

# Creating a sustainable business in all seasons at 'Coonabar'

The Gibson family are finding new ways to increase business profitability and improve their ecosystem.



'Coonabar' is a family operated beef cattle property. Located north of Rolleston, Central Queensland, Murray and Wendy Gibson (pictured), along with their son and daughter-in law Cameron and Kristy manage the property with the aim of creating a profitable, productive cattle business.

'Coonabar' was purchased by Murray and Wendy in 1988. Since then a key focus has been adopting highly flexible management strategies that maximise ecosystem health and business profitability. There have been two fundamental practices that have allowed the Gibsons to achieve this, namely KLR Marketing principles and time controlled (cell) grazing. An extensive knowledge of their business, coupled with a willingness to try new things has underpinned success for the Gibson family.



## Case Study Snapshot



**Location:** North of Rolleston, 320km West of Rockhampton, Central QLD.

**Property size:** 6,781 hectares

**Currently runs:** Between 2000 to 3500 LSU

**Average annual rainfall:** 650mm

**Enterprises:** Beef cattle trading.

'Coonabar' is a family operated beef cattle business in Central Queensland. The business operates under the KLR Marketing principles and uses ecosystem health to build business profitability.

### Achievements:

- ✓ Improved ecosystem health
- ✓ Increased carrying capacity
- ✓ Greater animal performance
- ✓ Cash-flow positive business

### Drivers of success:

- ✓ Flexible business model
- ✓ Extensive knowledge of business
- ✓ Education
- ✓ Early adopters

### Ideas for future innovations:

- ✓ Holistic business management system
- ✓ Walk-over weighing and automatic drafting
- ✓ Virtual fencing

## What makes this business sustainable?

When the property was first purchased it was entirely thick virgin standing scrub (pictured) and was capable of supporting 600 LSU (Large Stock Units). On the same land area the Gibsons now sustainably run up to 3000 LSU while simultaneously improving land condition. In the early days the business was high risk and at times it was challenging to make ends meet. Ongoing education and flexibility in their mindset is what has allowed the Gibsons to make gradual improvements to get where they are today.



'Coonabar' when it was first purchased in 1988. 'Pococks Dam' can be seen in the middle left side of the photo

Murray and Wendy currently share the management role with their son Cameron and his wife Kristy. Their three young children Jack, Scott and Trey are enjoying living and working on the land. The Gibson family operate their business solely as a cattle trading enterprise, as per KLR Marketing principles. This involves strategic livestock selling and purchasing regularly throughout the year to maximise profitability. Cattle are brought to the yards at 'Coonabar' approximately every six to eight weeks for weighing and assessment of class and market value. The goal is to purchase any class of animal that is under-priced and selling anything that is overpriced. Cattle are generally purchased as yearlings and sold to feedlots approximately six months later when they reach an appropriate weight. The transition to this business model from a cattle breeding enterprise has established a level of flexibility that allows them to moderate their operations to suit both market and climatic conditions. For example, if seasonal conditions are unfavourable, cattle numbers won't be replenished until after conditions improve. If the market prices favour breeders, bulls will be placed with the female herd to be sold as pregnancy tested in calf (PTIC).



'Coonabar' today. This photo is taken from a similar aerial position as the first photo. 'Pococks Dam' can be identified on top right hand side.



The cattle on 'Coonabar' are managed under a time controlled grazing system. This system uses animal impact and paddock spelling to regenerate pasture and improve ecosystem health. The fundamental principles in this grazing system are:

- ✓ Managing the time cattle spend in each paddock so plants have adequate rest to replenish root and leaf reserves
- ✓ Matching stocking rate to carrying capacity
- ✓ Closely budgeting, monitoring and adjusting the grazing system as per changing seasonal conditions and grass availability



Upcoming generations at 'Coonabar.' Parents Cameron, (far left) and Kristy (far right) and their three children Scott, Jack, and Trey.

Based on these principles 'Coonabar' has been developed from two large paddocks (plus a few holding paddocks) into a total of 104 paddocks. These paddocks vary in size, with 86 having been intensively developed on Western side of the property and 18 on the Eastern side of the property. The Western paddocks are under time controlled grazing where cattle are shifted nearly every day. The time cattle spend in each paddock is dependent on the season and the rest period required for the plants. Paddock sizes are approximately 25 hectares and generally have cattle numbers exceeding 1000 LSU. The Eastern side is in a less intensive rotation and may be moved once a week depending on the size of the paddock. Approximately 95% of the property is fenced using either single or double wire electric fencing.



