



BEEF NEW ENGLAND & NORTH WEST SLOPES news

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NSW Department of Primary Industries, www.dpi.nsw.gov.au/beefnews

A quarterly newsletter for beef producers of the New England and North West Slopes areas of NSW.

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NSW DEPARTMENT OF
PRIMARY INDUSTRIES

Managing Bloat

Alastair Rayner, Livestock Officer (Beef Products) Tamworth

Bloat is a common concern for producers during periods of rapid pasture growth. In normal grazing conditions, the digestion of pasture produces a large amount of gas, which the animal then passes out of its system. Occasionally however this gas can begin to foam or froth, which prevents the animal belching or passing the gas. This foam rapidly accumulates, expanding the rumen. This expansion compresses onto the heart, lungs and blood vessels. The compression causes Asphyxiation or compression of the blood supply.

Bloat is commonly associated with legumes or rapidly growing grasses in spring or autumn. This is due to the occurrence of a natural foaming agent in these plants. These foaming agents cause the development of stable foam, which then cannot be belched or passed, leading to bloat in the animal.

Typical signs of bloat include:

- Swollen top left abdomen
- Stops grazing
- Reluctant to move
- Distress- bellowing

- Straining to urinate or defecate
- Rapid breathing (mouth may be open and tongue protruding)
- Staggers

In advanced cases the animal will go down, and death is rapid.

Treatment

Cattle that are mildly affected by bloat can be treated with an anti-bloat preparation administered orally. After treatment the animal needs to be kept moving to encourage the treatment to mix through the froth in the rumen.

Moderately affected animals will require veterinary attention. In most cases they will administer anti foaming agents directly into the rumen. In the case of severe bloat animals will need rapid relief. This can be achieved by inserting a wide bore trochar and cannula into the rumen on the left flank (where the swelling is greatest).

After the release of froth and gas, an anti bloat preparation (dose according to label instructions) should be poured through the cannula into the rumen to help break down the remaining froth and foam. Veterinary attention will be necessary to clean the abdominal cavity as well as to clean and stitch the wound and provide antibiotics that will prevent serious infection.

Prevention

As with most animal health issues, preventing the problem should be a focus for producers. When a pasture is considered risky, options for bloat prevention include:

- Restrict pasture intake by limiting grazing time of use of strip grazing
- Fill animals with hay before putting them onto pasture
- Spray the pasture with an anti bloat preparation or oil twice daily
- Apply anti-bloat preparations onto the flank twice daily
- Add bloat oil into the water supply (Generally only useful when cattle drink from troughs only and there is no surface water in the paddock)
- Use anti-bloat blocks or licks
- Use anti-bloat capsules such as Rumensin®

Bloat can be difficult to manage particularly in larger operations. Generally no single strategy will work in isolation. In most cases a number of strategies to manage the problem will need to be adopted. It is important in periods of high growth that producers exercise vigilance and check their animals regularly, or consider using the pasture for other purposes. In some cases this may include conserving pasture as silage.

For more information on the management of Bloat, visit the NSW DPI website and read the Prime Note on bloat

(http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0009/111411/bloat.pdf)



Photo: Belinda Walker, NSW DPI

Is there really much difference between heifers calves and your mature cows calves?

Matt McKiernan Livestock Officer (Beef Products), NSW DPI, Glen Innes

Mating heifers as yearlings, as opposed to two year-olds, is commonly used by producers who seek to increase productivity, since it offers the opportunity for an extra calf in a cow's lifetime.

However, this first calf is often a difficult animal to manage as they are usually smaller and lighter than calves from mature cows. The challenge is to manage the live-weight gain of the total calf-drop when targeting a sale end-point.

While many producers are aware there is a difference between the calves from heifers against mature cows, quantifying the difference has been one area which hasn't been considered.

