

REEF RESCUE

2011

www.reefcatchments.com.au

(07)4968 4200



Gray Plantations

ADOPTION OF IMPROVED HORTICULTURE PRACTICES

REEF RESCUE HELPED GRAHAM WESSLING IMPLEMENT IMPROVED LAND MANAGEMENT PRACTICES ON TWO MACADAMIA FARMS HE MANAGES IN THE MACKAY WHITSUNDAY REGION. WITH THE FUNDING, GRAHAM WAS ABLE TO IMPLEMENT A RANGE OF SOIL, CHEMICAL AND IRRIGATION ACTIVITIES THAT BENEFIT NOT ONLY THE BUSINESS BUT THE ENVIRONMENT AS WELL.

Over the first 4 years of Reef Rescue, Graham applied for Reef Rescue funding to support a range of projects he was keen to implement on the 2 farms. This included soil, chemical, irrigation and storm water activities.

Graham says that the first action on both farms was the implementation of drainage improvements including some redesign work, grassing drains and installing hardened crossings to reduce the risk of erosion and any sediment loss.

Another focus was to install soil moisture probes including the downloading equipment and software to improve irrigation and fertigation scheduling and reduce the risk of any run-off from over watering. For improved chemical management, Graham is utilising a control

droplet applicator (CDA) sprayer with GPS guidance and also a double sided covered weed spray applicator under the trees which he says that not only reduces the risk of spray drift but the total amount of herbicide applied.

As in most tree crops, macadamias, which is a native species, also have quite a few stages in the production process before being able to successfully harvest a commercial crop.

Graham says that it takes around 4 years for a seedling in the nursery to be ready for planting and so it is technically Year 0 before the trees are even planted. He said that they are trying a higher density planting method of 6m x 2.5m (667 trees/ha) compared to the conventional 8m x 4m (312 trees/ha).



About the farm...
Graham Wessling works for Gray Plantations which owns and manages a 141 ha farm near Homebush (20km South-West of Mackay) and also another 116 ha for Red Eye Macadamia near Oakenden (25km South-West of Mackay). Both farms are bordered by Rock Creek which is part of the Sandy Creek Sub-Catchment. Having spent 36 years in Northern NSW, Graham said, "Gray Plantations first established a nursery in the region in 2005 which can now hold 100,000 seedlings and planted the first trees in April 2008 on what was originally cane farms." In 2011, there are a combined total of 80 ha planted with the majority of both farms to go under macadamia production.



This project is supported by Reef Catchments through funding from the Australian Government's Caring for our Country.



CARING FOR OUR COUNTRY



Operations include laser leveling, ripping and mounding up (150mm) and establishing drip trickle tape for irrigation and Rhodes grass as an inter-row crop. Graham says “that once the trees are more established around Year 4, a grass that is more shade tolerant will need to be used”.

After 3.5 years in the ground, the trees will hopefully flower well around Aug-Sept and the following year gets enough nuts for a commercial harvest. This means changes on farm with the drip trickle tape being hung in the trees and the need for a clean area under the trees to allow access and harvesting from the ground.

Fertigation is used and nutrient requirements change with respect to tree age/stage. Graham says “that there is still some weed control needed and a variety of pests to deal

with but with good management you may get 60 years or more production”.

Reef Rescue has helped Graham implement a range of key activities on the farms. Graham says “that if it was a high priority, it may still have been done but for most it has been brought forward 4 – 5 years by getting the funding”. Graham also stated that at first it seemed a bit daunting to get involved but was really helped out by Anna Geddes from Growcom in the proposal process.

“THERE IS STILL SOME WEED CONTROL NEEDED AND A VARIETY OF PESTS TO DEAL WITH BUT WITH GOOD MANAGEMENT YOU MAY GET 60 YEARS OR MORE

Outcomes

- Reduced risk of sediment losses from improved ground cover and drainage management
- Reduced risk of chemical losses by using knockdown herbicides and reducing applications
- Improved irrigation management helping reduce the risk of any run-off



OUTCOMES



Reduced risk of sediment losses



Reduced risk of chemical losses



Improved irrigation management

Reef Catchments

Reef Catchments is the regional NRM body who oversees the Reef Rescue program in the Mackay Whitsunday region for the federal government.

Contact Phil Trendell at Reef Catchments on (07) 4968 4200 or email:

phil.trendell@reefcatchments.com.au
www.reefcatchments.com.au