

PRODUCTIVE LEGUME PASTURES



CASE STUDY #2

CHAD BAKER, BURNFOOT PASTORAL ANGUS CATTLE AND COMPOSITE LAMB HINDMARSH TIERS, FLEURIEU

ABOUT THE PROPERTY

Location: Hindmarsh Tiers, Fleurieu Peninsula SA

Size: 2100ha, 1870ha is used for grazing, ~300ha native scrub, rivers and gullies excluded from livestock

Enterprise: 1600 cattle, mainly Angus, split calving in early and late winter. 4000 Lampro Primeline ewes, lambing in winter

Soil: wide variety: pure sand, sandy loam, grey loam, some heavier clays in the hills

Annual Rainfall: average = 850mm, Jan '24- Dec '24 = 620mm

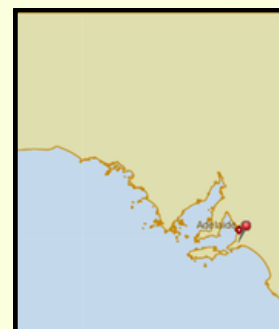


Image: Bureau of Meteorology

PASTURE MANAGEMENT AND LIVESTOCK SYSTEM

Persistent Pasture Species: pastures are selected based on soil type. The bulk of the undulating hills are minimally improved, supporting natural Victorian ryegrass and subclover. The 'kinder' hill country has been improved with Phalaris (Holdfast GT) and white clover. On the sandy soils, lucerne (SARDI 7), Phalaris, and white clover are grown.

Role of legumes: critical for sheep and lamb production, as high protein, energy and digestibility boosts growth rates, without which the lamb enterprise would not be profitable. Perennial legumes provide essential nitrogen fixation and support pasture quality by filling in gaps in grass dominant pastures during autumn where summer weeds might otherwise take over.



Tribute White Clover (photo: DLF seeds)



SARDI 7 Lucerne (Photo: H Griffiths)

Key tools: Burnfoot Pastoral employs rotational grazing across its pastures, ensuring that paddocks are rested for 20-30 days, depending on seasonal growth, before being grazed again. The property has five to six paddocks in each grazing cell, and stocking rate is matched to pasture growth to maintain balance and avoid overgrazing. Overall farm stocking rates in normal years sit at 18 DSE/ha in mid-winter, up to 20-21 DSE/ha in Spring.

Additionally, the Burnfoot has 180ha under centre pivot irrigation, This are grows Fescue (Quantica) and white clover (Tribute). This irrigated land contributes to grazing, fodder conservation and a longer pasture growing season



Angus cattle (Photo: The Land)

PREPARING FOR DRY SEASONS

Burnfoot Pastoral Company has 3 properties: Deepwater, Salt Creek, and Maylands, Parawa, in addition to Burnfoot at Hindmarsh Tiers. Having three locations experiencing different growing conditions allows stock or feed to be moved between properties. Each year, Burnfoot produces 800-900 tons of silage in pits, can store up to 110t grain and has containment facilities for up to 800 cows and all 4000 ewes and lambs if needed. In November most years when feed at Burnfoot is diminishing, significant cattle numbers are moved off farm to other properties where stock have not been grazed through winter and spring. The remaining stock graze pasture in the hills down to 1200 kgDM/ha remains, when they are put in containment. The stored silage is combined with grape marc for cattle feed, while the sheep are fed barley and straw.

*“Pasture drives your animals, with that drives your profit.
Pastures is one of the most important things to get right”*

RECENT CHANGES AND FUTURE DIRECTIONS

The dry season in 2024 required adaptation to maintain stock and pasture health. Typically, Chad trades 8000-10,000 lambs each year in addition to ~6000 bred on farm, grazing the irrigated land, but in 2024 Burnfoot retained its weaner cattle due to feed shortages on satellite properties. In 2024, no additional lambs were purchased.

Looking to the future, Chad is considering introducing plantain into the irrigation system, as it has shown promise in his pasture trials. Chickory has also performed well. so plantain may offer additional benefits for pasture diversity. Chad’s main concern going into dry or variable seasons is managing the higher cost of production, particularly with the sheep enterprise. As a result, Burnfoot Pastoral is focusing on cattle instead, where the costs of production are lower, and prices are generally more stable. By improving pasture management and resilience strategies, the farm aims to increase drought resilience and reduce the impacts of variable weather patterns.



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