Article

Grain on Grass

Background

The Warrumbungle Mixed Farm Producer Group (WMFPG) in the central west of NSW is an informal group with the aim of increasing the knowledge and skills of individual members using joint learning and experience sharing. These producers are grazing dual purpose cereal crops and cereal grazing crops through winter and utilising tropical pasture over summer. Due to the drought, many producers have invested in grain feeders and feed mixers, which are now being under-utilised or not used at all.

As most of the graziers are also grain producers and therefore have grain on hand, there is an opportunity for these producers to utilise feeding equipment and on-farm grain stores to increase weight gain of both feeder cattle and lambs on forage/dual purpose crops and/or tropical pastures.

By utilising a small amount of low value grain and/or supplement, producers will be able to turn off stock quicker and therefore increase carrying capacity without increasing the cost of forage production, thus increasing profitability.

Year 2 Results

With the return of favorable autumn sowing conditions for grazing cereal crops, we saw the demonstrations shift back to a winter grazing period. Sites were selected to allow for variation in crop type to mimic commercial operations within the Warrumbungle region. This round of demonstrations utilised both a grazing cereal (oats) as well as grazing lucerne.

Demonstrations commenced in mid-July, with the use of weaner steers. In contrast to the initial feed test results from the tropical pastures during summer in year 1, the protein levels of both the oats and lucerne were well above the requirements needed for weight gain of young stock (weaner steers), with the oats and lucerne test results being 17% crude protein and 22% crude protein, respectively. However, the amount of energy was dramatically different between the two feed stuffs. The oats tested at 13 MJ/kg DM but the lucerne results showed only 7.8 MJ/kg DM.

Research suggested that supplementing a cereal grain to increase starch levels would deliver increased liveweights, however the supplemented grazing oats used during the demonstration period resulted in liveweight gains that were significantly lower than expected. It is believed that an increase was not achieved in this demonstration due to the animals substituting an intake of the grazing oats for an increase in the supplement offered. However, while the supplemented mob didn't achieve the anticipated increase in liveweight gain, the reduced daily intake of the grazing crop did mean that the availability of herbage mass was extended when compared to the control paddock. This meant that there could be an opportunity under the same circumstances

for the producer to either extend the number of grazing days available or alternatively increase the stocking rate to utilise the surplus feed over that same period.

The results from the demonstration site where cattle were grazing on lucerne showed that, on average, it was possible to achieve an increase in liveweight of 48% by supplying the cattle with a supplementation that increased the energy level of their diet. The supplement used was a total mixed ration (TMR) as the producer had suitable equipment and commodities on hand. The ration included a mix of hay (10%), grain (85%) and concentrate (5%) at a total cost of $2,150/t or $2.15/kg. This site utilised an Optiweigh unit for the collection of liveweights for the duration of the demonstration. This meant that we were able to get regular weights without having the additional time and labour component of bringing the animals into the yards for weighing.

Conclusion

The demonstrations have shown that it is possible to increase production (weight gain) of weaner/yearling cattle with the addition of a grain supplementation on grazing crops and tropical pastures. However, the associated costs of labour and supplementary feed, combined with fluctuations in the livestock market, mean that it may not be financially beneficial to undertake every season.

There may be certain scenarios where the importance of an increase in liveweight gain may be placed above the immediate direct financial cost. For example, if producers have critical production targets they want to achieve by a predetermined date (such as a critical joining weight for heifers). In these cases producers may decide the increased cost of production is justified.

The recommendation is that producers undertake some basic calculations before commencing to ensure that there is a financial benefit to supplementing livestock. Factors to consider would include the cost of supplementation (commodity prices) and livestock prices (current and future).

Image 1 Optiweigh unit in operation

Image 2 Treatment cattle at end of demonstration

For further information: Matt Jones, Central West Local Land Services **M** 0439 925 106 **E** matt.jones@lls.nsw.gov.au