



Improving pastures, land, water quality at century-old cattle station

New grazing management practices are improving the land at 120-year-old Minnamoolka Station. By reducing erosion, the station's owners are also stemming the flow of fine sediment to the Great Barrier Reef.

Graziers Margie Atkinson and Greg Jenkins run 4,000 head of beef cattle, mostly for breeding, and they wanted to improve the pasture on their 29,000-hectare cattle station.

The property is situated at the headwaters of the Herbert and Burdekin rivers.

Through Terrain NRM's Upper Herbert Sediment Reduction Project, funded by the partnership between the Australian

Government's Reef Trust and the Great Barrier Reef Foundation under the Regional Water Quality Program, the pair began a cattle and land management regime based on natural grazing practices.

CHANGES TO GRAZING MANAGEMENT PRACTICES

Greg and Margie's aim was to divide their property up more so that they could rotate cattle through smaller paddocks, leading to a more even

grazing of pasture. This gives the cattle shorter, more intense grazing periods in paddocks and gives the paddocks variable rest periods – with the long-term aim of creating better ground cover and more diverse and nutritious pastures. It also helps to reduce fuel loads in the fire season.

Margie and Greg have focused on two sections of the Upper Herbert part of the cattle station for the Terrain NRM project.



They adopted a four to six paddock rotational grazing system on 12,200 hectares of land by adding 32.5km of fencing and by installing off-stream watering systems (two bores, one of them a solar pump-operated bore, and a header tank supplying two automated water stations). On a separate 2,500-hectare section of the land, which is more susceptible to erosion, they reduced their stocking rate and began seasonal spelling. These changes were made with contributions from both Terrain NRM and the grazier.

“With the new grazing system, the cattle are stimulating native grasses, keeping soil cover and allowing more water capture and that’s a better outcome for the whole eco-system.”

– Dick Richardson, Natures Equity



CHALLENGES

Providing enough water for stock has been the biggest challenge of this project. Margie and Greg have installed new water points, and plan to install more in the longer term.

“Grazing cattle in a large mob through smaller paddocks means there is a much higher daily demand on water points. We can have 600 cows in one group and at the same water trough at the same time. While dams are an ideal low maintenance water source, in the basalt country they generally don’t hold water.”

– Margie and Greg

“We knew the benefits but we couldn’t have done it without financial assistance. Planning is another part of it – where to put the fences and additional waters across a large property.”

– Greg Jenkins

Sandy soil areas are another challenge:

“They are more susceptible to erosion. We are aiming for better ground cover through the changes we are making, and that should lead to less topsoil movement in the wet season. Prevention is always better than a cure.”

– Margie Atkinson

GRAZIER WORKSHOPS

One of the project’s workshops, led by Grazing Naturally’s Dick Richardson, was “a catalyst for change” for Margie and Greg. Dick Richardson followed up with a station visit, as part of the project, to assess grass condition and work on a solid plan for the dry season including forage budgeting and determining stocking rates.

RESULTS

Every year, the grazing management practice changes through this project are preventing an estimated 100 tonnes of fine sediment from flowing into the Herbert River catchment and out to the Great Barrier Reef lagoon.

UPPER HERBERT SEDIMENT REDUCTION PROJECT



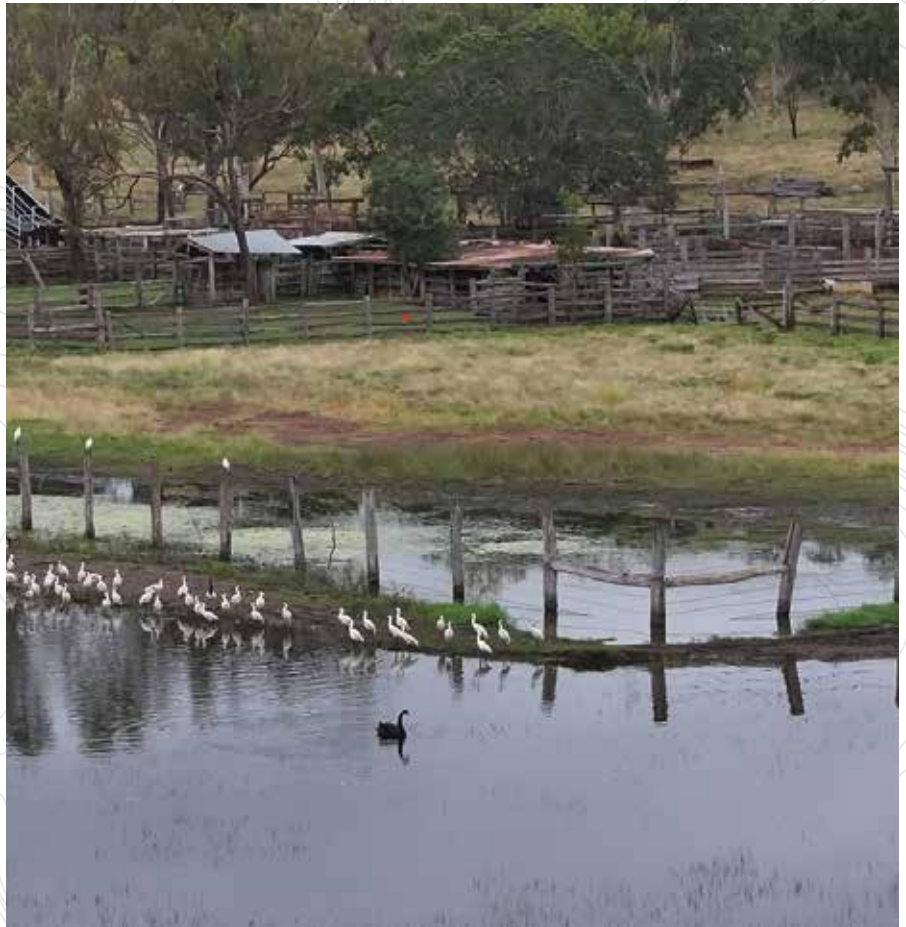
In terms of grazing results, the changes have led to a more even graze of paddocks and visible improvements in pasture quality. They've also allowed paddocks to be spelled, with plans for extended periods of spelling for some paddocks to improve grass loads.

"We've also noticed a change in the stock – the cattle are much easier to negotiate with now than they used to be. They look forward to moving to a new paddock because they know the feed will be better."

– Margie Atkinson

"Our aim is win-win projects that meet landholders' management needs while also leading to practice change that reduces the fine sediment entering the river system and the Great Barrier Reef inner lagoon."

– Duncan Buckle, Terrain NRM



ABOUT THE UPPER HERBERT SEDIMENT REDUCTION PROJECT

This is a three-and-a-half-year project delivered by Terrain NRM in partnership with landholders. It has collectively led to 56,000 hectares of grazing land management change as well as engineered solutions at two gullies and a streambank (a rock chute, diversion bunds and a pile field), resulting in an estimated annual reduction of almost 4,000 tonnes of sediment in the Great Barrier Reef lagoon.

The project includes workshops on natural grazing practices, and soil health and its link to pasture management. It also includes one-on-one consultation with graziers on changes to improve pastures and cattle management.

For more information contact Terrain NRM at **(07) 4043 8000**, email info@terrain.org.au or visit www.terrain.org.au



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