



Costing standing forage

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Costing and selling 'standing feed' before actual harvest in terms of dollars per tonne of hay or on a per bale basis can be a nightmare.

If it's to be done accurately and fairly, costing a standing crop is a complicated exercise and there are many traps for the unwary. Below are some questions and considerations to think about.

Who wears the cost if the weather turns bad just when the paddock is about to be or is being baled or has been on the ground when rain occurs? In all these scenarios the result will be forage with reduced quality and dry matter (DM) yields.

Be very clear as to when the crop is yours. Is it when the handshake occurs some time period before cutting, when cutting starts or after the crop has been harvested? Whose responsibility is it after baling? Whose problem is it if a stack in the paddock is rained upon? All these can affect the final DM yield and quality outcomes, especially if bad weather delays harvesting, or rain occurs during mowing.

Is the yield (and nutritive value) calculated before or after harvest? If buying on bales basis after harvest, how heavy are the bales? Don't work on three bales to the tonne. A 25 kg per bale difference over 100 bales is 2.5 tonnes at \$150 per tonne is \$375.

If buying for harvesting as silage into a stack or as bales, the dry matter content needs to be fairly and accurately assessed regularly throughout the harvest period.

Costing should be on a cents per kilogram dry matter (¢/kg DM) or dollars per tonne dry matter (\$/t DM) basis, at the very least.

If being harvested as silage, how do you know how much is in the stack and how is the final yield calculated? Many contractors will arrange to weigh loads regularly and take grab samples for DM content estimation. These samples should be kept in a cooled esky to avoid drying out throughout the day. How variable is the DM content if harvesting different paddocks of different crop types, or wilted to different DM contents such light verses heavy crops, paddocks cut on separate days, etc.?

Be aware that 'forage in' versus 'silage out' will be lower in yield due to DM losses of fermentation. This could range from as low as 8 per cent to well over 15 per cent depending on many factors such as crop type, chop length, DM content, compaction, effectiveness of sealing, fermentation type, etc. A well compacted stack of silage of 2 to 4 cm chop length should contain about 220 kg DM per cubic metre (approximately 660 kg fresh weight at 33 per cent DM as a very rough guide to the amount in storage).

How is the nutritive value accounted for in the costing? The ultimate costing should be on cents per mega joules of metabolisable energy (¢/MJ ME) or dollar per kilogram crude protein (\$/kg CP) basis. This allows a comparison to other suitable alternatives which may be available. This is very important when costing silage, usually of better quality than the hay, but not always!

When is the nutritive value to be tested? Some sellers send a sample for testing out of the freshly cut crop or windrow as it enters the machine or when coming out of the chopper for silage. The crop will generally be of higher quality at this stage than later as the baled (hay) or fermented (silage) product.

There will be some loss of leaves in hay at raking and baling and fermentation losses to turn forage into silage, both leading to DM and quality losses. Silage should not be tested, ideally, for at least six weeks, assuming it has undergone a good fermentation, longer if too wet or if wilting was too long.

What about arrangements where you may own the standing crop but someone else harvests the entire area and takes half as payment, or something similar? How do the above questions now affect your half?

If the agreement involves estimating what is in the paddock before harvesting, best of luck in that! Many quad cuts would need to be taken and even then, is only a very rough estimation of yield. Then how do the above questions affect the final DM yield and nutritive values? The 'best guesstimate' is the number of bales produced or number of loads taken off for silage, sampled for DM content and quality (if a factor in the purchase/sale price).

What price is put on the standing feed? This is a very hard question to answer. It is usually influenced by the current price for hay or silage for sale, availability of suitable alternatives and their pricing, and should take into account location and likely nutritive value at harvest.

Unfortunately, many standing crops are up for sale before the season starts or very early. The season as it eventuates (drier than normal, lot of fodder being made, drought situation, etc) and the availability of last season's fodder makes setting a price very difficult. If buying, the price should be based on what you are prepared to pay for the crop to give a profitable return in your business.