BREMER CATCHMENT ASSOCIATION INC.

October 2018

Our next Meeting in 2018 is the

AGM

18th October

Everyone welcome

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around the bremer

President's Message by Bill Steentsma

Our 2018 AGM will be very soon, Thursday 18th October. Two very important thoughts will be highlighted i.e. "which were the highlights of the past year" and "what will the highlights be for our next year".

Well, that is easy, just to ask these questions among ourselves.

Let us put down some notes for the next year.

The Bremer Catchment consists of 10 sub-catchments, each with specific land uses and…. Environmental issues. State and Local Government sections have been involved for the preparation of many Reports and Landuse Models. These had input by many Landcare groups and individuals. Very soon the River Health Report Cards are presented

One of our Projects, was Francis Street Scouts Project, where a fire broke out. BCA members were devastated when we were told that it happened on the 17th September. Shortly after, Brian and I had a meeting with the Scout Leader. It completely wiped out the recent major plantings of over 1000 native Australian plants, put in by BCA members, friends, volunteers, Scouts and Rotary members. Two weeks later one of the large trees, which had been smouldering inside the stem fell and in the process took out the entire powerlines within the property.

This development was done through a State Grant, which was greatly appreciated at the occasion of its cheque presentation by Jim Madden, MP.

BCA member and Bremer River Fund Support Officer (Ipswich Council), Dani Andlemac, will be attending the International River Symposium in Sydney. We are looking forward to much information from the Meetings.

Personally, I know how these Symposiums can be very interesting, meeting representatives from different countries. That was 26th September 2011, at Brisbane. It was great for me to hear keynote speakers and meet them from the Netherlands. Topics were the 1953 (21st February) flood disaster (family effected) and the Delta Works flood defence.

In conclusion, I am looking forward, at our AGM, for a different President. New ideas are always welcome for BCA.

Employees save Koalas without stepping away from their desks

Did you know that employees from Telstra, Konica Minolta and Qantas helped save endangered species, including the southern cassowary, mahogany glider, and koala – without even leaving their desks?

These are just three of the 23 companies that give to Landcare Australia through their Workplace Giving Programs. Last year their combined efforts resulted in $100,000 for ten habitat restoration projects across the country.

Shockingly, Australia has the worst mammal extinction rate in the world, and is home to 161 animal species classified as endangered. Feral animals, urban development and human encroachment put them at risk. At Landcare Australia, we're busy working to ensure that these animals don't become extinct. Through our recently awarded Habitat Restoration Grants, groups working to increase and protect habitat for these species were awarded funding.

Help educate the future custodians of the land through our Junior Landcare program, which has touched over 9,000 schools nationally.

The above interesting information comes from the **Landlink Newsletter**

Container Refund Scheme update

The Queensland Government has extended the timeframe for the introduction of the state's container refund scheme from 1 July to 1 November 2018.

The date was changed to respond to stakeholders who were keen to ensure the Queensland scheme leveraged the lessons learned from the rollout of the New South Wales scheme late last year.

The Queensland Government and Container Exchange (CoEx)—which has been appointed by the Queensland Government as the scheme's Product Responsibility Organisation (PRO)—want it to be the best scheme in Australia.

The delay will allow time for the PRO to get a critical amount of refund points in place, the communications strategy rolled out, and for the community infrastructure grants program to take effect.

CoEx will be governed by a Board of nine directors, made up of beverage industry and independent representation, and including an independent chair.

As the scheme's PRO, CoEx will work with the government to ensure the scheme is a success, and that it remains efficient and delivers positive outcomes for the public, community groups and the environment.

For more information about the scheme visit the
Queensland Government website.

Irrigation

As the current hot and dry weather is persisting, irrigation is coming to the forefront. **Water can be taken from Rivers, Underground and Dams.**
The most common mistakes made by producers are to overestimate the water required to irrigate a crop or pasture.

Measurements

Normally 25-50 mm of water per hectare is applied to a crop of pasture at each irrigation. This amounts to 250 000-500 000L of water.
When planning a farm dam for irrigation, a safe estimate of the amount of water which may be used in a year is 4.5 million L for one hectare. Therefore, the size of the farm dam is of utmost importance when irrigation is being contemplated. Most water supply problems stem from dams being too small—only supplying sufficient water during normal seasons but not enough during dry years.

Water Quality

The quality of irrigation water is vitally important and there is a range of factors to be considered; however, the most important short-term criterion is the level of chlorides in the water. Chlorides, or salts, in the water affect plant growth. Water with a very high level of salt should not be used at all.

Analyses of water can be carried out by commercial firms. The water analysis sheet will show, among other tests, a result for chlorides (as sodium chloride) in mg/L.

Other mineral determinations are also important but interpretation is complex and is best left to experts.

Irrigating with poor quality water can not only have a detrimental effect on plant growth but continued use can also cause deterioration of soil structure, making soils difficult to cultivate and causing water penetration problems.

