

Land and Water

JUNE-JULY 2016

Editor's Welcome

Daniel O'Keeffe



Reef Catchments Sustainable Agriculture Officer
M: 0488 730 021 E: daniel.okeeffe@reefcatchments.com

Shared learnings are vitally important for growers who are trying to change - whether the motivation is financial, social, environmental or a mix of all three. You can't trial everything yourself, so learning from the experiences of others is common sense. Reef Catchments continue to provide strong support to landholders in our region to test new and innovative practices. But we want their findings to go further than that. That's why we are pleased to announce the launch of a new range of resources, designed to help growers learn more from

other growers - both from successes and failures. New guides have been developed for Sustainable Grazing, Sustainable Forestry and Sustainable Horticulture. Also just launched is a new series of case studies from our GameChanger program, focused on cane practice-change that reduces use of inputs, enhances nitrogen efficiencies, and cuts sugarcane pollutant run. To request a free hardcopy of our Sustainability Guides, contact Reef Catchments - we look forward to hearing from you.

New grower guides now available for Horticulture and Forestry options

While less practiced in the region, these sectors offer strong potential for diversified operations, value-adding and enhanced farm efficiencies.

Reef Catchments is pleased to announce the launch of a new suite of guides designed to be an important tool for landholders in the Mackay Whitsunday Isaac region. Alongside the Mackay-Whitsunday Sustainable Grazing Guide, the suite also includes new guides for Horticulture and Forestry.

The guides have been designed to support the identification, validation, implementation and review of practices that can improve

productivity and land and water health. The guides outline different levels of management practices for varying water quality parameters, including sediment, chemicals and nutrients.

They are designed to be a jumping point to further information on practice change, and a useful tool for informed decision making.

The full suite of guides is available at no cost by request from Reef Catchments in hardcopy, or downloaded from our website.

E: info@reefcatchments.com
P: 07 4968 4200
W: www.reefcatchments.com

Growers are encouraged to find out about diversification options.

Pictured is a new variety of mango being trialled by Ken and Mary Ede.



In this edition...

New grower guides available	1
Launch of sustainable grazing guide for Mackay-Whitsunday	2
Cane innovation trial results released	2
Forestry an untapped alternative for farmers	3
Sugar high is sweet success	3
Site showcase: Fishway construction, hymenachne spray	4
Site showcase: Stream bank revegetation, erosion control	5
Dirty deeds done dirt cheap	6
Better fish health a good catch for Mackay	7
Botanic Garden wetlands improve water quality	7
Healthy Rivers to Reef Report Card well underway	7
Future of farming, innovation bus tour	8



Australian Government



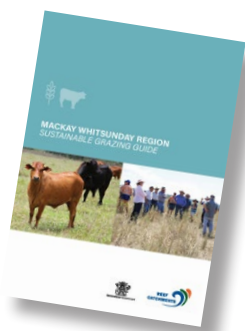
Queensland Government



www.reefcatchments.com.au

Sustainable Grazing Guide launches for Mackay-Whitsunday

From pasture management, to herd nutrition and climate forecasting, graziers in the Mackay-Whitsunday region can now easily access the information they need with the launch of the new Mackay-Whitsunday Sustainable Grazing Guide.



Reef Catchments sustainable agriculture coordinator, Michael Boland, said the Sustainable Grazing Guide was designed to help graziers find information quickly and simply.

"The Sustainable Grazing Guide is an easy-to-use booklet to point graziers in the right direction when they are looking for information to support decisions about their property, and how to best go about changing and updating their practices," Mr Boland said.

"It provides information and tools to assist graziers in achieving sustainable management of their land, while also maintaining or enhancing farm productivity."

The guide covers a range of topics, providing links to areas including:

- Pasture management
- Land condition assessment
- Grazing BMP
- Climate and seasonal forecasting (including drought planning)

- Tropical pasture improvement
- Herd nutrition
- Soil and gully management
- Chemical (nutrient and pesticide) management
- Planning and record keeping

"The guide is available for download at no cost online," Mr Boland said. The guide can be accessed at – www.reefcatchments.com or request a free hardcopy booklet.

