

Introduction

It is important to consider the effects of the impending winter on livestock. Our native pastures grow well in summer and autumn but can be of very poor quality in winter. It is common for cattle on the North Coast to lose weight over winter if they are only eating native pasture. The grasses in winter often contain inadequate energy and protein to meet the requirements of the stock. Weight loss also occurs over winter because nutritional demands increase, especially when cold frosty nights become the norm. By the end of winter, weight losses can be severe and will impact on a cow's ability to rear a calf and, importantly, to fall pregnant again. Animals that are well advanced in pregnancy or feeding young offspring will be most at risk compared to those that are eating just to support themselves. The photo shows a heifer that received no substantial supplementary feed over winter. The photo was taken in late August. Her poor condition is obvious.



Options available to producers include:

1. Do nothing and accept a certain amount of weight loss and poor reproductive cycling. Such an option must be done within animal welfare guidelines. No cattle should ever be allowed to become emaciated.
2. Substantially reduce stock numbers before winter to allow more pasture for those left behind. Some cattle may still lose weight on winter native pastures as it is of poor quality.
3. Increase the area sown to temperate pasture types such as rye grasses, clovers, legumes or crops like oats. This is a good option and is especially favoured where irrigation is possible. Producers can seek advice from a district or private agronomist to improve their pastures.
4. Supply additional protein and energy in the form of supplements. This is a good option but producers need to consider the aim of supplementation as considerable money, infrastructure needs and time can be involved.

Supplementation

If you have adequate standing feed but it is of poor quality you need protein supplementation. This supplementation is useful because it will increase the intake and utilization of low quality pasture. To supplement protein alone consider:

- Use of white cottonseed, soybean or sunflower meal. The question of white cotton seed causing infertility in bulls is still not fully resolved, so it is probably better to avoid feeding white cotton seed meal to bulls.
- A commercial protein liquid supplement. This can be a convenient “delivered to you” option but comes at greater cost.

If you have both poor quantity and quality of feed you will need both energy and protein supplementation. Costs of this form of supplementation can be a key factor in reducing the profitability of a beef enterprise so consider your business aims and options wisely. To supplement both energy and protein consider:

- Hay or Silage. These are good supplements but costs can be significant if you need to buy it in. Baled silage is increasingly popular however the size of the bales means that machinery is needed to be able to feed them out. The green plastic wrapped bales are very popular. Corn silage is becoming more available than in the past and offers improved protein levels over pasture silage.

A note of caution: Cattle may try to eat the plastic wrapping on silage if they have access to it. The plastic wrap does not break down in the animal and can cause blockages in the gut which lead to death. It is very important to remove all the plastic when feeding out silage. Cattle can also break through fences to get to the bales, so you should store the bales well away from livestock. The picture was taken on a property that lost several cattle over a two week period after they had access to silage bales.



- Grains. These are good sources of energy and protein and are easy to store and feed out but are often expensive to buy. Examples include wheat, barley and oats. Stock also need to be given time to adjust to grains to avoid “grain poisoning”.
- Molasses mixes. Molasses is a good cheap source of energy and can be mixed with things such as cotton seed meal or urea to be both a protein and energy supplement. *A note of caution:* If urea is not mixed correctly or if using more than 3% in the mixture poisoning can occur. If urea/molasses mixes get wet the urea can separate out and cause poisoning.
- Lick blocks will NOT provide adequate energy and protein unless fed at very high levels at high cost.
- Commercial feeds such as cattle “nuts”. These feeds are balanced and contain adequate energy and protein but are expensive in large volumes.

Dairy farmers can be a good source of information on how to feed cattle in winter.

Summary of health issues

- Any sudden changes to feed conditions may lead to diseases such as Pulpy Kidney in cattle, sheep and goats. It is a good idea to vaccinate with 5 in 1 (or 7 in 1) vaccine before the animals are fed higher protein diets or put onto good winter crops. The vaccine may only protect the animals for 3 to 4 months if the feed conditions are good enough. If you don't know if your cattle have been vaccinated start a fresh program, that is, 2 vaccinations one month apart, with boosters at regular intervals afterwards.
- Take care to avoid cattle accessing silage bales with plastic.
- Introduce grains slowly over a 2 week period to avoid “grain poisoning” which can kill stock.
- Take care to avoid urea toxicity.