BEEFnews
NEW ENGLAND & NORTH WEST SLOPES

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Winter Feeding

Alastair Rayner, Livestock Officer (Beef Products) Glen Innes

Winter on the Northern Tablelands and North West Slopes can be extremely challenging. After this year's hot dry summer, drier autumn and several severe frosts, producers are faced with a challenge much greater than usual.

Many producers are looking at a three to four month period where pasture feed will be limited or almost unavailable. This period generally coincides with the time of the year when cattle feed demands reach their peak at calving time.

While this year posses a challenge, it is manageable. Ideally most producers will have undertaken a stock reduction program, selling off non-performing and non essential animals.

The next stage of the winter plan is to identify the feed options available and the most suitable options for using pasture resources and matching both to the animals needs.

Matching pastures, feeds and animal requirements can be difficult. However the table below can act as a useful guide.

A key point of this table is to recognise that feeds are not always suitable to all situations. As pasture conditions change, supplements should also change. This allows the most efficient use of both pasture and supplements.

Once a supplement has been chosen, producers need to determine the amount of feed to provide for their animals.

Early planning, which involves considering which supplements may be offered and thinking of pasture conditions in a few months time will help in this planning process.

The table below outlines quantities of feed for various classes of cattle. However these figures are only a guide based on the assumption that dry standing feed is available. Available feed is more than 1000 – 1500kg/DM/Ha. If feed is limited, quantities of feed may increase dramatically.

These amounts will change depending upon the animal weight and pasture conditions. In a situation where feed is below 1000 kg/DM/ Ha, full hand feeding should be undertaken.

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

INSIDE THIS ISSUE

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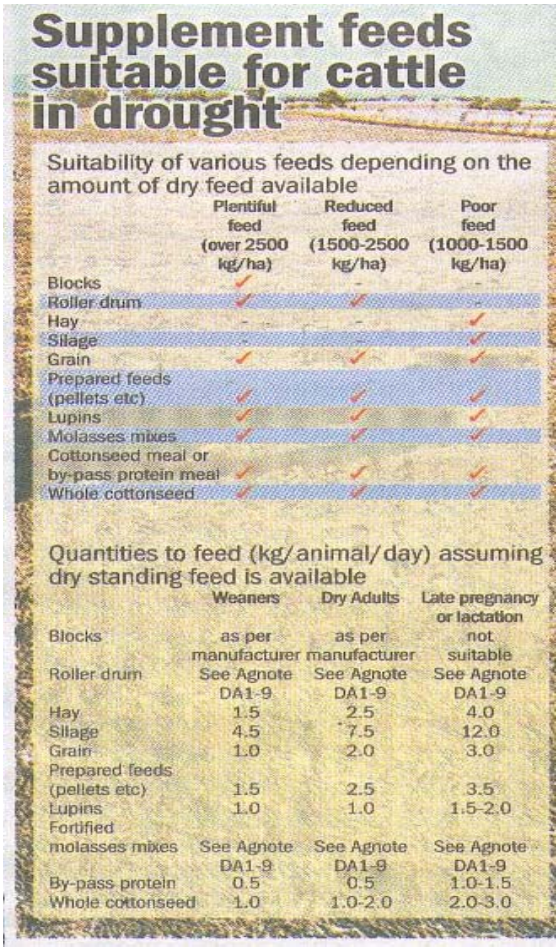

Supplement feeds suitable for cattle in drought

Suitability of various feeds depending on the amount of dry feed available

	Plentiful feed (over 2500 kg/ha)	Reduced feed (1500-2500 kg/ha)	Poor feed (1000-1500 kg/ha)
Blocks	✓	-	-
Roller drum	✓	✓	
Hay	-	-	✓
Silage	-	-	✓
Grain	✓	✓	✓
Prepared feeds (pellets etc)	✓	✓	✓
Lupins	✓	✓	✓
Molasses mixes	✓	✓	✓
Cottonseed meal or by-pass protein meal	✓	✓	✓
Whole cottonseed	✓	✓	✓

