

GrazingFutures Project Case Study

Lara Downs Station

“Don’t go into the wet dependent on having a ‘good’ wet season”

Overview

Lara Downs is a 33,000 ha property North of Julia Creek in northern Queensland. Andrea Burnett and her two sons Colin and Adam manage “Lara”. Located on deep cracking clays in the Mitchell Grass Downs country, Lara has a long-term carrying capacity of 3800 adult equivalents (AE). The family also hold Mt. Norman, a breeding block in the forest country north of Richmond which is managed by Colin and Adam’s sister, Danica and her husband Brad. Weaners from Mt. Norman are brought to Lara every year for finishing to target a variety of potential markets. Lara is managed primarily as a trading block with a small breeding herd. Sale options from Lara include live export, slaughter bullocks and steers into feedlots depending on the economics of the market. Mortalities were significant during the North West Monsoon event (Flood) of February 2019 with about 20% of the Lara herd lost due to wind chill and flood.

Colin Burnett attended a GrazingFutures-NextGen Nutrition and Grazing workshop in February 2017. He subsequently joined the DAF led \$avannaPlan-BeefSense NextGen mentoring program which focused on improving industry knowledge and confidence in managing grass, people and finances. These experiences led him to successfully apply for, and complete, a Nuffield Scholarship (How to Survive and Prosper in the North West Queensland Beef Industry) in 2019.

In June 2019, Colin sat down with Cloncurry Beef Extension Officer, Lindsey Perry to discuss the operation and thinking at Lara. The Nuffield experience, particularly the New Zealand leg, impressed on Colin the importance of maintaining land, herd, people and finance banks. He had the following notes about each.

1. Grass bank

“The amount of feed available at all times is managed. Grazing pressure is managed to always have a margin of safety with quantity of feed and to some extent quality (depending on the time of year).”

2. People bank – continuous upskilling

“At Lara we don’t have a lot of long term employees, but place importance on upskilling and training people in the business, as well as Adam and I continuing to advance our skills. We try to make it worthwhile for the workers we do have, including backpackers, grey nomads and seasonal workers”

3. The Cash Bank – safety margin in terms of cash in the bank.

“Building a financial reserve is important to be less reliant on market forces and seasonal conditions. It gives us the flexibility to sell when we want to, not when we need to. If it gets unusually dry we are not forced to sell cattle into lower markets, we haven’t done that for over 10 years.”

4. Infrastructure bank - minimising costs and maximising savings.

“We don’t have a big investment in plant and equipment, but install quality property infrastructure that lasts. I don’t want to have to rebuild the fence we are doing now ever again, not just because of the work-load but because of financial waste”

5. Mental health bank

“We try not to expect too much from people, including ourselves and aim not to be under the pump all the time. You get more out of people if you are not pushing them hard. In this way, if a big event happens, you have the mental capacity to respond to it.”

Grazing land management and nutrition

Having good groundcover at the break of season is fundamental at Lara Downs. Located on the northern fringes of the Mitchell grass downs, keeping healthy perennial tussock grassland is a priority.

*“Climate extremes are typical of the region, and you have to be responsive to it. Flood recovery isn’t all that different to drought recovery in terms of pastures. We have a few trees, but the majority of the place is groundcover from grass. There is no cell or rotational grazing here, but **every paddock gets a spell every second wet season**”.*

The wet season is variable, so each year what grass has grown and how best to utilise the resource is assessed.

“This year (2020) rainfall was light (150 mm total in some paddocks), which on top of last year’s flood damage (Figure 1) has led to poor grass growth in places. We are in a position to spell those paddocks, using plain wire electric fence to keep cattle in areas where there has been a reasonable season”.



Figure 1. Mitchell Grass paddock recovering from flood damage at Lara Downs

Conservative grazing land management strategies employed at Lara are not industry standard.

“There is minimal talk locally around the importance of groundcover but this is changing slowly in the next generation and the young producer groups in the region. Due to our grassland management strategies and having plenty of break of season groundcover, we regularly have requests to agist, buy Lara and buy or bale

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hay on Lara. Keeping conservative approaches gives us plenty of options during the dry time and we are not forced to sell. It allows us to be more price setters – price makers, rather than price takers”.

Trigger points are used at Lara. Mid-February is the key wet season decision point where if the season has not been good enough, cattle are sold to avoid running into trouble with grass later in the year.