In order to quantify the difference, Matt McKiernan undertook an experiment using a breeding herd run on the Glen Innes Agricultural Research & Advisory Station. The cattle used in this experiment were all pure-bred Angus born. The project used;

- Thirty six yearling heifers (Y group – aged ~ 15 months),
- 34 two year-old heifers (T group – aged ~ 30 months) and
- 136 mature cows (M group - average age 6.5 years, third and fourth generation)

All three groups were mated to Angus bulls for a nine week joining period and run on similar improved pastures from joining through to weaning. Weaning took place when the calves averaged 8 months. As well as the birth weight of the calves, data collected included weaning weight; hip height and P8 fat (measured using real-time

ultrasound) at weaning were recorded for all progeny. Average daily weight gain (ADG) from birth to weaning was then calculated.

Progeny of Y heifers were much lighter at birth and weaning than those born to the M group cows (14.5 and 13.8 per cent less, respectively) resulting in considerably lower growth rates (12.1 per cent less). However, of potentially greater impact, was the effect on P8 fat depth which showed a 30.7 per cent reduction.

To assess the impact of lower weaning weights, it was calculated that to reach a feedlot entry weight of 450 kg, given equivalent growth rates of 1 kg/head/day, it would:

- Take the Y progeny an extra 21 days compared to T progeny,
- Or 38 days compared to M progeny.

From the perspective of the producer, feed-lotter and processor, it is desirable to have all progeny meet the feed-lot entry weight at the same time, that is, achieve an 'even line' of cattle which can be managed the same and will perform similarly.

Using the MLA Growth calculator, it was predicted that the progeny from Y heifers required a growth rate of approximately 1.3 kg/day to reach a similar feedlot entry weight and level of fatness (approximately 450kg, 8.8 mm) as progeny from M cows. That equates to an extra 0.2 kg/head/day when compared to progeny from T heifers.

This highlights the need to treat heifer progeny differently to the progeny of mature cows by having access to either better pastures or supplementary feed.

Results here support the industry belief that progeny of heifers mated as yearlings are lighter at birth and weaning, leaner, and smaller in frame size than those of heifers mated at two years of age. The performance of the progeny of heifers is heavily influenced by nutritional management. The heifer dam/calf unit requires priority for nutrition in lactation, particularly for later calving females, if the calves are to perform as well as those from mature cows.

The differences which have been highlighted in the experiment have significant implications for breeders. Producers who choose to calve their females early should firstly consider if they are prepared to provide a higher plane of nutrition following calving. This may be through improved pastures, fodder crops or most likely through the use of a supplementary feed.

Any decision to calve early should include consideration of the economics of providing better nutrition. In addition some consideration should be made in regards to other management activities such as supervision of calving heifers as well as time available for increased feeding. These considerations can determine if calving younger females does actually provide the financial return to the operation to justify its place in the breeding strategies.





Editorial

Alastair Rayner, Livestock Officer (Beef Products) Tamworth

Welcome to the 2008 Spring edition of the New England North West Beef News. Spring is looking really promising for most of the region. There have been many enquiries regarding bloat in cattle. It's important to develop a plan to minimise the risk of bloat becoming an issue for your herd. If you do need some advice or input in designing a program to manage your cattle, don't hesitate to contact your Beef Cattle Officer, either myself in Tamworth or Matt McKiernan at Glen Innes.

There is plenty of interest in getting more from the NLIS devices and scanners. The E-Beef program offered by NSW DPI is designed to help producers use their NLIS devices to collect data which can fine tune management programs. If you are interested in E-Beef, feel free to give Matt or myself a call.

Coming Events

Workshop – The Farmer's Guide to Managing Climate Risk

This one day workshop helps develop your risk management skills by allowing you to monitor and effectively incorporate weather and climate information into your decision making.

The course covers understanding how weather works, reading and interpreting weather maps, analysing local and regional climate history and the relevance of seasonal climatic influences. It also covers the impacts of climate change, the use of forecasts for practical decisions and where to find weather and climate information.

Workshops are planned for
Walcha Wednesday 5th November
Armidale Thursday 6th November

The course costs \$30 per participant. There are limited places available for each day.

RSVP Cassie Gardiner 6763 1276 or further information Clare Edwards, NSW DPI Armidale on 6738 8500.



Considering Silage? Plan Now!

Clare Edwards, District Agronomist, Armidale, NSW Department of Primary Industries

Silage is a form of fodder conservation that has been the subject of increasing interest on the Northern Tablelands in recent years. One of the benefits of Silage is its use to manipulate the feed year to better match your livestock and pasture goals. Much of the baled silage I have recently looked at includes oats, pasture, sorghum, millet, lucerne and soybeans made from last year's spring-summer growth.

