Irrigation parts and equipment feature

New climate tools for growers
Tailoring your insurance to your farm has just become easier.

CANEGROWERS Insurance
Finally. Insurance that understands farming.
Strong agricultural lobby group CANEGROWERS has set up its own insurance service.
We have directly employed a team of qualified insurance professionals to work with growers on their insurance needs.

Interested in getting a quote?
Call CANEGROWERS today.
CONTENTS

CHAIR’S COMMENT
I would like CANEGROWERS’ grower members to give very serious thought to nominating for election to be a director of your local CANEGROWERS organisation.

Alf Cristaudo
CANEGROWERS Chair

INDUSTRY NEWS
4 Industry news briefs
6 Spotlight: Safety management for the record
8 CANEGROWERS elections: nominations open 1 February 2013

WHAT’S NEW
10 QSL update: Quiet holiday conditions with sugar and currency themes unchanged
11 It’s time to make your decision on 2013 pools
12 New climate tools for growers

IRRIGATION PARTS & EQUIPMENT
14 Control your irrigation from your smartphone
15 Monitoring water quality

FARMERS TEACHING FARMERS
16 Contract farming requires dedication

MEMBER SERVICES
20 Healthy Grower: Eye safety at work
21 Classifieds
The weather during the months of January and February in Queensland is always tumultuous. During the past three years, we’ve seen floods, cyclones, and this year – heatwaves and a lack of rain – causing widespread bushfires.

It’s a crazy time, and (unfortunately) no-one has a crystal ball to tell us what’s going to happen. So being as prepared as you can be for any weather event is as important as ever.

Of course, farming is an industry that is at most times, dependent on weather. And the past few seasons have been evidence of that. La Niña, El Niño and other weather patterns play a large part in the weather we experience, so having an idea of what they all mean and their affects is an advantage.

Thankfully, CANEGROWERS has released a booklet and DVD on climate, of which all grower members will receive a copy. CANEGROWERS Senior Manager – Environment, Matt Kealley, explains more on page 12.

Jasmine Hunt

Traction: CANEGROWERS punches well above its weight

By Suzi Moore

This year, CANEGROWERS is gearing up for an even bigger year in the media and beyond.

CANEGROWERS’ challenge is to work out the best strategic approach to deliver its messages, and receive coverage far in excess of the budget which has been allocated to it.

During the year, we will be keeping you updated of the strategic mix of communications and marketing tools we are using – and report back on how we are tracking.

At the end of the day it is about traction. CANEGROWERS enjoys some of the best traction of any agricultural body, because it reports in a timely, accurate and fair manner.

Our vision and mission underpins our strength, which helps us punch well above our weight.

At the beginning of each year, CANEGROWERS undertakes a full review of its performance in media and communications, and plans a strategy for the coming year aimed at outpacing its performance in the previous year.

In 2012, CANEGROWERS had extremely high coverage due to the sheer number of issues and extreme importance of those issues.

While we don’t have a proverbial crystal ball, we do know some of the big issues we expect to be covering extensively in 2013 will include: research reform, water, electricity, the federal election, CANEGROWERS elections, land ownership, expansion, cost of production, trade and market access, workforce skilling, regional development, biosecurity, regulation reform, and our development of a world-class Sugarcane BMP.

We look forward to keeping you up-to-date throughout the coming year.
Here’s hoping 2013 is our lucky number 13

By CANEGROWERS Chair Alf Cristaudo

Here we are at the beginning of a new year and I trust everyone has had an enjoyable, relaxing and refreshing break over the Christmas season.

Is 2013 going to be “lucky 13” for us this year? Well let’s be positive and aim towards making it that.

Of course we can’t control the weather and while most of us had good rain over the Christmas – New Year period, some in the south have continued to miss out.

Forecasts suggest that the rest of January will be on the dry side but February should see us receive good rainfall and if we can be lucky enough to get through the summer without any floods or cyclones we have the basis for a reasonable crop in prospect.

Sugar Research Australia progress

Our focus on establishing Sugar Research Australia (SRA) with a commencement date of 1 July 2013 continues in earnest.

Minister Ludwig received a brief from the Department of Agriculture, Fisheries and Forestry (DAFF) just before Christmas and we are confident that he will support the formation of SRA with a decision to take the proposal to cabinet and through the legislative process very soon.

I would like CANEGROWERS’ grower members to give very serious thought to nominating for election to be a director of your local CANEGROWERS organisation.

Water and electricity pricing negotiations

Negotiations with the Queensland Government on water and electricity pricing will intensify in the coming weeks.

The Queensland Competition Authority’s (QCA) recommendations to the government will cripple many producers and are not sustainable or supportive of the planned production growth promoted by Queensland Government.

We are working hard to convince government of a more sensible, reasonable and sustainable outcome.

As always, CANEGROWERS will be working very hard to achieve results on every issue that impacts cane growing businesses. I wish everyone a successful and prosperous year in 2013.

Do you want to be part of one of the strongest agricultural organisations in Australia?

Put your hand up for nomination for your local CANEGROWERS organisation director elections. There are 88 positions available state-wide.

More information at www.canegrowers.com.au or contact Returning Officer Ron Mullins on 07 3864 6444.

Nominations open: 1 February 2013
Nominations close: 22 February 2013
New Ravensdown CEO to continue innovative direction

Greg Campbell has taken over from long-serving Ravensdown CEO Rodney Green as head of the grower-owned fertiliser business. Greg took the chance to meet with CANEGROWERS at the Ravensdown AGM in Bundaberg last month before he officially started in the role.

Previously the CEO of Ngai Tahu Holdings Corporation, Mr Campbell has significant international experience as a chief executive, having been former chief executive at Transpacific Industries, Australasia. He also headed the Christchurch City Council-owned Red Bus operation from 1999 to 2005 and has had management stints with BP and Skellerup Industries. He has been a director of a number of public and private companies. Greg has an MBA from Massey University.

He said the co-operative structure of Ravensdown appeals to him, as the grower-owned company is not driven by share price or short-term focus. “Essentially the profits are returned to our owners and customers. So we are able to invest in products and services that support our cane growers’ businesses,” he said.

“Of course, the buying power and logistical efficiencies which deliver our Australian owners lowest price and best quality are only sustainable when we continue to receive their full support.”

“Science and technology and the knowledge and experience of the team at Ravensdown are the way ahead, but it will be a challenge,” he said. “I believe that if you support and empower people, you will see the best in them.”

Greg Campbell said his initial focus is to meet as many staff, suppliers and shareholders as he can. “I have a passion for the agriculture industry and am excited about taking up this new role.”

The Chairman of Ravensdown, Bill McLeod said: “Greg is someone who will continue the innovative direction Ravensdown has taken for some years while maintaining the culture we have with customers, staff and suppliers.”

Agribusiness optimistic in 2013 despite challenges –survey

A business survey by Bentleys Chartered Accountants has highlighted optimism that business will improve in the coming year despite key challenges for those in agribusinesses, including higher than average reports of rising business costs.

Chartered accountancy firm, Bentleys, canvassed the thoughts of 200 business in 2012 and sought projections for 2013 in an effort to provide a snapshot of the current needs and challenges across the sector.

According to the survey, the agribusiness sector reported one of the highest levels of increased business costs in 2012 with almost three quarters (72 percent) experiencing higher costs compared to 57.5 percent of all respondents.

Despite increased costs, 34 percent of agribusiness reported higher turnovers last year, and almost half (44 percent) believe that business will improve in 2013. Of the survey’s 98 Central Queensland-based respondents, 48.9 percent believed business would be better in 2013, indicating optimism in that region.

The survey also indicated that 24 percent of agribusinesses increased their debt level in 2012, relatively on par with the 22.5 percent survey-wide.

Earlier in 2012, Bentleys analysed the financial health of 15,822 borrowers as part of the QRAA biennial Rural Debt Survey, finding rural debt now totals almost $17 billion and the average borrower owes $1,073 million.

Report shows ageing farm population

The Australian Bureau of Statistics (ABS) has released a report on demographic changes among Australian farmers and farming families in recent years and decades.

The report highlights there are 157,000 farmers in Australia, 19,700 fewer than 2006.

It also says that farmers tend to be older than other workers with a median age of 53 years compared to 40 years for people in other occupations. More than half of farmers work 49 hours or more per week (only 17% of other workers work such long hours). The report highlights the well-known challenge facing agriculture of an ageing workforce.

Reef Rescue confirmed for a further five years

The federal government has confirmed the continuation of the highly successful Reef Rescue program, with the recently released prospectus One Land – Many Stories: Prospectus of Investment (2013-2014).

The Prospectus, released by federal Minister for Environment, Tony Burke, presents the Australian Government’s framework of priorities for biodiversity conservation and natural resource management in 2013-2014 through elements of the Land Sector Package and the sustainable environment stream of Caring for our Country.

The prospectus confirms the continuation of the hugely successful Reef Rescue program for a further five years.

The government has also indicated that Caring for Country funding, of which Reef Rescue is a part, will be delivered through two streams – sustainable agriculture and sustainable environment.

Funding guidelines will be released in stages in the first quarter of 2013 including the new funding amounts available.
El Niño not on the short term horizon, according to BOM

Although it’s been a drier than normal couple of months, growers and farmers across Australia can breathe a tentative sigh of relief as it looks like there won’t be an El Niño or La Niña weather event until at least autumn, according to a Bureau of Meteorology report issued earlier this month.

