Tackling the tough years: How we manage for seasonal variability

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Overview



"Find the balance between what your land can produce, degrading your country and what you can earn."

Our turning point was in 1997, our second year on Blanncourt, when we lost a lot of cattle. We thought if this is what station life is about we don't want to be here.

From that point we were determined to always have grass up our sleeve."

Blanncourt Station owners Cheryl and Glen Connolly

Blanncourt Station, owned by Glen and Cheryl Connolly, has an average rainfall of 800 mm and is situated west of Georgetown in the Queensland Gulf Region. The station is a typical family-run breeding enterprise with 2500 head on 18,739 ha. The Connolly family also own Elwell, a 16,190 ha property south of Prairie with an average annual rainfall of 400 mm.

Long term records (Figure 1) show there is considerable rainfall variability across both properties. Managing this seasonal variability is a major challenge for all extensive beef producers. Glen and Cheryl have land and cattle management and marketing strategies in place to minimise both the financial and personal strain of low rainfall years resulting in poor seasons.

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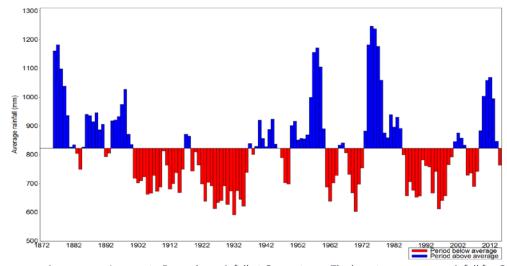


Figure 1. 5-year moving average January to December rainfall at Georgetown. The long-term average rainfall for Georgetown is 822 mm

The main land types on Blanncourt include Gilbert River frontage, poor alluvial, red sandy, yellow clay and gravelly ridge (lancewood or spinifex ridge) and granite soils. Elwell includes a mix of Downs/black soil and spinifex. Most land types on Blanncourt are fenced separately and the main road subdivides the red soils and poorer ridgey country to the north. Both sides of the river are fenced which is critical for spelling as well as controlling pigs, wallabies and woody weeds. The poor alluvial soils are also fenced off. The country south of the Gilbert River runs from good alluvial soils, to old alluvial soils, to lancewood ridges.

Annual liveweight gains up to 180 kg/head are expected on Elwell, while 120 kg/head is generally achieved from unimproved country on Blanncourt (Photo 1). Annual liveweight gains from Blanncourt frontage country with improved pastures can reach 200 kg per head. The family operation runs high grade Brahman cattle with some Charolais bulls to improve marketing options. Crossbred offspring are not retained for further breeding. Waygu genetics are also being trialled in an attempt to attract market premiums. Since purchasing Blanncourt 20 years ago, the Connolly family have improved both productivity and profitability through implementing lighter stocking rates, wet season spelling, feeding and/or supplementation programs, crossbreeding and pasture improvement.



Photo 1. Improved pastures consisting of stylos and buffel grass on Gilbert River frontage carry 1 Adult Equivalent (AE) to 4 hectares and annual liveweight gains of up to 200 kg/head.

Herd Management

Under current management cows are mated all year round with two main weaning rounds in May and September for weaning, branding, castration and dehorning. A third muster is conducted in December to process calves however none are weaned at this time. During the wet season, there can be little or no access to the southern half of the property due to water in the Gilbert River, limiting herd management options and often affecting timing of the first round of weaning.

Breeders are segregated on a wet-dry basis.

Boxing of wet and dry cows is an unfortunate reality, due to downed floodgates or broken fences, but it is important to start the system again next muster. Bulls are joined with heifers in November. Heifers are pregnancy tested and those who fail to fall pregnant are sold. Heifers that fail to rear a calf are also sold.

The plan is to get heifers into the right calving window but they inevitably drift each season. Heifers calving in early October tend to stay in the ideal calving window for longer. M8U (molasses with 8% urea) is available for these heifers, and wet season spelling and lower stocking rates ensure they have plenty of feed at calving (Photo 2).