The Sustainable Grazing Guide was prepared by Reef Catchments, through funding from the Queensland Government Regional Natural Resource Management Investment Program.

Reef Catchments wishes to acknowledge the technical input from: Jim Fletcher, Phillip Trendell, Neil Cliffe and Ross Dodd, DAF, Mackay; Jacob Betros and Claire Mahony, Catchment Solutions; and Bill Davies and Bob Bennet, Mackay Whitsunday Grazing Working Group.

A new resources is available for growers interested in finding out more about sustainable grazing. Contact Reef Catchments for a free copy.



Pictured: Bloomsbury grazier, Juanita Angus.

Innovative cane trials

Practices that can make a real difference to growers' bottom line and our environment are in demand.

However, more research and resources are needed to help growers identify and adopt changes that are right for them and financially viable, finding out where real gains can be made.

To support this challenge, Reef Catchments is coordinating the GameChanger program for growers in the Mackay-Whitsunday region.

The GameChanger program is an extension of **Project Catalyst** activities. GameChanger supports farmers to adopt strategies where evidence has shown they can be applied across farms with sound economic outcomes while significantly increasing the cuts to sugarcane pollutant runoff.

In total, seventy (70) growers are engaging in trials of several key farm management practice changes, including:

- Variable Rate (VR) application based on block yield
- Reduction of N and other nutrients for older rations
- Reduction of N and other nutrients for late harvest ratoons
- Enhanced Efficiency Fertilisers (EEF)
- Residual vs knockdown herbicides
- Optimising effective weed control

One of the key goals of GameChanger is to support wider practice uptake by sharing trial learnings. All growers are encouraged to access a new range of case studies outlining trial details and early-stage results.

Case studies can be accessed at no cost from the Reef Catchments website.

Grower led and grower driven with practical farming outcomes aimed at improving water quality is the primary focus of the Game Changer project. To achieve this, the project seeks to expand on the success of Project Catalyst and engage with a wide selection of growers throughout three key NRM regions to search for innovative ideas on nutrient and chemical management that also addresses improved water quality entering the Great Barrier Reef lagoon.

GameChanger is supported by NRM Groups across Queensland, through funding from the Australian Government and major project partners, The Coca-Cola Foundation and WWF. In the Mackay-Whitsunday region, the program is managed by Reef Catchments.

Forestry an untapped alternative for farmers

Landholders in the Mackay-Whitsunday region are being encouraged to find out more about how to make forestry work in their favour.

A Forestry Field Day was hosted this June by Reef Catchments to help demonstrate how cultivating trees could create an extra stream of income.

"The focus is on how to make use of marginal land that is not currently earning anything for the grower," said Reef Catchments Regional Landcare Facilitator, Jake Betros.

Mr Betros said forestry was potentially an untapped market for local landholders.

"Reef Catchments is working with farmers to explore the possibility of using marginal land for production purposes, to increase returns and deliver environmental benefits like increased land cover and stability.

"Done correctly, this is a real area of opportunity for landholders in the Mackay-Whitsunday area."

He said the site showcased at the Forestry Field Day was a trial designed to support early forestry findings – if successful, practices can be adopted by other landholders in the area.

"The trial is a mixed species trial implemented along the O'Connell River.

Reef Catchments is working with the landholder to grow trees in a previously dormant area, with the ultimate aim of selling to the timber market."

This is the first time the trial site, which has been operating for 1.5 years, has been opened to the public.

"Cane and grazing are obviously the main areas of agriculture in our region, but there is no reason landholders can't broaden their horizons," Mr Betros said.

"We would encourage anyone with an interest in forestry to contact us to obtain a copy of the ABCD Framework and new Forestry Sustainability Guide as a starting point."

The Forestry Field Day also included a special presentation by Ray Greaves on silviculture in the Central Queensland Coast region.