“If we have not had much rain by mid February we destock. The big bullocks go at the end of March when there is usually some green feed and this is the best you will get price and weight wise. Most of the weight gain occurs between February and April at around 0.6 kg day. In a dry year, we hook in and sell what we need to by the end of April. We keep stocking records but don’t use them that much to compare stocking rates between paddocks and years. Adam knows what we can run based on historical data, but we don’t cut and weigh grass, as we can’t see the cost-benefit in terms of the whole-business. Lara is easy in terms of destocking, we get a drone up and shift them when we need to”.

Keeping significant groundcover and protecting perennial pastures, means that soil erosion is low and Colin feels that stock have a little protection from the winter rain and wind. Production feeding (Table 1) allows the Burnett’s to control turnoff better and enhance production from the pasture. Colin says “The advantage is having cattle that are ready for sale at a set time, although we would estimate that there is a 10 – 20 kg improvement in the bullocks (Figure 2) through feeding vs. not feeding. Although we do a lot of weighing of stock, we don’t necessarily track cost of feeding against weight gain every year”

Table 1. The estimated cost of feeding different classes of cattle on Lara Downs

	Feed	Total cost of feeding/head/year	Daily feed cost/head (\$)	Estimated cost per kg gain (\$)*
Weaners 100 – 150kg	Yes	\$150	\$0.75	\$1.40
Weaners – 150 – 200kg	Yes	\$40	\$0.20	\$0.30
Weaners 200 + kg	No	-	-	-
Cows	No	-	-	-
Bullocks (500 – 700kg)	Yes	\$15	\$0.20	\$0.25
Steers (200 – 500kg)	No	-	-	-

*assuming 10 – 20 kg per head weight gain improvement compared with no feeding.

Cows are not spike fed to push any poor condition cows into calf, as the economics are not favourable. The breeders are not supplemented and with soil phosphorus levels of 15 mg/kg (Colwell) wet season P is not required. Weaners and steers are fed through the dry months to fill the feed gap with a good quality protein meal. “Nutrition has been a game changer for us; understanding what is in soil; monitoring grass at different times of year and how the rumen responds to it”.

Colin watches the commodities market keenly to find economical feed concentrates, which in the past has included whole cottonseed meal, grain and molasses. The 2019 Flood changed some strategies to include more production feeding. “From the middle of the year (June) a big flood, big drought or average wet can all happen by the end of the year. We feed small weaners to October so that we can sell before break of season to live export. This way they are gone before either drought or flood.” An example feed rations used on Lara are detailed in Table 2.

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Table 2. An example of feed rations used for paddock feeding weaners at Lara in 2019

	Starter	Weaner	Grower
Ingredients	%	%	%
Sorghum Rolled	44	56	54
Grass Hay	28	16	20
Soybean Meal - 49	12	8	4
Water	10	10	10
Cottonseed High Lint	3	5	7
Trace Minerals	3	5	5
Cost/tonne (as fed)	\$356.70	\$384.90	\$362.30



Figure 2. Bullocks at Lara Downs

Weaning and Breeder Management

The Mt. Norman breeder block is in more marginally productive country north of Hughenden. Maximising breeder efficiency there is critical to the overall operation.

“About two years ago, based on advice from Mick Sullivan (DAF Rockhampton) we decided to wean down to 100 kg in the northern forest breeder block to give both the cows a chance to return to body condition to rebreed and to decrease calf losses. There are two rounds of weaning a year at Mt. Norman and the weaning rate has increased from about 50% to 68% in the last two years of data. Weaners come from Mt. Norman anywhere between 100 to 200 kg LW. Initially, good quality lucerne hay is fed to fresh weaners for 6 weeks to get them moving ahead to reach market weight more quickly.

Meanwhile on the more productive Lara Downs country higher weaning rates and better growth paths provide replacement heifers and heavier weaners from the core breeding herd. There isn't a static herd but a total of 900 heifers and cows were put to bulls in 2019/20. At Lara controlled mating is practised (bulls go in in March until first round weaning) with calving pushed forward until January. A lot of the 2019 sale heifers were kept to rebuild herd numbers after the flooding.