Time controlled grazing at 'Coonabar'

Since adopting this sustainable business management model, the Gibsons have observed a number of improvements in their ecosystem, including:

- ✓ Increase in ground cover
- ✓ Increase in carrying capacity
- ✓ Greater response to rainfall
- ✓ Greater biodiversity
- ✓ Presence of native pasture species such as Queensland Bluegrass.

The family have observed an increase in native grass species, including *Dichanthium* spp. (Bluegrasses), and *Panicum* spp. (Panic grasses). The Gibson's believe this indicates a greater resilience in environment, as native grasses will be less susceptible to disease, whilst the diversity provides greater growth coverage in changing climatic conditions.

The Gibsons use Low Stress Stock handling techniques for every interaction with their livestock. They have found educated cattle are more efficient, reducing costs and creating vital efficiencies in the business.

At 'Coonabar' there is effective support and communication between staff (i.e. the family), and this teamwork propels the business forward and allows the Gibson's to take opportunities when they are presented. The Gibson's ability to work as a team also allows them to raise a family with a balanced lifestyle and contribute to their community.

## Data, decisions and direction

A key trait that makes the Gibson's successful business managers is their ability to use data to make decisions, resulting in greater control over their situation. The Gibson family are currently using a number of management tools to monitor the progress of their business and environment. These tools include:

- ✓ KLR Calculator and Business Analyser spreadsheets
- ✓ RCS ProfitProbe business analysis and benchmarking
- ✓ Gallagher TSi animal performance monitoring based on National Livestock Identification System (NLIS)
- ✓ Grazing Charts
- ✓ PAM mapping system

***“It is a huge relief knowing that our business can do well in most seasons.”***

The KLR spreadsheets and RCS Grazing Charts are pivotal decision making tools at 'Coonabar' as they hold information on grass available per rainfall received. With this data they forecast what animals they will run, and for how long, allowing the Gibsons to calculate what is overpriced and under-priced, and make trades accordingly. These decisions give the business a great deal of leverage, direction and stability, as they know how much grass they have and what their cattle are worth at any given time. Murray states “it is a huge relief knowing our business can do well in most seasons.”

Figure 1 and 2 highlight the quantity of development that has occurred at 'Coonabar'. Before development took place the distance between water points was 3 kilometres. Now cattle have a maximum walk of 800 - 900 metres, which distributes an even grazing pressure over the paddocks, and utilises all areas of the property.

