

Our country, Our future.

Fencing land types

If you fence it, they will eat it



Making cattle eat the right grass in the right place is a lot like forcing a child to eat their vegetables - it's difficult. When cattle find a more desirable grass species in a level, shady spot, they stick around.

Reef Rescue on 'Limestone'

Phil and Deborah Reid own Limestone, a cattle property located the base of the Peak Downs Ranges near Emerald, with spectacular Open Downs and Mountain Coolibah Woodland country.

Reef Rescue funding provided by Fitzroy Basin Association (FBA) helped the Reids make simple changes to their farm infrastructure that allow them to better control cattle movement to achieve more even grazing pressure and reduce erosion.

"The improvements mean we can spell country more frequently and manage land types to their capabilities, improving overall land condition and ground cover," Phil said.

A moo'ving feast

Cattle naturally preferred to graze grass growing in the black soils of the flatter Open Downs country on Limestone, and would barely touch pasture growing in harder, hillier parts of the landscape.

As Limestone's manager Dave points out: "you're not going to eat salty plums over raspberries are you?"

The result was unevenly grazed paddocks with bare areas leading to erosion and sediment entering nearby Isaac River, while also providing the right conditions for Parthenium weed to take hold.

Phil and Dave knew the answer was moving cattle from the black soils to encourage growth of native pastures.

But it wasn't until they discovered FBA offered Reef Rescue incentive grants through funding from the Australian Government's Caring for our Country, that the work seemed possible.

They worked with their local sub-regional group CHRRUP, a delivery partner of FBA, to develop a successful project application.

"The incentives made the process of doing the work in a shorter time frame much easier," Phil said.

Fencing reap rewards

In 2010 the Reids were funded to fence their waterway and improve the placement of water troughs to attract cattle to higher parts of the property, which dramatically improved ground cover.

"These waters, infrastructure and the combination of two great seasons has seen Parthenium competitors explode - it has made the world of difference to these paddocks," Phil said.

In 2011 a project was completed on Limestone to construct 15km of land type fencing and 7 km of riparian fencing, again separating Open Downs country from Mountain Coolibah.

The fencing enabled paddocks to be rested more often which encouraged growth of pastures.

After many years of Parthenium infestation the property is now host to a diverse range of native species.

"In the five years leading up to our first FBA project, we probably spent the same amount of money on spraying out the Parthenium as we've spent on recent infrastructure improvements," he said.

"Spraying year after year was not helping us fight against Parthenium because we simply could not get cattle off paddocks due to the lack of infrastructure," Phil said.

"I believe that although the health of the catchment is a big winner in all of this, through the funding landholders like me are also value-adding to our properties," he said.



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Better ground cover

Improving land condition



Improving land condition on degraded paddocks is a long-term process, and requires a long-term solution. Thankfully the long-term result is a healthier reef!

Butcher of 'Mt Benmore'

Andrew Bourke and his wife Toni have a lot going on. They have three young daughters, run two butchers' shops in Rockhampton, are heavily involved in rodeo and have a beef herd of 2,200 head across their two properties near Middlemount.

Andrew took over their main 31,000 acre property Mt Benmore from his father, who had divided the property and now lives on a smaller 14,000 acre section on the other side of the Mackenzie River.

His butcher shops rely on the slaughter and sale of his own beef herd, with other meat purchased through wholesale suppliers.

Andrew was approached by the Three Rivers sub-regional group - part of the Fitzroy Basin Association network - to commence a Voluntary Land Management Agreement (VLMA).

Fitzroy Basin Association supports landholders to do VLMA's with funding through the Reef Rescue component of the Australian Government's Caring for our Country.

Andrew decided the VLMA was worth a try if it meant receiving financial assistance to help him improve his property.

"I was trying to run as many cattle as I could to make as much money as I could, as most people do. What I didn't realise until I started the VLMA was how much we were knocking the land around," Andrew said.

Rotation brings benefits

As part of the VLMA, a rundown paddock on Mt Benmore was split into two to reduce grazing pressure around the existing watering point.

Being able to rotate the stock between the two new paddocks gave the paddocks time to spell and grow.

"I found that if the cattle were out of the paddock when it was

raining I got more growth in the paddock and the ground cover lasted longer once I let them back in because they weren't flogging the ground."

Andrew used mechanical treatment but has found that just by resting his paddocks the ground has started to look better and he's seeing growth over the areas that were just bare patches.

"I took photos when I started and even I am amazed at the improvement to my land," Andrew said.

Fencing for the reef

In 2012 Andrew completed an additional riparian fencing project with Fitzroy Basin Association to fence three kilometres of the Mackenzie River from his cattle and has added a bore for cattle to drink from.

"This fencing means I will be able to get my cattle up away from the creek when it floods and limit their access to this area allowing the ground cover to improve and I can incorporate the area into my rotational grazing," Andrew said.

"Primarily for me it's about growing grass which improves ground cover, increases stock weight and has the benefit of reducing the amount of sediment that runs off to the reef."

