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CASE

STUDY



THE GRONOWS WERE SUPPORTED THROUGH REEF CATCHMENTS SUSTAINABLE AGRICULTURE PROGRAM IN 2013 TO PURCHASE A FLAIL MULCHER.

TRIAL:

IMPROVING AND DEVELOPING FARM PRODUCTIVITY THROUGH IMPLEMENTING SUSTAINABLE LAND FARMING PRACTICES

LANDHOLDER:

Dale and Jane Gronow

LOCATION:

Murray Creek sub-catchment

ISSUE:

Improving soil health and landscape management

FOCUS ON

- ▶ UTILISING A FLAIL MULCHER TO REDUCE TIME FOR BREAKDOWN OF ORGANIC MATTER
- ▶ AIM TO CREATE MORE ORGANIC MATTER FOR IMPROVED SOIL CARBON, NUTRIENT RETENTION AND WEED SUPPRESSION



BACKGROUND

Dale and Jane Gronow come from farming backgrounds, having grown up in farming areas around Clermont and Victoria. They previously farmed at Sarina (south of Mackay) and have been farming their current property near Kuttabul, in the Murray Creek sub-catchment, since 1990. As the property is not large (34 hectares) they both also work off-farm.

IMAGE 1: Flail.



They farm Brangus cattle and stocking rates vary between 35 – 40 breeders depending on season and pasture condition. The Gronows have implemented a number of practices to improve their sustainability including cell grazing and off-stream watering points, and supplement feeding their cattle to overcome low soil phosphorus levels and maintain good animal health.

TRIAL OVERVIEW

The Gronows were supported through Reef Catchments Sustainable Agriculture Program in 2013 to purchase a flail mulcher. A flail mulcher is an aggressive mulcher with flails that cuts straw/ pasture to shorter lengths that reduces the time for breakdown of organic matter. The flail mulcher is often used in southern cropping systems when heavy crops of stubble can adversely impact on growth and productivity in grains. The Gronows had been slashing their property; however they noted that slashing created windrows and the slashed grass took a while to break down. They were keen to accelerate the benefits of creating more organic matter, including improved soil carbon, nutrient retention, weed suppression and maximising the productive capacity of the land. Dale and Jane acknowledge that their system would not suit many larger enterprises but consider it has made a huge difference on their own farm.

OUTCOMES TO DATE



Dale and Jane have visibly noted a difference in their pastures with use of the flail mulcher. In the current dry period for the region they have noted their pasture has increased density and moisture retention compared to previous dry periods in the region. Baseline soil samples were taken prior to using the flail mulcher on their property in 2012. Additional soil testing has recently been undertaken (mid-November 2015) to determine improvements to soil health.

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THE GRONOWS HAVE IMPLEMENTED A NUMBER OF PRACTICES TO IMPROVE THEIR SUSTAINABILITY INCLUDING CELL GRAZING AND OFF-STREAM WATERING POINTS. THEY SUPPLEMENT FEEDING THEIR CATTLE TO OVERCOME LOW SOIL PHOSPHORUS LEVELS AND MAINTAIN GOOD ANIMAL HEALTH.

IMAGE 2: Ground - no mulching.



IMAGE 3: Ground - mulched.