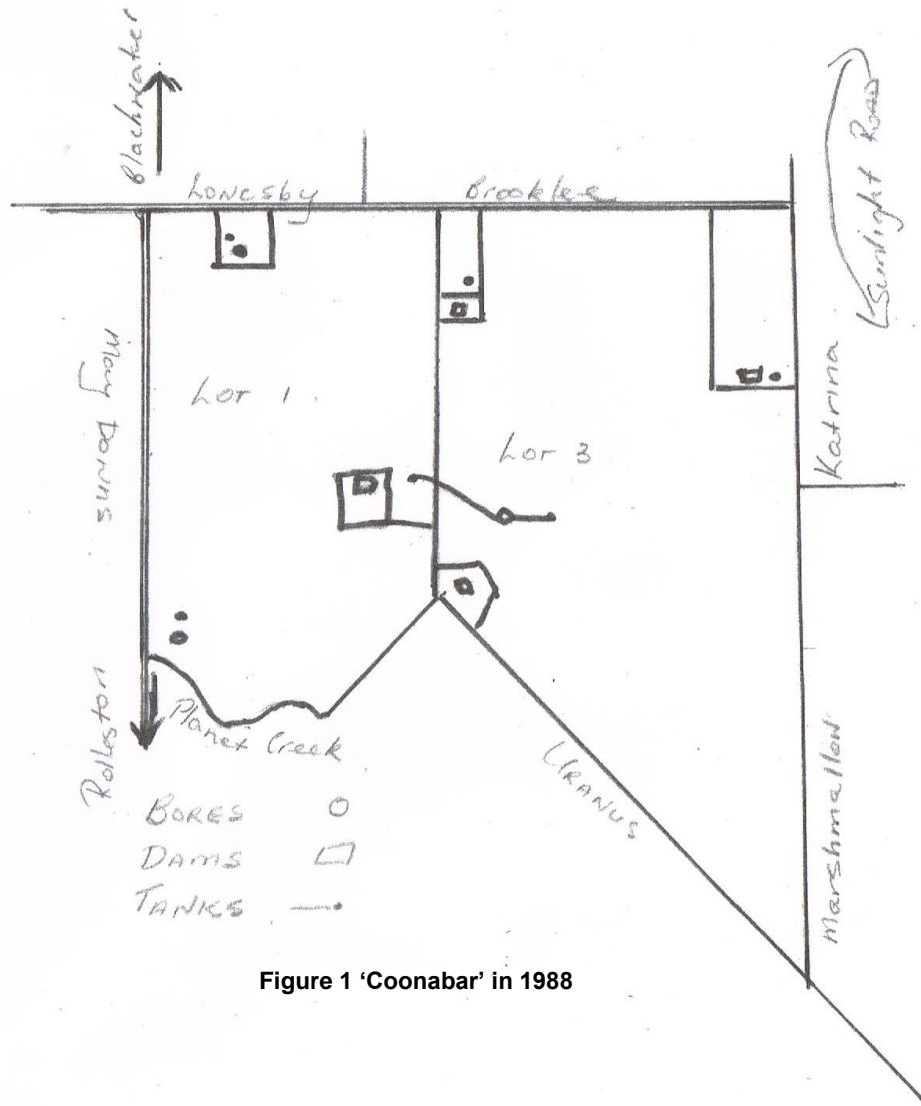


Figure 1 'Coonabar' in 1988



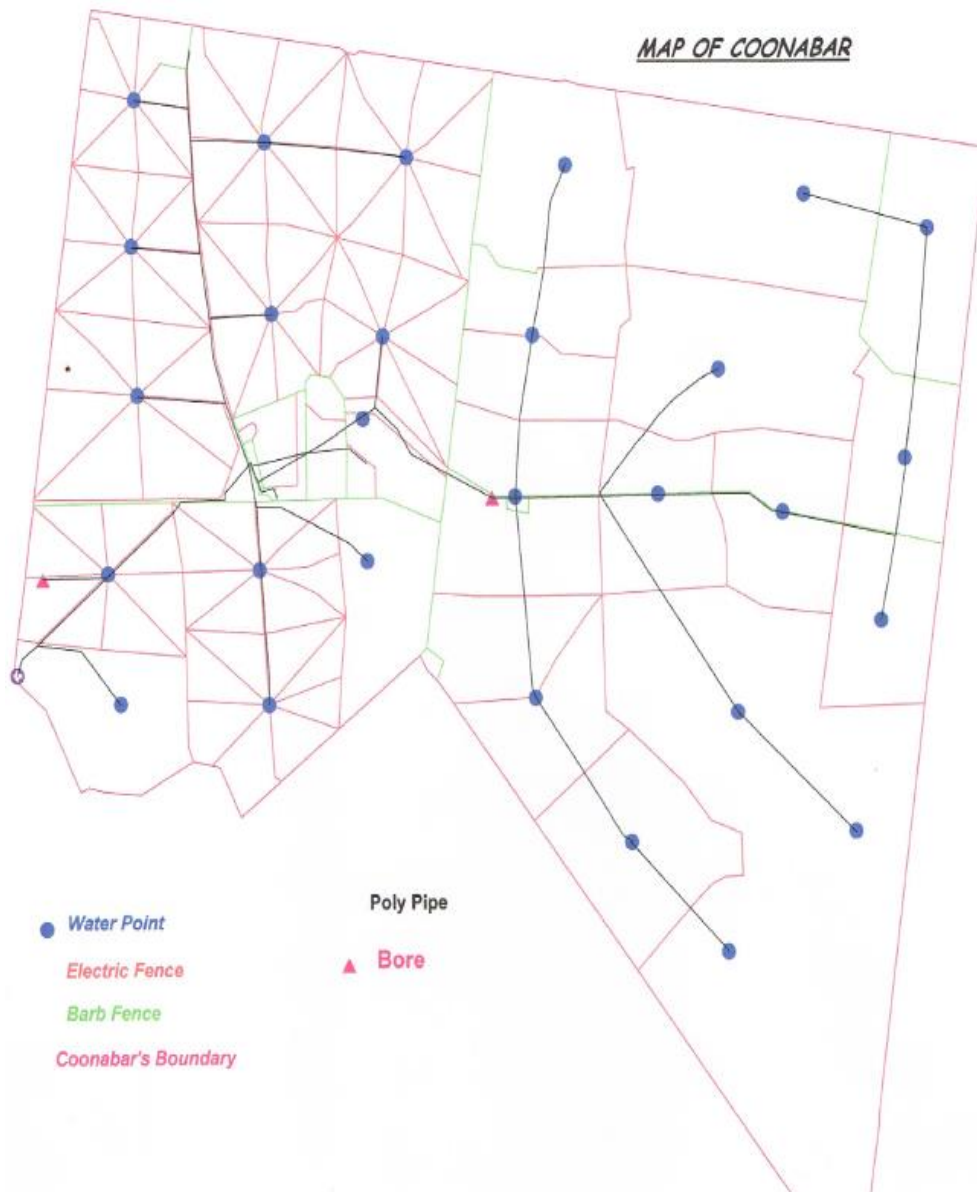


Figure 2 'Coonabar' in its present development stage in 2014.

Figure 3 below shows carrying capacity over time, measured in Stock Days per Hectare per 100mm Rainfall (SDH/100mm). This unit of measurement is a function of rainfall – enabling graziers to determine if they are running appropriate cattle numbers for the quantity of rainfall received.