"My focus has been to make my country better, I didn't realise the impacts these changes have on the reef but by improving your land use it has benefits for both sides."

"If I'd never started a VLMA I would have flogged my land in the short term, I have the passion to have more grass and cattle but at the end of the day I want the property to be in a better condition than when I got it and be looking good for my kids," he said.





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Environmental grains

Cropping innovation



Grains Best Management Practices (BMP) is helping more cropping enterprises assess their business and access Reef Rescue funds to make changes for the better.

Cropping on 'Glendale'

Located on the banks of the Dawson River, 'Glendale' is a 2,084 ha mixed irrigation and dry land cropping farm. Glendale is predominantly a cotton farm with grains grown between seasons and on land less favourable to cotton.

Greg Hutchinson works alongside his father, David and brother, Christopher to manage his Grandfather's property 'Glendale', located 22 kilometres from Moura.

Glendale has been involved in Grains BMP since 2010, with corn, wheat, chickpeas and mung beans grown on the property.

As a result, Greg has introduced controlled traffic farming, made modifications to machinery and incorporated the use of mapping software.

Reducing run-off

Making modifications to their planter means Glendale now has a 12 metre planter, which they can run on the same tracks as the 24 metre boom spray every second lap.

This has significantly reduced the amount of sediment and chemical run off to the nearby Dawson River, which flows into the Fitzroy River and out to the reef.

"With less wheel tracks there will be less run off. The wheel tracks had created furrows for water to run down, so less tracks will lead to less erosion in the paddocks," Greg said.

"We were aware of the issue for a long time, it was about finding the time to do something to modify practices, and the funding assisted us and prompted us along to do just that," he said.

Greg notes that the 12 metre minimum till planter is allowing them to plant 25% faster and with better moisture in the ground than before.

Mapping & precise spraying

As a result of completing Grains BMP, Glendale worked with their local sub-regional group, DCCA, to develop several projects successfully funded by FBA through the Reef Rescue component of the Australian Government's Caring for our Country.

They were funded to improve the design and layout of their farm using mapping software and machinery was updated to incorporate low drift nozzles.

The mapping software purchased will allow Greg to gather data over the next couple of years so he can see trends in the paddocks and then define areas of the paddock that need attention.

"This software allows us to import yield maps into our program as well as chemical applications, for better record keeping," Greg said.

"This will enable better placement of fertiliser to better match soil types and grains grown in that area of the paddock.

"At present we spray at same rate across all paddocks but this will allow us to determine which areas need less spray which will reduce over saturation in some areas and reduce run off to the reef," he said.

On top of the \$10,000 provided by FBA, the property managers contributed a further \$139,000.

Glendale is committed to incorporating best management practices on farm and is now commencing with further plans to modify machinery to make the most of rainfall and make improvements to spray technology to further reduce pesticide application.

Learn more about Grains BMP at www.grainsbmp.com.au.



Growing better

Halting run-off in horticulture



Rainy weather in CQ in the last few years has been a boon for local wetlands, and the fish, birds and other wildlife that rely on them. One local grower is helping protect local natural beauty by reducing run-off from his property.

Co-existing with wetlands

The Coleman family farm produces a range of foods that appear on the menu for most families including sweet potatoes, sweet corn, zucchini, pumpkins as well as melons.

A wetland downhill from the farm on the Fitzroy flood plain at Gracemere, west of Rockhampton, is being protected from stormwater run-off thanks to a project supported by Fitzroy Basin Association (FBA) and their local sub-regional group Fitzroy River and Coastal Catchments (FRCC).

The project was made possible with funding through the Reef Rescue component of the Australian Government's Caring for our Country.

Stopping storm water

The storm water from the property was running down a slope towards the wetland and to make matters worse was mixing with other stormwater from the neighbouring properties before it reached the wetland.

The property manager Eric Coleman realised the storm water was a concern for erosion and the health of the wetland due to sediment and pesticide run-off from the farm.

FBA, FRCC, industry body Growcom and the Queensland Government worked together with the Colemans to design a project to rectify the stormwater issues for the property.

The project incorporated determining the size and positioning of drains and a sediment trap, as well as the installation of an additional underground irrigation mainline and a hydrant, to facilitate full farm trickle irrigation.

The project team drew on industry best practice guidelines to design the changes to farm layout.

Positive results

Eric has been able to better manage the storm water that enters and leaves the vegetable farm by improving the farm's internal drainage and polishing the water before it runs off into the wetland.

He has had some sections of the farm laser-levelled to reduce the areas where channels had formed from the storm water run-off.

Drains were installed along the east and west boundaries of the farm to guide the water to the northern end of the farm where the sediment trap was installed.

The sediment trap has a shallow area that filters the water before it leaves the property and enters the adjacent wetland.

The overburden from the drains was used to slightly elevate the existing roadways so they can act as contour banks to keep the neighbour's water from entering the property.

Eric is happy with the progress of his crops following the project work and pleased the changes have had a positive impact on the wetland.