

REEF RESCUE

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Brian & John Stevens

CONTROLLED TRAFFIC IMPROVED FARMING SYSTEM

Reef Rescue helped Brian and John Stevens to implement a Controlled Traffic System by providing funding support for a GPS tractor kit and autosteer unit, a six-row bean planter and three-row wavy disc cultivator.

Brian and John Stevens first began converting to a Controlled Traffic System at their Ilbilbie and West Hill sugarcane properties in 1996.

They decided on a 1.85 metre system and currently plant dual rows 500 millimetres apart with a double disc opener planter.

In this time, the Stevens' have modified all of their tractors and most of their equipment for managing cane.

Brian says they only have around 13 hectares left to convert to the wider rows.

"Then we will finally have both farms entirely on the new system. Once we are all on the wider rows, our aim after last ratoon is to direct-drill a legume crop and spray out the cane. We will then spray out the legume crop, go through once with a ripper, which is a three-row zonal that can go through trash, once with a three-row wavy disc cultivator and then plant."

All of the Stevens' work will be done with a GPS.

This will help save time and money and maintain the most amount of ground cover during the fallow and replanting period.

Reef Rescue assisted the Stevens' in implementing this Controlled Traffic System by providing funding support for a GPS tractor kit and autosteer unit, a six-row bean planter and the three-row wavy disc cultivator.

Their harvesting group was also successful in receiving funding to fit a GPS on their harvesting gear, so that all the operations would now be on guidance.

"We also changed the coulter on the bean planter to double discs, or moisture seekers, and this has helped greatly to plant directly through trash and the old stool to maintain our minimum till system," John says.

On-farm trials showed the benefits of maintaining the trash,



A family business...

Brian and John Stevens are third and fourth generation sugarcane farmers. The pair have two farms in the Plane Creek district at Ilbilbie and West Hill. The family began farming in 1948 and have since cultivated a total cane production area of about 710 hectares. Marion Creek flows through their Ilbilbie property and West Hill Creek through the other.

compared to cultivation for establishing legumes.

One of the biggest benefits that the Stevens' found from using GPS guidance was the reduction in driver fatigue during operations.

Driver fatigue was seen to be responsible for causing inefficient and inaccurate operations, such as harvesting, that had flow-on effects such as increased compaction in ratoons or billet losses.

Another benefit is the reduced tillage, minimising soil disturbance, helping to reduce weed pressure and the need to control them.

Along with improving their soil management, the Stevens' have been looking at ways to improve their nutrient, chemical and stormwater management on-farm too.

They utilise a three-row Stool Splitter Fertiliser Box and are currently fitting double-discs for improved sub-surface application.

"We use EM mapping, soil testing and the BSES Six Easy Steps

recommendations to determine our nutrient requirements across the farm," Brian says.

For chemical management, the pair have been successfully using a new residual, called Flame, on their plant cane and this has helped reduce the need for control in ratoons.

The Stevens' have also constructed some sediment/detention basins to help with stormwater for irrigation purposes.

This leaves the sediment/detention basins empty for the next rainfall.

The work that the Stevens' are doing through Reef Rescue to improve water quality includes reducing the

risk of sediment and particulate nutrient losses with a GPS-based Controlled Traffic Minimum Tillage System maintaining ground cover, reducing run-off and improving soil structure.

"Reef Rescue has really helped us to fast-track our vision for our farm from maybe a 10-year goal, to earlier than five years. We would have definitely had to prioritise activities and possibly would not have done some of it at all, without the support," Brian says.

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OUTCOMES



Save time and money and maintain the most amount of ground cover during the fallow and replanting period



Reduction in driver fatigue during operations



Reduced tillage, minimising soil disturbance, reducing weed pressure and the need to control them



Improving water quality by reducing the risk of sediment and particulate nutrient losses, reducing run-off and improving soil structure.