BREMER CATCHMENT ASSOCIATION INC.

March 2021

Special points of interest:

The next Operational Meeting will be held on

15-04-2021

Inside this issue:

President's Corner	1
Koalas	2
Brigalow softwood scrub	3
Flashback—Water Monitoring Program Report 2005 (BCA sponsored study) - Executive Summery	4
Optiweight takes the guesswork out of livestock weight monitoring	5
Winter forage legumes	6
Quad bikes and side-by-sides under the spotlight	7

around the bremer

President's Corner by Bill Steentsma

Since 1995/96, when the Bremer Catchment Association Inc. (BCA) came to formation, there has been, among its Members a constant devoted interest to the Health of the Catchment. Several sponsored studies have provided the landholders, catchment and protection boards and rural communities with the best "tools".

The development for benchmarking and monitoring the condition of land and water resources became urgent.

The realisation of the Bremer Catchment's agricultural, horticultural, grazing and tourism potential is increasingly heralded.

This newsletter is dealing with a variety of issues. I allowed a "Flashback", to BCA's first Water Monitoring Study. A second one was produced in 2015 at great expense and circulated amongst stakeholders free of charge with limited feedback.

The "water" topic among landholders is gaining momentum. At next month (April Meeting), all are welcome to listen to our guest speaker from the Dept. Regional Development, Manufacturing and Water.

What about all this rain? We need it but…

The southern oscillation is the second most important influence on the climate in many parts of eastern Australia. What is its effect on rainfall and what else is effected? Where and when does it have most influence?

Happy reading and please let me know the topic you would like covered in the next newsletter.

Wishing you all a great Easter

KOALAS. From Ipswich City Council 'Koala Fodder Trees.'

No doubt, many of us shake our heads when we hear the outcries that our native koalas are disappearing, only then to see large tracts of bushland being bulldozed down for residential development or other uses.

Koala under stress

Can we stop this? Probably not, as such developments are really in the hands of local or State Governments depending on the location of the land.

So how can we help? Well, if you live on agricultural or peri urban land, you might look at the vegetation and species growing there if you are in a known koala habitat area.

Happy Koala

Of course eucalypts and a small number of similar species are officially regarded as 'Fodder Trees for Koalas', so if you have any of the following preferred species, you are on the right track:-

Eucalyptus leaves

*Corymbia citriodora (*Spotted) Gum;
Eucalyptus microcorys (Tallowwood);
" *propinqua* (Grey Gum);
" *robusta* (Swamp Mahogany);
" *tereticonis* (Blue Gum), otherwise the next list contains another 7 species that also come under this classification. These being:-

Lophostemon convertus (Brush Box) and the following *Eucalyptus*. - *crebra (Narrow Leaf Ironbark);*
grandis (Flooded Gum); *major* (Grey Gum);
m*elanophloia* (Silver Leaf Ironbark);
m*oluccana (Gummed Topped Box);*
*Racemosa (*Scribbly Gum) and
s*eeana* (Narrow Leaf Red Gum).

It is not reasonable for owners of suburban properties to consider including any of the above unless any were retained there from day 1.

The measure for suitability of species in this instance is; 'the tree should be planted the distance of the height of the mature tree from the house', which realistically translates that hardly any large tree (let alone eucalypts) should be planted in suburbia. (Bill prefers 1½ times tree height distance).

So in reality, householders must rely on common sense in such an instance.
However, no matter where one is residing if in a known koala habitat area, keeping pet dogs under control will be the first and best way to help protect koalas.

Brigalow softwood scrub

Land Resource Area	Scrub Walloons (6b)
Landform	Undulating low hills and steep hills (3-10% slopes)
Broad vegetation Description	Brigalow open forest on sedimentary rocks with vine forest understorey
Native trees and shrubs	Brigalow (*Acacia harpophylla*) , Narrow-leaved ironbark *(Eucalyptus crebra)* (T), Red kamala (*Mallotus philippensis*), Shiny-leaved canthium (*Psydrax oderata* forma *oderata*) , Leopard ash (*Flindersia collina),* Foam bark (*Jagera pseudorhus)*, Bitter bark (*(Alstonia constricta*). Chain fruit (*Alyxia ruscifolia*), Scrub boonaree *(Alectryon diversifolius),* Silver croton (*Croton insularis*). (T) = Suitable timber species
Pasture composition	Minimal grassy understory
Desirable pasture species	Queensland blue, kangaroo, Rhodes grass, green panic
Intermediate pasture species	Pitted blue, Barbed wire grass, hooky grass, couch
Undesirable pasture species	Wire grass, blady grass, slender chloris, slender bamboo
Suitable sown pastures	Callide Rhodes, green panic, creeping blue grass, Siratro, shrubby stylo, caatinga stylo. medics.
Introduced weeds	African boxthorn, lantana, Bathurst burr, thistles, fireweed,
Soil Description	Grey and brown cracking clays with self mulching surfaces (grey and brown clays). Brown clays often shallower than grey clays. Variable gilgai development often present. Sometimes mottling of grey clay subsoils. Varying amounts of soft and concretionary lime below 30 cm, and occasional weathered rock fragments and iron manganese.

Brown clays are often shallower than grey clays.

Flashback—Water Monitoring Program Report 2005
(BCA sponsored study) - Executive Summery

Turbidity levels were elevated during periods of run-off.

The Bremer Catchment Water Monitoring Project was resumed in February 2004 following good rains after a prolonged dry period.

The water monitoring program utilised community support for collection of twenty-five water samples from sites around the catchment, with at least two sites from each of twelve sub-catchments.

Water monitoring was carried out on a monthly basis. The parameters monitored were: pH, conductivity, turbidity, dissolved oxygen, nitrates, orthophosphates, and sulphates.

pH readings around the catchment were within the target range of 6.4 to 8.5.

