Excel dry season pasture budget soon to be available on FutureBeef

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Introduction

An excel 'dry season pasture budget' calculator ('dry season' aka 'no or low growing season', or 'closed season') is being developed to be freely available on the FutureBeef website in 2026. For tropical and subtropical pastures in Queensland, pasture budgeting involves assessing the total amount of dry matter pasture that is grown over the growing season (i.e. parts of spring, summer and autumn) and then comparing available pasture dry matter yield to stock feed demand, aiming to ration the pasture out until the next pasture growing season, typically in summer. The aim is to also retain good ground cover of "rain ready" pasture stubble for when the next summer rainfall is expected in order to maximise infiltration, improve pasture response and minimise runoff and soil loss.

Importance of pasture budgeting

Balancing stock numbers around long-term carrying capacity is important for maintaining land condition which is the foundation and one of the largest profit drivers for grazing businesses. Drought and overstocking are amongst the greatest risks to ground cover, land condition and grazing business resilience. Droughts can have devasting impacts on people, pastures, soil, stock, water resources, biodiversity, businesses and communities. Impacts of drought on ground cover also represent a large threat to the great barrier reef through poor water quality. Pasture budgeting over the "no or low growing" dry season (i.e. typically late autumn, winter, spring in Queensland) assists with adjusting stock numbers based on how much pasture feed has grown over the summer pasture growing season. Adjusting stocking rates is one of the most important grazing practices for managing drought and land condition. By assessing available pasture yield in autumn, it can be forecast if there will be enough feed to carry stock until an estimated "green date" when there is a reasonable probability of pasture growing rainfall and warmth to grow feed again. Graziers use experience and various methods of estimating sustainable stocking rates for their paddocks. A pasture budgeting calculator can add an extra tool to assist with balancing stock numbers with feed availability and retaining records.

Whole of property pasture budget calculator – points of difference

Whilst there are various calculators available on the internet, some points of difference include:
- an excel calculator free to download from the FutureBeef website.
- allows for pasture budgeting for each paddock and for the whole property.
- caters for grazing multispecies within mobs (cattle, sheep, goats, horses, camels, kangaroos).
- uses AE's and DSE's for cattle, sheep and goats (McLennan *et al.,* 2020, McLean *et al.,* 2021).
- caters for up to 90 paddocks including three rotations per paddock over the "dry season".
- estimates the date when stock will graze the pasture down to hit the nominated residual pasture yield. It also shows how many tonnes of dry matter would be needed for stock until the end date. This helps with anticipating and planning for feed shortages well ahead of time.

References

McLennan et al (2020) Re-defining the animal unit equivalence (AE) for grazing ruminants and its application for determining forage intake, with particular reference to the Northern Australian grazing industries. Final Report, Project B.GBP.0036, Meat and Livestock Australia Limited, Sydney.

McLean I, Blakeley S (2021) Development of generic animal unit ratings for sheep and goats. Bush Agribusiness Pty Ltd.

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