Neutral conditions (neither El Niño nor La Niña) persist in the tropical Pacific Ocean, and climate models surveyed by the Bureau of Meteorology indicate that the tropical Pacific is likely to remain neutral at least until the southern hemisphere autumn.

Climate indicators of the El Niño-Southern Oscillation (ENSO) remain within neutral values. According to the BOM, sea surface temperatures in the tropical Pacific are generally close to the long-term average.

Atmospheric indicators, such as the Southern Oscillation Index (SOI), trade winds and cloudiness near the Date Line have fluctuated in recent weeks, but generally remained within the neutral range. The SOI was expected to ease further towards zero during the past fortnight as the influence of the tropical weather system which spawned TC Evan is removed from the 30-day average. The BOM says large fluctuations in the SOI over summer due to tropical weather systems are not uncommon.

Record breaking heatwave

At the time of print, the Bureau of Meteorology (BOM) was confirming the extreme temperatures the nation experienced during early January to continue for at least another week.

Assistant Director of Weather Services, Alasdair Hainsworth, said the heatwave had proven to be every bit as severe as forecast, both in the huge area affected and in the temperatures recorded.

“The late onset of the monsoon, that would bring some relief in the way of cloud cover and rain, has not yet eventuated. As a result extremely hot air masses are developing in the north of the continent and being driven into southern Australia ahead of each cold front,” he said.

Assistant Director of Climate Information Services, Neil Plummer, said the heatwave had broken national records. This is consistent with the trend of an increase in extreme heat events associated with climate change.

“On Monday 7 January the average maximum daily temperature record for Australia was broken at 40.33°C. The previous record, 40.17°C on 21 December 1972, was held for 40 years. The daily average maximum temperature yesterday (8 January 2013) is a close third at 40.11°C. The number of consecutive days where the national average maximum daily temperature exceeded 39°C has also been broken this week—seven days (between 2 - 8 January 2013), almost doubling the previous record of four consecutive days in 1973,” said Mr Plummer.

For further information and forecasts go to www.bom.gov.au.

NFF REPORT

Blueprint finalisation

Last week, National Farmers’ Federation CEO Matt Linnegar wrote to all members, along with other agricultural sector stakeholders to provide an update on the finalisation of the Blueprint and the development of the legacy phase. The final Blueprint report will be launched at the National Press Club in Canberra on Thursday 14 February, followed by two industry forums throughout the year to enact the Blueprint strategies.

Stakeholders have been asked to advise their interest in engaging with the Blueprint legacy phase by registering their interest with the NFF by COB today. To do so, please contact Tiana Peneha on 02 6269 5666 or tpeneha@nff.org.au

Australia’s native vegetation framework

Last week, Council of Australian Government’s (COAG) Standing Council on Environment and Water released Australia’s Native Vegetation Framework. Developed with all states and territories, the framework provides a long-term vision for all sectors of the community on how to manage native vegetation in an ecologically sustainable way that recognises the environmental, economic, social, cultural and spiritual values that our native vegetation provides. It sets 14 targets to measure the nation’s progress against five goals for action.

Need the best value fertiliser in Queensland?
You’ll find it at Ravensdown

Call your account manager or our Customer Centre now on 1800 624 122 to secure quality fertiliser for this season
Safety management for the record

By Manager - IR & Grower Services, Greg Trost

The 2012 season is over, Christmas and New Year have been enjoyed and most grower’s thoughts have undoubtedly now turned to this year. The crop for this season’s harvest is growing, and we are all hoping for a wonderful season.

Numerous other activities are currently being planned and scheduled into the work program – cultivation, planting fallowed blocks for the following season’s crops, applying fertiliser for increased production, applying chemicals for weed and/or pest control, irrigating this coming season’s cane and machinery maintenance and overhaul.

A workplace accident can happen at any time. A tragic event involving injury or worse can adversely impact upon work and family.

Employers and self-employed are equally involved

Cane growers who are employers and growers who are self-employed have ongoing obligations to consider and address the effectiveness of their safety management systems in preventing incidents from occurring in the workplace.

Sugarcane farm safety resources

In an effort to assist growers with the farm safety review process, CANEGROWERS can provide guidance material and resources. Especially designed for the cane growing industry, the Managing Sugarcane Farming Safety guide is available from CANEGROWERS. This guide represents best practice for occupational health and safety on cane farms and includes information on the responsibilities of employers, risk identification and management, and farm planning.

The Managing Sugarcane Farming Safety kit is free and is available by contacting your local CANEGROWERS office.

An alternative option for managing farm safety is the CGU Insurance Farm Risk Radar computer ‘online’ tool. This resource is available free to CGU policy holders. Risk Radar helps growers to assess and manage safety risks on the farm.

The program involves working through a series of questions on farm safety practices, farm environmental risks and assessment of safety policies and plans.

Risk Radar provides personalised assessment of risk and action plans to help reduce it.

Through the completion of a simple questionnaire online, the Risk Radar produces a personal report which can be viewed, printed and saved for tracking over time.

The action plans which are generated also include reference to resources to help the farmer manage and improve workplace risks.

For more information on the CGU Farm Risk Radar go to www.cgu.com.au or contact your local CANEGROWERS Insurance Regional Manager.

In addition to those mentioned above, there is a whole suite of resources to help growers manage sugarcane farm safety.

Information, general and specific, is also available from the Workplace Health and Safety website www.worksafe.qld.gov.au

Farmsafe Queensland, as consultants, offer comprehensive workplace health and safety plans.

Now is a good time to include a review of safety in the schedule of activities to be carried out on the farm before the 2013 harvesting season is upon us.
Workplace acts renamed

The government has announced a few name changes to workplace acts focusing on equal opportunities for both genders in the workplace. The Equal Opportunity for Women in the Workplace Act 1999 has been renamed the Workplace Gender Equality Act 2012 (WGE Act) and the Equal Opportunity for Women in the Workplace Agency has been renamed the Workplace Gender Equality Agency.

The focus of the legislation has changed from equal opportunity for women to gender equality in the workplace. Reporting has also changed. Rather than being required to report on workplace programs, non-public sector employers with 100 employees or more will be required to report annually against a set of gender equality indicators, focusing on outcomes.

Weather update

By Professor Roger Stone

This weather update covers shorter-term weather forecasts, monthly and seasonal climate forecasts.

Please note that this service may also be occasionally less frequent with the crushing season now being over, although this change of schedule may also be reviewed, depending on demand.

21 January - 29 January weather forecasts - totals for the week (Lesser confidence):

- 20 - 35 mm north from Proserpine, increasing to 80 – 150 mm north from Ingham, including the northern Tablelands (nil sig remainder).

Seasonal and monthly forecasts:

The seasonal and operational three month climate forecast (higher confidence) for the total amount of rain over the January to March period shows rainfall higher than normal probability values (60%-80%) for the Mackay region and between Ingham and Cooktown for this overall three month period. Remaining districts have close to normal probability values with the exception of the extreme southeast where values are below normal. Note, however, that many inland districts of Queensland have above normal probability values for this period, especially the central west.

Individual months (only experimental for feedback purposes as to the value of this type of output):

- January (updated 3/1): most models suggest average to below average rainfall for the month as a whole.
- February (updated 13/1): advanced models suggest average to slightly above average rainfall probability values for all districts for the month of February.
- March (updated 13/1): an advanced model suggests close to ‘average’ rainfall probability values for the month of March for sugar districts.

The Madden Julian Oscillation (MJO) is currently crossing northern Australia and is slowly moving east. This system may well facilitate the start of the northern wet season. The wet season has been delayed considerably so far this season due to the ‘Modoki’ (a part El Niño system) of the past 6 months in the tropical Pacific Ocean. However the passage of the MJO may well herald the northern wet season.

Longer-term general overview:

- Overall, for the coming three to six month period (through to end of May, 2013), rainfall values currently generally appear to be close to normal/average for this overall three to six month period.
- Longer term forecasts of sea-surface temperatures for 2013 now available are currently suggesting a repeat of 2012 conditions - in overall terms.

SOI: The 30 day average SOI to 13/01/13 is Minus 0.64 (-0.64).

Sugarcane BMP Update

By Senior Manager - Environment, Matt Kealley

The Sugarcane BMP has been signed off and work is well under way with respect to planning, engagement and resourcing.

Engagement of Project Director

Malcolm Petrie has been appointed to the role Project Director - BMP. Malcolm Petrie has a Bachelor Degree in Natural Resource Management and has over 10 years’ experience in project managing Australian and Queensland Government-funded natural resource management (NRM) programs.

Malcolm has held previous roles as NRM project manager for the Local Government Association of Queensland (LGAQ) and the Queensland Department of Environment. He has strong project management experience, stakeholder engagement, facilitation and project delivery.

Malcolm has a good industry knowledge of sugarcane and agriculture through LGAQ where he provided policy advice on a wide range of Australian and state government legislation, policies and programs that are closely aligned with the sugarcane industry. Malcolm Petrie starts 28 January 2013.

District working groups

To ensure that the BMP is built from the ground up and the program supports growers’ business needs and focuses on profit, productivity and stewardship; grower engagement and input is essential.

