



August 2013

Special points of interest:

- The AGM of BCA will be held 17th October 2013. Please mark your calendar and attend the meeting.
- Next operational meeting is on 15th August 2013.
- The Government has extended the completion date from August to November 2013 for flood remediation work being carried out with QRAA funding.

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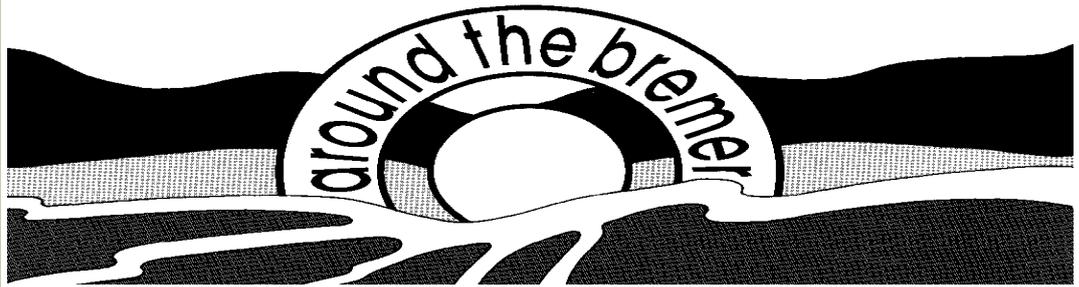
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Minister for Natural Resources and Mines The Honourable Andrew Cripps

Proposed Levee Management to Boost Flood Resilience

Queensland's flood resilience will be strengthened by proposed new rules regarding the management of levee banks.

Minister for Natural Resources and Mines Andrew Cripps today released a Regulatory Impact Statement about a new regulatory framework for community consultation.

"In response to the Queensland Floods Commission of Inquiry Final Report, the Newman Government committed to implementing a state-wide regulatory framework for levees and to work with councils to determine the most effective way to regulate levee construction," Mr. Cripps said.

"Consistent with the Commission's recommendation, the new regulation will only apply to the construction of new levees and the modification of existing levees; it will not be retrospectively applied to existing levees.

"The Queensland Government now wants to hear what landholders and local councils think about the management of levee bank construction and modification."

Mr Cripps said the consultation would involve gathering ideas about the levels of assessment that should apply to different types of levees.

"The consultation RIS proposes that the construction of smaller, low impact levees should be self-assessable under a code to be developed by the State Government, rather than requiring any formal approvals," he said.

"Other types of levees may need to be assessed based on potential impacts which could enable

neighbours and local landholders to make submissions or lodge appeals on proposed levees.

"We are also seeking feedback on whether State Government or local council should assume the role of assessment manager for the construction and modification of levees.

"Clarifying the regulation of levees will ensure the design and construction of levees adequately assesses their impact on neighbouring properties, communities and affected catchments as a whole."

Public consultation on the levee Regulation Impact Statement will run until Friday 6 September.

Further information on the levee management consultation is available at www.dnrm.qld.gov.au or by telephoning 13 7468.



Building levee banks in an emergency



Droughtmaster Bull

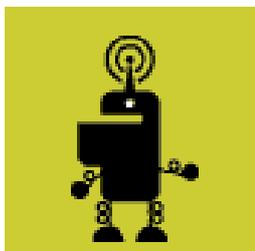


Droughtmaster

- Australia's

own Beef

Cattle Breed



Robots soon to come

The Droughtmaster Story — from Bill Catlow

Initially two Zebu bulls were mated to British breed females and the resultant progeny, through their tolerance of ticks and drought conditions provided a ray of hope for the cattlemen of North Queensland who were facing parasite and environmental challenges. The importation of Zebu cattle in 1910, and Brahman cattle in 1931 enabled these northern cattlemen to broaden their crossbreeding programs. This grading up process was carried out over many years using carefully selected red pigmented Brahman bulls over select females—hence the Droughtmaster breed evolved. The Droughtmaster is stabilized around half Bos Indicus, half Bos Taurus bloodlines and is classed as a pure breed. The Droughtmaster name was chosen for several reasons—mainly because the breed was spawned during the drought years of the late 1920's, but also due to the ability of the cattle to not only survive drought conditions in the harsh North Queensland tropical environment, but they also proved to continue to be productive under those conditions.

Nineteen studs were designated as “Foundation Studs” whose principals were among the breeders activity en-

gaged in improving the breed under the banners of the Australian Zebu Cross Beef Cattle Breeders' Association and then the Australian Tropical Beef Breeders Association prior to the formation of the Droughtmasters Stud Breeders' Society in 1962.

Two studs of interest are: “Mimosa Stud”—A.R. Apel, as Bill Steentsma, BCA President, has Property Planned during his DPI time in the Central Burnett. The other stud is “Amberwood Stud” which is owned by Bill Catlow and family, who is a member of BCA.

