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Inside this issue:

Upper Warrill Healthy Country	1
Annual Ragweed	1
Clean up Australia Day 2013	2
Bremer Catchment's Water Monitoring Program	2
Scrub Tick	4



Upper Warrill Healthy Country Program

The Queensland Government recently launched an extension of the highly successful Healthy Country program into the Upper Warrill Creek catchment. This project is being managed by the SEQ Catchments in collaboration with the Department of Environment and Heritage Protection, Bremer Catchment Association, the Scenic River Improvement Trust and the Scenic Rim Regional Council.

The project is supporting communities, farmers and scientists to work together to improve water quality in the Scenic Rim and South East Queensland's catchments and Moreton Bay.

Objectives of the project are:

- Reduce sediment entering the waterways
- Improve landscape resilience to flooding and erosive forces
- Improve riparian management
- Contribute to biodiversity and ecosystem services
- Develop science and planning to guide future implementation

Engagement of people and communities is critical to this Project as these communities need confidence that the solutions proposed are practical and worthwhile, and farmers need to be sure solutions not only benefit the environment and community but will assist their productivity.

Submitted by John Carleton, Coordinator Health & Environment—Scenic Rim Council



Annual Ragweed

Annual ragweed, also called *ambrosia*, is a fast growing, introduced weed from North America. Annual ragweed is a Declared Class 2 plant requiring landowner to take measures to eliminate, control and prevent its spread.

It can invade weak and overgrazed pastures, reducing productivity. The pollen can cause health problems such as hay fever and can aggravate asthma.

Annual ragweed is an erect plant, one to two metres high with slightly rough fern-like leaves. The leaves are deeply divided with hairy undersides. Flowers are not conspicuous, small greenish and in spikes up to 20 cm long in the upper part of the plant. Flower spikes appear yellow than mature because of pollen production.

Germination normally occurs from spring through to summer. Flowering usually occurs from mid to late March, after which the plants die. Late germinating plants may over-winter and survive until the following autumn.

Prevention of annual ragweed is more effective than control. Infestations can be minimised by maintaining healthy, dense pastures. Infestations can be controlled with pasture management, herbicide use and manual techniques.

For more information about weeds visit the Weeds of National Significance website at www.weeds.org.au or contact the Scenic Rim Regional Council's Pest and Animal Management team on 5540 5444.

Clean Up Australia Day 2013

Sandra Burton shared this with you: <http://vimeo.com/58081730>

The lyrics and melody of the *River Crying out* by John Williamson epitomise our sentiments on the state of the local waterway... the Bremer River.

On March 3, 2013 the Bremer Catchment Association Inc., (BCA) will be joining the "Clean Up Australia Day" campaign in an effort to repair the damage done to our local environment.

Beyond the Bridge was recorded on the Bremer River between June and December 2012 (at low tide) to illustrate the amount of rubbish that permanently shapes our riverbed,

Water quality improvement, removal of environmental weeds and restoring eroded riverbanks are just a few of the ongoing tasks for the BCA and its' partners, but this project will be focused on removing the large number of shopping trolleys/tyres/building materials/plastic shopping bags/tidal debris etc., from a 6-kilometre stretch of the Bremer River, between Cribb Park, North Ipswich and Shapcott Park, Woodend.

If you are a landholder, business, industry, government department or a resident of Australia who would like to help save our waterways, please log on to

<http://www.cleanupaustaliaday.org.au/Beyond+the+Bridge>

Or to learn more about the Bremer Catchment Association Inc., please log on to—<http://www.bremercatchment.org.au>

This article was submitted by Sandra Burton

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Bremer Catchment's Water Monitoring Program

The Bremer Catchment Association has a long history studying the water quality of the Bremer River and Warrill Creek and their tributaries.

The original study commenced in October 1999, funded by the Brisbane River Management Group, and concluded in 2000.

The purpose of the report was to collate all water quality data, and a site assessment data for the entire catchment. This provided a "benchmark indicator of the fundamental water quality in the Bremer catchment."

In July 2012, armed with BCA's new Horiba U52

Water checker, the current study started.

This time around the monitoring regime had been modified to include more sites.

This methodology was chosen to enable a closer comparison between similar streams. The nature of



Bremer River at Shapcott Park



Workers begin Bundamba Creek Clean up



The new water monitoring horiba

Bremer catchment is a complex one. Through the mid-sections of the catchment the streams tessellate, giving an opportunity to compare the parameters between the different tessellations.

The Horiba U52 measures water temperature, pH, conductivity, turbidity, dissolved oxygen, total dissolved solids and ORP (Oxidation-Reduction Potential). Monitoring these parameters over the 50 sites gives a much higher resolution analysis of the behaviour of water quality throughout the catchment.

Here is one result comparing the mean water quality from selected sites on the Bremer River.