Quantities to feed (kg/animal/day) assuming dry standing feed is available

	Weaners	Dry Adults	Late pregnancy or lactation
Blocks	as per manufacturer	as per manufacturer	not suitable
Roller drum	See Agnote DA1-9	See Agnote DA1-9	See Agnote DA1-9
Hay	1.5	2.5	4.0
Silage	4.5	7.5	12.0
Grain	1.0	2.0	3.0
Prepared feeds (pellets etc)	1.5	2.5	3.5
Lupins	1.0	1.0	1.5-2.0
Fortified molasses mixes	See Agnote DA1-9	See Agnote DA1-9	See Agnote DA1-9
By-pass protein	0.5	0.5	1.0-1.5
Whole cottonseed	1.0	1.0-2.0	2.0-3.0

In this situation amounts and feed suitability will be critical decisions. Producers seeking more advice on these issues should visit the drought pages on the DPI website http://www.agric.nsw.gov.au/reader/drtfeeding or contact their advisory office of the NSW DPI.

Identifiying Akabane in your herd

Andrew Biddle, District Veterinarian, Northern New England RLPB

During routine blood sampling of sentinel cattle herds in the Inverell and Warialda areas animals tested have returned positive antibodies to the virus that causes Akabane disease.

The virus causing the disease is common in Coastal areas so animals are immune and disease is uncommon. The virus is carried up from the coast by biting midges. This summer we had a lot of wet easterly weather which increases the likelihood of insects carrying the virus moving off the coast. Wind and weather patterns determine where the insects end up.

Akabane causes deformities in calves when the cow comes into contact with the virus during pregnancy. This year the virus is likely to have arrived in the region between January and April. The effects of the virus depend on the stage of pregnancy.

Infection late in pregnancy can cause cows to abort or calves that appear uncoordinated.

The classic first sign of an outbreak occurs as the result of calves born with fused joints or bent legs or spine. This occurs when infection occurs in the 5th to 6th month of pregnancy.

The other common presentation is that where severe brain damage has occurred. This may be seen as blindness, aimless wandering and a dome shaped head. This is the result of infection around 3 to 4 months.

To put it simply if you joined your cows in the spring or summer of 2005 it is possible that your cows may have been infected with Akabane. If you joined earlier in September or October the likely clinical signs will more likely to involve the bones, joints or spine while later joining toward November or December are more likely to result in brain effects if infection occurred. It is quite normal to see a range of spines in the one herd depending on how long the virus was around.

The last serious outbreak of Akabane in this area was 1998.

This is 8 calving ago so most cows in herds younger than 8 years have no immunity. The bad news is that at this stage if your cows were exposed to the virus there is nothing you can do to stop abnormalities occurring. However deformities such as large heads, bent legs, fused joints or spinal columns can create problems during calving. Large framed older cows that you would not expect problems with may require closer inspection during the calving period.

The range and spread of Akabane within and between regions is hugely variable. The insect carrying the virus does not contact all cows or all cows do not become infected by the virus as losses vary from paddock to paddock or between properties.

Editorial

Alastair Rayner, Livestock Officer (Beef Products) GLEN INNES

Welcome to the second electronic edition of Beef News. Thank you to everyone who has subscribed or made some comments on the first edition.

The season has certainly become much colder and for many people more difficult. Despite the optimism of the high weaner prices last month, many people are reviewing their options for the next few months. I have been working with many people to consider their winter options. I would encourage all producers to make a plan for the following months which addresses your stock numbers, feed available (both paddock ad supplementary) and water supplies. I often work plans on the best and worst case. If you need some advice, don't hesitate to get in touch.

Coming Events

Beef Improvement Association Annual Conference

The Beef Improvement Association of Australia will be holding their annual national conference in Tamworth on the 26th of July. Key note speakers will cover issues from genetic technologies for beef producers to making better supplementary feeding decisions. The conference is a great opportunity to update information as well as improve your industry network. For more information contact the BIA on 03-5341 7700

Which tall fescue variety is right for the Northern Tablelands?

Carol Harris, Research Agronomist DPI Glen Innes

Tall fescue is a deep-rooted perennial grass adapted to a wide range of growing conditions. Tall fescue is well suited to the Northern Tablelands where growth potential is maximised by summer rainfall and mild temperatures. Tall fescue is more tolerant of wet, poorly drained soils than cocksfoot and more tolerant of acid soils than phalaris. Research on the Northern Tablelands has shown that tall fescue based pastures have a longer effective growing season with more consistent animal production across seasons compared to phalaris and cocksfoot based pastures.