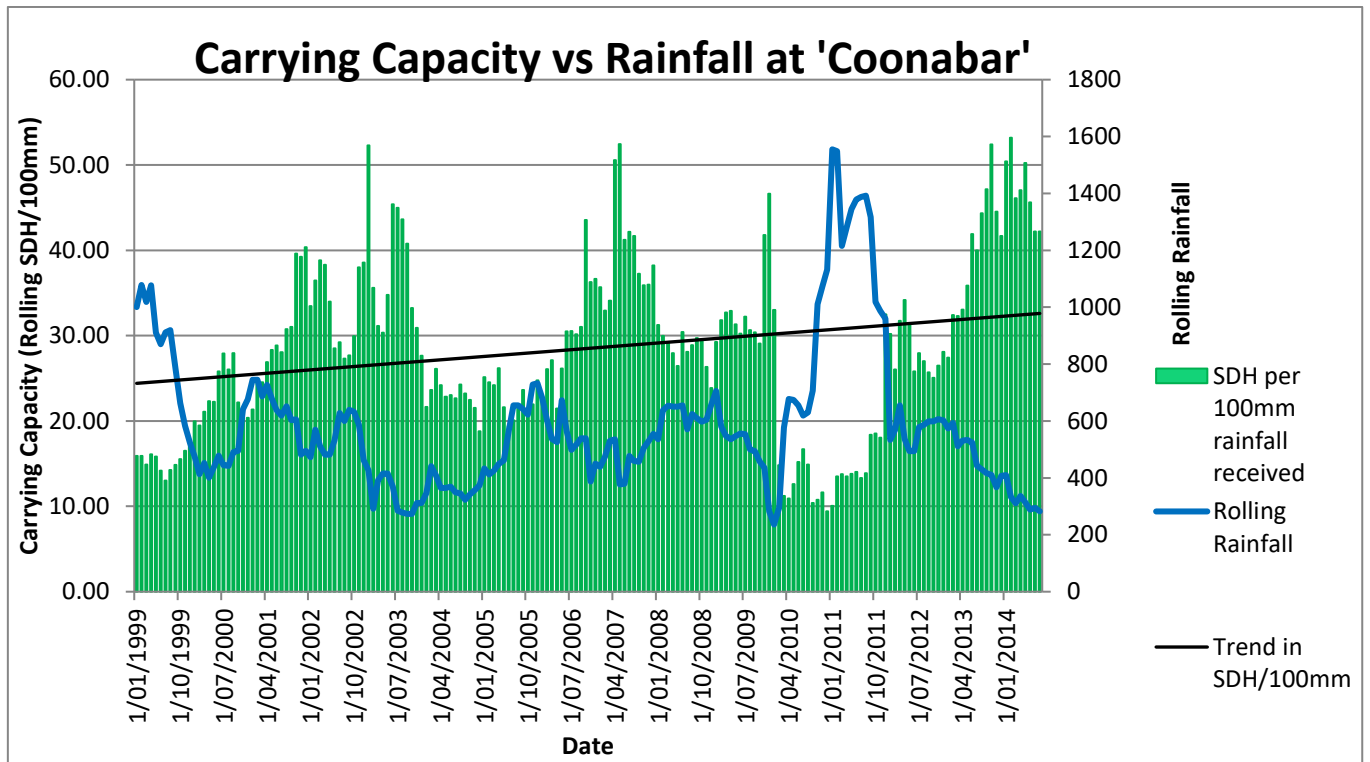


Figure 3 Carrying capacity and rainfall over time

Stock numbers at 'Coonabar' are highly variable. This is due to the family's ability to consistently matching stocking rate to carrying capacity as per rainfall received. The graph also shows that in 2010 a high rainfall event restricted cattle numbers on the property due to flooding and access issues. The trend line shows there has been a gradual increase in carrying capacity over time which is a result of effectively managing pasture health. Terry McCosker, RCS Director states "The standard carrying capacity benchmark for the area under continuous grazing management is 18-20 SDH/100mm. The Gibsons are achieving well above this on 'Coonabar'. In addition to this, the Gibsons are achieving this with 40% retained timber regrowth."

Figure 4 shows the trends in ground cover at 'Coonabar' since 1990. While Central Queensland Buffel grass landscapes are known to have high ground cover, there have still been improvements made over time on the property. The most noticeable change is the bottom 10<sup>th</sup> percentile improving from less than 60% to nearly 80% ground cover. Overall, this data shows the improvements the Gibsons have made at 'Coonabar' since 1988 through development and grazing management which are directly reducing runoff into the Great Barrier Reef.