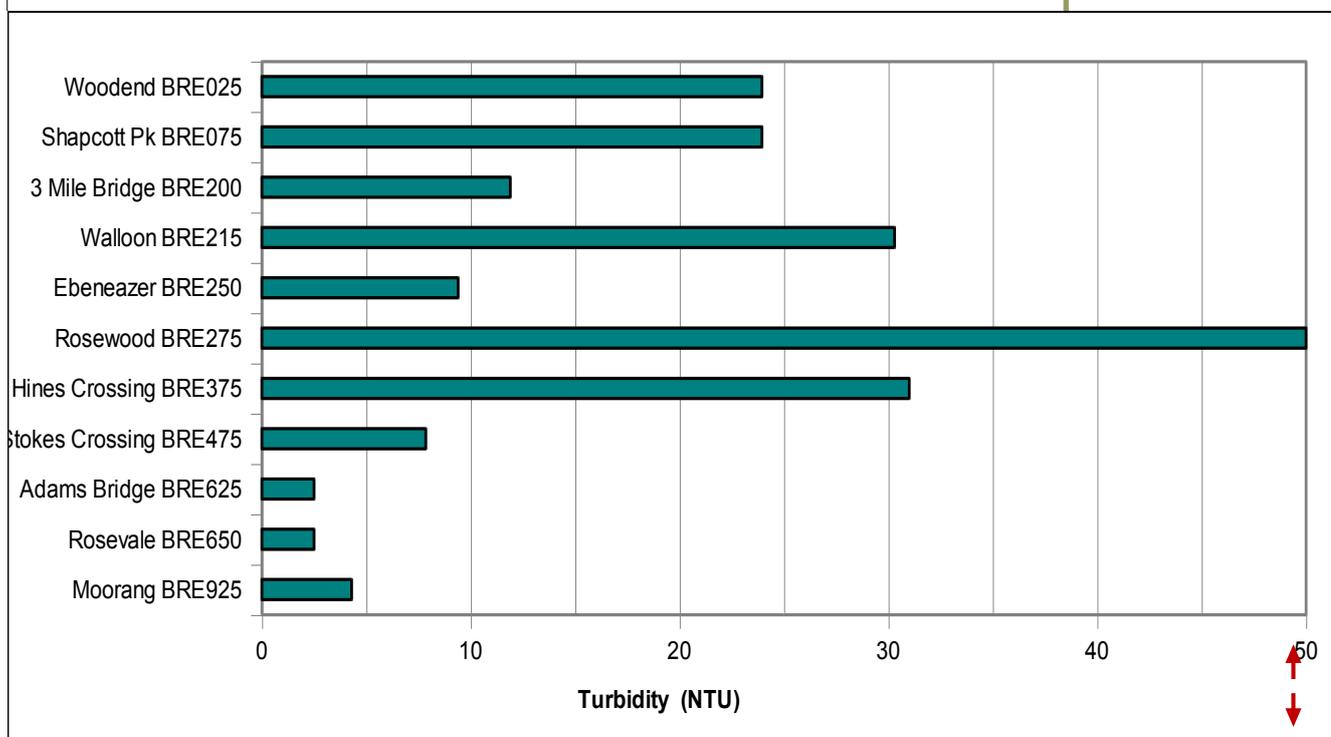
Turbidity

Turbidity is a measure of suspended material. It is often associated with runoff from disturbed soils. The new State Government recommended maximum turbidity is 17NTU for the Bremer River. This diagram shows mean turbidity levels measured in the seven months to January 2013.

Bremer River mean turbidity



Liz and Nick explaining the horiba to some UQ Honour students



The above is an abridged article submitted by Liz Tilbrook .



Working Together

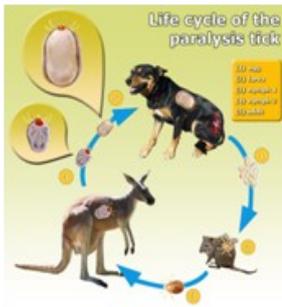


Image of Paralysis Tick (*Ixodes holocyclus*) lifecycle (courtesy of Bayopet).



Dead Scrub Tick removed from skin after rainforest walk.

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It has come to my notice that the problem with ticks in the Roadvale area is very serious. The main predator in this area is the “Scrub Tick” (*Ixodes holocyclus*) also called the Paralysis Tick. These are transported effectively by many native bush-land animals (e.g. wallabies, possums, bandicoots, rodents).

These native animals migrate towards human habitat and domesticated animal enclosures. This effectively brings the Scrub Ticks into contact with human population and domesticated animals.

Description

Ticks are Arachnids, but not true spiders. In Australia there are about 70 species of ticks. The Scrub Tick or Paralysis Tick (*Ixodes holocyclus*) is a native species. It has a hard body (dorsal plate) and piercing mouthparts with backward pointing barbs. Ticks are usually pale brown in colour, but adult females may appear grey-blue in colour after feeding. Paralysing toxin is produced by adult female Scrub Tick.

Breeding

The life cycle has four stages of development - egg, larva, nymph and adult. Most species of hard ticks feed on different hosts during the larva, nymph and adult stages. Larvae and nymphs feed on their host for several days and drop to the ground where they moult into the next stage. Adult females feed for several days before laying thousands of eggs on the ground. The females die after egg laying.

The Scrub Tick has a body length of 3mm - 5mm. It can get up to 10mm-15mm when fully developed.

Range

Scrub Ticks are found from Queensland to Victoria in humid bush-land along the coastal strip to about 70 km inland.

Notes

Tick paralysis in humans is rare but can be fatal with young children most at risk. Tick paralysis is caused by neurotoxins in the saliva of adult females. Symptoms start several days after attachment of the tick and include unsteady gait, weakness of limbs, and lethargy. Paralysis progresses over hours. In severe cases the use of an antitoxin may be necessary. There are different opinions on the best way to remove ticks. One approach is killing it before removal with an insect or tick repellent.

The Editor thanks Gary H Cochrane for the help of this article.

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