

Getting ahead in drought through early weaning and planning

Producer Case Study, June 2021

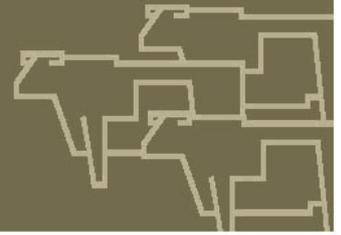


Photo: early weaned calves, 2019

At a glance

Owner & location:

Jim, Jenny and Rebecca Cross, Wengenville district, south-east Queensland.

Property Size: 850 ha and agisting a further 890 ha in the region.

Pastures: Native pastures and a small area of improved pastures sown as the seasons allow.

Average rainfall: 750 mm

Cattle enterprise: 380 breeders including Belmont Reds, South Devon, Brahman, and composite herds.

Target market: Sell feeder steers for feedlots and have a boxed beef business.

Background

Jim and Jenny Cross and their daughter Rebecca run a 380 head breeding operation on approximately 1754 ha (~4300 acres) near Kumbia in the Wengenville district of south-east Queensland. Jim and Jenny have been on their current property for 12 years and in 2018 Rebecca joined the business and now farms in partnership with her parents.

The property is managed following Dick Richardson's Grazing Naturally method of holistic management, as well as input from courses attended over the years with Queensland Department of Agriculture and Fisheries, RCS Australia and Holistic Management. Extensive use of single wire electric fencing has provided low-cost subdivision of the paddocks allowing rotational grazing and pasture recovery periods. When the seasons allow, multi species pastures are direct drilled into the native pastures. They aim to have sufficient pasture to run all their cattle and to turn off steers suitable for the feedlot market.

Rebecca described their breeder and weaning management as *"We have a set breeding season [where] we try to have all our calves within a 3-month window. Prior to 2019, we weaned from March to April when the calves were 6-9 months old. We usually yard wean them (including education) for a couple of weeks [before we] run them through the flats where we have oats or natural pastures for them to graze."* In addition to the feeder steers for feedlots, they have a small, boxed beef business selling direct to consumers in south-east Queensland.

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Involvement with FutureBeef

Jim and Jenny receive the FutureBeef eBulletins, participate in webinars and utilise the online tools on the website. Jenny explained *“There is wide ranging information in FutureBeef. You learn so much from following those links [in the eBulletins]. We use all the forage budgeting and recording tools.”* Rebecca keeps up to date through the FutureBeef Facebook page and as the Secretary of the South Burnett Grazing Network, regularly shares FutureBeef posts with their Facebook group and forwards the FutureBeef eBulletin to their members.

The FutureBeef resources were particularly useful during the severe drought in 2019, when the Cross’s were forced to make some tough decisions to get their cattle through. Rebecca recalled, *“There was a lot [of discussion] about early weaning around that time. There were some specific articles around nutrition of cattle as well as managing water.”* She recalled how every time the FutureBeef emails came out, they triggered discussions. *“We would go through, read them and then have a chat about the different things that could be implemented.”*

“Using FutureBeef, we would read an article or a case study and view webinars that were going on and we could then take it to our cattle nutritionist and our vet and say we are thinking about doing this, what can you recommend. We went through every scenario and all the options for feeding those calves.” The combination of the FutureBeef resources, the input from their service providers and their own discussion gave them the confidence *“... to make a good decision.”*

The need for a plan

The Wengenville district has not received its 750 mm annual rainfall since 2013 and has been drought declared since 2014. The last three years have been particularly tough as Jim explained, *“We’re a full year’s rainfall behind in the last three years.”* In 2019 the Cross’s were forced to refine their drought strategy, as the season became more severe. Rebecca explained, *“We’d had a very late season and it was a very small season, it was less than 100 mm. In June/July when we did our culling after pregnancy testing, the prices were really low for cattle, our cattle weights were down and that was at the point where we thought right, we need to start looking at some options, because there just wasn’t the grass.”*

Jim, Jenny and Rebecca investigated many options before deciding on their drought strategy which consisted of early weaning, supplementary feeding, reducing stock numbers, investing in water infrastructure and utilising their holistic grazing principles. *“We looked at leaving the weaners on with the cows, putting creep feeders out and selling cow calf units. We looked at every option we had and decided early weaning was the best option for us.”* said Rebecca.

