BREMER CATCHMENT ASSOCIATION INC.

October 2015

Special points of interest:

The Annual General Meeting will be held on Thursday 15th October.

Operational Meeting starts at 6.00pm with AGM starting at 7.00pm at Queens Park Educational Centre

All welcome

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around the bremer

The President's Message—Gary Cochrane

The Bremer Catchment Association can reflect well back on their goal setting and achievements over the past several months. The Upper Mt Walker Hillslope Erosion Project (UMWHEP) has been finally signed off by the regulators and John Jackson (Project Officer) congratulated on the work completed so far.

Additional development stages on this UMWHEP project are now being discussed like that of revegetating the gully area and installing further groynes adjacent to existing groynes. It is in the interest of BCA to network with other folk who totally understand the problem at this site to discuss the further development stages. While this work is only proposed at this stage funding is definitely required to ensure such work continues on the project.

As BCA members should now know the association has been successful in obtaining funding from a community gambling grant application. This funding is important to assist BCA in upgrading some of its equipment and more importantly the opportunity to secure all the equipment in one place. It is expected that over the next couple of months a 20' shipping container will be purchased to 'house' all of BCA's revegetation equipment.

This will come as a pleasant surprise to Andy Nisbet who has 'housed' the BCA trailer in his garage for over 10 years. Be rest assured Andy has commented that he has had no problem with the trailer in his garage, but it will be great for him to utilise this space for his own belongings. Thanks Andy for your patience.

In most recent weeks I attended the Annual general meeting of West Moreton Landcare at Tallegalla, just north west of Rosewood. Both Bill (Steentsma) and I were made feel most welcome and I enjoyed the discussion during the meeting. West Moreton Landcare have experienced similar problems regarding funding for their targeted projects and I got the feeling that persistence pays off in the long run.
Persistence being that you just have to keep targeting local members (and others) to gain 'an ear' to discuss the benefits and advantages of such projects. It is anticipated that the BCA will continue to seek funding for projects from various avenues, with the expectation that some applications will not be successful. However the irony is the more applications which are applied for the more chance BCA has of being successful with its submission.

With the recent dry and hot weather experienced it is a good time to remind BCA members and alike to ensure you are well equipped for the oncoming fire and storm season. Already we have seen a number of fires being lit and local community fires services in attendance. There is a huge amount of debris and fire fuel on the ground and in these dry times there always appears to be an increased rate of fire activity. Using the scouts motto……..Be prepared.

Stay safe and drive steady on the roads.

Queensland Fire and Emergency Services - QFES

Don't let that happen in your area

SOUTH EAST QLD – heightened fire danger. A high to very high fire danger is predicted over the coming days for parts of the south east, with Sunday expected to be one of the highest fire danger days of the season so far.

Temperatures will be high and relative humidity will be low and these conditions make it difficult to contain vegetation fires. Residents are asked to take extra care and be alert. Residents who have obtained a permit to burn should defer any burning to another time as conditions are too risky. Should a landholder conduct a permit burn under these conditions, they will automatically be in breach of the permit conditions and the Fire and Rescue Service Act and penalties including prosecution could apply.

Tune into fire advice or warnings of bushfires in your area by regularly listening to ABC Radio and logging on to the Rural Fire Service website www.ruralfire.qld.gov.au

Queensland - weather and climate drivers

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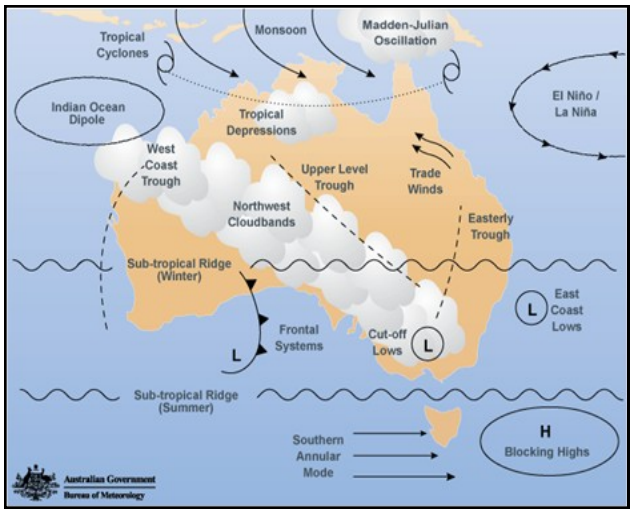
El Niño

The El Niño - Southern Oscillation (ENSO) is a major influence on eastern Australia's climate including almost all of Queensland.
It is associated with extensive warming of the sea surface in the central and eastern tropical Pacific.
It is often associated with below average winter/spring rainfall over much of eastern Australia.
Tropical cyclones are generally less frequent during El Niño events.