As part of the engagement, district working groups are being established to provide information and views on what the BMP should look like and how it can be successfully used in their business and cane operations. It will also ensure growers have ownership of the Sugarcane BMP program and drive its success.

Meetings will start in 2013 to get this initial advice into the BMP project by end of March 2013. District working groups will continue to provide valuable advice and input throughout the project. CANEGROWERS looks forward to your involvement in the project and introducing the new Project Director in the coming weeks.
CANEGROWERS elections - nominations open on 1 February 2013

Nominations for Directors for the CANEGROWERS local companies elections open Friday, 1 February 2013. CANEGROWERS Queensland will be conducting 16 of the 17 state-wide elections, with Innisfail to conduct their elections locally.

“Members wishing to nominate for director or Area Committee positions for the 3-year term of office (2013-2016 have until 5 pm on Friday, 22 February 2013 to submit a nomination,” said returning officer Ron Mullins.

“All members are encouraged to consider how they can participate in the running of the CANEGROWERS local companies. The CANEGROWERS organisation is strong because it represents the interests of its grower members, and its members are actively encouraged to seek nomination for leadership roles within the organisation,” said Mr Mullins.

“Of course, each CANEGROWERS directors’ election is a democratic process which seeks to have the best candidates nominate based on merit, with eligible growers, both men and women, of all ages being encouraged to nominate as candidates for these important CANEGROWERS elected positions,” he said.

Mr Mullins is working with each CANEGROWERS local company for the preparation of the official roll for the election process. “Members are urged to ensure that their membership records are up to date. The official roll for each election is to be finalised by 5 pm on Monday, 22 February 2013,” he said.

Important dates:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominations open</td>
<td>1 February 2013</td>
</tr>
<tr>
<td>Nominations close</td>
<td>22 February 2013</td>
</tr>
<tr>
<td>Official Rolls close</td>
<td>22 February 2013</td>
</tr>
<tr>
<td>Ballot papers posted</td>
<td>15 March 2013</td>
</tr>
<tr>
<td>Ballot papers returned</td>
<td>10 April 2013</td>
</tr>
<tr>
<td>Counting of votes</td>
<td>13 April 2013</td>
</tr>
<tr>
<td>Election results declared</td>
<td>15 April 2013</td>
</tr>
<tr>
<td>Term of office for elected Directors commences</td>
<td>1 May 2013</td>
</tr>
</tbody>
</table>

Growers seeking further information on the election requirements or process should contact their local CANEGROWERS office or the Returning Officer, Ron Mullins, on 1800 177 159.

Ron Mullins, CANEGROWERS Chief Operating Officer

Members wishing to nominate for director or Area Committee positions for the 3-year term of office (2013-2016 have until 5 pm on Friday, 22 February 2013 to submit a nomination.

Single mackay area zone

Mackay has consolidated its local process and will now elect 11 Committee representatives for a single Mackay Area zone, replacing the former four zones in the Mackay Area (Farleigh, Marian, Pleystowe and Racecourse).

The streamlined process gives one vote to growers who have farms in the same name in more than one of the former four zones. Previously growers held one vote per farm held in the same membership name in each of the prescribed zones. The Plane Creek Area Committee election requires four representatives to be elected.

“On completion of the Area Committee elections, the local Mackay Company will conduct appointments for the nine-person directorship for Mackay Canegrowers Limited from the elected representatives, with seven directors coming from the Mackay Area and two from the Plane Creek Area.

These appointments are scheduled to be completed prior to the commencement of the next term of office on 1 May 2013,” said Mr Mullins.

Innisfail

“Innisfail is to be conducted as part of the company Annual General Meeting or General Meeting scheduled to be held in April 2013. The number of directors required for this election is five,” said Mr Mullins.

Sixteen of the total of 17 CANEGROWERS local elections are to be run simultaneously using the same timetable. For these elections, a total of 98 candidates are required to fill the elected positions on offer.
Microwaves to deliver chemical-free weed control

The technology that heats the common kitchen microwave oven has been adapted to deliver a chemical-free solution to Australia’s weed problems.

Dr Graham Brodie, of the University of Melbourne, has developed a fully operational prototype machine that can successfully focus microwave energy at ground level, killing weeds within seconds.

“Herbicide resistance and environmental concerns already limit the chemical options available for weed management,” Dr Brodie said.

“In looking for alternative weed treatments, we have found that microwave treatment is immediate, chemical-free and leaves no residue at the treatment site.”

It has been estimated that weeds cost Australian agriculture more than $4 billion dollars each year, including control costs and lost production.

Dr Brodie’s research during 2011-12 was conducted as part of the Australian Government’s National Weeds Research and Productivity Program, administered by the Rural Industries Research and Development Corporation (RIRDC).

The Commonwealth provided $12.4 million to RIRDC to support more than 50 research projects, with the program ending on 30 June 2012. The funding covered the first two years of a five-year National Weeds and Productivity Research Program R&D Plan for 2010-2015.

The RIRDC Weeds Program invested in projects aimed at improving knowledge and understanding of weeds, as well as delivering new treatments, with 11 research projects dealing directly with herbicide resistance issues.

Interest in the effect of microwaves on plant health dates back to the 1920s, but it was not until recently that studies shifted away from attempting to treat seeds in the soil and instead targeting plant seedlings.

The concentration of microwave energy collapses the structures within the weeds that carry water through their stems. Depending on the amount of energy applied, irreversible wilting and subsequent death occurs within just seconds of the microwave exposure.

Dr Brodie’s research initially tested a 600-watt kitchen microwave, before developing the 8-kilowatt field unit that has been tested in the paddocks at the university’s Dookie campus.

A series of four microwave horn antennae, each just 11 cm wide and transmitting 2 kW of microwave energy, were fitted to a trailer to focus their transmission solely onto the weeds in the inter-row space of agricultural field crops.

Dr Brodie said that in a broadscale agricultural operation numerous antennae could be mounted on a tractor trailer at spacings in line with whatever crop was being treated.

Treatment could take place regardless of the weather conditions, would successfully kill herbicide resistant species, and would not limit production schedules with withholding periods at the site once treatment is completed, he said.

“There is potential to develop an industrial 15kW unit which could operate in broadacre situations at near the speed of current chemical spray applicators, with each weed requiring less than a second of exposure to the microwave transmission,” Dr Brodie said.

“Microwave weed management has the potential to be applied throughout Australia to manage weeds not just in agricultural enterprises, but on public land, sporting facilities and in landscape gardening.

“A smaller 1-2 kW unit could also be designed for use by householders if the market supported the concept.”

The prototype microwave system is now operational and can be demonstrated to interested parties who may wish to use the technology in commercial systems.


Above: Dr Graham Brodie, of the University of Melbourne, has developed a fully operational prototype machine that can successfully focus microwave energy at ground level, killing weeds within seconds.

Right: The prototype machine has four microwave horn antennae, each just 11 cm wide and transmitting 2 kW of microwave energy onto the weeds in the inter-row space of agricultural field crops.
Quiet holiday conditions with sugar and currency themes unchanged

By QSL Treasurer, Stephen Stone

Sugar

In this market commentary we note relatively quiet conditions over the 2012/2013 holiday season, with core sugar and currency themes unchanged. Raw sugar futures continue to reflect a physical market in surplus, with languishing flat prices and a curve continuing to steepen through Mar14, as spreads assist with carrying the current physical surplus forward.

Prices have bounced between 18.50-20.00 c/lb in the front end, with important support under 18.50 c/lb continuing to hold. Despite little change to the fundamental picture around projected world sugar balances, or potential gasoline policy change in Brazil, the market remains reluctant to push through recent price support levels. The weekly speculative positioning report is flagged by market participants as a bellwether for short term price action. Any increase in speculative shorts above the 60,000 lot (3 million tonnes) level continues to support prices with short term positioning squaring.

Prices in the Mar13 contract have also gained some support in recent sessions from Index fund rebalancing, where commodity investors adjust their preferences for 2013. Where to from here? Does 2013 look likely to herald significant change to the current fundamental picture in sugar markets? The quick answer to that is probably not. We must always add the ‘probably’ caveat as this is an agricultural market with weather, government policy and grower intentions always able to provide shocks to global prices. A probable continuation of vulnerable front end prices and curve steepening is likely, however, until we clear the current surplus. That being said, price weakness from current levels would appear limited to 2-3 c/lb. even on an overshoot to the downside, whilst speculative positioning and market shocks from weather or policy change would drive an aggressive price correction above 20 c/lb.

Currency

The A$ market continues to grind out small weekly ranges in a period of historically low market volatility. Such trading conditions if anything makes the currency more attractive as our interest rates and the low volatility are increasingly sought by investors. The opening to 2013 has seen the A$ push to the US$1.0600 level, with the currency set to remain firm.

Sluggish data locally and the likelihood of another interest rate cut by the RBA have been offset by an obvious bounce in core commodity prices and better than expected data from China. We expect the A$ to continue to trade at elevated levels and quite likely outperform in the first half of 2013, with many of our trading partners using currency weakness being used as a policy tool for economic weakness.
It’s time to make your decision on 2013 pools

By Greg Beashel, QSL Chief Executive Officer

Queensland’s raw sugar producers are highly exposed to fluctuating world prices for raw sugar. Suppliers can elect to manage this exposure to price risk themselves through supplier-managed pools or elect QSL to manage this exposure.