“We made the decision very holistically - we wanted to make sure our cows were able to cycle again for 2020 so we could keep up our numbers. We wanted to make sure our calves survived, had good nutrition and our land didn’t get too degraded. We knew we were going to have to take it to the wire, but we didn’t want to go below the wire. We took a very holistic view of that.”

Early weaning

Rebecca recalled that *“it was incredibly dry, the worst we had ever seen it”* when the 2019 calves hit the ground in September, October and November. *“As we got closer to November, we made the decision that for the cows’ health and for the calves we would need to wean early.”* In late October, they made the decision to wean calves down to 70 kilograms in early November, *“so some were quite young.”* This was followed by a second round of weaning in December and a final weaning in February *“as it had been a poor season the year before and we had some late calves.”*

Supplementary feeding

A tailored calf feeding program was implemented to ensure the calves nutritional needs were met, and they had effective rumen development and growth. Using nutritional information from their vet, from FutureBeef

and from other sites, a feeding regime was developed. The calves were split into two mobs, those under 100 kg and those over 100 kg, so that the smaller ones would not get bullied off the feed.

The Cross's explained they had a special ration prepared based on their calves' nutritional requirements and rumen capacity and used ANIPRO® (molasses based) to assist with gut health and as a supplement. They also used a Norco special Brahman mix which reduced the risk of acidosis. Rebecca added *"We were very lucky considering how small they were... We had a little bit of pink eye but no respiratory issues."*

The remaining breeding herd which still had small calves at foot were supplemented with hay and dry mineral mix from Top Country from January onwards as there was insufficient pasture to maintain their needs. *"While we had dry mineral lick from Top Country out most of the year, we started supplementary feeding hay in January 2020, and selling anything that wasn't needed"*, said Rebecca. The cattle identified as culls were also fed to increase their weight and sale price.

Reducing stock numbers

Maintaining their breeding herd numbers, their herd genetics and their John's Beef Assurance Scheme 7 (JBAS7) accreditation status were important considerations. They got very close to unloading the herd. To avoid doing so they weaned the calves and reduced stock numbers by culling non-performers. Jim described their approach, *"We tried to keep as many breeders as we could, but we did use the drought as an opportunity to go though and cull out anything that wasn't performing... We were able to maintain the remainder of the herd. We are rebuilding it back now."*

Jenny continued, *"It really made us look carefully at our selling program. We did up a 'what if' scenario. If it doesn't rain by this date then we will sell this group of cattle, then that group of cattle and all the time, keeping in mind the ones you wanted to take through into the future. We had a very clear plan of what we were going to sell through the drought progression."*

Water infrastructure

Development of water infrastructure has been undertaken on the property since 2014 and was vital in enabling the Cross's to maintain stock numbers through the drought. Jim explained their water situation, *"We had no surface or creek water, and we would have had to totally destock if it wasn't for the water infrastructure. We had no running water until May this year (2021)."*

"We have big solar bores that pump up to the top of the escarpment which is about a 90m climb and then gravity feeds out through the rest of the property and to a series of tanks and troughs which Burnett Water Services helped plan and future proof for potential growth. We put in thirteen troughs, eight tanks and four bores with solar pumps supplying water. The whole property is linked up with bore water now which is great." Over the years they have received funding support through various grants including most recently through the Grazing Resilience and Sustainable Solutions (GRASS) program. GRASS is funded by the Queensland Government's Reef Water Quality Program, and it assisted with a small riparian fencing and off-stream water project.