La Niña

La Niña is associated with extensive cooling of the sea surface in the central and eastern tropical Pacific.
It is often associated with above average winter/spring/summer rainfall over much of eastern Australia.
Tropical cyclones are often more frequent during La Niña events.

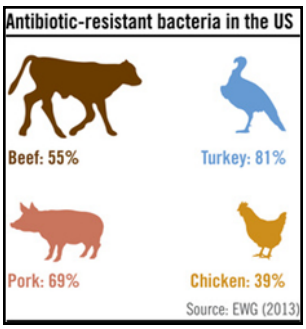
Overuse of herbicides and antibiotics in farming linked to resistance

Abstract: Biocides, such as herbicides, are routinely tested for toxicity but not for sub lethal effects on microbes. Many biocides are known to induce an adaptive multiple-antibiotic resistance phenotype in potential pathogens. The effect occurs upon simultaneous exposure to antibiotics and is faster than the lethal effect of antibiotics.

Exposures of *Escherichia coli* and *Salmonella enterica* serovar Typhimurium to commercial formulations of three herbicides—dicamba (Kamba), 2,4-dichlorophenoxyacetic acid (2,4-D), and glyphosate (Roundup)—were found to induce a changed response to antibiotics. Killing curves in the presence and absence of sub lethal herbicide concentrations showed that the directions and the magnitudes of responses varied by herbicide, antibiotic, and species.

When induced, Minimal Inhibitory Concentration (MICs) of antibiotics of five different classes changed up to 6-fold. In some cases the MIC increased, and in others it decreased. Herbicide concentrations needed to invoke the maximal response were above current food maximum residue levels but within application levels for all herbicides. Compounds that could cause induction had additive effects in combination.

The magnitude of the induced response may undermine antibiotic therapy and substantially increase the probability of spontaneous mutation to higher levels of resistance. The combination of high use of both herbicides and antibiotics in proximity to farm animals and important insects, such as honeybees, might also compromise their therapeutic effects and drive greater use of antibiotics. To address the crisis of antibiotic resistance requires broadening our view of environmental contributors to the evolution of resistance. Pathways of exposure with relevance to the health of humans, domestic animals, and critical insects are discussed. Sub lethal exposure to commercial formulations of the herbicides dicamba, 2,4-dichlorophenoxyacetic acid, and glyphosate cause changes in antibiotic susceptibility. From: WeedsNews5454 | June 16, 2015 |



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South East Queensland Environment .

Predominantly rural landscapes lie to the west of the urbanised coastal centres. The Lockyer Valley, a major agricultural area referred to as "South East Queensland's Salad Bowl", lies outside Brisbane. Many World Heritage listed rainforests are located along the region's southern border ranges, and area known as the Scenic Rim, such as Lamington National Park and Main Range National Park. Within the region, the koala is listed as vulnerable. The Australian Koala Foundation says the animal is threatened by mining and land development.

Act or Axe: Queensland—From the Australian Koala Foundation, QLD.

The south east Queensland area probably has the highest population of Koalas in the State; unfortunately they mostly live in suburbia.

Between 1997 and 2013 over 15,000 Koalas were taken into care as a result of vehicle strike (8,000), dog attack and disease, and 74% of these died. AKF believes there are only 3570 – 6735 Koalas left between Maryborough and the Gold Coast. This is clearly unsustainable; we are looking at 10 - 15 years before Koalas are extinct in these 21 electorates.

The Queensland Government has passed a raft of legislation in that time that has done nothing to prevent this disaster. Offsets to assist development are encouraged, and in the last few years translocations have become the norm. There are few big patches of bush left, and we know that large patches are required for Koalas to thrive, not patches cut up by roads. The Queensland Government has "Koala Habitat Values" mapping for a few areas, we know this mapping is inaccurate and just plain wrong in many areas but developers are encouraged to use it.

In a very disturbing move the Queensland Government (as in NSW) has started to translocate Koalas that are "in the way" of housing development. Five years ago this was unthinkable, but where will it stop? The Victorian Government used to do it but too many Koalas died.