Photo 2. Heifer are segregated on Blanncourt and M8U is often used around calving

When weaners come off, the weaner mothers go to a used paddock while wet cows with a branded calf are run in the spelled paddocks. This improves nutrition and reduces supplement costs. Weaning calves in November helps push breeders back into the preferred calving window of October to December. These cows are pregnancy tested and non-pregnant females are sold. Over the last two decades, weaning rates have improved from 46% to 68% (5–10 year average) on Blanncourt. Improved pastures have lifted first round weaner weights from 150–180 kg to 220–250 kg and second round weaners from 100–120 kg to 150–180 kg.

Herd Nutrition

Breeders on Blanncourt receive wet season phosphorus and dry season urea-based supplementation. Breeders on the southern side of the river are sometimes not accessible for long periods during the wet season which can be an impediment to feeding phosphorus. This is overcome by distributing the entire wet season phosphorus requirement in the late dry season into covered lick troughs to avoid spoilage. Depending on the season, all weaners are fed cottonseed and hay from June, or go to Elwell.

Blanncourt has the capacity to grow 800–1200 tonnes of sorghum silage on the alluvial country of the Gilbert River. In the past, silage has been used for backgrounding steers and cull heifers that may be marketed in southern Queensland. Silage has not been grown on Blanncourt over the last four years as the returns have been marginal. Wet season phosphorus is also fed on the spinifex country at Elwell.

Improving native pasture productivity takes time

When purchased in 1996, Blanncourt had been set stocked and overgrazed and both land and cattle condition was poor. Country was spelled over the wet season every year for first 3-4 years but change in pasture condition was very slow. Silk sorghum and buffel grass were planted on the frontage country and by 2003, 400 hectares of buffel was well established, providing a massive body of feed. This improved country was able to carry 1000 cows from May to December in 2003, allowing all other breeder paddocks to be spelled. These paddocks had plenty of carry over feed, thereby maximising break of season cover and response to rain (Photo 3). By 2008, the Connolly's were confident they were doing the right thing with pasture spelling, as well as reducing breeder numbers from 2200 to 1200.



Photo 3. Breeder country on poorer soils lightly grazed in August. The aim is to have half of this stubble and 50-70% ground cover to maximise the pasture response to break of season storms (December/January)

Identify what cattle numbers you can carry safely (7 years in 10)

Rule 1: Set safe stocking rates that allow for long term rainfall variability Rule 2: A safe stocking rate will allow you to wet season spell significant (25 %) areas of the property annually

Safe stocking rates across Blanncourt paddocks vary from 1 AE to 4 ha on the improved frontages, down to 1 AE to 19 ha on the poorer soils. PTIC first-calf heifers are run in Top and Bottom Rocky paddocks, which are dominated by red sandy and yellow clay soils of marginal fertility. As a result, stocking rates are kept very low (1 AE to 19 ha or 47 acres) on these poorer soils to improve diet selection and heifer performance. The Downs/black soil

(6070 ha) on Elwell will safely carry 1 AE to 8 ha. The Elwell spinifex country, which includes small areas of black soil (10100 ha), will safely carry 1 AE to 14 ha. Elwell runs around 1600 head at an average weight of 350 kg.

Paddocks and Water Distribution

In order to boost the live weight gains of weaners and young cattle in the wet season, fertile frontage country was fenced into smaller paddocks and established with improved pastures. Weaner paddocks are spelled over the wet season to provide fresh paddocks for all newly weaned calves.

Blanncourt currently has 13 paddocks greater than 200 ha and approximately 30 water points. Good water distribution has greatly improved business resilience during a run of dry years. Over 70 per cent of Blanncourt is within 2 km of water while 96 per cent of the property is within 3 km of water (Figure 2).

The remaining areas of the property, greater than 3 km from water, include the yellow clays that are of low grazing value. Most water points are within water squares and holding paddocks, which assist with mustering cattle. All dams are large enough to last just over 12 months when the seasons fail. Half of the waters on Blanncourt are dams while the other stock waters rely on reticulated water from bores.

