BREMER CATCHMENT ASSOCIATION INC.

April 2019

Special points of interest:

Our next Meeting in 2019 is on 18th April 2019 Everyone welcome

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Have you all paid your BCA Membership for 2018/2019

Around the Bremer

President's Corner by Mark Edginton

Within the February edition of "Around the Bremer", was an excellent article by Jenn Meyer on the Small Creek restoration project.

This was more than a story about the rehabilitation of a creek in Bremer Catchment. This project is a symbol of a paradigm shift not merely in how we treat catchments, but in the way we think of Nature.

In the past, humans have seen nature as a force to do battle with. Nature was seen as something that must be subjugated and controlled so that humans could survive in a malevolent world.

Nature was seen as unkempt and in want of human tidying and engineering solutions. This is why we turned creeks into storm drains. But now we realise that Nature is far more organised than we gave her credit for, and that behind the 'chaos' is an intricate ecological web that is so complex that we will never understand all of it.

We know that we tinker with that web at our peril. And this is why Small Creek is being re-wilded.

Small Creek restoration: that's one small creek for restoration, one giant leap for Nature!

Benefits of Small Creek

- Improved aesthetics, with the creek appearing as a naturally occurring waterway over time.
- Cooler water in our waterways, a vital requirement for native fish species.
- Reduction in air temperatures by up to two degrees around the creek corridor.
- Improved environmental outcomes and better water/habitat quality for animals and plants.
- Increased value of surrounding property, as evidenced by recent research of similar projects.
- Provision of improved active transport connections for residents.

Selecting the right trees for the right job, John Ive

Shining Gum (*Eucalyptus nitens*),

The choices depend on many characteristics including tree size, shape, growth rate and life expectancy under expected conditions.

Enthusiasm for the planting within the community continues to build. But planting just any kind of tree isn't good enough; the right species must be chosen for specific purposes and locations. Use of the wrong species could waste money and do little to help with the problems trees were being planted for.

It might also release a potential weed and worst of all, the enthusiasm of even the most committed people will wane if plantings repeatedly fail.

Decades may pass before we realise that the wrong species were planted, so the right ones must be chosen at the start. Tree planters must decide on what they want to achieve; planters may want trees for their direct benefits, wood or shade for example, or for their indirect, especially land-restoration benefits such as soil conservation and enrichment of the soil's organic matter and Nitrogen content.

The choices depend on many characteristics including tree size, shape, growth rate and life expectancy under expected conditions.

It's important that the right local varieties (called *provenances*) of native trees are chosen, because even within the same species some are more tolerant of certain conditions than others.

River Red Gum (*Eucalyptus camaldulensis*)

For example, specific varieties of the widely occurring River Red Gum (*Eucalyptus camaldulensis*) are more resistant to shallow salty water tables or severe frosts, while varieties of Shining Gum (*Eucalyptus nitens*), a species with relatively restricted natural range are sought after for planting timber producing plantations.

Generally, local native species should be planted unless there is a good reason not to.

However, because of extensive clearing and development it is impossible to be sure which species are native to the area.

Moffatt Fresh Produce: Still going strong

A Bremer Catchment Story

Armed with a rich family history of farming that spans almost 100 years, Steve Moffatt and his team at Moffatt Fresh Produce are well-equipped to achieve their goal to produce the best carrots and onions in Australia.

In a picturesque pocket of south-east Queensland, a bright blue sky shines down on the Fassifern Valley, effortlessly creating postcard views of the mountain ranges that hug the surroundings of Moffatt Fresh Produce.

The loamy creek soil flats typical of the Tarome area are as rich as Moffatt's family history, which traces back to 1924 when Robert Moffatt and his son Allan (better known as Scotty) planted their first crop as share-farmers.

Today, Moffatt Fresh Produce is fast approaching its 100-year anniversary, and the successive generation of farmers shows no signs of slowing down the family trade. Scenic backdrop aside, Tarome was chosen as the home of Moffatt's all those years ago thanks to its favourable climate, alluvial soils, reliable water supply and proximity to key markets, providing a solid foundation on which to build the business.

Today, Moffatt Fresh Produce is fast approaching its 100-year anniversary, and the successive generation of farmers shows no signs of slowing down the family trade.

While Moffatt's has dabbled in growing various vegetables over the years, its flagship commodity – carrots – have been a staple of the business since the 1960s when they were grown on just 10 acres. Today, Moffatt's carrots are produced across three regions in Queensland, including the Fassifern Valley, Southern Downs and Granite Valley, allowing the business to produce a year-round supply to the tune of 25,000 tonnes a year.

"Everything we have here today is the result of the generations before us. We're quite proud of the fact that we've been able to manage succession within our business – the benefits are that each generation improves, and off the back of that the farm improves," Steve says.

"After the floods in 2011, 2013 and 2017, we re-evaluated and got back to doing what we do best – carrots and onions. We could see that there was an opportunity to become a leader in what we do."