Each year suppliers are required to declare their forecast export tonnages to be supplied to QSL by the pricing declaration date, which is the last business day in February, in the year harvesting commences. For the 2013 season, the pricing declaration date is 28 February 2013. Growers may be required by their milling company to make their nominations earlier than this date for administrative reasons.

A portion of this declared export tonnage from each supplier is allocated to the QSL US Quota Pool based on an individual supplier’s quota entitlement. The QSL US Quota Pool is a committed sugar pool.

The remainder of a supplier’s forecast export tonnage is nominated by the supplier into a range of committed sugar pools and the QSL Harvest Pool in accordance with the nominations made earlier by growers.

At the pricing declaration date, suppliers can have a maximum of 65% of their total estimated export tonnage allocated to committed sugar pools, with the remainder of their total estimated export tonnage being allocated to the QSL Harvest Pool. The QSL Harvest Pool provides a buffer against decreases in production below each supplier’s estimated volumes for the season.

In making a pricing decision, growers should decide whether they want to control their pricing decisions, have the pricing decisions made for them in a pool environment or a combination of both. The following diagram provides an overview of the options generally available to growers – appreciating that individual milling company offerings may differ (see diagram below).

Each of the QSL pools offered has differing types and amount of risk. More information on QSL pools, their risks and pricing management approaches is available on QSL’s website and through local CANEGROWERS offices.

---

QSL US Quota is standard [up to 5%] so what else can I do?

Do I want to commit tonnes (maximum 65%) overall including 5% QSL US Quota Pool?

- **YES**
  - Committed Sugar Pools [ICE 11 Max 60%]
    - (Get more choice)

  Do I Want To Make A Decision On Price?

  - **YES**
    - **Mill’s Forward Pricing Products**
      - Fixed Priced Forward Contract Pool
      - In-Season Pricing Fixed Price Contract Pool
      - Supplier Pricing Scheme Pool

  - **QSL Managed Pools**
    - QSL Discretionary Pool
    - QSL Actively Managed Pool
    - QSL Guaranteed Floor Pool
    - QSL 2014 2 – Season Forward Pool
    - QSL 2015 3 – Season Forward Pool

  - Or A Combination of Mill Products and QSL Managed Pools

- **NO**
  - Uncommitted Tonnage Pool

  Harvest Pool [Min 35%]

  Size Of Pool Affects How It Is Managed

  The size of the production buffer depends on how many tonnes are in the overall pool & how sugar is priced/sold during the season.
New climate tools for growers

By Senior Manager – Environment, Matt Kealley

You have probably heard of the terms ‘El Niño’, ‘La Niña’, ‘SOI’, ‘El Niño–Southern Oscillation (ENSO)’, ‘Madden–Julian Oscillation (MJO)’ and the ‘Sub-tropical Ridge’, but did you know how they all interact to create the weather systems and climate variation we experience daily, seasonally and from year to year?

As sugarcane growers well know, the Australian sugar industry is strongly influenced by the impacts of both short term weather and seasonal climate variation. This was particularly true for growers in Queensland, especially after the devastating effects of Cyclone Yasi and flooding events from the 2010 and 2011 La Niña seasons.

These coastal regions experience significant seasonal and annual variability in temperature and rainfall and much of this variability can be attributed to the Pacific Ocean El Niño–Southern Oscillation (ENSO) phenomenon.

A better understanding of climate variability and its drivers, and how this relates to industry planning is of vital importance to the Australian sugar industry.

CANEGROWERS has produced a DVD, booklet and is providing a suite of web-based tools on climate forecasting for primary producers in the sugar industry. These were developed through a project supported by the Rural Resilience Industry Grant from the Queensland Government.

The project, climate forecasting tools for primary producers in the sugar industry, has allowed CANEGROWERS to provide information and tools to cane growers on climate drivers and climate forecasting as a decision support tool to assist with strategic and tactical decision making on farm.

Climate booklet

Growers are multi-skilled and make daily decisions about what to plant, when to irrigate and how much fertiliser to apply. These decisions are more often than not influenced by the seasonal conditions and the localised weather conditions.

In the CANEGROWERS climate booklet, decision support tools are provided to aid in the timing of production, harvesting, storage and logistics planning. This information has come from industry meetings with growers and the decisions are provided for planting, irrigation, fertilising, spraying and harvesting in selected cane regions. This information may be useful to evaluate risk along with other information when making business and operational decisions for the farm.

The drivers of climate such as ‘El Niño, ‘La Niña, ‘SOI, El Niño–Southern Oscillation (ENSO), and the Madden–Julian Oscillation (MJO) are described in more detail. Further information is provided on what causes the weather phenomenon we see daily and over the seasons. These climate drivers and how they link together offers an insight on what weather patterns and seasonal conditions might be expected during the season. The information is technical, yet it provides the background as to how climate phenomenon interact so weather prediction and seasonal forecasts can be made with better confidence.

Finally, explanations are also provided for both the SOI Phase system and the latest developments in coupled ocean-atmosphere modelling which assist in short, medium and long term weather and climate forecasting. These models provide our climate outlooks, which relates back to how we could use this information for decision on farm.

DVD

The DVD provides a series of short videos on climate drivers that affect the Queensland sugar industry. Presented by Professor Roger Stone, Climatologist at the University of Southern Queensland, the DVD provides a useful insight on how climate and weather work. The chapters include:

- ENSO – SOI drivers for climate variability.
- The Sub-Tropical Ridge (STR).
- The Madden-Julian Oscillation (MJO).
- Sea Surface Temperatures (SST).
- Walker Circulation.
- Autumn Break.

Web based tools

CANEGROWERS has developed a climate page on its website. This provides 7 day forecasts, ENSO, SOI as well as seasonal outlooks and weather information. The climate page will also include links to climate sites, the Bureau of Meteorology, videos, apps and other useful information that may assist growers. The booklet and DVD will be distributed through the
As sugarcane growers well know, the Australian sugar industry is strongly influenced by the impacts of both short term weather and seasonal climate variation. This was particularly true for growers in Queensland, especially after the devastating effects of Cyclone Yasi and flooding events from the 2010 and 2011 La Niña seasons.

Matt Kealley, CANEGROWERS Senior Manager - Environment

Australian Canegrower magazine and will also be available on the CANEGROWERS website at www.canegrowers.com.au

The success of the sugar industry depends heavily on capitalising on good weather, being prepared for future climate and weather patterns and minimising the risks associated with climate variability. Hopefully these resources can assist growers with information on climate drivers and climate forecasting to assist with strategic and tactical decision making on farm.
New year – new irrigation equipment?

The nation has sweltered through one of the hottest summers in decades, with 40+ degree temperatures across much of Eastern Australia. With the Bureau of Meteorology forecasting hotter weather, and a drier than normal first quarter of 2013, now could be the perfect time to review and possibly update your irrigation equipment. This edition we feature a look at Lindsay’s FieldNET technology. We’ve featured FieldNET before, and this time Lindsay’s announced a new program that includes applications accessible on iPads, iPhones and Android technology. These apps allow you to control your irrigation equipment from the palm of your hand.

Jasmine Hunt

Control your irrigation from your smartphone with Lindsay’s FieldNET

Supplied by Lindsay Corporation

Lindsay Corporation, maker of Zimmatic irrigation systems, has announced the next generation of FieldNET wireless irrigation management.

The new FieldNET now includes several new features and user interface enhancements for remote control of center pivot irrigation systems, lateral irrigation systems and pumps, according to Richard Hall, Lindsay Regional Manager, Southeast Asia, Australia/New Zealand. Also new to FieldNET Mobile are apps that are compatible with the iPhone, iPad and Android devices so growers can check their entire irrigation system from virtually anywhere.

“FieldNET was redesigned around a completely new and modern architecture that provides a much more integrated solution for water management,” Mr Hall said. “It’s even easier to use and information is more insightful with a new patent-pending user interface.”

Hall says the new design features are a result of research conducted by Lindsay to better understand the wireless irrigation management needs of growers. A common theme was how widely growers used the FieldNET Mobile application in a variety of working conditions and how much users value speed and convenience when managing their irrigation systems remotely.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.

In addition to controlling pivots, laterals and pumps, FieldNET can monitor and record water usage, energy usage and tank or pond levels. Growers can also monitor web-based weather information such as temperature, rainfall, humidity and wind speed. The product is designed to work with a variety of plug and play sensor add-ons. FieldNET also works on non-Lindsay pivots.

“With its new and innovative interface and apps for smartphones and tablets, we haven’t yet seen another product on the market that is as easy-to-use and feature rich as FieldNET,” Mr Hall said.

FieldNET includes a system dashboard that provides a graphical overview map of a grower’s entire irrigation operation - even across multiple farms. A new feature allows users to click or tap a status icon on the main system dashboard and access a “Quick Tray” to manage irrigation functions without ever leaving their system dashboard.
Monitoring water quality

Abstracted from the SmartCane Harvesting and Ratoon Management Best Management Practice booklet by Bernard Schroeder et.al.

Within the sugarcane industry, irrigation water sources are mainly surface supplies from large public dams and delivered to irrigation areas and farms either by open channels or pipes. In most areas, groundwater is also an important component of supplies and on-farm water storages play a minor, yet significant role in some districts. Surface water supplies from public storages are generally of satisfactory quality. However, when storage levels are lowered severely, water quality can deteriorate due to increased salinity, turbidity and low oxygen levels.