When considering Silage, you need to ask yourself a few pertinent questions. Why make silage? Does it fit in with your business goals and whole farm plan by meeting your production and management goals? Is silage the most economic and/or productive option to fill a feed gap, to balance rations, or to utilise excess pasture?

A major benefit of silage is the utilisation of quality feed from a time of abundance to fill feed gaps at later times when paddock feed is inadequate. Another advantage not commonly considered is that fodder conservation can be used to improve pasture quality or to manipulate the composition of pastures.

Maintaining a pasture in Phase II for as long as possible means that plants are in the leafy, productive stage for longer and the reproductive phase (running up 'to head') is postponed. This maintains pasture quality (digestibility), because as grass plants become more 'stemmy' as they reach the reproductive stage quality is lost. This is one of the reasons for considering silage at this part of the season. Unlike hay, silage is more about quality of product than quantity. Quality silage can maximise animal production potential, minimise storage and feed-out costs per unit of stored ME, and increase management flexibility.

Growth Stage	ME (MJ/kg DM)	Crude Protein (% DM)	Potential Yield (t DM/ha)
Vegetative (25cm)	10.0 – 11.0	15 - 25	1.5 – 3.0
Head emergence (40 cm)	9.5 – 11.0	12 - 22	2.5 – 4.0
Flowering	8.5 – 10.0	10 - 20	2.5 – 5.0

Effect of growth stage on potential yield and quality of perennial ryegrass pasture. Forage quality will vary with proportion of legume. Source: Successful Silage

Other pasture considerations include manipulating pasture species, for example allowing a less dominant species to flourish by removing the competition at the time of its greatest potential. Likewise, fodder conservation such as silage can also be used as a weed control strategy. However, the timing and management of pasture regrowth is critical and the timing of the cut may not be ideal for maximum pasture quality. Pasture manipulation can occur at the feed-out stage too, with conserved fodder decreasing the grazing pressure on other pastures which can then be conserved for critical times such as lambing or calving.

On the downside, many Northern Tablelands producers associate the making of silage (or hay) with high costs or unacceptable risks due to variable seasonal conditions. Also, many paddocks on the tablelands are not suited to fodder conservation due to pasture type, land class or land suitability (too many rocks, for example). The introduction of any fodder conservation system may also affect the farm's capital structure as the cost of machinery for the making, storing, and feeding out of fodder needs to be

considered. Remember that even with silage, further supplements may be required if the silage sample quality does not match your animal requirements.

Understand the silage system before you embark. There are a number of silage information sheets on the NSW Department of Primary Industries website that detail many of the stages in silage making and feeding out. Speak to your local agronomist and livestock officer on how it might fit into your farm plan.

I recently inspected silage from a number of properties which had been made for a range of reasons. These included the feed being too wet for hay, the crop having been frosted and the manipulation of pastures for younger livestock. All are relevant reasons to make silage, however it is just as critical, if not more so, that you understand the quality aspects. In some of these cases, the resulting silage quality was not optimal.

I would strongly recommend that those producers making their own silage needs to do a Feedtest before first feeding out. This test has two purposes; the first allows you to check the feed quality when feeding out, thus making sure that your animals is reaching your targets in terms of weight and production. The second purpose allows you to assess the silage process to determine if any changes need to be made. Feedtest kits are available by calling 1800 675 623 or from your local NSW DPI office.

So, as the season progresses and the amount of soil moisture and pasture growth increases, it is time to consider fodder conservation. If you are thinking of silage, I would suggest it is now time to start earmarking pastures or crops for this purpose. It is also the time to talk to contractors or to plan your own schedule involving your own machinery and staff.

Gaining EU accreditation

Australian Quarantine Inspection Service

Why do we need the Scheme for the European Union?

The European Union will not accept Australian beef unless we meet certain production requirements. These requirements include:

- Individual animal identification for trace-back of cattle slaughtered for the EU market, and
- The beef is from cattle that have not been treated with Hormonal Growth Promotants (HGP's).