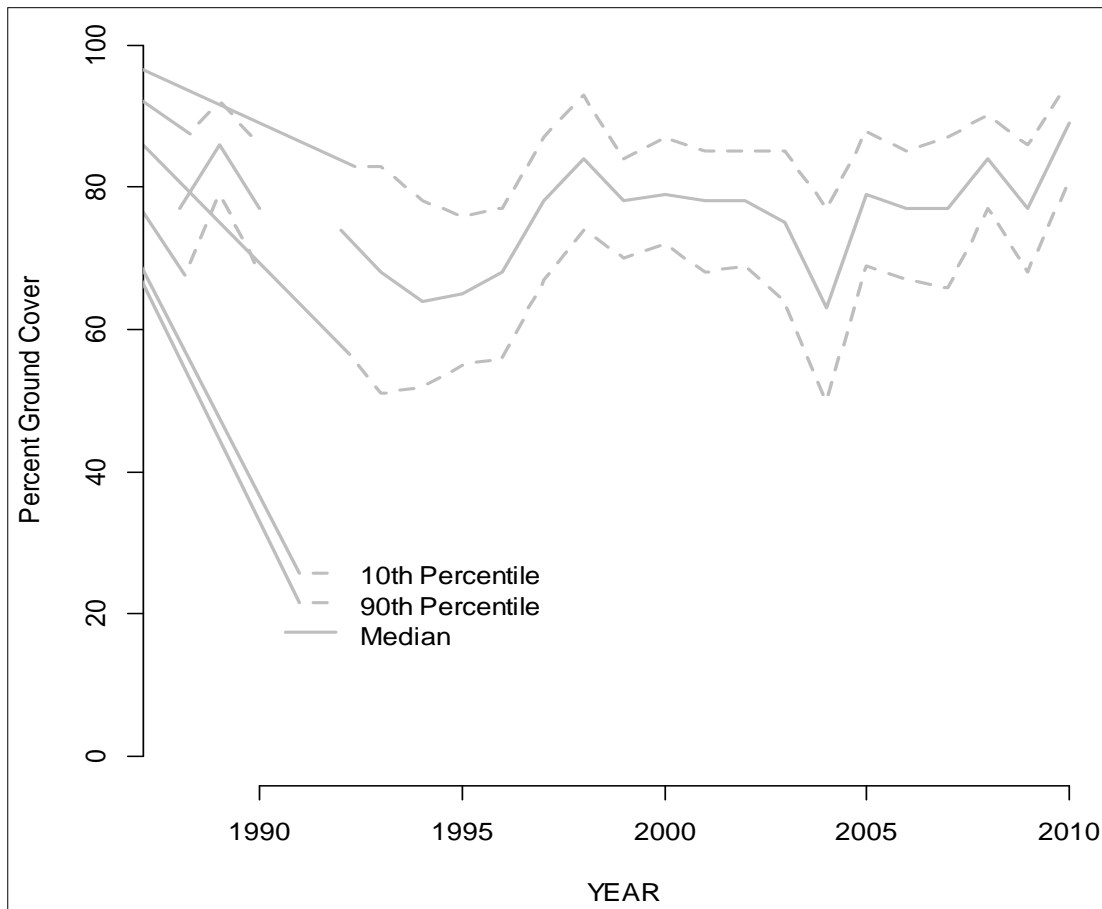


Figure 4 Trends in ground cover at 'Coonabar'

Source: Daniel Gregg, CQ University



## Motivations for change

By nature the Gibsons are innovators and early adopters who enjoy a challenge. They also have a deep connection to the land, the community and the beef industry which has urged the family to lift productivity at 'Coonabar' and demonstrate that the beef industry can be environmentally sustainable.

It was through their interaction with RCS that Murray and Wendy committed to time controlled grazing. "Our paddocks weren't being utilised. Cattle would concentrate their grazing within a two kilometre radius of water. There were areas that were heavily overgrazed whilst large areas at the backs of paddocks would

remain virtually untouched". It gives the family a great deal of satisfaction when they look at what 'Coonabar' is today and know they have significantly improved the quality of their land.

***"Ongoing education and willingness to learn is how we got to where we are today"***

Generating a profitable operation was also big driver for the Gibson family. Their strong family

connections have inspired Murray, Wendy, Cameron and Kristy to create a future on the land for the next generation. They believe for the industry to be sustainable, businesses must continue to improve ecological health and be able to measure profitability.

Murray and Wendy were prompted to adopt a sustainable business after completing the RCS GrazingforProfit School in 1992. Cameron and Kristy experienced this too, and both couples have gone on to complete the three year ExecutiveLink program with RCS. A turning point for Murray and Wendy was gaining knowledge of ecosystem health and how this underpins business profitability. Murray states "ongoing education and willingness to learn is how we got to where we are today."

There have been some challenges along the way for Murray and Wendy. In the era of 18% interest rates there have been times the Gibsons were uncertain of the future of their business. Murray acknowledges it was difficult to commit to a change in management, as there were so many conflicting opinions. "Sometimes we got it wrong. We cleared 15,000 acres straight up, our first cell grazing paddocks were too large and our cell fencing couldn't maintain sufficient electrical current to keep cattle in. But we learnt from our mistakes. We eventually got it right and now are happy with how the property is progressing".



Murray emphasises the need to learn from others. "We never thought about operating differently. It wasn't until we were exposed to our own financial pressures and saw how other families had improved their properties that we realised with change we could improve our own business." Today the Gibsons maintain a continuum of networks that provide the necessary "constructive criticisms" required to stay informed within the beef industry. "We maintain ongoing relationships with international agricultural tour groups, university groups, private sector specialists and government bodies. But for us, the most influential advice came from RCS and other graziers in the

industry. Field days were valuable. They demonstrate first-hand sustainable business management. They are genuinely supportive and help peers share key learnings.”

***“Our biggest success is looking at where ‘Coonabar’ is today”***

There have been a number of success points for the Gibsons since 1988. They believe their biggest success is looking at where ‘Coonabar’ is today. Another highlight was changing their business to adopt a system that perfectly fits their scenario, as they are no longer at the mercy of the markets or seasons, and the knowledge gained from KLR and RCS courses has given them confidence in what they do and the decisions they make.