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“At Lara there is an 80-85% weaning rate, with three weaning rounds per year. Ideally we want to wean everything first round. At Lara, we wean down to ~180 kg (Figure 3) keeping an eye on body condition score (BCS) of cow. The aim is to keep breeders around BCS 3 or over at calving to have breeders back in calf again before weaning. The heavier (~180 to 220 kg) weaners go straight onto fresh spelled pasture. A 10% urea block in the yard for weaners kicks their rumen into gear before they go onto better feed. Our aim is to ensure that their guts are right, disease wise they’re right, growth on feed is best we can do, so they can reach their genetic optimum, there shouldn’t be anything holding them back.”



Figure 3. Mixed weaners at Lara Downs are fed a production mix to target particular markets.

Trading and markets

Julia Creek has rainfall variability of 42% which makes breeding operations risky. Trading cattle provides some drought and market shock resilience by using seasonal pasture growth and selling down easily when it is dry.

“Last year (between June and December 2018), we sold 1500 head, we weren’t over stocked at the end of the dry which helped minimise losses in the flood. Around 40% of our turnoff is LiveEx, but this year it will be about 60% given the season. However we aim to keep our LiveEx sales under half of total turnoff. Cattle are sold into feedlots, abattoirs and some to local re-stockers. We also sell some pregnancy tested in calf (PTIC) cows and weaners to re-stockers. Last year we fed bullocks a urea based dry season lick at \$8 total per head over 3 months. We had rain in November that cut about \$3/hd off the total bill. We keep the rumen active with a protein supplement, and prefer to do this than have compensatory gain and so production feeding is a strategy we use”

Colin’s brother Adam, who is conservative by nature always says:

“You don’t want to go into a wet season dependent on having a good wet season and be left hanging”

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After the flood at Lara, restocking or baling hay were options to make cashflow out of the grass. *“After the flood, we were able to bale hay off a portion of Lara. We think there is a 10 – 20% chance of having good winter rain and mid-year cheap cattle are usually available. In a normal year, we would sell about 2200 head”.*

Hormones and Disease management

Every Brahman female (with the exception of replacement heifers) gets HGP hormone. All Lara cattle receive the long acting one-year botulism vaccine and the bulls are vaccinated for vibrio. Young cattle get Dectamax and backline for internal and external parasites. *“When we tested the Mt. Norman herd about 50% had been subject to Pestivirus and we estimate that all retained heifers are exposed to pestivirus before we join.*

Everything we sell, except those going direct to slaughter, go to a feedlot somewhere. Even our live export cattle. Even the tail of our turnoff needs to be of reasonable quality so we keep working on improvement across the herd. Everything is transparent now regarding who has poor performing cattle in terms of fertility, growth and temperament so we are conscious of this with even the tail of our turnoff.”

Finance and business

Keeping that Cash Bank is important at Lara. *“Managing the cattle as we have in the last few years, has improved profitability but also eased the financial stress and improved our sustainability (always having grass up our sleeve and good land condition). This is essential if Lara is to be kept in the family for a few generations.*

“The business leans towards the financial side of sustainability. We think by looking after the environment, you get better dollars out of it anyway. Prior to the flood, we had paid off 20-25% of debt in 2 years, through altered herd management and focused nutrition including production feeding. These changes were mainly management; using HGP’s, sorting out stock, selling the right classes at the right time and selling fats before Easter. In June, when Indonesia observes Ramadan, we try to avoid being caught with boat cattle, as the market eases. Production feeding carries these animals over to be sold into a more favourable market”.

“Some unintended consequences of changes in the herd structure were more weight gain than what we thought through better nutrition. This year in May, bullocks dressed heavier than we thought, at an average 338 kg at 6 teeth.”

The brothers also culled on temperament in the last few years and *“didn’t realise how much easier this would make life. Now two people can move a mob of cattle without a laneway”.*

Summary

“There isn’t much I would change about what we have done in the last few years. We wanted to learn and do it and get the results. The quality of the herd is improving slowly and getting close to the temperament, growth, fertility and carcass traits needed to achieve premium for the country we have. Many producers don’t implement the simple things and it impacts on production and profits. Do the simple things well and then focus on the 1 percenters. Nuffield has dramatically changed how I think. Extensive beef is a good clean product and there are good opportunities in northern Australia.”

Colin’s full Nuffield report “How to Survive and Prosper in the North West Queensland Beef Industry” can be found at www.nuffield.com.au

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