Tolerance of plants to salinity

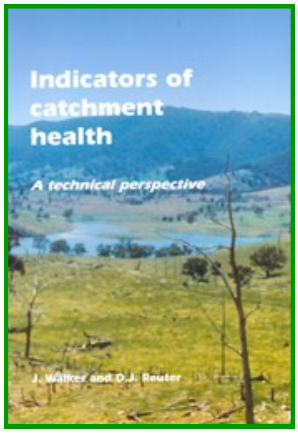
Type	High 801 to 1300 mg/L	Medium 441 to 800 mg/L	Low 220 to 440 mg/L
Pasture Plants	Rhodes grass Couch grass Kikuyu grass Pangola Wimmera ryegrass Lucerne Siratro	Berseem clover Glycine Perennial ryegrass Paspalum Sudan grass	White clover Lotions Setaria Lablab Greenleaf desmodium Silverleaf desmodium Safari clover
Field crops	Barley	Rye Lupin Soybean Oats Millets	Cowpea Field bean

Note: Many crops are less tolerant to salts during germination and seedling stages than in later stages of grows.

A Technical Perspective

J Walker, DJ Reuter

This topic discusses tools that science has so far developed for benchmarking and monitoring the condition of the land and water resources in the catchments.



The primary focus is to provide landholders, catchment groups, catchment and land protection boards, and rural communities with the best tools that science has so far developed for benchmarking and monitoring the condition of the land and water resources in the catchments.

A diverse range of potential indicators have been reviewed and the most appropriate suite of indicators assembled to aid this focus. The proposed indicators cover farm productivity and financial performance, product quality, soil health, water quality and landscape integrity.

The following is a short point out of the book.

Riparian Extent and Distribution Indicators

(See p.7—Riparian Vegetation)

The size and amount of riparian buffer adjacent to streams and water courses is an important determinant of soil loss, sediment movement and contaminant movement at the farm, sub-catchment and catchment scales. These conditions can in turn affect water quality across an entire catchment.

Therefore condition of riparian buffers and change in the percentage of stream kilometres with riparian buffers of certain minimum thickness and connectivity are important indicators of the risk of declines in water quality.

The width and extent of riparian buffers can be estimated in the field, from air photos or by GIS manipulation. Restoring riparian vegetation and limiting access of grazing animals to stream can effect a marked improvement in stream water quality.

Flashback River Symposium 26/09/2011 (Quote)

If one system is overlooked, the others go a "different direction"

Some Information from the September newsletter of

Farming together.

RURAL WOMEN'S AWARDS TO OPEN

Online applications for the 2019 AgriFutures™ Rural Women's Award open Monday, 3 September, and close 11pm AEDT, 31 October, or Sunday, 27 January 2019 (NT only). **More?** http://www.agrifutures.com.au/people-leadership/rural-womens-award/

FREE FORUM FOR FOOD FUTURES

Discover hundreds of innovations to revolutionise how we produce food at a free major event, the Global Forum for Innovations in Agriculture, 27-28 November at the Brisbane Convention & Exhibition Centre. Find innovations to: Increase yields; manage energy use; Improve nutritional value; go organic; improve soil health; prepare for climate change; save water; control pests; reduce food losses; automate inputs and use ICT effectively. Register for free at www.gfiaaustralia.com and you'll also have access to environment/protected cropping and precision ag conferences as well as an innovators pavilion, **More?** www.gfiaaustralia.com

POWER TO THE PEOPLE

CSIRO has developed the CSIRO Energise app for Australian households to participate in energy surveys.

FREE MARKET RESEARCH FOR VEGETABLE GROWERS

Understand consumer buying preferences on a range of hort products from the innovative Harvest to Home website backed by Hort Innovation using national Nielsen sales data. **More?** https://www.harvesttohome.net.au/

CLIMATE CHANGE BENCHMARK SURVEY

A national online survey is being conducted by the CSIRO and the Department of the Environment and Energy, asking people with a long-term (>10 year) relationship with a piece of land to share observations about the features that have changed and those that haven't. You need to be able to select an area (eg a farm) and complete the survey taking about 30 minutes.

FARM SUCCESSION PLANNING REBATE

Up to $2500 rebate (up to half of total cost) offered for Queensland farming families to undertake farm succession planning. Deadline 30 June 2019. **More?** **https://www.business.gov.au/assistance/farm-management-grants-qld**

The Variety in Wetlands. Submitted by a BCA Member

What are wetlands? The following definition is a particularly apt one:

"Wetlands are areas of land where water covers the soil – all year or just at certain times of the year. They include:
Swamps, Marshes, Billabongs, Lakes, Lagoons, Salt Marshes, Mudflats, Mangroves, Coral reefs, Bogs, Fens, and Peat Lands.
Wetlands may be natural or artificial and the water within a wetland may be static or flowing, fresh, brackish or saline. There are even underground wetlands".
(http://www.environment.gov.au/water/wetlands/about)

Winfield, SEQ

To elaborate on just one of the types of wetland above, and arguably one of the most interesting, billabongs, or ox-bow lakes as they are known world-wide, are formed when a river changes course, leaving a part of the the old course stranded. This little truncated piece of river course becomes a new wetland. When the jolly swagman camped by a billabong, he was camping by a piece of stranded river course.