Breed Characteristics -The breed is basically red in color, with variations from a honey color to dark red. Animals may be polled or horned. They have medium to large ears, an extended dewlap and a moderate hump.

Droughtmasters are medium to large cattle with medium maturity. They have good body length, a sleek coat, and a reputation for reasonable fertility.

For more information go to:

<http://droughtmaster.com.au>

Farm Robots soon to be a Reality

Fleets of small robots working spraying crops might sound like technology of the future—but it's already happening in Central Queensland.

Gindie farmer Andrew Bates's interest in defense and manufacturing robotics led to him in-

vestigating the potential for agricultural robots.

“We have done the zero till and controlled traffic over the last fifteen years and I feel that technology has started to plateau,” he said.

“I started thinking there's got to be better ways... and I started

looking into robotics in the military industry.”

Through a chance meeting I realized some of the best robotic research in the world is actually happening right here in Australia. More info at:

www.abc.net.au/news/2013-07-17/qld-farm-robots

Vetiver Grass – A Hedge Against Erosion

Soil erosion is perhaps the world's most chronic environmental problem that is literally costing the earth. The soil it carries off now totals 20 billion tons a year and this loss is not only severely degrading the environment, it is eroding the economic viability of countries. A remarkable tropical grass may hold the key to a cheap, practical solution for controlling soil erosion on a huge scale in tropical and semi-arid regions.

GROWING CONDITIONS

A dense, clumping perennial grass, growing to 1.5 m in height, is a native in India and Ceylon. In its natural environment, vetiver grows on riverbanks and requires a hot and humid climate. It is adaptable to a wide range of soil and climatic conditions. It can

be established on very acid, sodic, alkaline or saline soils. Vetiver tolerates very high levels of aluminium, manganese and a range of heavy metals in the soil. Due to its extensive and deep root system, vetiver is very tolerant of drought.

USES

Erosion control:

Vetiver grass is widely used throughout the tropics for planting on the contour as an anti-erosion measure. When planted in single lines along the contour, hedges of vetiver are found to be very effective in soil and moisture conservation.

Perfume: the aromatic roots have been used since ancient times in India. The fragrant, insect-repelling roots yield oil, which is valuable in the perfume industry.

PLANTING DETAILS

Don't plant after March in southern Queensland to ensure survival from early frost (a well-established plant can survive severe frost). Cover vetiver roots with 2-3 cm of soil and compact the soil firmly.

Vetiver grass is propagated by root divisions or 'slips', which are planted at a distance of about 10-12cm (9-10 plants to a metre), to ensure a close hedge during its first year.

Slips should be planted in wet soil or irrigated well immediately after planting. Water every second day until established. Fertilise with a complete organic fertiliser at the time of planting.

For more info go to:

<http://greenharvest.com.au>



Vetiver grass

This deeply rooted, persistent grass has restrained erodible soils for decades

Restoration Ecology

Restoration ecology emerged as a separate field in ecology in the late 1980s. It is the scientific study supporting the practice of ecological restoration.

This is the practice of renewing and restoring degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action. The term "restoration ecology" is therefore commonly used for the academic study of the process, whereas the term "ecological restoration" is commonly used for the actual project or process by restoration practitioners.

For more info go to: www.wikipedia.org



Concept earth

Mother-of-millions - *Bryophyllum spp.*)

***Mother -of-
millions is
highly toxic
to stock***

***125 head of
cattle died af-
ter feeding on
mother-of-
million on a
travelling
stock reserve.***

Mother-of-million is a native plant of Madagascar. Unfortunately, it is highly toxic to stock! The plant's ability to reproduce in such large numbers and to withstand droughts explains why it has escaped from gardens and rubbish tips to become a serious problem in many rural areas.

Mother-of-million is well named. Each plant produces thousands of plantlets which detach to form new plants. A succulent, and drought-tolerant, most of these plant parts will survive.

Effect on Animals

Mother-of-million, particularly the flowers, can be **VERY POISONOUS**. It continues to claim the lives of cattle throughout the infected areas. In one of the worst reported cases in recent times, 125 head of cattle died after feeding on mother-of-million on a travelling stock reserve. (Moree area, 1997).

Greatest risk is when the plant is in flower, and especially during dry times when feed is scarce. And, when cattle are stressed or in unfamiliar territory (e.g., a new paddock) they are more likely to try plants they would not normally touch.

To quote from the Qld. Dept. of Primary Industries & Fisheries (Fact Sheet P33 March 2000) on mother-of-millions, "POISONING SYMPTOMS in cattle include signs of dullness, loss of appetite, diarrhea and heart failure.

The treatment is intense and needs to be given by or under the direction of a veterinarian."

Control Methods

Non-Chemical Options: Plants can be removed and burnt or stored in black plastic bags until completely destroyed. Encourage a strong pasture competition. Biological control: "South African citrus thrips" (*Scirtothrips aurantii* Faure) are present in southern Qld. and northern NSW. The thrips are having a significant impact on large mother-of-millions infestations.