The European Union Cattle Accreditation Scheme (the Scheme) addresses these concerns.

What do I have to do to meet the requirements?

Farms, feedlots and saleyards must become accredited to participate in the Scheme. Entry into the Scheme is by way of an application form. The Australian Quarantine and Inspection Service (AQIS) administers the accreditation arrangements. The Scheme requires accredited farms to:

- have only HGP-free cattle on their property at all times (with the exception of breeding bulls),
- only purchase and sell Scheme cattle from other accredited properties and saleyards (with the exception of breeding females)
- use the NLIS to identify and trace Scheme cattle movements,
- use European Union Vendor Declaration (EUVD) forms and specific Scheme transaction tailtags

to identify Scheme cattle that are being moved.

How do I become accredited?

To gain accreditation, the manager responsible for the cattle will first have to fill out an application form. Application forms are available from AQIS by phoning 1800 305 544 Monday to Friday 8am - 4pm.

Before an application for farm accreditation can be approved, you must meet certain conditions of accreditation:

- You must not use HGP's on the farm you intend to obtain accreditation for.
- If you have used HGP's on the farm you intend to obtain accreditation for within the past two years, you must:
 - Remove all the cattle that have been treated with HGP's from the farm you intend to obtain accreditation for,
 - Surrender all unused doses of HGP's to the HGP retailer or wholesaler where you bought them, and
 - Have records that prove these things have occurred.
- You must have only HGP-free cattle on the farm you are obtaining accreditation for at the time of accreditation. Cattle introduced to your property after 30 June 2000 must have come from an accredited property and be identified in the NLIS.
- You must have records that prove your cattle are HGP-free.

The Manager who signs the application form for accreditation takes full responsibility for meeting all the conditions of accreditation. If

Getting a breeding herd accredited

You can gain accreditation for your farm based on the existing breeding herd if the animals meet a certain criteria. The criteria

these conditions are not met, the Manager may face penalties and imprisonment.

for cattle permitted on accredited farms is laid out in the Rules Scheme at www.daff.gov.au/agis and search EUCAS. Alternatively call the EUCAS Helpline Monday to Friday 8am – 4 pm on 1800305544.

NLIS – Are your cattle Lifetime Traceable?

Alison McIntosh, Project Officer (NLIS), NSW DPI Goulburn

Record all cattle movements

Help protect Australia's \$13 billion beef industry by ensuring you record on-line all cattle movements to the National Livestock Identification System (NLIS).

The following movements must be reported:

- moving cattle between properties, if they have different Property Identification Codes (PIC)
- buying cattle privately (receiver's responsibility)
- moving cattle to and from leased properties
- moving cattle to and from agistment

You have seven days to record cattle movements to the NLIS database www.nlis.mla.com.au and will need to know your PIC to access and update the database.

You do not need to complete a transfer when you:

- send cattle to a saleyard or an abattoir

Animal traceability from paddock to plate is essential in maintaining our international reputation and market access.

If you have questions about making on-line movements, call 1800 654 743.

Your Rural Lands Protection Board (RLPB) and NLIS

If you are just starting to sell cattle in this area, you may not have been allocated a PIC. Your local Rural Lands Protection

Board (RLPB) issue PICs to new landowners. They also assist with ensuring you have correctly identified livestock and that stock movements are carried out in accordance with NLIS requirements.

Alison McIntosh, NSW Department of Primary Industries (DPI), NLIS project officer explains, "We are working with producers to fully understand how the database can impact on their business and ultimately the dollars in the bank. In addition to identifying and recording their cattle movements there are on-farm benefits to be utilised with the NLIS to better their existing management systems and to help them make decisions, based on accurate and well recorded information."

Cattle producers can collect on-farm performance and management data and use the NLIS system to boost productivity and efficiency by linking live weight, health treatments and breeding records. This information can be used to monitor individual animal and herd performance.

Recording systems are available to record herd fertility and disease and growth information, NLIS can also be linked to stockyard equipment to automate cattle drafting.

Carcase feedback information is also available from NSW processors electronically through the NLIS database. This is a useful tool for breeders and finishers and can help monitor cattle performance against international and domestic market specifications.