Historically there have been a limited number of cultivars of tall fescue available to producers (Demeter and AU Triumph). Today there are approximately 20 commercial cultivars including temperate (spring/summer active), Mediterranean (winter active) and safe endophyte varieties, which can make choosing a new variety to use confusing.

The newer varieties of tall fescue are currently evaluated for yield performance and persistence at the NSW DPI Agricultural Research & Advisory Station. The trial was established in 2001 and comprises 15 tall fescue temperate and Mediterranean varieties.

Total yield over the period November 2001 to March 2006 was greatest for Quantum (16319 kg DM/ha) followed by Dovey (15114 kg DM/ha). These yields are significantly higher than many of the other varieties. The commonly used cultivars AU Triumph and Demeter were the next highest yielding varieties with 13017and 12521 kg DM/ha respectively. The varieties Jesup, Advance and Torpedo yielded poorly (8335, 5813 and 3772 kg DM/ha respectively).

There was no significant difference among the Mediterranean varieties Fraydo, Prosper and Resolute. On average the best performing temperate varieties produced more than twice the total yield of the Mediterranean varieties (i.e. Quantum at 16319 kg DM/ha versus Fraydo at 7350 kg DM/ha). Therefore on the Northern Tablelands where the temperate types of tall fescue are well adapted the winter active Mediterranean varieties of tall fescue appear to have limited use.

A temperate, Mediterranean mixture (varieties Dovey and Prosper) produced the 3rd highest yield that was significantly higher than a number of the other variety treatments. However, Dovey accounted for the majority of the herbage mass with few Prosper plants persisting in the plots.

Trials evaluating the role safe endophyte in tall fescue have been established at Glen Innes, Inverell and Barraba in 2005. Early data indicates that the Mediterranean safe endophyte varieties have the potential to extend the zone of adaptation of tall fescue into lower more marginal rainfall areas on the slopes. By contrast, temperate safe endophyte varieties are not showing the same potential for improved production and persistence in high rainfall areas of the tablelands.

Using the bull sale catalogue

Alastair Rayner - Livestock Officer (Beef Products) Glen Innes

The annual bull selling season is about to commence and producers will be confronted with sale catalogues promoting hundreds of bulls on offer at both on property and multi vendor sales.

Working through this material can often be quite daunting. Each catalogue contains a huge range of information including pedigree of the bull; his EBV's; breed EBV's and trends, as well as supporting information from the breeder. When some catalogues may list as many as 60 bulls, its no surprise that information overload can quickly occur!

So how can you use this information to your best advantage? I believe the answer is to use the catalogue as the initial "drafting gate". To do this you firstly need to consider what it is you want from a bull. Use one of the following options to do the “first draft”.

OPTION 1:

If you wish to breed steers to be grown out to meet supermarket specifications, as well as retaining heifers you will have specific requirements for a bull. In such an operation you may wish to purchase a bull which has the genetic potential to add growth to the herd, improve retail beef yield, while also adding fertility to the female herd. A consideration may also be to avoid increasing the maturity pattern within the herd.

Having identified the traits that a bull must have for this operation, now consider the information available to identify which bull can add these traits to the herd. Such information is available by looking at the EBV's (Estimated Breeding Values) of the animal. While there are numerous EBV's, those for consideration are those which address the desired traits. In this example, assessing the bull’s potential for growth at 400 days. The desired weight would be above breed average; Retail Beef Yield (RBY) should also be above average; Birth Weight (BW) should be slightly below average; Milk & Scrotal Size and finally Mature Cow Weight which may also be breed average.

Having highlighted these traits, and then read through a catalogue highlighting those animals which will provide the genetic improvements required for this operation. The non-highlighted bulls in the catalogue should be forgotten about because they don't suit that operation. Those animals that have been highlighted are those which have made it into the pound for further drafting. Further drafting happens on sale day when the animal is assessed for structure; temperament; muscularity as well as other visual traits required.

