The Cowboys and CANEGROWERS recently joined forces in a bid to highlight the importance of sustainable farming practices, beginning with our nation’s youth.

Schools now have access to a fun module about one of Australia’s key agricultural commodities – sugarcane. By learning about sugarcane through the module, Years 5-7 across Australia are eligible to enter their school to win cool Cowboys prizes.

“The Cowboys are taking the message straight into classrooms that farming practices have progressed significantly from the more traditional crop-farming methods of many years ago,” said Ian Ballantyne, CEO of peak sugarcane growers group CANEGROWERS.

“The new partnership is aimed towards letting the next generation know what farmers are doing on the farm to look after and protect the Great Barrier Reef while ensuring that the industry continues to grow and support the economy.”

Heading up the learning module is Cowboys player Ty Williams, who grew up in sugarcane territory. With Ty kickstarting a series of visits beginning last month, the program has become so popular that the Cowboys’ presence has been sought by hundreds of schools who want to participate. Ty has just finished filming a series of videos about the sugarcane industry for the educational kit, which will be distributed to schools where a personal appearance is not possible. These videos are also available free on the CANEGROWERS website.

The program is open to all schools in Australia, with participating schools given the opportunity to enter a competition and win a limited edition Johnathan Thurston print, or a framed jersey signed by the whole 2010 Cowboys team.

Schools interested in participating can download materials from the website: www.canegrowers.com.au/kids

Ty Williams sharing his knowledge with the kids
Third and fourth generation sugarcane farmers John and Phil Deguara began converting their Beaconsfield and Brightly farms to a Controlled Traffic System in 2003. Reef Rescue helped the pair to finish modifying their equipment to suit the system, and purchase and install a Viper Pro Variable Rate Control Unit to improve the efficiency and accuracy of nutrient and chemical applications across the farms.

After measuring their harvester, haul-out and tractor wheel spacings, they decided that a 1.9 metre single wide row system would be most suitable. In seven years, the pair have modified their tractors and planters to match the new row spacing and have installed a GPS autosteer unit and base station.

After this year’s planting, the Deguaras will have about 20 hectares left until the farm is entirely converted to the Controlled Traffic System.

Phil says they have experienced significant timesaving of labour whilst managing the new system.

Reef Rescue helped John and Phil to finish modifying their equipment to match their row spacing, including a zonal tillage unit, mounding boards and their ripper and grubber, which is also now three-row.

They also have a bean planter, so that they can plant legume crops, such as soybean, during the fallow period. This helps to provide a cover crop during the wet season and helps put organic matter and nitrogen back into the soil, which can be utilised by the following cane crop.

Along with improving their soil management, John and Phil have been looking at ways to improve their nutrient and chemical management on-farm.

Through Reef Rescue, they received funding to purchase and install a Viper Pro Variable Rate Control unit. This is used for both nutrient and chemical applications and has improved the efficiency and accuracy of operations across the farm. This was combined with Reef Rescue funding to modify their three-row Stool Splitter Fertiliser Box to match their row spacing and the fitting of double discs for improved sub-surface application.

The Viper Pro Unit allows for specific targeting of nutrient requirements and is mapped on a kilogram output, which is good for record keeping.

The new double discs and press wheel setup has been a major improvement to the Deguara’s fertiliser application. They go through wet trash or thick trash and help reduce moisture loss, which can cause stress on ratanos.

To improve their chemical applications, the pair received funding to purchase a four-row shield sprayer unit and to modify and widen their High Clearance Spray Rig, so that they could replace residual herbicides with knockdowns where practical across the farm.

“Reef Rescue really helped speed up what we were trying to achieve on our farms from probably over a five to ten year period, perhaps to a two to three year period,” Phil says.

The work that John and Phil are doing through Reef Rescue benefits water quality by reducing the risk of sediment and particulate nutrient losses as the Controlled Traffic Minimum Tillage System reduces run-off and improves soil structure.

There is also a reduced risk from dissolved nutrient losses, with accurate targeted sub-surface granular applications based on crop requirements. Accurate targeted applications based on weed pressure and replacement of residuals with knockdowns also reduces risk from residual chemical loss.

**Reef Rescue**

**A CASE STUDY**

**GRANTS SECURE WATER FOR THE LONG TERM**

Collinsville grazier Brett Stagg knows the value of water.

While the past season has been good, Brett’s number one priority is to secure water for the long-term.

While acknowledging it as no small task to organise water for his 6620 hectare property, Mr Stagg said he has been greatly assisted by the Australian Government’s Caring for our Country Reef Rescue initiative and encouraged other graziers to invest on-ground grants this new financial year.

“Reef Rescue is a very useful tool for graziers to take on board,” Mr Stagg said. “It gives you a head start on infrastructure, plus you manage your country a bit better. Once I’ve broken up some paddocks, I’ll be able to rotationally graze cattle.”

Mr Stagg received a substantial grant to put in a new eight kilometre fenceline enabling him to split an 8000 acre paddock; plus funds to build a dam in each new paddock.

Mr Stagg’s property, Normalby, has four major creeks running through it: Flagstone Creek, Middle Creek, Emu Creek and Dart creek, all of which run into the Broken River.

The Bowen, Broken, Bogie basin was chosen by the Federal Government last financial year as a priority area for Reef Rescue funding, administered by natural resource management group NQ Dry Tropics.

This financial year NQ Dry Tropics has $9 million to administer to graziers, canegrowers and horticulturalists in the Burdekin Dry Tropics NRM region. Priority catchments are: Upper Burdekin, Cape Campaspe, Suttor, Bowen Broken Bogie and Lower Burdekin Basins.