"Ray is local to the Mackay Region and has been involved in the forestry industry for almost 20 years, including as a ranger with the state government," Mr Betros said.

A mobile sawmill was on display, with participants invited to view soil samples and trial results to date.

To find out more, or to obtain a free copy of the Forestry ABCD Framework and Sustainability Guide, contact Reef Catchments.

The Forestry Field Day was a Reef Catchments initiative, through funding from the Australian Government's National Landcare Programme.

Pictured: Early stages of forestry trial on marginal land, Bloomsbury.



Sugar high is sweet success for water quality and the Reef



Following a review of projects delivered by Reef Catchments under the Australian Government's Reef Programme, some exciting figures have emerged.

Approximately \$1.1 million of Federal Government funding has been invested in farm plans which focus on improvements and practice change for nutrients, pesticides and irrigation efficiency, involving 305 individual growers since 2013.



Manager Katrina Dent is proud of the programme achievements, "To date Reef Catchments has outlaid an estimated \$2 million in small (\$300 per grower) and major (up to \$90,000 for certain projects) grants with almost \$500,000.00 still to be paid.

The farm plans have been developed and reviewed over 2 and 3 years, being refined to allow growers to adopt best practice for water quality improvement, whilst aiming to increase productivity."

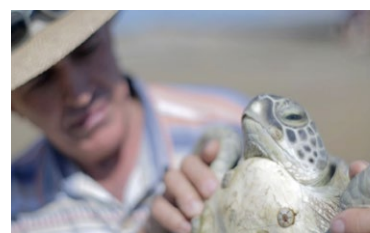
Growers have matched this funding dollar for dollar, to



illustrate their commitment to best management practice.

Mackay grower Joe Muscat has been keen to be involved since funding first became available in 2007.

"Our first project through the early phase of the programme, offered the opportunity to improve our farming system and implement best practice. Without this investment our transition into A class practice would have been slowed, it's allowed us to step into site specific crop management with variable rate ameliorants and



irrigation being applied."

Joe has also been able to achieve the many fundamentals of a controlled traffic farming system, modifying nutrient, chemical and planting equipment to meet the system requirements.

"Identified initiatives must continue to be supported strongly to achieve improvements that deliver real value for farming, the community and the environment. Currently we're installing wetlands which will allow for improved water quality from our farm into the catchments."

DATE CLAIMER



For your calendar!

Reef Catchments will be hosting the annual

Members & Stakeholders

FIELD DAY

THURSDAY 11 AUGUST

Landholders are invited to join us on a full-day bus tour.

Learn more about Reef Catchments projects and view on-ground works around our region.

To RSVP or register your interest contact us:

E info@reefcatchments.com

P 07 4968 4200

Fishway construction and Hymenachne spray: Wetland/Ecosystem Repair Project

REEF CATCHMENTS PROJECT FOCUS

THE PROJECT:

FISHWAY CONSTRUCTION AND HYMENACHNE SPRAY: WETLAND, KOUMALA

WHAT'S HAPPENING AT THIS SITE?

Reef Catchments is working with a landholder to improve fish passage and habitat through waterways in the Rocky Dam Creek Catchment. A partial width rock ramp fishway was constructed on an existing fish barrier adjacent to a large wetland area near Koumala. A Hymenachne infestation in the wetland was also sprayed, to improve the water storage capacity and improve dissolved oxygen levels.

WHO'S INVOLVED?

This is a Reef Catchments project, with co-funding from the landholder and through the Australian Government Reef Programme. It is part of the wider Rocky Dam Basin System Repair program.

PROJECT GOALS:

To improve fish passage and habitat of important migratory species through the Rocky Dam Basin.

CURRENT ACTIVITY:

With assistance from the Australian Government Systems Repair funding (Reef Programme), a partial width rock ramp fishway was constructed on a priority barrier, connecting salt and freshwater environments. During flows migratory fish such as Empire Gudgeon, Barramundi, Crescent Perch and Giant Herring are able to move through the fishway. The design has small drops and deep pools to reduce turbulence and provide suitable conditions

for movement of juvenile fish and small species.