Groundwaters are more likely to suffer quality problems which can include the major components of water quality viz. salinity, sodicity hazard (sodium adsorption ratio and residual alkalii), toxic ions and presence of corrosive materials, eg. iron compounds.

Regular use of waters with these characteristics may detrimentally affect plants, crops, soils and equipment.

Remedial treatments will probably be necessary in these cases.

Salinity is a measure of the total quantity of dissolved salts and is best estimated by measurement of the electrical conductivity (EC) of water. The standard EC unit is decisiemens per metre (dS/m), although conductivity meters often read in millisiemens per centimetre (mS/cm) or microsiemens per centimetre (μS/cm); mS/cm are equivalent to dS/m and μS/cm are one-thousandth of that measure.

The sodium absorption ratio (SAR) is a prediction of how water will affect soil sodicity. Sodic soils disperse easily, have poor infiltration and drainage characteristics and are difficult to cultivate and irrigate. Soil dispersion is likely to be greater with low salinity water. The risks associated with different SAR values are shown in the table above.

Relatively high levels of chlorine, sodium, boron, lithium and other ions are toxic to some crops but rarely to sugarcane. More unusual water sources such as sewage effluent should be monitored to avoid problems with long-term use. These could include corrosive materials such as iron compounds, colloidal clay and sand. Waters with low pH or high chlorine content are generally corrosive. Those with high chlorine content are particularly corrosive in turbine pumps.

Where water penetration is a problem, especially with low salinity water, the addition of gypsum as a soil amendment or dissolved in the irrigation water may be necessary.

---

Table: Soil dispersion risk categories

<table>
<thead>
<tr>
<th>SAR</th>
<th>EC (dS/m)</th>
<th>EC</th>
<th>SAR and soil dispersion risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 - 0.3</td>
<td>0.3 - 0.9</td>
<td>0.9 - 1.8</td>
</tr>
<tr>
<td>1 - 10</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>10 - 18</td>
<td>high</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>18 - 26</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Over 26</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

---

Industry-Leading Irrigation Management Technology

- NEW AND IMPROVED!
  - FieldNET Wireless Irrigation Management – for water, energy and labour savings
  - Growsmart® Precision VRI (Variable Rate Irrigation) applies the right amount of water/chemicals defined by zone or individual sprinkler.

THE LINDSAY ADVANTAGE

PROVEN STRENGTH.
LEADING TECHNOLOGY.
SUPERIOR SUGAR CANE YIELDS.

Zimmatic® by Lindsay offers proven systems and products that are built to be strong, long lasting, durable and easy to use for sugar cane growers who need highly efficient irrigation choices.

Growers across Australia rely on Zimmatic’s network of knowledgeable dealers for certified service and support to add value and reduce risk.

To find out how a Zimmatic irrigation system can help increase your yields, see your local dealer, email infoaustralia@lindsay.com or call 0458 967 424.

Scan this QR code with your smartphone to view a video of the new and improved FieldNET, or visit www.youtube.com/LindsayIrrigation.
Mark Fritz follows a very detailed planting plan for the crops grown for the Pacifi c Seeds plant breeding program. This paddock is planted to maize, two rows of the male line then two rows of the female line. Photos by Amy Claireton.

By Amy Claireton

Mark Fritz is a fourth generation farmer in a family with a long history in cane and small crops.

His great grandfather migrated to the Bundaberg district in the 1800s and started growing cane.

Mark’s father, Gordon, diversified into small crops in the 1960s as one of the fi rst tomato growers in the Bundaberg area.

As that industry expanded, he diversified into capsicums, watermelons, sweet corn and beans.

“The small crops have been in rotation with cane and the two industries generally complement each other,” says Mark.

“Last year small crops were not good but cane performed well. In some other years the opposite has been true.”

The past cane season was one of the best for Mark, who saw blocks testing over 17 CCS for the fi rst time on the family’s farms. “We had a whole week of high CCS,” he says.

“We cut several hundred tonnes of Q208 that registered CCS of 17.3, and more blocks that achieved CCS readings over 16.”

In the mid-1990s the family started growing potatoes for processing into potato crisps.

“Smith’s were looking for growers with suitable soils, some horticultural gear and experience to grow potatoes in northern areas, to provide a more even supply of potatoes for processing into crisps,” says Mark.

The diversification into processing potatoes gave Mark some certainty over their production system and income.

More recently Mark has started working with Pacifi c Seeds in their hybrid plant breeding program.

Mark now grows watermelons over summer, potatoes for Smith’s Snackfood

Farmers teaching farmers

Key learnings

- Mark Fritz is a fourth generation cane and small crops farmer.
- The Fritz family grows cane, watermelons, sweet potatoes, grains and crisping potatoes.
- The sandy soils on the Fritz’ farms make fertiliser management a challenge.
- GPS part-funded from the government’s Reef Rescue project has helped the family greatly with fertiliser management from crop to crop.
- Mark uses a trash incorporator bin with a ripper tine to bust the centre of the stool area and place fertiliser either side of the stool while maintaining the trash on the soil surface.
The small crops have been in rotation with cane and the two industries generally complement each other.

Mark Fritz, Bundaberg cane grower

in winter/spring and is part of Pacific Seeds’ plant breeding program for canola, millet, grain and forage sorghum, maize and sunflower seed.

The Fritzes own three farms in the Calavos area south of Bundaberg and lease another five farms, giving a total farmed area of 250 ha.

Mark and Gordon grow 120 ha of cane between them and sent around 10,000 tonnes to Millaquin Mill this year.

The sandy soil is well drained and with a moisture holding capacity of just 25 mm, it is not well suited to trickle irrigation as the profile doesn’t wet up evenly.

“Trickle under plastic for the watermelons works well but not for potatoes, which grow roots out into the interrow, because tubers will not form if the soil is too dry,” says Mark.

“Even with the melons, we use a winch to top-up the soil profile as required.”

Green cane trash blanketing has made a big difference to soil moisture conservation and weed suppression on the sandy soils.

“We get all weeds here and because there are not many pre-emergent herbicides available for use in some of the cereal crops, we need to cultivate those blocks more than we do for cane,” he says.

Mark uses a trash incorporator bin with a ripper tine to bust the centre of the stool area and place fertiliser either side of the stool while maintaining the trash on the soil surface.

On the sandy soils of Mark’s own and leased farms, fertiliser management is challenging.

“Each crop uses all the applied fertiliser and there is not usually any residual nutrients in the soil for the next crop,” says Mark.

“In the cane, we use a variable rate applicator that has paddlewheels rather
than a worm mechanism and a gear box that is infinitely variable.”

“Although we don’t generally change rates within a block, being able to adjust the application rate from block to block has benefits,” he says.

“The GPS unit in one tractor was purchased with assistance from the Reef Rescue program and this unit gives us accurate measurements of block area.

“Having this information gives us better control over application rates.”

“We have started using black urea blends and Entec-treated blends on our crops,” says Mark.

“Urea can kill some soil microbes and the humic coating of black urea helps protect microbes from the harmful effect of uncoated urea and the product is also far less volatile.”

Both blends still need to be incorporated into the soil or irrigated in, but there is a 7–10 day window before there are losses through volatilisation.

With these significant benefits Mark believes the extra $100/t for the black urea and Entec blends over the ‘normal’ urea blends is justified.

Mark and Gordon grow 2 - 4 ratoon crops and then spray out the cane, ready for the next crop. They have recently changed over to smaller jets to apply glyphosate at a higher rate to achieve a better sprayout.

The Fritz’ farms are outside the Bundaberg surface water scheme and rely on bore and dam water for irrigation.

“The last two wet seasons have provided much-needed recharge for the groundwater aquifers in the area,” says Mark.

“Altogether we have access to about 200 ML of dam water and the dam has continued to overflow for the last 12 months.”

The watermelon crops are irrigated using trickle tape that is then reused in some cane blocks.

“About 20% of our cane is grown on surface trickle tape each year,” he says. “The rest is watered with travelling irrigators.”

The Smith’s processing plant in Brisbane sources potatoes from growers in the Atherton Tablelands, Charters Towers, Bundaberg and Gatton regions to

The GPS unit in one tractor was purchased with assistance from the Reef Rescue program and this unit gives us accurate measurements of block area.

Mark Fritz, Bundaberg cane grower
Farmers Teaching Farmers is another grass-roots Reef Rescue initiative. Reef Rescue is aimed at addressing off-farm impacts on water quality by encouraging voluntary uptake of the latest technology and best practices.

**Farmers teaching farmers**

Farmers Teaching Farmers is another grass-roots Reef Rescue initiative. Reef Rescue is aimed at addressing off-farm impacts on water quality by encouraging voluntary uptake of the latest technology and best practices.

The Fritz’s grow around 3000 tonnes of potatoes from end June/start July to October. Potato production was down this year due to the cool, wet conditions over winter. Mark and his father Gordon have held contracts with Smith’s Snackfoods for crisping potatoes since the mid-1990s.

Spread the production window and season risk.

The Fritzes grow around 3000 tonnes of potato over 16 to 20 weeks (June/July to October).

“We ship from 150 to 200 tonne per week and have worked hard to increase our yield per hectare as we are paid a fixed price per tonne,” says Mark.

“Having lower yield potential here also means we concentrate on quality to earn the bonus payments for high specific gravity, or dry matter.”

