

The transformation of “Mitiamo” from mixed farming to grazing

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Abstract: *This paper details the transformation of “Mitiamo” from a mixed farming property to a grazing only property. It provides an insight into our experiences with establishing tropical grass and legume pastures, and an overview of the productive road we are now on with our grazing management and choice of cattle enterprise.*

Key words: direct drilling, ground cover

Introduction

Our properties are located 20 km southwest of Bingara in the Horton Valley on the North-West Slopes of New South Wales. We first settled on “Pallal Station” in 1885, when it encompassed approximately 68,826 ha. Following World War I, “Pallal Station” was subdivided into several soldier settlement blocks. “Mitiamo” and “Berrybank” were two of many properties created through this subdivision process and were allocated to the Mack brothers. More recently, we purchased the adjoining property “Paradise”, bringing our current operation to 3,240 ha.

Today, our business is a family-run beef grazing enterprise focused on producing high-quality grass-fed cattle while continually improving our pastures, soils and grazing management.

Farm description

Our three properties are situated within the Horton Valley, which receives an average annual rainfall of approximately 711 mm. While the past three years have delivered above-average rainfall, the period from 2017 to 2019 presented significant challenges, with prolonged drought conditions resulting in Pallal Creek ceasing to flow for several months. As Pallal Creek supplies water to our livestock trough system, these dry periods reinforced the importance of conservative stocking rates and drought preparedness.

The country is predominantly gently undulating, with scattered rocky outcrops throughout the landscape. Soil types vary considerably across the properties, ranging from red clays (Red Chromosols) through to brown and grey clays

(Brown and Grey Vertosols), along with areas of Trap soils (those other than basalt or granite, usually sedimentary in origin).

Since 2005, we have progressively transitioned from a mixed farming operation to a fully grazing-based operation, with a strong emphasis on pasture productivity and long-term soil health.

Livestock

Our breeding herd consists of approximately 600 Angus and Black Baldy cows, joined to both Angus and Poll Hereford bulls. Our primary market is the Coles Grass Fed program, with steers generally turned off at 270 kg dressed weight (approximately 540–550 kg liveweight).

Previously, oats formed part of our finishing system; however, improvements in our pasture base have eliminated the need for oat production. We also trialled steer trading for a period, but found it required significant labour for minimal financial return, leading us to focus on our breeding enterprise.

Calving occurs from July through to September, with calves weaned during January and February onto quality tropical grass paddocks where they continue to grow on a high-quality forage base.

Weeds, pests and diseases

Maintaining dense pasture cover has greatly reduced weed pressure across the property while also significantly improving water infiltration and virtually eliminating runoff and erosion.

Our cattle are managed under a preventative animal health program, with routine vaccinations and herd health practices implemented to maintain productivity and minimise disease risk.

Drought strategies

Conservative stocking rates form the foundation of our drought management strategy. Rather than carrying maximum stock numbers, we aim to match livestock demand with seasonal pasture production. Nevertheless, hay reserves are maintained each year to provide security during extended dry periods, and livestock receive appropriate nutritional supplements when pasture quality declines, particularly during winter or prolonged dry conditions.

Goals and business objectives

At the heart of our operation is a simple philosophy:

We are growers of grass.

A key strategy has been designing our pasture systems so that no matter what time of year rainfall occurs, something productive and beneficial is ready to respond. By incorporating a diverse mix of tropical grasses, temperate species, legumes and broadleaf plants, we aim to ensure that every rainfall event contributes to pasture growth, soil improvement and livestock nutrition. This diversity allows us to maximise the value of unpredictable seasonal rainfall while maintaining year-round ground cover and reducing reliance on synthetic fertilisers.

Pathway to pasture production

Our journey towards improving pasture production began after attending the 2004 Grassland Society of NSW Conference in Gunnedah. A tour of George Avendano's property demonstrated how tropical grasses could be successfully incorporated into a grazing system and inspired us to begin our own transition.

Our first attempts at establishing tropical grasses during 2005–06 were far from perfect. Seed was simply blown out behind the air seeder and lightly covered with harrows. Despite the challenges, the potential was obvious. In the summer of 2006–07, we established a 10-hectare demonstration site in partnership with the NSW Department of Primary Industries. This was followed by a further 25 ha that were sown using a home-built direct drill

fitted with tynes and press wheels. As our confidence and experience grew, so did our tropical pasture program. In 2015, we further modified our seeder by replacing the tynes with discs, significantly improving sowing accuracy and establishment success. By 2020, we had progressed to harvesting, drying and grading our own tropical grass seed into first and second grade. This has since developed into an additional enterprise, supplying tropical grass seed to other producers. The predominate species we have grown is digit grass (*Digitaria eriantha*).

An important lesson came after making tropical grass hay one season. While the hay itself was excellent, removing such a large volume of nutrients meant the paddock took almost two years to recover. Since then, we have chosen to purchase hay for drought reserves rather than harvesting our own pastures.

Like many producers, we spent years following traditional farming practices that had been passed down through generations. Through ongoing learning, field days and practical experience, we have gradually changed the way we think about farming. Rather than working against nature, we now focus on working with our environment.

By incorporating multispecies pastures (we've added legumes such as arrowleaf and subterranean clovers to our pastures), improving grazing management, adopting zero or minimum till establishment methods and moving away from cropping that continually removed nutrients from our soils, we have reduced input costs while improving productivity, soil health and pasture resilience. In many ways, we have had to "*learn to ride the backwards bicycle*", challenging long-held beliefs to achieve better long-term outcomes.

The future

Our focus moving forward is to continue improving pasture productivity, soil health and grazing efficiency while building a resilient farming system that can better withstand seasonal variability. Ultimately, our aim is to leave the land in better condition than we found it, ensuring it remains productive and sustainable for future generations.

Conclusions

Our farming journey has been one of continual learning and adaptation. The greatest success has not been a single practice or technology, but a willingness to question traditional methods and embrace new ideas. Improving pasture diversity, maintaining year-round ground cover, adopting rotational grazing and reducing reliance on synthetic fertilisers have all contributed to healthier soils, more resilient pastures and a more profitable grazing enterprise.

There will always be seasonal challenges, but by focusing on growing healthy grass first, we are confident our livestock and business will continue to thrive. Looking after the land today ensures it will continue to support both our family and future generations of farmers.