The wetland is seriously infested with Hymenachne.

This is reducing the water capacity within the wetland and impacting on dissolved oxygen levels. During monitoring in April 2016, dissolved oxygen levels in the wetland were recorded at ~4% for the open water channels. These levels are critical and very little life can be sustained. It has been demonstrated in other wetlands that controlling Hymenachne has improved dissolved oxygen levels within waterways. The control will also have added benefits of increasing the water storage capacity for the landholder. Reef Catchments has funded the aerial spray of 30ha of the Hymenachne, focusing on the old channels and deeper water, which is not suitable for grazing.

STATUS:

The fishway was constructed in late 2015 to improve wetland health. Fishway monitoring in February 2016 showed that fish population diversity and numbers were lower than in nearby wetlands without major Hymenachne infestations. In April 2016, 30 ha of Hymenachne were sprayed using a helicopter.

MOVING FORWARD:

Reef Catchments, with approval from the landholder, plans to undertake a second spray of the same area to ensure the suppression of the weed. Follow up monitoring will also be undertaken to compare water quality results, in particular dissolved oxygen levels of the open water. Reef Catchments plans to continue working on the critically important

Pictured: Below, Fishway in construction.

Middle and left: Hymenachne before and after spraying.



Stream Bank Re-Vegetation: Ecosystem Repair Project

REEF CATCHMENTS PROJECT FOCUS

THE PROJECT:

STREAM BANK RE-VEGETATION: CHERRY CREEK, KOUMALA

WHAT'S HAPPENING AT THIS SITE?

Reef Catchments has been working with a cane grower and a grazier to reduce erosion and improve water quality at Cherry Creek, Koumala.

Works have occurred in two stages and include: Bank stabilisation through bank battering (gradient reinstatement), construction of a rock wall, and 5,500 native plants planted.

WHO'S INVOLVED?

This is a Reef Catchments Project, with co-funding from the landholder and through the Australian Government Reef Programme. It is part of the wider Rocky Dam Basin System Repair program.

PROJECT GOALS:

To reduce soil loss from erosion and improve water quality of the Rocky Dam Basin.

CURRENT ACTIVITY:

With assistance from the Australian Government's Systems Repair program, the landholders were able to reduce bank erosion through reef profiling of heavily eroded stream banks. Reef Catchments facilitated the planting of 5500 native species that historically grew in the area. The landholders provided financial and in-kind support to the project and will continue to maintain the re-vegetation site until it is fully established.

EVERY YEAR THOUSANDS OF CUBIC METERS OF VALUABLE SOIL IS LOST FROM LOCAL PROPERTIES DURING RAIN AND FLOOD EVENTS TO RIVERS AND STREAMS.

A study was undertaken by Alluvium Consulting looking at the role of vegetation in protecting stream banks from erosion. The study found that stretches of stream that have been cleared experience much greater erosion than those that are vegetated.

THE SECTIONS WITH ESTABLISHED VEGETATION REDUCED EROSION RATES BY 80 - 95% DUE TO THE STRUCTURALLY DIVERSE VEGETATION.

STATUS:

Stage one plantings have established well. Stage two plantings were completed in April 2016. Little to no soil loss was experienced in the 2015-2016 wet season, indicating that the native re-vegetation has aided bank stabilisation. The project has increased the productivity of the land, through the reduction in soil loss and improved the water quality and habitat of Cherry Creek, Koumala.

MOVING FORWARD:

The Australian Government Systems Repair program will be completed in June 2016. However, the landholders have expressed interest in further re-vegetation works at their properties into the future. Future programs will likely focus on water quality improvement in the catchment.

Pictured: Revegetation of 5,500 native plants was an integral part of the erosion control project.



NATIVE RIPARIAN VEGETATION MUST BE OF A HIGH QUALITY AND CONTAIN DIVERSE STRUCTURAL ELEMENTS COMPRISING OF IN-STREAM, BANK AND FLOODPLAIN VEGETATION.

