals and undertaking activities to reduce fly populations can all help to prevent flystrike.

"Breeding or selecting for low breech and body wrinkle (score 1-2), or removing high-risk sheep from the flock can be considered for longer-term protection from flystrike," she said.

"Sheep previously affected by flystrike or with high wrinkle score are considered particularly high risk.

"It is worthwhile identifying sheep that have been struck to be culled.

"Monitoring stock is vital for early detection, particularly if your sheep have high susceptibility and blowflies are present."

Blowflies can be identified by fly traps and checking sheep camps or watering points for activity.

Costing the industry an estimated $227.4 million in losses each year, the aim is to detect strike before it advances to the systemic stage.

Prevention, monitoring and treatment measures are all important.

But prevention really is key to minimise costs and production losses and maintain animal health.

Leading Sheep is a partnership between Queensland DAF and Australian Wool Innovation and is supported by AgForce.

- More information: leadingsheep.com or leadingsheep@daf.qld.gov.au.

CHEMICAL CONUNDRUMS EXPLORED WHEN IT COMES TO FIGHTING FLYSTRIKE

IFYOU are noticing flystruck sheep, the New South Wales Department of Primary Industries (NSW DPI) wants to hear from you - especially if there is strike despite the use of registered chemicals.

NSW DPI, in collaboration with Australian Wool Innovation (AWI), is conducting a two-year research project across Australia to investigate blowfly resistance to flystrike chemicals.

NSW DPI researcher Narelle Sales said a similar project conducted between 2018 and 2020 found varying levels of resistance in every submission from NSW.

The current project aims to improve understanding of the scope and level of blowfly resistance knowledge, particularly in Queensland, Tasmania and Victoria.

Ms Sales said researchers were keen to receive submissions from Queensland, as warmer areas may have a greater resistance problem if insecticides have been used either more intensively or more frequently due to longer flystrike seasons.

Department of Agriculture and Fisheries extension officer Millie Nicholls said knowing the level of chemical resistance in blowfly populations on your property would help you select the best chemicals - ultimately saving you time and money.

"This is a brilliant opportunity for producers to participate in research, at no cost, with direct implications for on-farm decision-making in the selection of chemicals you use for flystrike management," she said.

It is very easy to be involved. Pick up a collection kit from Charleville or Longreach DAF offices or contact Ms Sales at narelle.sales@dpi.nsw.gov.au

FLYSTRIKE

To do list

- Check your historical flystrike risk using Flystrike Quick Tools at flyboss.com.au
- Use the simulator to compare different management strategies/timing and look up products
- Get a collection kit and submit some maggots to find out your resistance profile.