AgForce Projects Reef Rescue project officer Joshua Schwarz helped facilitate Mr Stagg’s involvement with Reef Rescue.

“Brett struck me as an impressive property manager right from the start,” Mr Schwarz said. “He had a 10-year development plan for his property and every year budgeted a certain amount to achieve it. His end goal is to utilise all of his property in the best and most sustainable way.”
CENTRAL Queensland grain growers are showing a keen interest in the cost-saving advantages offered by state-of-the-art WeedSeeker technology.

WeedSeeker has gained a tick of approval following on-going regional weed control research trials.

Judging by the avalanche of growers’ questions, there is no doubt that WeedSeeker spray demonstrations at five on-property grower meetings has allayed doubts and buoyed enthusiasm.

The trials and field days are part of a project to investigate WeedSeeker technology supported by Fitzroy Basin Association Inc. (FBA) with funding from Reef Rescue.

Project partners include the Department of Employment, Economic Development and Innovation (DEEDI) Central Queensland Sustainable Farming Systems and the Grains Research and Development Corporation.

The WeedSeeker technology uses infra-red detection units to activate herbicide spray nozzles only when the units detect target weed plants.

DEEDI weeds research scientist, Vikki Osten said the 2m WeedSeeker-equipped shielded sprayer was trialed to apply herbicides in the crop for inter-row weed control in sorghum and chickpeas. Grain sorghum in-crop weed control trials have been conducted for the past two summer seasons where post-emergent non-selective herbicides have been used for inter-row weed control.

The WeedSeeker only targeted individual weeds within a 60cm inter-row band within the 1m row spacing. Residual herbicides were banded over or on the row at planting.

“Similarly, we started the shielded sprayer WeedSeeker trials in chickpeas planted on 1m rows last winter applying non-selective herbicides and have continued this trial with 2010 winter season chickpeas,” Ms Osten said.

“The trials to date involving 12 differing treatments have clearly indicated that WeedSeeker in-crop shielded spray application plus the banding of residual herbicides over the row can cut the physical total chemical use by 50 – 90 per cent depending on weed density. It also reduced costs by 60 per cent if not more.

“Banding residuals on the rows and using the shielded WeedSeeker for the inter-row is a very cost-effective, environment friendly example of zonal weed management – putting herbicide only where it is needed.”

Ms Osten said that in addition to the huge environmental benefits, WeedSeeker technology used with or without shielded sprayers has real potential to reduce the risk of developing herbicide resistance by paving the way for future registrations of differing classes of herbicides across a range of broadacre crops.

Growers were also treated to a demonstration of a 12m WeedSeeker equipped boomspray by Scott Jameson, business manager of Crop Optics Australia, the Tamworth-based national licence holder for the technology patented in the USA.

Mr Jameson said there was performance-based evidence that a fully set-up, three-point-linkage-mounted 24m WeedSeeker equipped boom spray valued at $150,000 to $160,000 would pay for itself in just two years. The payback was primarily based on the annual reduced chemical use on a cropping area of 810ha using glyphosate for fallow weed control.

Growers who have participated so far have addressed improved chemical and nutrient management practices. These changes have included low volume spray applicators, targeted spray applicators, advanced fertigation systems and whole of farm nutrient balance recording systems.

Implementation of these new practices indicates so far that a 10-50% chemical saving is feasible, and improvements in fertiliser application can reduce fertiliser inputs by 25%. These savings, on top of reduced labour inputs, reduced diesel consumption, improved product quality, improved soil health and a sustainable future, make for a compelling case for change, especially when ROI is typically within 12 months even without Reef Rescue funding.
Rob McArthur believes life, like luck, is what you make it.

Despite his grandfather’s good fortune when first purchasing Mystery Park, today the property’s success has resulted from smart management decisions made by Rob and his wife Ainsley, as well as a lot of hard work on and off farm.

Rob is a current Fitzroy River & Coastal Catchments (FRCC) committee member, and the couple are active members of Broadsound CQ BEEF (Better Economic and Environmental Futures) group.

In 2008 he learned of the Australian Government’s Caring for our Country Reef Rescue voluntary on-ground grants and soon after received approval for a grant to implement a Regional Ecosystem and Riparian Fencing Project. The project included 11 km of riparian fencing, six troughs, three tanks and an eight-kilometre poly-pipe watering system.

He used his hardwood timber for fence posts, paid for two of the project tanks and provided his time to contribute about 50 per cent of the value of the project, one of the guidelines of Reef Rescue.

“For our property, it’s helping us fund things I was going to do anyway,” said Rob. “It sped it up so we could achieve our long-term sustainability goals sooner.”

As for benefits to the Great Barrier Reef, FRCC Project Officer Lisa Sutton said the project will increase groundcover, substantially reducing soil erosion and improving the quality of runoff from Mystery Park entering St Lawrence Creek.

“Most of the St Lawrence Creek catchment is within Mystery Park – this makes the project extra special,” she said. “Plus many of the property’s riparian areas were identified as having regional biodiversity significance and several were fenced prior to the current project.”

Ms Sutton recently established photo monitoring sites and took initial photos of the property, which will provide valuable documentation of environmental improvements resulting from the project.

Ms Sutton said the pasture, overall land condition and productive capacity had improved, and Rob commented that even the cattle were happier.

“You wouldn’t get a very good drink from the creek if you were the 80th to arrive,” he said. “So the improved water quality is benefiting the cattle as well as the reef.”

For more information about Reef Rescue or the projects profiled in this newsletter, contact Queensland Farmers Federation on 07 3857 3747 or Queensland Regional NRM Groups Collective on 07 4699 5002.