Structural works like gradient reinstatement (bank battering); pylons or logjams may be required in addition to riparian vegetation to provide an appropriate level of protection from flood related stream erosion.

While grass alone can limit erosion due to its coverage of the bank surface area, it is less effective at increasing the cohesive properties of the soil and reducing the stream velocity near the bank.



Dirty deeds - done dirt cheap | Central Queensland Soil Health Systems

There is a growing movement of producers looking at their soil condition as a key place to begin to improve productivity and yield on farm.

Central Queensland Soil Health Systems (CQSHS) is a not for profit group of farmers seeking new and improved ways of growing crops and pasture whilst reducing costs over the long term.

It is widely recognised that soil biology needs soil carbon levels of 3% or more to become fully active. The calcium/magnesium ratio also needs to be correct so that soil PH will be at the desirable level. The group have also found compaction is a widespread issue for good water and air infiltration, vital for healthy soil.

Believing farmer-driven research and trials can address multiple issues at any one time through multiple science disciplines, the aim of CQSHS is to have all landholders involved, regardless of land use.

Home gardeners, graziers and growers of crops found out more at the CQSHS Soil Health Field Day this April, proudly sponsored by Reef Catchments alongside a wide range of supporting organisations and businesses.

The day included presentations from soil health scientists and experts, including Dr Greg Bender, Dr Neil Wilson and David Hardwick.

Shared learning from growers was also a focus, including from founding CQSHS member, Allan McLean. Allan is a local grower who has been on the land all of his life, working his property with cattle and cane for 67 years. Practice-change and adaptations on his property have included reduced tillage, stool splitting and the use of legumes to improve pasture (signal grass). Cattle have also been an integral part of land management in rough terrain where fire can be an issue.

Allan feels collaboration is the way forward for soil health gains.

"Collectively we can come up with better strategies to improve practices, soil health is very important to remaining a viable farming enterprise. I've seen the benefits in soils becoming easier to till, hence less costs to work the soil and water retention from rain and irrigation greatly improved resulting in less runoff," Allan said.

The Soil Health Field Day was supported by Reef Catchments through funding from the Australian Government's National Landcare Programme.

Reef Catchments' Regional Landcare Facilitator, Jacob Betros, said soil condition was essential to all forms of agriculture, and ensuring healthy soils could deliver greater production to producers in an environmentally conscious manner.

His job is to support groups and individuals to promote sustainable farm and land management practices.

"Not only do we work with sugarcane, but the programme also focuses on grazing, horticulture, and forestry. New scientific information regarding soil health is being generated faster than ever, and it's important for local land managers, to adapt this information and implement new methods, to remain viable, and ensure sustainable production for future generations," Jacob said.

He said one of the most interesting project developments to date was the improvement to soil compaction through remediation on Simon Mattsson's farm.

"Intercropping with sunflowers has really given the soil a new lease on life. I was recently at his property and have seen how well the cane as done in the year following the sunflower harvest."

"Increased production means increasing economic viability. This ensures the Central QLD Coast region benefits environmentally and continues to offer stability to the community with employment, tourism, and agricultural industries."

To find out more about CQSHS visit www.cqshs.farm/about/

For more Reef Catchments soil health initiatives visit www.reefcatchments.com

"INTERCROPPING WITH SUNFLOWERS HAS REALLY GIVEN THE SOIL A NEW LEASE ON LIFE."

- Jacob Betros, Reef Catchments

Growers are turning to soil health for gains in productivity and land health. Pictured: Marian cane grower Simon Mattsson is trialling crop diversity and rotation of varieties.



Pictured: Central Queensland Soil Health Systems (CQSHS)

Better fish health a good catch for Mackay

From barra to barred javelin – the release this May of a benchmark report in Mackay shows keen recreational fishers are set to benefit from improved quality and quantity of fish in our waterways.

The report, titled *St Helens to Cape Hillsborough net free zone pre and post declaration surveys* has included local data collection and monitoring for the first time.