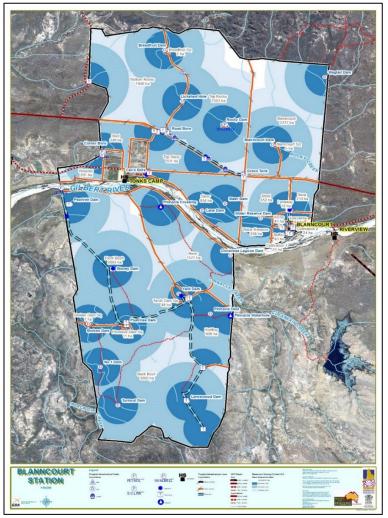


Figure 2. Establishing permanent water infrastructure on Blanncourt has been a priority for Glen and Cheryl since 1996. This map shows grazing distance to water in most paddocks is 2-3 km

Coping with dry years—'Our rules of thumb'

- Match cattle numbers to the amount of grass you grow. Cattle numbers are not set in stone on Blanncourt but generally we don't have to dramatically reduce cattle numbers in the dry years. Total cattle numbers on Blanncourt don't vary much however cattle numbers per paddock are adjusted depending on rainfall variability and feed supply.
- Systematically lock up 25% of your property over the wet season this can be achieved if your stocking rates are not too high. Each paddock on Blanncourt receives a wet season spell every 2–4 years, however all weaner paddocks are spelled annually. Wildfires can be more common and a bigger threat when spelling country.
- Don't be disillusioned when the pasture response to wet season spelling is slow in the dry years. If some country is spelled every year you will eventually get under a good season, and pastures will respond.
- Don't just carry cattle numbers carry cattle that produce. Get rid of the nonperformers and you will end up with productive cattle and grass. Rather than debit your grass and country, turn non-performing breeders into a credit (cash).
- If you have a lot of big fat cows, you have problems.
- Foetal aging is very difficult unless pregnancy testing a large number of animals regularly. Having enough skill to pick up 'empties' or 'in calf' is sufficient.
- Wet-dry breeder segregation is simple but effective. In dry years sell down your herd out of the dry cows. Concentrate on what your dry cows are doing sell if they come in dry a second time.
- Overgrazed country will not improve overnight. Changing stocking rates and introducing a systematic wet season spelling regimen requires patience. It took 10 years to really see the value of spelling and reducing numbers on Blanncourt.
- Avoid the regular or annual panic of running out of grass. Stocking rates should be set so your business can handle a dry year without panicking and emergency destocking. Avoid getting jammed in a corner with no grass by maintaining safe stocking rates in the good years.
- Identify paddocks in poor condition, then wet season spell every year until pasture condition turns around
- Ideally have bores and poly rather than relying on dams and surface water
- Marketing decisions must be driven by what grass is in the paddock. If there is a good wet season it is not critical to move too quickly. Look at country in February and if there is no rain in March, move your cull cows. Always consider the SOI and seasonal forecasting. If there is talk of a dry year, or El Nino and cattle prices are good, it pays to sell cattle.
- Have a variety of market options (live export, local store, backgrounders or slaughter markets) and if you need to sell, sell early. Use agistment if needed to back off stocking rates and implement wet season spelling.
- When it comes to November-December we need good stubble and ground cover to make good use of first storms (Photo 4). Avoid having second round weaner mothers in a body condition core less than 2.5 around the break of season.



Photo 4. Good pasture response (above left) on Blanncourt after 60mm of rain in December 2015. Retaining some old feed and ground cover greatly improves rainfall infiltration and pasture growth at the break of season. Similar country (above right) near Blanncourt after the same rainfall event.

- Based on accountant's advice, put money away in Farm Management Deposits, or self-managed super funds.
- Manage debt pressure to allow for sensible property development to improve land and herd management options.
- Don't get trapped by the common misconception that "more cattle means more money".