The Smith’s company keep a close eye on production indicators on contract farms, as changes in paddock conditions have a direct influence on factory throughput. Mark keeps detailed paddock records of planting, estimated yield and changes in temperature.

“This year we had 300 mm of rain during the growing season and a combination of wet conditions, short days and cool temperatures reduced potato set and therefore yield,” he says.

“In Queensland we achieve lower yields than southern producers who grow potatoes over summer, but we help the continuity of supply to the factory because we can grow crops over winter.

“Anything that reduces the amount of sunlight during the growing season has a significant effect on yield.”

Pacific Seeds have moved their seed generation program from the Darling Downs to the Bundaberg – Childers area.

The agronomist is based in Childers and manages the company’s plant breeding program for canola, millet, grain and forage sorghum, maize and sunflower.

“The area used to grow seed varies considerably from year to year but was probably around 50 ha across the Bundaberg–Childers district this year,” says Mark.

“This year we grew 1.5 ha of canola in winter and we have 2 ha of maize, 1.5 ha of millet, 4 ha of sunflower and 2 ha of sorghum growing at the moment.”
Eye safety at work

Information sourced from Better Health Channel; www.betterhealth.vic.gov.au

Any job that involves airborne particles or hazardous substances carries a risk of eye injury. Ordinary eyewear does not protect you against injury and contact lenses may worsen an eye injury. Reduce your risk of workplace eye injuries by wearing protection equipment and making sure prevention measures are followed.

Most eye injuries in Australia are minor, but some workplace accidents can result in serious injury, vision loss or blindness. Any job that involves airborne particles or hazardous substances carries a risk of eye injury. The eye is extremely delicate and permanent vision loss can result from a relatively minor injury.

Ordinary eyewear does not adequately protect you against injury – in fact, contact lenses may make an eye injury worse. In Australia, men of working age are most at risk of serious eye injuries.

The risk of workplace eye injuries is reduced if proper prevention measures are followed. Pay attention to your working environment and always wear eye protection every time you are required to do high-risk work.

Types of eye injuries

Different types of eye injury include:

- Scratch or cut.
- Puncture.
- Embedded object.
- Chemical burn.
- Welding flash (vision loss caused by bright light).

Common risk factors

Factors in the workplace that increase the risk of eye injury may include:

- The employer doesn’t supply any eye protection.
- The employer supplies eye protection but workers won’t wear it.
- The employer doesn’t enforce the use of eye protection or train the workers in how to use protection equipment.
- Neither the employer nor the workers appreciate the potential for injury and don’t think to use eye protection.
- The eye protection is inadequate, such as the use of glasses when the job requires a face shield.

- The eye protection doesn’t fit properly – for example, the glasses are loose and allow particles to enter from the sides.
- Only the operator of the machine wears eye protection, so anyone in the vicinity who is not wearing eye protection is at risk from flying particles.
- The workers don’t know how to properly operate the equipment or tools.
- The equipment isn’t maintained in good repair.
- Work involves the use of metal on metal, such as hammer and chisel injuries.

Identify and control hazards

To improve eye safety at work, you must first identify the hazards. Walk through the workplace and look for potential hazards, and talk to employees about past injuries at work.

Use eye protection

Wearing eye protection appropriate for the task can significantly reduce the risk of injury. Always buy eye protection that complies with Australian Standards.

General recommendations include:

- Low impact – for tasks including chipping, riveting, spalling and hammering. Recommended protection includes: safety glasses, safety glasses with side shields, safety clip-ons, eye cup goggles, wide vision goggles, eye shields and face shields. Choose items marked with manufacturer ID and Standards mark.
- Medium impact – for tasks including scaling, grinding and machining metals, some woodworking tasks, stone dressing, wire handling and brick cutting. Recommended protection includes: safety glasses with side shields, safety clip-ons, eye cup goggles, wide vision goggles, eye shields and face shields. Choose items marked with manufacturer ID and Standards mark ‘I’.
- High impact – for tasks including explosive power tools and nail guns. Recommended protection includes face shields marked with manufacturer ID and Standards mark ‘V’.
- Welding – filters and shields marked with manufacturer ID and Standards mark as set out in AS/NZS 1338.1.
- Chemical handling – wide vision goggles, eye shields or face shields marked with manufacturer ID and Standards mark ‘C’.
- Dust – goggles marked with manufacturer ID and Standards mark ‘D’.

First aid – general suggestions

In all cases of eye injury, seek immediate medical help. Injuries that seem minor can sometimes cause permanent damage including vision loss. First aid treatment differs slightly depending on the type of injury.

Suggestions include:

- Cuts, punctures or embedded objects – do not rub the eye. Do not wash or flush the eye. Do not try to remove an embedded object. Gently cover the injured eye with an eye pad or shield secured with tape.
- Dust or loose particles – do not rub the eye. Flush the dust or loose particles with clean water.
- Chemical splash – do not rub the eye. Flush with clean running water for at least 15 minutes. You may need to hold open the eye with clean fingers. Alkaline chemicals are especially dangerous to the eyes so take particular care that these are flushed from the area thoroughly.

Please note that the above first aid suggestions are not a substitute for first aid training or professional medical help.

Where to get help

- Your doctor.
- In an emergency, call triple zero (000).
- Emergency department of your nearest hospital.
- Optometrist.
- Ophthalmologist.
- Your manager or supervisor.
- Your elected occupational health and safety (OH&S) representative and your workplace OH&S coordinator.
- Royal Australian & New Zealand College of Ophthalmologists (RANZCO) t. 02 9690 1001.
- Optometrists Association Australia t. 03 9663 6833.
Using bulk purchasing power, Member Plus gives CANEGROWERS members savings on:

- electrical products
- new vehicles
- tickets & attractions
- car hire
- travel & accommodation
- and much more…

To check out monthly Member Plus specials, visit canegrowers.com.au today!

“Member Plus is a very easy, time-saving and worthwhile service to use. I saved $455 on the total purchase of a TV, Blu-ray player and fridge with one phone call to Member Plus. For any further items I require, I will use Member Plus for sure.”

CANEGROWERS member, Andrew Vassallo, Eton

All use of Member Plus services are governed by the Terms of Use located at our website at www.memberplus.com.au/privacy.html as varied from time to time. Please refer to those Terms of Use prior to engaging any service provided by Member Plus.
CANEGROWERS classifieds

FIRST 30 WORDS FREE FOR CANEGROWERS MEMBERS book online anytime of the day or night www.canegrowers.com.au or email ads@canegrowers.com.au Next deadline is 29 November 2012.

*As a FREE service to CANEGROWERS members, Australian Canegrower will print suitable classified advertisements UP TO 30 WORDS FREE, FOR ONE ISSUE ONLY. A charge of $5.50 will apply for each extra 7-word line or part thereof. A charge will apply for advertising of non-cane growing activities. Advertisements must relate exclusively to cane farming activities, e.g. farm machinery etc. Advertisements from non-members are charged at $11 per 7-word line incl GST. Only pre-paid ads will be accepted.

**FOR SALE**

**John Deere Cane Harvester**
- CH 3520
- 2010 model
- Excellent condition
- Full Track
- 3,500 hours
- $295,000 + GST
- Offers considered

Phone 0410 664 890

**WANTED**

- 1 x Double Bin Trailer with Floatation Wheels.
- 4 tonne HBM Tipper Bins

Call Ross on 4068 5499 or 0418 988 601

**TRACTOR SPARE PARTS**

New and Used Parts for all makes and models

Specialising in Fiat and Same

G.W. TRACTORS
Call 1800 062 790

**Liquid Nitrogen Beaulieu R.U.M.**

Your local R.U.M. distributors are:
- Mackay  Noel Jensen  0438 595 325
- Burdekin & FNQ  Wally Ford  07 4782 1990

Technical Information  1800 020 909

Not only do R.U.M. distributors sell R.U.M. They USE R.U.M. Give them a call, Have a look at R.U.M. at work.

**FOR SALE**

John Deere Cane Harvester
- CH 3520 4WD.
- Excellent condition 2300hrs
- Kubota M9580 4WD Air Cab Bi Speed Turning
- Case JX110U 4WD Air Cab with LH x Case Loader – 1300HRS
- 2005 Cameco Elevator & Fronts complete. GC.
- 2 x Moller 3 Tonne Billit Planting Bins
- 1 x Kubota 9540 FWD Tractor Ex Con
- 1 x John Deere 5520 FWD V/G Con
- 1 x 2009 Trimble Auto pilot to suit a John Deere 3510 Harvester

**WANTED**

- 1 x Double Bin Trailer with Floatation Wheels.
- 4 tonne HBM Tipper Bins

Call Ross on 4068 5499 or 0418 988 601

**FOR SALE**

- 1 x John Deere 6930 4WD. Excellent condition 2300hrs
- 2 x 220 HP Cummins 2000 Models.
- Case JX1100U 4WD Air Cab with LH x Case Loader – 1300HRS
- 2005 Cameco Elevator & Fronts complete. GC.
- 2 x Moller 3 Tonne Billit Planting Bins
- 1 x Kubota 9540 FWD Tractor Ex Con
- 1 x John Deere 5520 FWD V/G Con
- 1 x 2009 Trimble Auto pilot to suit a John Deere 3510 Harvester

**WANTED**

- 1 x Double Bin Trailer with Floatation Wheels.
- 4 tonne HBM Tipper Bins

**TRACTOR SPARE PARTS**

New and Used Parts for all makes and models

Specialising in Fiat and Same

G.W. TRACTORS
Call 1800 062 790

**Graham Twyford Machinery Sales Pty Ltd**

Specialising in Used Cane Harvesting Equipment Sales

 JD 3520 WHEEL HARVESTER 2010,
2,828 HRS. 9 Litre 375 HP ENG. Whole Topper. New Elevator Chains. Separated Chopper/Basecutter Circuits. IDEAL FOR LARGE TONNAGE !