Mackay Recreational Fishers Alliance Inc spokesperson, Lance Murray, said while monitoring was in the early phases, results were encouraging.

"We are seeing encouraging figures in some critical areas, including the size of the fish being caught and released, and the amount of legal fish caught and retained.

"Monitoring showed 28 breeder barramundi over 1 metre, including two over 1.2 metres, were caught and released by recreational anglers. This amounts to 22.2 percent of all the barra caught in the February to April survey period.

"I've been a recreational fisher in the area for more than 40 years and this is the first we've heard of people catching barra that big.

"Early figures are showing that our breeders are being given the chance to breed and that's what it is all about – replenishing our stock to a state of abundance. This net free zone compliments the Mackay Area Fish Stocking Association's excellent work over the years in stocking our impoundments and is the foundation stone of making Mackay the fishing destination of Queensland!"

Reef Catchments spokesperson, Stefanie Wabnick, said Reef Catchments was committed to supporting local groups in Mackay and the Whitsundays to gather real data.

"It's about having good information behind environmental decision-making."

The report is a joint partnership involving Reef Catchments, Mackay Recreational Fishers Alliance Inc, and hundreds of volunteers (rec fishers), assisted through funding under the Australian Government's National Landcare Programme.

An electronic copy of the report can be obtained on request from the Mackay Recreational Fishers Alliance Inc, contact 4955 0600 or email mrfa@easynet.net.au



Pictured: Lance Murray, MRFA

2016 Healthy Rivers to Reef Report Card well underway

The Mackay-Whitsunday Healthy Rivers to Reef Partnership was launched in October 2014 and is a collaboration between 22 partners from community, Traditional Owners, farmers and fishers, industry, science, tourism and government.

With the launch of the pilot Report Card in October last year, partners are now working with the Technical Working Group to confirm indicators, identify gaps and start the data collection work to ensure that the first Report Card due later this year is more comprehensive.

The Mackay-Whitsunday Healthy Rivers to Reef Partnership is focussed on providing more data in future Report Cards to give a more complete picture of waterway and marine health in our region.

As part of this improvement the 2016 Report Card will include an assessment of fish barriers in the region's river basins which provides an increased understanding of how fish communities have been impacted by changes to the region's waterways.

The improved Report Card will also include a more complete picture of the water quality in inshore zone off the urban area of Mackay. For the first time the report card will an assessment of stewardship in the urban sector along with a repeat of assessments in the agriculture, heavy industry, ports, tourism and aquaculture sectors.



HEALTHY RIVERS TO
REEF PARTNERSHIP
MACKAY-WHITSUNDAY

To sign up for updates, visit:
www.healthyriverstoreef.org.au

Botanic gardens wetlands improve water

Reef Catchments has been working closely with Mackay Regional Council and the Department of Transport and Main Roads (DTMR) to create a naturalised waterway with two adjacent wetlands at Lagoons Creek (Mackay Regional Botanic Gardens).

The Lagoons Creek rehabilitation project has entered its second stage, and is set to create a corridor to wetlands and three fishways that will have a positive impact on the area's marine and birdlife populations.

"What this project will do is connect a saltwater environment to a freshwater environment; that's particularly important to our fish species," said RCL coasts and biodiversity co-ordinator Stefanie Wabnick.

Stage two of the project is underway beside Glenella Connection and Lansdowne roads, connecting stage one to the existing Botanic Gardens lagoon.

The Lagoons Catchment exists within a low-lying alluvial flood plain with an average elevation of less than 10m, draining into the Pioneer River and, ultimately, the Coral Sea.

Ms Wabnick explains, "This stage of the project will address issues through the

establishment of a vegetation corridor, rock placement, filtration of water entering the waterway, and in-stream vegetation to treat pollutants.

"Installing wetland and submerged plants provides the retention time required by 'biofilms' to grow and treat pollutants."

Fishways will also be installed to assist diadromous (migratory) species, connecting the fresh water systems to the Pioneer River and ultimately the sea.