The water infrastructure developments enabled early weaning as the yards were equipped with troughs and an adequate water supply. Rebecca explained, *"At our main yards, the troughs were too tall for the small calves. Luckily when we put in the water infrastructure, we had put in one trough at another yard that was low, like a sheep trough. So, we were able to put the little weaners into that yard."*

Holistic grazing

The holistic grazing principles used by Jim, Jenny and Rebecca involve rotational grazing, monitoring available pasture and matching stocking rate to their carrying capacity. Jenny detailed how important this approach was to their ability to manage their pastures, cattle and decisions through the drought. *"The holistic management of your pastures is another planning tool that is so important. Because you know that you have 100 days of feed in front of you, you are not forced into selling them tomorrow because you have run out of the last bit of grass."* Rebecca continued, *"In September 2019 when it became clear that the forecast wasn't*

changing, we did pasture monitoring and stocktake of what grass we had. We did our grazing plan out to the end of January, so we knew we could get them through until at least then. When cattle prices really dipped in December, we knew we didn't have to cull everything, and we knew we could get through to February and that prices were likely to get a bit higher."

Impacts

The drought strategies implemented had positive impacts on their livestock, pasture and business, including:

- **Breeder fertility** - Early weaning reduced the nutritional stress on their cows allowing them to recover. This resulted in good pregnancy rates considering the year, with 85-90+% across all paddocks, in 2020. Jim believes *"If we hadn't done that weaning, those cows would not have been cycling."*
- **Flow on effects for replacement heifers** - The supplementary feeding allowed for future replacement heifers to have their nutritional needs met and will have flow on effects into the future. Rebecca described this *"By feeding and looking after the heifers now, you are getting ready for their calf on the ground in one- and two-years' time."*
- **Maintaining pastures** - The early weaning slowed the rate of consumption of the pastures allowing for them to respond when it rained in February 2020. *"As we weren't down to just bare ground, we had a good response when it finally rained."* said Rebecca.
- **Being able to sell when the prices improved** - The feeding program allowed the calves to reach marketable weights and to be sold at a time when the market prices had improved as the drought was starting to break.

Benefits

There were many benefits associated with the drought strategies including:

- **Improved livestock and pasture health** – Jim described the benefit of early weaning was ensuring their breeding herd and pastures were looked after and the flow on effects this will have for maintaining their future performance.
- **Improved confidence in early weaning** - Rebecca recalled that she was initially worried about early weaning. However after having read about it on FutureBeef and talked to others about it, she felt more confident to trial it. Having now seen the benefit to both the cow and calf in that season, she says she *"wouldn't be afraid of early weaning again."*
- **Better planning** - The resources they used from FutureBeef, and other sources helped the Cross's to plan ahead so *"we weren't making decision on the run"*. They designed their drought plan with actions for 3, 6 and 12 months down the track. This has had flow on effects for their business as *"we now have better planning and are trying to now be price makers rather than price takers"*, said Rebecca.
- **Improved relationships** - As a result of their frequent interactions throughout the drought, Jim, Jenny and Rebecca described have improved relationships with their service providers including their vet, agent, produce suppliers and nutritionist. These relationships have improved their confidence that should they *"need that information again you have people you can go to or resources you can get"*, explained Rebecca.

Take home messages

For other producers experiencing drought, looking at early weaning and drought feeding the Cross's advice is to:

- **Develop a plan to provide relief** – Jenny described the relief of having a plan as *"helping your mental health, if you have a plan out in front of you it really does have an effect on how you view life."*
- **Plan long term** – It is important to think broadly and with a *"long term business mindset"* whilst dealing with the day-to-day decisions required during drought. The decisions made by the Cross family will have positive impacts into the future through the fertility of their herd and their land.
- **Seek nutritional advice** – Rebecca and Jim stressed the importance of seeking advice from a vet or nutritionist to ensure feeding programs meet the calves' nutritional needs, effective rumen development and their health.