CASE FULL TRACK 1999/2000 Update
Tilt Cab. Komatsu 325 HP. Shredder Topper. 15″ x 6 Blade Chopper System Ext Blade Adjuster. Late Model Fronts Reduced Angle Augers. Good Tracks. HARD TO FIND !


CASE POWER HAUL 1998 Cummins 170 HP 10 Tonne RH Side Tipper Front Suspension 40 K’S.

MULTIPLIER TWO INTO ONE SUIT CASE 7700 SAI Radial Piston B/Cutter Drive Motors Good Condition - MAKE AN OFFER

NEW 4 SLAT OPEN BUTT ROLLERS
Suit JD 3510/20. Helps Drop Dirt. Enquire NOW !

10 & 12 BLADE AVAILABLE NOW:
DIFFERENTIAL CHOPPER DRUMS
Suit JOHN DEERE/CAMECO 3520/3510 MODELS 12 Blade Sets 95mm Blade & 10 Blade Sets 95mm Blade. New Seal Plates Supplied With Kits. INCREASE Bin weights, Better Cleaning. Tungsten Hard Faced on Wear Areas. ENQUIRE NOW

NOW TAKING ORDERS FOR NEW:
BILLET PLANTER 2500 ADJUSTABLE FURROW DEPTH & WIDTH RUBBER MAIN FEED BELT

40 Years Associated with Sugar Cane Harvesters

Graham Twyford
48 Central Park Drive, Paget Mackay
Mobile: 0418 742 696
Phone: 07 49 526 668
Email: graham@gtmachinerysales.com.au
Web: www.gtmachinerysales.com.au
Mossman - Tully

Daybreak couler (self cleaning), easily modified to zero till direct drill bean planter and/or confidor applicator $6,500 + GST. Contact IBCPS South Johnstone 0427 620 316 – Michael Porta or 0427 632 230 – James Dunn

IH 4 row 186 cm soya peanut planters $2,200. Grimme 2 row potato harvester $27,000. 4 row potato planter with SS fert boxes $1,500. 0417 703 230 (Tablelands)

3 New Holland 4WD TS115 tractors, approx. 4500hrs coupled to 5 Ton HBM Tippers, all G.C. Farmall Firebreak Pusher & one 3PL Linkage PTO Driven Wash Down Unit. 0427 160 799 (Innisfail area) Ford 7000 tractor. Inter Farmall AM7 diesel. 11 tyne root rake and 3 pusher, suit a Cat D4 dozer. Southern Cross aluminium irrigation pipes, 50 lengths - 7m x 100mm. 2 banana trailers. 0428 644 135

Herbert River - Burdekin

NH 8970, 240hp, s/steer, r/duals 80%, M/flow hyd, YR 2000, VGC. 0439 556 234 1 Ford 5000 good condition tyres 70% price $5,000. 1 514 tricale good running condition 3 point linkage, tyres front new, back 60%, diesel price $3,200. 1 7 yard tip body 4 satage ram good condition $1,200. 07 4782 0140 after 7pm NH 8970, 240hp, s/steer, r/duals 80%, m/flow hyd, yr 2000, VGC, $51,000 inc GST. 0439 556 234

Toft 7700, full track ’03 model, Komatsu engine, new track chains & sprockets, top condition, $175,000 + GST. 0407 029 949

2 MF188 - one with front forks $10,000 - one with extra clearance $9,000. All in good order. 0429 772 617

2 John Deere Articulated 7710 Tractors with 14 Tonne Carta Tippers. 0428 181 507

Complete planting outfit: Billet planter B110 Bonel Contractor Special. 2 double side tipper bins Toft 6000 Series 4. 07 4784 0140

Land Cruiser ute 05 Direct injection 4.2ltr 3inch exhaust 3 inch lift kit dual pipe side rails, Toyo open country tyres, Arb bull bar, tool box and water tank under tray, light bar on top of tray, led tail lights, HID spot lights, winch but not working, air seat driver side, 272,400 KM Well serviced on time and maintained, no rust in chassis or cab, good reliable ute $36, 000 ono. 0409 277 484

Mackay - Proserpine

Tractors x 3 for sale. 2 x FIAT 160-90s, 1 with new motor $40K, other low hours $30K, 1 x FIATO $28K recently spent on back end (diff / gear box) & cab, $30K. Also TOFT 6500 rotary chop $5.5K, all parts avail. 0438 598 239

12t self-propelled 6x6 elev. infelder. 6t side/tipper on Leyland tandem GC. Don Mizzi 741 model on Fiat 750 special turbo plus MF102 half-tracks to suit. Mason 9550 4 row precision vacuum seed planter GC. 0438 606 578 (Mackay)

1996 CASEMCO Full-track harvester, Cat 3306 motor, 8 blade Westhill chop with adjuster. POA. 0438 789 106 (Sarina)

1996 Cat 3306 Camco harvester, motor needs re-build $2,500 + GST. 0438 789 106 (Sarina)

M11 Cummins harv spec. 7,000hrs, running, suit rebuild. $2,500 + GST. 07 4959 1098

High speed track motor to suit 1996 full track Camco harvester, fully re-conditioned. $3,500 + GST. 0438 789 106 (Sarina)

Toft 4000-6000 base cutter box. $600 + GST. 0438 789 106 (Sarina)

96 Cameco parts. Trackmachine wrecking. Laid down fronts, standard topper, rear spread, track hubs. 0408 011 983

Machio Heavy Duty Rotary Hoe 5.7m, suit zonal 1.8, hyd doors, hyd crumble roller, depth wheels. lots of spare h/f blades. G.C. $15,000 + GST. 07 4959 1098

766,786 International tractor offers, Westhill Half tracks, kazuma RTV Buggy with tipper tray, 6ft Howard gal slasher, Single row Conford applicator with 200ls Hardi tank with 12volts pump, Hodge 4 furrow plough, Fuel tanks 1x2500lts overheard 2x1000lts squat tanks, Toyota Hilux well type tray,205MF Harvester, 2x.5tonRear tipper bins for planting,1x4ton Westhill side tipper. 0402 203 829

Stick planter w/gal fert box. Bonel stick plant cutter. 2 fan thrash extractor. Single row cutaway, all 3pl in GC. 2 whole stick planting trailers $5,000 ex GST. 0417 198 707 after 5pm

Case Puma165 2009Model 50km.4wd.a/c. front suspension, excellent condition. $73,000 + GST. Ford TM 155 2006 Model.40km.a/c. good condition. 0419 707 805 or 0405 140 322

John Deere 760A Scraper. Full power shift 9yd. Working cond. $14,000 + GST. 07 4959 1098

Austoft 7700, 1999 model, 325 hp Komatsu, 8 blade chop, Westhill adjuster, shredder topper, swingout radiator. G.C. $120,000 + GST. 0427 595 085

Bundaberg - Rocky Point

Drop-deck, tautliner and flat top extendable for hire. 07 4159 8174 or 0417 004 717.

For Sale: 500 odd shares in Isis Central Sugar Mill Ltd. Must be Isis Mill grower. 0438 597 444 (Bundaberg)

2007 CASE IH MAGNUM 245 Tractor w/ 12’foot Laser Bucket. – 2300 Hours, Trimble Laser System, V.G.C. P.O.A. For more information phone 07 4159 7677 or email buneearth1@bigpond.com

Howard AH100, new chain, new blades, new stub axle and bearing, new shield and rear flaps, rubber wheels. $6,500 inc GST ono. 0417 764 952 or 07 5546 2164

G C shielded spray unit $15,500 Massey Ferguson 165 Elevated to 3ft clearance 1105 Massey Ferguson VGC new clutch & many other repairs completed, sand blasted and painted. 0467 597 551

Ian Ritchie 6 tonne side tipper, in good condition. Ph. 0418 495 755 (Mackay area)

98 CamecoHarvestertrack, 1.8 modified, includes 20’ grousers, lengthened elevator, widened zulu fronts with hyd er nie, GPS ready, tilt cab, SA1 radial piston chop, Westhill adj., GFT50 hubs, fully variable rollers, b/c,oppers and primary ext. 360hp M11 900hrs. Service history, low component hrs, dollars spent, one, owner/driver, VGC $125,000+GST. 07 4959 1098

Toft 6000 Series 3. Rotary chop, 4ft ceiling fan, 2000 Charllyn motors. L10 Cummins, new elevator floors. Cut plants for the last 10 year. $45,000 + GST. Ph. 0438 744 484 or 0418 737 167. (Mackay)

10 tonne carter bin hooked to JD3650. All new tyres and in very good condition. $44,000 + GST. Ph. 0428 819 270.