Chemical options: Winter is the best time to treat this weed. The plants are then in flower and easier to find. According to the NSW DPI's excellent booklet "Noxious and Environmental Weed Control Handbook 4th Edition" numerous chemicals are available.

Pesticides must only be used for the purposes for which they are registered and must not be used in any other situation or in any manner contrary to the directions on the label. Never use herbicides in any way contrary to the label recommendations.



Roads and Tracks

Previous Newsletter (June), we discussed “whole Farm Planning”

In this newsletter we will concentrate on ‘roads and tracks’. Bill Steentsma used this method while working in the DPI.

- Locate roads and tracks on ridge-lines or along the contour to minimize the build-up of runoff water along them.
- Where tracks run up and down the slope, construct low earth mounds (whoa-boys) across them to remove runoff water. Position whoa-boys every 50 m along tracks on slopes, with up to 100 m spacing on low slopes. Ensure that the outlet of each whoa-boy is free of stumps or rocks so that the flow of runoff water is not obstructed.
- Where tracks must run diagonally across the slope, zigzag them to avoid long straight runs where runoff water will accumulate. Where tracks need to cross a flat area, keep them as close to the contour as possible to prevent runoff water flowing along them.
- Where tracks cross streams or gullies, position whoa-boys at the top of the crossings.
- On contoured land, site tracks just below the bank.
- Avoid positioning tracks in or close to watercourses, waterways and fence lines as runoff water concentrates in these areas.
- When constructing tracks, minimize soil and vegetation disturbance.
- Change the location of the wheel tracks regularly to prevent ruts developing.



A fast track

Consider the siting of tracks, watering points, fences and other improvements with the property's natural features.

Fences and Gates

- Fence similar land and Pasture types into the same paddock to even out grazing pressure.
- Fence adjacent and parallel to watercourses and gullies to minimize the number of gully crossings.
- Site gates on high stable areas 100 to 200 m from paddock corners to minimize stock-pad erosion and reduce the risk of stock jamming into corners. A short dummy fence may be required to direct stock through the gate.



Fences and Gates are important in property planning



Working Together

Bulldog ants collect nectar and other plant juices, as well as animal prey, which are carried back to the nest.



Run for your life

Disclaimer

While we hope that you will find this publication informative, BCA does not guarantee 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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BCA

Introduction

Working in various bush land environments a number of biting insects can be experienced. One of these which people find belongs to the Family Formicidae. Bulldog Ants (*Myrmecia* spp.) can inflict a painful sting.

Description

There are some 90 species of Bulldog Ants found in Australia. This large Family Group of ants has wide range of environments (urban areas, forest woodlands). They are easily identified by their large size, large eyes, large mandibles and aggressive type nature. They appear in several colour variations, ranging from orange through to red or purple to black. Their body conformation is slender with a narrow waist (petiole) with large long legs. In a defensive mode Bulldog Ants will rear up to their attacker. (Fig. 1.).



Figure 1. Image of adult Bulldog Ant showing large mandibles (Courtesy of Australian Museum).

Lifecycle

Like other colonial insects Bulldog Ants construct a communal type nest. These nests are usually located in relatively soft soils or under fallen timber debris. The nests can extend down for some metres and are defended well by Bulldog Ants. Nest castes (other individuals) include winged forms referred to as reproductives. After a colonising flight, mated female Bulldog Ants construct a nest in a suitable site. They deposit their eggs and after a short period of time larvae emerge from these eggs. Larvae forms are then fed on collected caterpillars (*O. Coleoptera* [Beetles], *O. Lepidoptera* [Moths]) and other small arthropods. Adult Bulldog Ants are also fed on plant nectar and other plant extracts, although they also forage for other small prey. The life span of Bulldog Ants is considered long lived around 15 - 20 years.

Range

Bulldog Ants vary greatly in size between 20 mm - 40 mm in length. They can be found throughout much of Australia. Often a colony of Bulldog Ants will invade another colony. The resident Queen is killed by the raiding Queen who takes over the colony.

Danger

Bulldog Ants are very aggressive when intruders invade their territory. They are able to jump quickly and cover large distances rapidly. These ants cause painful stings by injecting venom into their victim. Localised swelling is widely known and in some victims stings may also cause allergic reactions. Stings from these Bulldog Ants can cause anaphylactic shock with some people succumbing to a number of these stings at once.

First aid measures for Bulldog stings include applying cold water or cold pack to relieve the pain of the sting. Where stings are experienced medical treatment is strongly advised to be sought from qualified medical personnel.

NOTE: Bulldog Ants are extremely aggressive when disturbed and will inflict painful stings. Unsuspecting victims who are working in bush land areas should exercise extreme care when tackling heavy growth vegetated sites.