A family affair

Family is at the heart of everything at Moffatt's. Relatives are scattered throughout the business, with Steve at the helm, his wife Jenny in administration and his cousins Mitch in the paddock, Nicholas in the factory and Krissie on reception. They are part of a team of 55 full-time employees and around 40 casual workers in the peak season.

"There was never a doubt that we would not be here," Steve says. "Even though we're a large operation, there is not one part of our business that the family doesn't touch. We're only as good as the people we have working for us, and we're still very much hands-on. I can confidently say, we grow it, we pick it, we pack it, we freight it."

With so many years of farming behind them, it is understandable that the scale and structure of Moffatt Fresh Produce has changed significantly since its inception in the 1920s. As Steve points out, that is largely due to the family's vision for the future and access to technology.

"We had a focus of where we wanted to be. We needed to get better at what we do, not just in the farm but in the factory. We drive efficiencies on a daily basis here; we record those efficiencies and we judge ourselves on our own scorecard to continually become better," he says.

For more information see: **https://ausveg.com.au/grower-profiles/steve-moffatt/**

Managing weeds after a natural disaster

Queensland has once again endured a summer of drought, fires and floods and our thoughts are with those who have suffered loss. Unfortunately, natural disasters such as these can also lead to weed outbreaks as weed seeds and plant fragments can easily be transported over long distances by floodwaters, wind, fodder, muddy vehicles and machinery. Weed growth is also enhanced by soil disturbance, increased moisture and the addition of nutrients.

When a natural disaster occurs, it is important to consider weed management practices as part of recovery efforts. Check your property regularly for weeds and if you find something new, contact the Queensland Herbarium to get it identified. Clean-down your vehicles and machinery to keep them weed seed free and if buying in fodder, consult the publication:

Reducing weed risks from fodder

Prepared by M.J. Laidlaw, M.A. Louden, A.R. Bean and E.J. Thompson Queensland Herbarium Science Delivery Department of Science, Information Technology and Innovation.

Below is the introduction only, the full article can be found at Weed Spotters Network Queensland

Introduction

Across Queensland's grazing lands, rainfall tends to be highly variable leading to periods of low pasture productivity. During dry seasons and in times of drought, fodder is an important tool used widely to manage grazing properties. Not only does fodder provide nutrition for cattle when pasture productivity is low, the dietary fibre it provides is vital to maintaining healthy rumen function in cattle when the protein content of pasture is reduced. Fodder can be grown and sourced locally either from your property, neighbouring properties or local suppliers. Fodder may also need to be sourced from further afield, including interstate, particularly during wide spread drought events.

In cases where fodder of unknown quality is imported from outside of your region, it may contain seeds from fodder and weed species that are not currently known or that don't currently pose a problem in your region. These new and emerging weeds can compete with pasture for water and nutrients, leading to reduced pasture productivity, reduced stocking capacities and erosion. Increased control and management costs are likely, arising from the need for physical, mechanical and chemical control methods. Fodder contaminated with dried stalks, leaves or seeds of toxic weeds can pose a threat to livestock. Where the source and quality of the fodder can't be identified, taking steps to reduce weed risks is recommended.

In cases where fodder of unknown quality is imported from outside of your region, it may contain seeds from fodder and weed species that are not currently known or that don't currently pose a problem in your region.

This guide to *Reducing weed risks from fodder* aims to increase awareness of weed risks associated with fodder use in Queensland. It highlights tools which can be used to help you assess your weed risks when sourcing fodder and suggests simple strategies for reducing weed risk during fodder transportation, storage and feeding out. Ongoing monitoring for new weeds following the use of fodder is also recommended and this guide explains easy steps to monitor your weeds and have them identified. An information guide to weeds commonly associated with fodder movement is also included.

This guide to *Reducing weed risks from fodder* has been funded by the Australian Government National Landcare Programme.

Ongoing monitoring for new weeds following the use of fodder is also recommended and this guide explains easy steps to monitor your weeds and have them identified.

Cribb Park Report by Anthony Edwards

In early January, the Ipswich City Council (ICC) asked if a Plant Swoop Group could have a planting day on the 9th February. (This group asked via the Internet).

In January we cleaned up the hill site (Section 1)from weeds.

On the 7th February 2019, the Council organised the hole digging, mulch, 300 grass plants and 10 under storage trees. On the 9th we did the planting between 9 and 11 am. We had 9 people present; 6 from the Plant Swoop Group, 1 from the ICC and 2 people from the Garden of Eden Project.

ICC has a Scout Group interested to do some planting, but no plans have been worked out as yet. With the heat and the amount of excessive watering required it was suggested to wait for a more favourable weather for the planting.

I have been informed that the IC Council Grant application has been successful and the paperwork has to be finalised

Cribb Park along the Bremer River

Technology in agriculture: critical to success but are we ready?

The reports deliver critical insights for government, industry and Rural Research and Development Corporations in the areas of regulation and community perceptions.

Adoption of emerging technologies in Australian agriculture is expanding at a rate faster than the consumer's capacity to understand the opportunities - creating an urgent need to explore community perception and regulatory challenges around the use of new technologies.