It is very easy to become overwhelmed by the quantity of information provided in most catalogues. Individuals, who use catalogues to draft out bulls, quickly find they no longer become swamped by the data presented to them. More importantly on sale day, instead of looking at dozens of bulls, trying to compare them all, only look at the few bulls which will deliver the desired genetic outcome for the breeding program.

OPTION 2:

Not everyone wants to go through and consider each trait individually. It is possible to select bulls which may suit your operation without working through every category of EBV available by using $Indexes. Dollar Indexes have been developed in most breeds. Often there are two or three indexes for common markets such as Supermarket or Japanese Long fed (B3) markets. They are developed by a program, called Breed Object, which places weighting upon the important traits for a breeding herd targeting a particular market. The weighting factors take account of the relative economic importance of the traits in meeting a breeding objective. Highlight bulls in the catalogue with high $Indexes for your market as a "first draft". Remember, as with EBVs, $Indexes cannot be compared across breeds, they only apply within breed.

Address the basics when buying a new bull this year

Alastair Rayner, Livestock Officer (Beef Products) Glen Innes

The bull selling season is about to commence in Northern NSW. Many seedstock production systems will be selling this year's bulls at on farm sales or at special feature sales. These sales are an excellent opportunity for beef producers to purchase bulls to improve the genetics of their herds.

Buying a bull can often be a daunting experience. There are many factors which producers need to consider. Many of these, for example marbling ability or retail beef yield, relate to the usefulness a bull may have in contributing to improved production or quality traits.

However, there are basics which apply to any operation, producers must remember when buying a bull. These basics could be used to form a basic checklist producers can check off before they purchase.

The three main points to check are; temperament; structural soundness and fertility. NSW Agriculture has identified bulls with sound structure and fertility can be used for longer periods in a herd, compared to bulls which are not selected with these traits in mind.

Temperament is important not only for personal safety. Quite often temperament can be hereditary. Poor temperament in a bull's progeny can affect ease of handling, and meat quality.

Structural soundness is very important in bull selection. A structurally sound bull will have a longer working life, and breed structurally sound progeny. Producers should look at the bulls:

- Feet, avoiding overgrown, scissor or curved claws
- Walk, looking for a free moving gait, making sure the feet step into the footprints of the front feet
- Leg angulation, avoiding post legs (straight hocks) and sickle hocked legs, and also avoiding excessive shoulder development or straight shoulders
- Reproductive organs, soundly placed without obvious problems in the sheath or scrotum
- Head, avoid undershot or overshot jaws, look for bulls with hooded eyes or good pigment around the eye.

It is also important for a bull to have well formed large testicles. The acceptable minimum circumference for Bos Taurus bulls at 18 months is 34cm. Large testicles with a good tone and no abnormalities not only help successfully meet a bulls mating load, but also influence fertility of the bull's daughters

Bull Buyers Checklist

For most of the characteristics below, bulls can range from unacceptable (✗), through acceptable (✓) to very good (✓✓). This checklist could be completed this way, using the six columns to compare up to six bulls, with space for extra bulls or comments. You could also photocopy and laminate this checklist for use at bull sales.

	Bull No.					
The delivery system	**1**	**2**	**3**	**4**	**5**	**6**
Legs	❑	❑	❑	❑	❑	❑
Feet	❑	❑	❑	❑	❑	❑
Walk	❑	❑	❑	❑	❑	❑
Scrotal Size	❑	❑	❑	❑	❑	❑
Scrotal Firmness	❑	❑	❑	❑	❑	❑
Temperament	❑	❑	❑	❑	❑	❑
Serving capacity	❑	❑	❑	❑	❑	❑
The genetic package						
BREEDPLAN EBVs	❑	❑	❑	❑	❑	❑
Growth	❑	❑	❑	❑	❑	❑
Milk	❑	❑	❑	❑	❑	❑
Fertility	❑	❑	❑	❑	❑	❑
Carcase	❑	❑	❑	❑	❑	❑
Muscle Score	❑	❑	❑	❑	❑	❑
Maturity Pattern (Finish)	❑	❑	❑	❑	❑	❑
Your additional requirements						
e.g. Condition to work	❑	❑	❑	❑	❑	❑
Calving ease	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