Conductivity levels at most sites were below the draft water quality guidelines. The exceptions were upstream Bundamba Creek and site PUR7 at Purga Creek. At the latter site, the summer conductivity measurements peaked at 9900µS/cm ANZECC guidelines for conductivity for cattle drinking water is <9900µS/cm.

Dissolved oxygen levels were often in the very high or low range, rather than the optimal target range.

Turbidity levels were elevated during periods of runoff. There were elevated turbidity readings following heavy rainfall events at all sites. Annual mean turbidity levels were above target levels at most sites.

Nutrient levels exceed ANZECC targets at all downstream sites. Levels of nitrates and orthophosphates, indicative of agriculture and urban activity, are high at all sites.

Levels of nutrients and conductivity were elevated at Bundamba Creek. The source is between sites BUN1 and BUN2. sulphate levels were also consistently high.

There is no ANZECC guideline for sulphates; however the measured levels are many times in excess of levels that impact on macro invertebrates.

Catchment wide upstream/downstream comparisons generally indicated water quality was better upstream and degraded downstream

The Bremer River passes through the heart of Ipswich and feeds into the Brisbane River

Optiweigh takes the guesswork out of livestock weight monitoring

The in-paddock walk-over weighing solution designed by NSW beef producer and early adopter, Bill Mitchell provides farmers with a low-stress, portable system to weigh up the profits without the hassle of mustering their cattle.

Cattle farmers Bill and Jacquie Mitchell of Guyra, NSW have been supplying beef to the Coles supermarket chain for over a decade. Their Glenbrook Pastoral operation was one of the first farms in the country to background and grass finish British-bred heifers for the chain's 'Graze', grass-fed beef product range.

When devastated by drought in 2018, the Mitchells were one of five NSW-based farmers to receive funding from the Coles Nurture Fund, enabling them to drought-proof their property and keep their premium beef produce on supermarket shelves.
"Ultimately, we're in the business of feeding consumers," Bill said of the decision to go grass -fed.
"If we want to keep our rural communities healthy and vibrant, then we've got to keep a close eye on the clear consumer trends, and create more profitable and sustainable business models."
A farm boy who grew up in Armidale, Northern NSW, Bill Mitchell graduated from the University of NSW with a degree in Wool and Pastoral Science in 1991. Since then he has dedicated his life to finding solutions to the problems that farmers like himself face in the paddock every day.

The quest to efficiently track herd weight

In 2016, Bill commenced work on the creation of Optiweigh, an innovative device he was sure could solve one of his farm's biggest problems: accurate weight monitoring of his mob.
"This accurate weight monitoring is the critical component for beef producers," said Bill.
"Because every decision you make to improve the profitability and efficiency of your cattle operation, is based around mob weight."

Regular weighing helps producers decide when to sell cattle as well and optimise the feeding regime. "But it's just not possible to yard weigh the animals frequently enough to accurately make those decisions," Bill explained.

"So there was a real need for an in-paddock, low-stress, portable weighing solution for our animals. Walk-over weighing systems for cattle require farmers to train their animals to walk across a full platform. This may work on a dairy farm, where the movement of cattle is predictable, but for beef producers, the infrastructure and training required to do this regularly is not sustainable. That's where Optiweigh comes in."

The Optiweigh for livestock weight monitoring
For more information go to Evoke, March newsletter.

Winter forage legumes

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

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

Fertilising

Superphosphate should be applied at planting. Since these plants are all legumes, nitrogen is not needed. However, if a mixed legume and grass fodder crop is being grown, then nitrogen will be required. The amount used will depend on the proportion of grass to legume; that is, more grass requires more nitrogen.

Planting time

Late March and early April is the best time to plant these crops. It is important that they are established before the really cold weather starts.

Clare sub clover

Grazing

Persian, Berseem and Clare sub clover can be grazed six to eight weeks after planting, providing that they were planted in late March. They are capable of providing grazing every four to five weeks.

Bloat can be a problem for stock feeding on Clare sub clover and Persian clover. Berseem clover is generally considered safe although care must always be taken to prevent overgrazing.

Berseem and Persian clovers

Both are hollow-stemmed, tall-growing clovers which require fertile soil and good seedbed preparation. Berseem, although tolerant of wet conditions, does not perform as well as Persian clover under high soil moisture levels and is more susceptible to damage from overgrazing. Both are relatively winter-active legumes.

Planting rates

Persian clover 3-6kg/ha and Berseem clover 10-15kg/ha.

Clare sub clover

This is a low-growing annual clover with light green, hairy leaves. Short-lived, it is adapted to slightly acidic-neutral soils only and generally stops growing by October. It is 10-15kg/ha.

Berseem clover

Persian clover

Quad bikes and side-by-sides under the spotlight in wrap up of 2020 farm safety stats

A familiar tale sees quad bikes and tractors continue as the leading cause of death and injury on Australian farms, according to annual statistics released by AgriFutures Australia. Despite the increased safety attention on quad bikes last year, the number of deaths continues to rise.

Figures collated by AgHealth Australia's National Farm Injury Coronial Database revealed 58 on-farm deaths were reported in 2020*, the same number of cases reported in 2019. Quad bikes and tractors again reported as the leading causes of injury. AgriFutures Australia funds research to enhance farm health and safety as part of its National Rural Issues Program, working alongside the Rural Safety and Health Alliance (RSHA).

.

Figures collated by AgHealth Australia's National Farm Injury Coronial Database revealed 58 on-farm deaths were reported in 2020*,

Editor's Contact details:

Email: msteent@ngvemail.com

Mobile: 0414 381 664

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