## How heavy is that hay bale?

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Many farmers still buy and sell hay on the basis of bale weight or on " 3 bales per tonne" basis. Every load of hay should be paid for on the true weight of the hay in that load regardless of the number of bales. Most purchases do happen this way but some do not.

Farmers also often pay contractors and other farmers the cost of baling on a per bale basis.
However, bale weights can vary enormously in the paddock depending on moisture content, maturity of the crop, type of species, and especially the density of the bale. To compound matters even further peoples estimates of bale weights can and do vary enormously.

A competition conducted by AFIA (Australian Fodder Industry Association) at the Elmore Field Days in 2010 highlighted this issue dramatically. AFIA ran a simple "Guess the bale weight" competition with 200 entries entered.

Although some inexperienced folk will have entered the competition, many experienced fodder producers and contractors had a go at estimating the correct weight of the large rectangular ( $8^{\prime} \mathrm{x} 4^{\prime} \mathrm{x} 3^{\prime}$ ) vetch bale.

Guesstimates ranged from 250kg to 2000kg, with most in the 500-800kg range (Figure 1). The actual weight of the bale was 404 kg with the nearest guess being 400 kg and less than ten guesses were in the 400 range!

The average bale weight with all guesses is about 816 kg , but if the guesses over 1000 kg were ignored, the average bale weight was still nearly 700 kg !

Who would have "got done here" depending on whether you were buying or selling? If was selling or paying for the baling, I would go for the lightest guess, eh?

What might this mean for a buyer of hay since many bales of hay are still traded by the bale, not the actual bale weight or even load weight?

AFIA found that that not only was it hay sellers that overestimated the weight but also many hay purchasers, who might tend to err on an underestimate, tended to overestimated the bale weight.

How can these weights affect your pocket?.
Say a B-Double holds a load of 53 large squares of $8^{\prime} \mathrm{x} 4^{\prime} \mathrm{x} 3^{\prime}$ of vetch hay, (the same size of the bale that was at Elmore)
53 bales @ 404kg each = 21.412t
53 bales @ 700kg each = 37.1t
21.412t @ \$220/t = \$4710/load

Difference \$3452
Round hay bales would be even more variable in weight (and size). Now if we looked at the actual moisture content of bales bought and sold, this is another minefield, albeit much less so than the one discussed above.

Most wives buy small packages of fruit and vegies on a weight and price per kilogram basis so why are some farmers and hay producers buying much larger packages, still using guesstimates, and often bloody poor ones at that? Accurate i.e. measured information on which to base a transaction is more transparent and less likely to be disputed.


Figure 1. Range of weight guesstimates for a single bale (Source: AFIA 2010)