Wetlands may be more or less permanent or ephemeral i.e. only wet some of the time. In outback areas which have a distinct wet and dry season, and low yearly totals of rainfall, such as the Channel country of south-west Queensland and the Gulf Country that makes up most of north-west Queensland, almost all wetlands are ephemeral. In south-east Queensland, with our higher yearly totals and year-round rain, permanent wetlands are much more common.

The dependency of wetland plants on wetland habitat can be divided into two categories. Firstly, facultative wetland species are species which occur in wetlands, but also very commonly occur outside of wetlands. Obligate wetland species occur exclusively or almost exclusively in wetlands; they very rarely occur outside of wetlands. Often when they do occur outside of wetlands, it is because the water table is very close to the surface or because there is a seepage.

North Ipswich Wetlands

The presence of obligate wetland species is of particular interest, because, in times when the wetland is dry, the presence of obligate wetland species provides the evidence that we are probably looking at a wetland. Common obligate species in south-east Queensland include *Melaleuca* quinquinervia (swamp paperbark), the bulrushes *Typha domingensis* and *Typha orientalis*, *Phragmites australis* ('common reed'), *Philydrum lanuginosum ('frogsmouth')*, and many (but not all) species of sedges in including many *Cyperus, Eliocharis, Finbristylis* and *Scleria* species. The use of *Melaleuca quinquinervia* as a street tree might appear to contradict its classification as an obligate wetland species. However, it is an obligate wetland species in the wild because it needs occasional swampy conditions to reproduce, not because it needs swampy conditions to grow. When we plant this species, we are circumventing its natural life cycle requirement for swampy conditions.

For more information on obligate wetland species in Queensland see https://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/flora/flora-indicator-species-list.html

For a good example of wetlands in Ipswich, visit the North Ipswich Wetlands at Daly Street, Tivoli. You might even like to become involved with the wetlands rehabilitation project being undertaken there. If you are interested, contact Brian Pepperall on 0400 655 990

Natural Resources within the Bremer River Catchment

Water
Less than one per cent (1280ha) of the catchment is covered by water. Moogerah Dam supplies a large proportion of the catchment with water for irrigation, drinking water to local townships, such as Boonah and Kalbar.

Riparian Vegetation
This vegetation grows on land adjoining waterways, gullies and dips, around lakes and on river floodplains. The natural vegetation helps to stabilise banks, shade streams reducing evaporation, provide food and habitats for birds and wildlife, and most importantly, act as a buffer for catchment run-off.

Freshwater Wetlands and Swamps
These areas of land are seasonally inundated by water, generally for two to six months of the year. They act as sinks for nutrients and sediments and absorb pollutants from catchment run-off. Wetlands are also important in reducing the velocity of surface run-off, helping to prevent soil erosion whilst supporting a diverse range of wildlife.

Soils
Agriculture and cropping is important within the catchment. Many commercial crops, including potatoes, carrots and onions are grown throughout the region on the rich alluvial soils.

Minerals
The potential for coal mining within Ipswich encouraged early development of the area. Coal seams were discovered throughout the region. The early 1900's saw the opening of many mines including those at Rosewood and Ebenezer. Mt Marrow, north-west of Walloon, was established as a crushed rock quarry for use in road making. Aside from coal, limestone was also discovered within the Bremer River Catchment. The Mt Flinders Dolomite Mine at Peak Crossing, established in the early 1890s, is still operational today.

Timber
Much of the Bremer River Catchment, prior to European settlement, was covered by tracts of sub-tropical rainforest, eucalypt forest and large areas of 'scrub country'. The scrub consisted of valuable timbers including hoop pine, brigalow or "rosewood", crows ash, blackbean and red cedar. This bought about the timber boom of the late 1800s.

Catchment Land Uses Today, more than half of the total catchment area is used for grazing, and crop production is still an important industry within the catchment. Although urban settlement only takes up approximately 2% of the total catchment area, it supports a diverse and economically important range of commercial and industrial businesses.

The Mihi Creek forms an integral part of the Bremer River catchment system, weaving its way through the suburbs of North Ipswich and Brassall before joining the Bremer River near Woodend. Its past is rich in history yet its future has become uncertain. The impacts of past actions compounded by the pressures of development and expansion have placed the creek system in a fragile situation.

The Annual General Meeting

of the Bremer Catchment Association is held on

Thursday the 18th October 2018 at the Queens Park Educational Centre.

The operational Meeting

will start at 6.00pm with refreshments and the AGM will commence at 7.00pm.

AGM Agenda for the Meeting

1. President's Welcome
2. Apologies
3. Minutes of the 2015 Annual General Meeting
4. Guest Speaker – **Cr. Duncan McInnes (Scenic Rim)**
5. President's Report – **Bill Steentsma**
6. Treasurer's Report – **Brian Pepperall**
7. Election of Management Committee
8. Appointment of Auditor
9. Date of next Annual General Meeting
10. Closing Remarks by President

Disclaimer

While we hope that you will find this publication informative , BCA does not guaranty that the information herein is without flaw, or is wholly appropriate for your particular purpose. We therefore disclaim all liability for any error, loss or other consequence , which may arise from you relying on any information in this publication

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