Reef Catchments Manager Katrina Dent said, "This is the missing link between the Mackay Regional Botanic Gardens and Pioneer River, with so many recreational fishers and boats we have a responsibility to ensure fishstocks into the future."



Wetland construction, Botanic Gardens

Land and Water

The future of farming is in innovation

The 'Innovation in Agriculture' bus tour (April, 2016) examined how farmers are trialling methods in mixed operations like horticulture, cane and aquaculture to boost productivity while also improving water quality and protecting the Great Barrier Reef.

Local cane grower John Attard left school to farm in 1976 at Eton. He's adopted many changes like homemade bio-fertiliser, brewing Nitrogen fixing bacteria and VAM (Vesicular-arbuscular mycorrhizae).

"As we learn more, farm management systems will reduce these costs further, I'm on tour to learn what's working and what's not," John said.

Reef Catchments Regional Landcare Facilitator, Jacob Betros, knows agricultural entities need to build resilience to climatic events in order to achieve financial, social, and environmental outcomes in the face of adversity.

"Innovation wise I was really interested to see Pacific Reef Fisheries in action. They use water from the Great Barrier Reef to grow black tiger prawns. The trial they showcased is focused on the bioremediation potential of high rate algae ponds."

Tour highlights included Ray Zamora's sugar cane farm at Euramo, south of Tully. Ray's innovative practices were also showcased as part of Project Catalyst. From making bio-fertiliser, to cover cropping, he is also now trialling an aerator to reduce compaction.

In Inkerman, organic practices were shared. The Spotswoods, certified organic

producers of low-input vegetables, fruit, and herbs, are pioneering integrating cattle into their horticulture and cane production.

With a wide variety of innovative practices being undertaken across Queensland, Sustainable Agriculture Project Officer Daniel O'Keeffe said shared learnings were key.

"It is important that growers have the opportunity to learn from other growers. They're often visual learners and very good at solving problems when something is right in front of them," he said.

The bus tour also provided the opportunity for three Natural Resource Management groups to collaborate and benefit all farming entities – Reef Catchments (NRM group for Mackay Whitsunday and Isaac), NQ Dry Tropics (NRM group for the Dry Tropics) and Terrain NRM (NRM group for the Wet Tropics).

"This is a huge step forward for individual landowners to work together in achieving whole of landscape outcomes. For ideas and skills to be shared widely and so seamlessly is a benefit to all primary producers," Jacob said.

Reef Catchments will continue supporting innovation through the Australian Government's National Landcare Programme and QNRM.

Two examples of innovation highlighted were the trials of local growers Simon Mattsson and Joe Muscat. Simon is well known for his trial of multi-species cover crops to enhance soil health and improve nutrient and pesticide use. Joe has been developing fibre production from sunn hemp and elephant grass alongside sugar.

Contact Reef Catchments

Mackay Office

P: 07 4968 4200

F: 07 4968 4228

E: info@reefcatchments.com

Suite 1/85 Gordon Street
Mackay QLD 4740

PO Box 815
Mackay QLD 4740

Proserpine Office

P: 07 4945 2321

F: 07 4968 4228

E: info@reefcatchments.com

45 Main Street
Proserpine QLD 4800

PO Box 1096
Proserpine QLD 4800

This newsletter is produced by Reef Catchments – the Natural Resource Management organisation for the Mackay Whitsunday Isaac (MWI) region. For more information on any of the articles in this newsletter, or to submit a story idea for the next issue, please contact Reef Catchments on (07) 4968 4200.

DISCLAIMER

At the time of publication, all due care and diligence has been taken to accurately reflect current information. Research and materials produced by, or for, Reef Catchments remain the property of Reef Catchments where applicable. The content of this newsletter is provided for information purposes only and has been published in good faith. Reef Catchments does not accept any responsibility for the accuracy or currency of information, errors or omissions within this newsletter.



At Ray Zamora's Euramo cane farm talking about his multiple approaches to soil health