Inter-generational teamwork is an important aspect to business sustainability in agriculture. Murray and Wendy were motivated to create an environment where the family and business can operate together. With three generations of the Gibson family living on ‘Coonabar’ the business has positive times ahead. Cameron states “Jack, Scott and Trey are your typical country kids with their big hats and big aspirations. They love the life on the land, working with all the animals and spending time with their parents and grandparents, Murray and Winnie.”

## Innovations and opportunities

At ‘Coonabar’ the highly flexible business model differs significantly from traditional business management. While the Gibsons have a great deal of attachment to their land, they have little emotional attachment to their cattle. This allows the cattle to be traded rapidly, creating significant cashflow in the business. It also gives the Gibsons the opportunity to de-stock if required in a below-average rainfall year preventing damage to pastures or cattle losing condition while at ‘Coonabar.’ This lack of emotional attachment to cattle is a paradigm shift from the industry and doesn’t mean Gibsons don’t care for their cattle. It simply means they are determined to do what it takes to create a sustainable, profitable business.

Time controlled grazing with electric fences is also another innovation the Gibsons have adopted. Murray and Wendy began a rotational system in 1994 and by 1998 this system was in place. The adoption of time controlled grazing has proven valuable for the Gibsons and they are now reaping the benefits of being early adopters.

***“We could see a need for retaining a level of vegetation to preserve biodiversity.”***

The Gibson family have a different approach to vegetation clearing at ‘Coonabar.’ When Murray and Wendy purchased ‘Coonabar’ they cleared and burnt 15,000 acres of timber, leaving only narrow strips along water courses and fence lines. After this initial clearing Murray states “We could see a need for retaining a level of vegetation to preserve biodiversity.” While the majority of producers in the area cleared all regrowth timber Murray and Wendy have taken a different tactic. The couple left 40 metre wide strips of the regrowth vegetation, seen in the picture on page 2. By retaining this timber Murray and Wendy aspired to create a healthy grazing environment. Retaining 40% canopy cover has proven to be cost effective and opens potential future opportunities in tree carbon offsets.

Brigalow is a nitrogen fixing legume that can assist in improving soil stabilisation and protection of riparian areas. Additionally, it provides shelter for cattle. The Gibsons aim to use animal impact to transform these areas from dense shrub to more open woodlands. This has been difficult to achieve, with the successful

transition only occurring in areas of intensive time controlled grazing areas. These areas are now seeing the encroachment of grass into the understorey which will increase biodiversity and enable grazing under the canopy while retaining the trees.

All vegetation has either been cleared in a concentric square pattern (to force animal impact as discussed above), or in north-south strips. The intention is provide a buffer from the sun and wind, reducing the amount of time both the grass and soil is exposed to transpiration and evaporation. By retaining this timber Murray and Wendy aspired to keep the natural biodiversity. The family can see the inherent value in protecting their natural capital and using it to create a more resilient business.

## What next?

Looking down the track, the Gibsons aspire to have an environmentally sustainable and financially secure business, growing their operation both on and off farm. While they are uncertain of their specific future production targets, they believe they may be able to increase their sustainable carrying capacity by developing the 18 paddocks on the Eastern side of the property into approximately 60 – 70 paddocks.

The Gibsons see 'Coonabar' has the potential for carbon farming. This is in the form of offsets from remaining vegetation and soil sequestration through time controlled grazing.

Innovations that would make a big difference in the Gibson's business include:

- ✓ A software package for the business that includes all aspects of holistic management in a simple, useable format. (i.e. a program that incorporates grazing chart data and paddock moves, animal performance data, financial data all linked in with the NLIS system)
- ✓ Walk-over-weighing and automatic drafting. This could potentially save a lot of labour at 'Coonabar'. Ideally, the drafting could be set up remotely from a computer or smart phone.
- ✓ Virtual fencing via smart phone or computer.



Other practices the Gibsons feel could be beneficial to the industry include tax deductible incentives for improving the ecosystem and rewarding sustainable management practices. Also, providing incentives for graziers to upskill and increase their education.

The Gibsons achievements are underpinned by their ability to see opportunities, adapt their practices and maximise resources at 'Coonabar'. They have instilled a level of protection on the natural capital, as exemplified by increased grass cover, and remain motivated to further develop an improving environment. There is a great sense of achievement in the way 'Coonabar' operates and the Gibsons take pride in being members of the Australian Beef Industry, and advocating its worth.