This is the focus of two new AgriFutures Australia-funded reports: Emerging technologies in agriculture: Consumer perceptions around emerging agtech undertaken by GHD and AgThentic and Emerging technologies in agriculture: Regulatory and other challenges by ACIL Allen Consulting.

The reports deliver critical insights for government, industry and Rural Research and Development Corporations in the areas of regulation and community perceptions. They consider changes needed to safeguard industry use of new technologies and point out the opportunity cost of getting it wrong.

Robotics, for example, can reduce producer operating costs. For a farm investing $100,000 per annum on insecticides, herbicides, and fertilizers, it is claimed that robots could reduce these costs by up to 40 per cent due to the bots' ability to spread chemicals in precise locations and in optimum volumes.

The value-add is clear, however ACIL Allen's research reveals farmers need guidance to help demystify common concerns accompanying the use of robotics, such as insurance, ethics, standards and data ownership and protection.

Meanwhile, research conducted by GHD and AgThentic revealed there is confusion and skepticism around block chain amongst primary producers, as it is often associated with crypto currencies. These perceptions can lead to barriers to adoption which in turn effect consumers.

Understanding and, where possible, proactively identifying and mitigating perception issues is critical to ensure farmers continue to adopt beneficial technologies, while consumers have confidence and trust in the way their food and fibre goods are produced.

AgriFutures Australia Managing Director, John Harvey, insists Australian agriculture needs to stay ahead of the curve when it comes to understanding the potential regulatory impact of technologies, and possible negative perceptions that might prevent technology use.

"With the sector likely to increase its reliance on new technologies over the short to medium term, it's important not to become complacent by assuming we will always have free and easy access to new technologies," said Mr Harvey.

"These reports offer clear actions to help industry and government understand what needs to be done to support agtech adoption on our farms.

"If we don't address these actions, the sector may be locked out of emerging technologies or be unable to capitalise on opportunities that our international competitors have access to. The reports are instrumental in identifying what the challenges and impediments are and provide practical solutions in areas that will have the greatest impact."

AgriFutures Australia Senior Manager, Business Development, Jennifer Medway said the reports promote the need for industry, government and agribusiness to proactively engage with consumers to identify possible concerns early to overcome adoption bottlenecks.

"We take the role of helping to prepare industry for what is coming seriously, and keeping our finger on the pulse to proactively address issues as they arise is key to this," said Ms Medway.

AgriFutures Australia is committed to looking beyond today towards tomorrow and works to identify cross-sectoral opportunities and challenges for the agricultural sector. These reports contribute to the AgriFutures™ National Rural Issues Program which includes the recent Horizon Scan series, offering a watch list of emerging technologies.

The reports are funded by the AgriFutures™ National Rural Issues Program, which forms part of the AgriFutures Australia National Challenges and Opportunities arena.

Read the full reports online:
Emerging technologies in agriculture: Regulatory and other challenges
Emerging technologies in agriculture: Consumer perceptions around emerging agtech

Media enquiries:
Samantha Munro, AgriFutures Australia, Manager, Communication & Capacity Building
samantha.munro@agrifutures.com.au | 02 6923 6916 | 0409 966 182

AgriFutures Australia is committed to looking beyond today

Pastures and Fodder Crops in the Bremer Catchment

Selecting the best mix of grasses and legumes for each land type will ensure the best financial return on investment from improved pastures.

The beef industry is a major contributor to the wealth of the South East Queensland region which includes the Bremer Catchment and this valuable industry relies on productive pastures and fodder crops.

Selecting the best mix of grasses and legumes for each land type will ensure the best financial return on investment from improved pastures. It will help all grazing property managers, from those on small grazing blocks to properties of10 000 ha or more.

Landuse change from former agriculture to grazing land has been very dramatic within South East Queensland.

South East Queensland lies within the southern black speargrass region of Queensland's pasture communities. On the surface it may seem simple to manage a paddock full of grass but the way graziers manage stock numbers under a variety of climatic conditions can dramatically improve or deteriorate the condition of the ecological system.

To establish and maintain healthy and sustainable pastures, graziers need to know:

- what plants are in the pasture and the condition of the pasture
- whether there are changes occurring in the number of broadleaf weeds, woody weeds or other unfavourable species
- how many stock to carry with the feed on hand (i.e. when is it time to sell stock or begin to feed supplements?)
- how changes in stock or pasture management will affect the pasture composition or condition
- how to maximise income without jeopardising pasture health
- how to demonstrate that the property management strategies are sustainable
- how to use system like Stocktake to monitor changes in pasture condition over time.

Winter forage legumes

Most of the winter legumes are better adapted to the heavier soils and are mainly grown to feed dairy cows.

The major species available are Persian clover, Berseem clover, and Clare sub clover . Other winter forage legumes that can be tried are lupins, Dunfield peas a and Namoi woolly pod vetch.

Disclaimer

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Editor's Contact details:

Email: msteent@ngvemail.com

Mobile: 0414 381 664