1 x 6T Tip Trailer $550.1 x 1T McLeod Fertiliser Bin, 2 row, ground drive. GC $440. Phone 0417 778 319

Call Kim Thackeray

on 07 3864 6444

ADVERTISING

ENQUIRIES

Call Kim Thackeray on 07 3864 6444

21 January 2013 | Australian Canegrower 23
Wanted

Tractor tyres of all sizes. 07 4168 4664 all hours.

Wanted – Dual wheels for John Deere 7820, 100mm axle, rim size 42 inch. 438 554 624

Wanted- Double bin 6 ton cane trailer. Also wanted hydraulics and sensor shaft for Fiat Also wanted hydraulics and sensor shaft for Fiat 1000. 0419 601 959

Wanted - Tully welding works or Carta elevating tipper either single axle or tandem, with or without tractor. 0437 434 280

Wanted to buy 1or 2 Rims to suit Carta or Corridini axels to take Tryer 23-1-26, 1x14ton Carta or Corridini elevating tipper able to deliver both sides, with or without tractor. 0402 203 829

Wanted - Two single bin, 6 tonne cane trailers in good condition. 0419 601 959

Wanted to buy: 120 inch rotary hoe. 1 tonne bag lifter. 0400 071 522

High-Clearance Tractor or High-Rise Spray Unit Ph: (07) 4063 2321 (Innisfail area)

Wanted to buy: 1 x 6640 Ford / New Holland 2WD tractor, air cab. 07 4959 1451

Wanted Dowdswell rotary hoe parts 90,100 or 120. 0427 587 945

Positions Vacant

Wanted Harvester Driver and Cane Carter for 2013 season. Approximately 4,000 tons. 07 4958 5232 (Mackay)

Wanted: Eligible persons for planting crew Burdekin area. Harvester or Haulout Operator. April to August 2013. 0413 319 906

NSW

Bonnel Billet Planter. Good working order. $15,000 + GST. 0432 748 229 (Broadwater area)

WEATHER REPORT

<table>
<thead>
<tr>
<th>Location</th>
<th>Recorded rainfall in mm</th>
<th>Average rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 days to 9 am</td>
<td>Year to date</td>
</tr>
<tr>
<td>08/01/2013</td>
<td>15/01/2013</td>
<td></td>
</tr>
<tr>
<td>Mossman</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mareeba AP</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Cairns</td>
<td>43</td>
<td>72</td>
</tr>
<tr>
<td>Mt Sophia</td>
<td>63</td>
<td>160</td>
</tr>
<tr>
<td>Babinda</td>
<td>33</td>
<td>96</td>
</tr>
<tr>
<td>Innisfail</td>
<td>15</td>
<td>99</td>
</tr>
<tr>
<td>Tully</td>
<td>44</td>
<td>183</td>
</tr>
<tr>
<td>Cardwell</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>Lucinda</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Ingham</td>
<td>14</td>
<td>102</td>
</tr>
<tr>
<td>Abergowrie</td>
<td>11</td>
<td>81</td>
</tr>
<tr>
<td>Townsville</td>
<td>0.2</td>
<td>30</td>
</tr>
<tr>
<td>Ayr DPI</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Proserpine</td>
<td>18</td>
<td>29</td>
</tr>
<tr>
<td>Mirani</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Mackay</td>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td>Sarina (Plane Ck)</td>
<td>21</td>
<td>98</td>
</tr>
<tr>
<td>Bundaberg</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Childers South</td>
<td>0.2</td>
<td>2</td>
</tr>
<tr>
<td>Maryborough</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Tewantin</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Eumundi</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Nambour</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Woongoolba</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Murwillumbah</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Ballina</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Woodburn</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(WZero indicates either no rain or no report was sent). These rainfall figures are subject to verification. Cardwell’s year to date amount is inaccurate due to equipment failure as a result of cyclone damage. Weather forecasts, radar and satellite images and other information for the farming community can be accessed on www.bom.gov.au

2010 John Deere 3520 Full Track Harvester 4800 hours, 9L engine, elevator extension suit 1.8m, service records, GC $225,000 + GST. 0418 881 343 (Maryborough)

2050 Case billet planter excellent condition. 4455 John Deere tractor, power shift transmission. Komatsu D45A, power shift, bull tilt blade, rippers, out of chassis engine rebuild. 0418 711 411

2 row Grizzly billet planter, all hydraulic drive, 5 years old and planted only 800ha, vg. $75,000 + gst. Photos and info email hugh@bullseyepf.com.au or 0447 980 842.
Looking for a special piece of machinery? Place an advertisement in our classified Wanted columns at www.canegrowers.com.au

Work Wanted

Hard working. UD/HR Licenses. Gun/Marine Licenses. Worked 30 years on family grain/cattle/sheep farm in Darling Downs. Experienced in yard, fence, plow, harvest, planting, general machine maintenance. Eager to start work in the Burdekin area. Please call John on 0487 108 442

Honest, hardworking, punctual Couple looking for work for the cane harvest. Are experienced machinery operators. Willing to give anything a go. 0458 52 7034

Property

Cane farm for Sale P.O.A. Dumbleton, Mackay – Total Area 57 HA CPA 40HA.
Phone: 0417 778 319

RAINFALL REPORT

provided by Bureau of Meteorology’s Commercial Weather Services Unit, Brisbane

<table>
<thead>
<tr>
<th>Location</th>
<th>2012 Rainfall</th>
<th>Average rainfall</th>
<th>Jan - Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mossman</td>
<td>3284</td>
<td>2249</td>
<td></td>
</tr>
<tr>
<td>Mareeba AP</td>
<td>895</td>
<td>911</td>
<td></td>
</tr>
<tr>
<td>Cairns</td>
<td>2002</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Mt Sophia</td>
<td>3137</td>
<td>3409</td>
<td></td>
</tr>
<tr>
<td>Babinda</td>
<td>4304</td>
<td>4287</td>
<td></td>
</tr>
<tr>
<td>Innisfail</td>
<td>3366</td>
<td>3580</td>
<td></td>
</tr>
<tr>
<td>Tully</td>
<td>3716</td>
<td>4102</td>
<td></td>
</tr>
<tr>
<td>Cardwell</td>
<td>2079</td>
<td>2127</td>
<td></td>
</tr>
<tr>
<td>Lucinda</td>
<td>3244</td>
<td>2131</td>
<td></td>
</tr>
<tr>
<td>Ingham</td>
<td>2718</td>
<td>2124</td>
<td></td>
</tr>
<tr>
<td>Abergowrie</td>
<td>1830</td>
<td>1831</td>
<td></td>
</tr>
<tr>
<td>Townsville</td>
<td>1315</td>
<td>1152</td>
<td></td>
</tr>
<tr>
<td>Ayr DPI</td>
<td>1119</td>
<td>952</td>
<td></td>
</tr>
<tr>
<td>Proserpine</td>
<td>1772</td>
<td>1455</td>
<td></td>
</tr>
<tr>
<td>Mirani</td>
<td>2095</td>
<td>1493</td>
<td></td>
</tr>
<tr>
<td>Mackay</td>
<td>1907</td>
<td>1606</td>
<td></td>
</tr>
<tr>
<td>Sarina (Plane Ck)</td>
<td>2422</td>
<td>1744</td>
<td></td>
</tr>
<tr>
<td>Bundaberg</td>
<td>1059</td>
<td>1026</td>
<td></td>
</tr>
<tr>
<td>Childers South</td>
<td>1106</td>
<td>907</td>
<td></td>
</tr>
<tr>
<td>Maryborough</td>
<td>1357</td>
<td>1155</td>
<td></td>
</tr>
<tr>
<td>Tewantin</td>
<td>1985</td>
<td>1153</td>
<td></td>
</tr>
<tr>
<td>Eumundi</td>
<td>2076</td>
<td>1684</td>
<td></td>
</tr>
<tr>
<td>Nambour</td>
<td>2226</td>
<td>1668</td>
<td></td>
</tr>
<tr>
<td>Woongoolba</td>
<td>1636</td>
<td>1350</td>
<td></td>
</tr>
<tr>
<td>Murwillumbah</td>
<td>1641</td>
<td>1618</td>
<td></td>
</tr>
<tr>
<td>Ballina</td>
<td>1905</td>
<td>1756</td>
<td></td>
</tr>
<tr>
<td>Woodburn</td>
<td>1493</td>
<td>1367</td>
<td></td>
</tr>
</tbody>
</table>

Please note:
While most of these rainfalls have been confirmed, there may be some small variations at some sites. The highest rainfall for 2012 on the above list was Babinda PO with 4304 mm. Happy Valley, 3 km west of Babinda recorded 4428 mm. However, this was surpassed by the Bellenden Ker Top Station (elevation 1545 m) with 6780 mm and the Bellenden Ker Bottom Station with 4498 mm.
Spotted anything unusual?

Nothing will protect your fields more than a good hard look.

Cane growers are the key to protecting Australia’s fields from exotic insects and diseases that could devastate the industry.

It is important that you are aware of the risk, and if you spot anything unusual in your field you should always check it out and call your local BSES office or the Exotic Plant Pest Hotline on 1800 084 881. The call is free (except from mobiles) and early detection will help protect your industry.

Visit www.planthealthaustralia.com.au for further information and a list of the top priority pests.

LOOK. BE ALERT. CALL AN EXPERT.

EXOTIC PLANT PEST HOTLINE

1800 084 881