Koalas are in trouble everywhere in Queensland. Large coal mines and transport have already killed and disrupted Koalas in central Queensland and this will get worse if the nine planned mining projects go ahead. Drought has impacted Koalas in the drier Mulga Lands areas and the geographic range has contracted towards the coast. Climate change models predict that in 50 years the only places suitable for Koalas will be on the coast.

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Siratro Vine

Siratro *Macroptilium atropurpurem*

Siratro is a perennial vine with a deep, swollen taproot and trailing, climbing and twining stems.

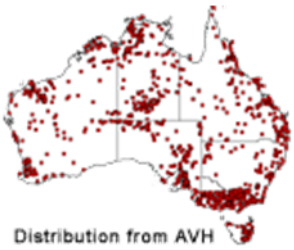
It grows on a wide range of soils from dark cracking clays to sand and gravels, but does best on more fertile soils. It is sensitive to frost and rust but is drought resistant.

Siratro persists best under rotational grazing and requires spelling to set seed to ensure persistence. Siratro seed requires scarification before planting it has an average crude protein of 25%. The Aztec variety is rust resistant.

Kangaroo Grass

The widespread Kangaroo Grass, *Themeda triandra,* is one of the most recognisable members of the grass family (Poaceae) in Australia.

The species has a particularly wide distribution; in Australia it is found in all states and territories. It commonly grows in grassland and open woodland communities for example at the *Mt. Walker Hillside Erosion Project.*



Distribution from AVH

Themeda triandra is a tufted perennial that can grow to 1.5 m tall and 0.5 m across. Its leaves are 10-50 cm long and 2-5 mm wide, green to grey drying to an orange brown in summer. The flowering period is from December to February.

It grows in full sun to part shade on sandy to clay soils and needs little water once established.

Kangaroo Grass can be grown from seed or by division of older clumps. Seed may be sown straight away with some success in midsummer to autumn but generally the seed has a dormancy period of up to 12 months depending on the area where it was collected. Fire or temperatures of 40-45^{0}C may also break dormancy.

As Kangaroo Grass does not tolerate heavy or continuous grazing, it can be a useful indicator of the level of disturbance in an area.

Kangaroo Grass

Madeira vine *Anredera cordifolia*

Description

- Vigorous climbing vine.
- Leaves are light green, heart-shaped, fleshy, 4-5cm long.
- Flower spikes are 10cm long, with numerous individual small flowers, resembling a lamb's tail.

Tubers are small, light brown or green, potato-like, growing along stems then falling to ground to sprout.

Habitat

- Prefers subtropical and warmer temperate areas.

Found in bush land, edges of rainforests, waterways, disturbed sites, waste areas, parks, gardens and roadsides.

Distribution in Queensland

Found in coastal and hinterland areas of central and South East Queensland

Madeira Vine
Mal Abbott
(BCA member)
mentioned this in his report of the Upper Warrill Creek area.

Protecting your investment

Fencing out part or even all of the dam edge helps the landholder control grazing by livestock

Protecting your investment from grazing when seedlings are being established, sturdy fencing or well maintained electric fencing is desirable to exclude grazing animals from key areas. Once tree and shrub thickets are well established there may be times when selective grazing is necessary to keep grass down. Stock access to these areas should be planned and managed like access to any other part of the farm. Weed control is essential for young trees especially in the first two years and, in certain cases, fertiliser use and watering in droughts are desirable.

Fencing out part or even all of the dam edge helps the landholder control grazing by livestock and feral animals and gives the vegetation better protection. Taking land out of a paddock is a cost – as money spent on fencing, plans weed control and other aspects; such tree projects should be planned and carried out carefully so that the project objective is achieved and the investment recovered from increased or improved capital value.

Water Quality in Dams

Within the Bremer Catchment, poor water quality in farm dams can reduce production. Good management of trees, shrubs and pasture in the dam catchment will improve the quality of the water. Indicators of water quality can be divided into three groups:

Physical indicators such as: temperature, colour, odour, turbidity or murkiness, and presence of mud or decaying plant matter.

Chemical indicators such as: dissolved oxygen, pH (acidity or alkalinity), salinity, level of pesticides, and level of nutrients such as phosphate and potassium.

Biological indicators such as: algae, bacteria, water plants and health of fish.

By keeping an eye on these indicators you can monitor the water quality in your dam and take early remedial action.

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.