- **Read, seek information and be prepared** – The FutureBeef resources and other information sourced by Jim, Jenny and Rebecca broadened their knowledge on weaning and feeding strategies. Rebecca advised *“If it’s something you haven’t done before, it’s really important to not go into it blindly and say she’ll be right.”*
- **Ensure you have good access to feed suppliers** – Access to feed suppliers is critical to any decision to supplementary feed. The Cross’s saw many rural produce suppliers closing their books to new clients during the peak of the drought. They put their success down to the fact they had shared their business amongst multiple produce stores, as Jim explained *“we had a foot in three or four different stock feed camps where we could get some supplement or grain, and these long-term relationships really helped during times of shortage.”*
- **Continue undertaking property developments for the long term** – The water infrastructure developments undertaken on the Cross’s property were vital to their ability to provide stock water. Jim advises *“Not taking your eye off the development. There will be long term benefits into the future.”*
- **Build a network around you to draw on** – Over the years Jim has developed a network through his involvement with many industry organisations (including the Cattlemen’s Union, AgForce, South-East Queensland Beef Research Committee and North Australia Beef Research Council) and has a network of contacts to draw on. *“All those opportunities to meet with people and build up a knowledge base means when you get to this stage, you are able to use it, along with the FutureBeef resources. All those contacts come in handy.”*

Summary

Jim, Jenny and Rebecca’s experience demonstrates the importance of planning and thinking ahead before and during times of drought. While 2019 was a particularly difficult year, their key strategy of putting the cow’s needs first paid off for their livestock, their pastures and their business. Their drought strategy included weaning their calves early, supplementary feeding, culling surplus stock, developing water infrastructure and holistic grazing. By implementing these strategies, they were able to retain their selected breeding herd, get them back in calf for the following year, maximise the price for their weaners sold and maintain ground cover without degrading their soils.

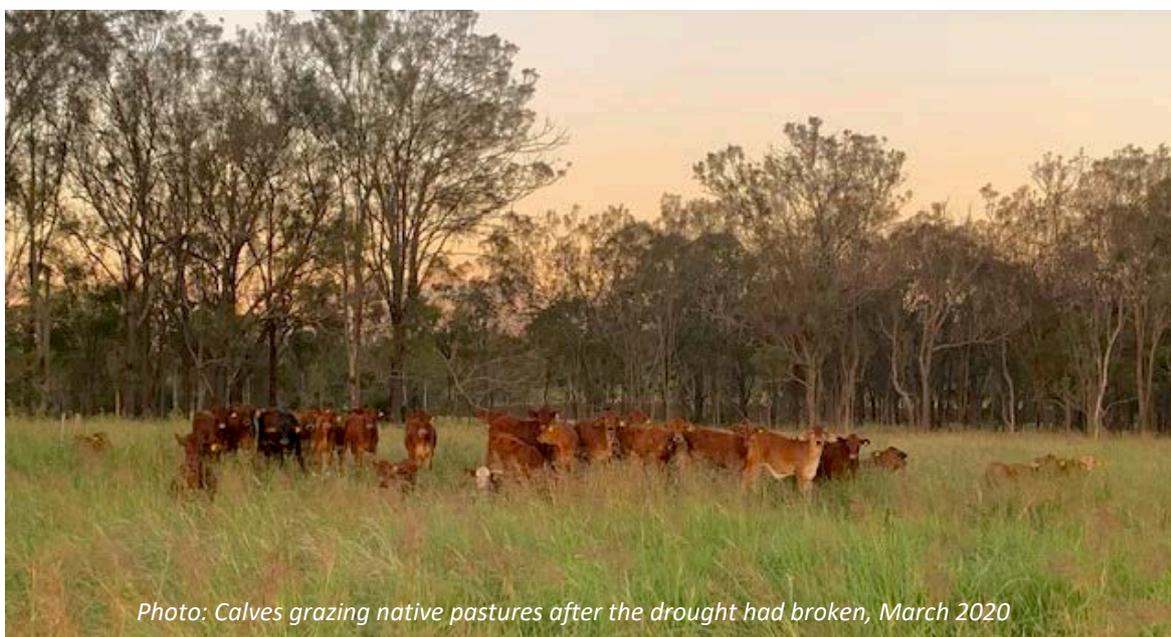


Photo: Calves grazing native pastures after the drought had broken, March 2020

This case study was prepared by Sophie Folder of Pear Consulting for the ‘A review of user satisfaction with FutureBeef communication tools and impact on practice change’ project for the Queensland Department of Agriculture and Fisheries. The author acknowledges the contribution of Jim, Jenny and Rebecca Cross to this case study and thanks them for their willingness to participate and share their story of change with others.

