BREMER CATCHMENT ASSOCIATION INC.

**December 2014**

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**The first Operational Meeting will be on the 19th February**

# around the bremer

## *Presidents Message*

With the successful 2014 Australian G20 Summit Meeting now over we can resume our lives without being pestered on every media front. I watched with some reservation the speech given by Barack Hussein Obama II at University Queensland, St Lucia. He is an inspirational speaker and certainly touched the feelings of so many. It was good see him target specific topics and the number of environmental issues, particularly climate change, which is essentially important when contemplating sustainability.

One hopes with some anticipation that the Government takes on board these sentiments and responds well over the next several months. It's high time more environmental issues are taken seriously and not given a token gesture to soothe the many who are genuinely concerned

Speaking of concerns one has to ask the question of Ipswich City Council for allowing the removal of several large *Eucalyptus* trees (some > 80 years old) from the Bundamba Creek (Bundamba). It would appear as though the Council was not aware that such trees were being removed.
While the developers have suggested that they will revegetate the riparian area along Bundamba Creek , it will take many decades to replace the biodiversity which has now been lost.

The Upper Mt Walker Hillslope Erosion Project (UMWHEP) received some welcomed visitors in recent weeks. Project Leader John Jackson hosted Scenic Rim Mayor Cr John Brent, Member for Beaudesert Jon Krause and Cr. Duncan McInnes who visited the site to inspect stabilisation work. It was encouraging for such political members to inspect the work which BCA has undertaken, in particular the immense amount of work John Jackson has provided. Thank you John.

It will be heartening to receive some welcomed rain which will permit planting and re-vegetation on the UMWHEP site.
Recent sweltering temperatures have again highlighted the need for many folk to be prepared for the oncoming fire season.
There have been good reports of a number of species of snakes on the move, so be aware of your surroundings when working or enjoying the great outdoors.

Stay safe and drive steady on the roads during the Festive Season.

Gary H Cochrane
President
Bremer Catchment Association

# Red Imported Fire Ants by Gary Cochrane

Red Imported Fire Ants **(RIFA)** are an invasive species of ant which can trace their origins from South America. They survive in colonies usually built in a mound configuration and are regarded as 'Tramp Ants'. By Tramp Ants it means that such ants can simply collect the entire colony and migrate to another area.

Figure 1. Head shape of RIFA (***S. invicta***).

## Biology

***Solenopsis invicta*** **[Buren, 1972]** (Fig. 1.) are described as small brown to dark brown ants between 2 - 8mm in length. These ants possess a [1]four (4) tooth mandible, [2]10 segmented antennae ending with 2 large clubbed antennae.

Figure 1 shows the typical head shape of RIFA, with the four tooth mandibles in readiness. Note the antennae and large clubbed section on the end. These morphological features ensures that RIFA are a formidable pest ant species.
The RIFA are well equipped to defend their colonies against invading enemies. Similar to other ant species, trails are established by 'scouts' and these are marked by the use of pheromones. These are used so other ant individuals can collect food or moisture from surrounding areas.

The body shape of RIFA also consists of a [3]double node (between thorax and gaster). This allows greater mobility for using it gaster as a hypodermic needle. This flexibility provides significant options for such ants to manoeuvre around prey and colony environments.
Figure 2 shows the distinctive body shape and characteristic of RIFA. These ants are covered in small fine hairs and possess a stinger on the gaster. When disturbed such ants become aggressive, attacking any predators/enemies in large numbers. They are able to inflict painful stings, by using their stinger like a hypodermic needle. RIFA defend their colony with grave results, often ending in individual deaths.

Figure 2. Characteristics of Red Imported Fire Ants.

Figure 3 shows the variation in size of *S. Invicta*. This polymorphic characteristic (different size) is typical of the species, making it one way of their identification. As discussed the colour of these ants is typically dark brown. The large specimen on the right is a reproductive Queen.

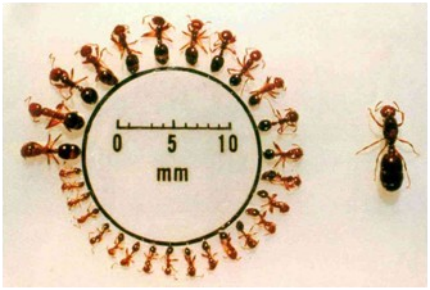


Figure 3.

As mentioned earlier RIFA survive well in terrestrial colony environments. However when climatic conditions arise, these RIFA ant colonies basically become floating masses on waterways. This provides an ideal opportunity for RIFA to travel or cross rivers to adapt to new suitable habitats.

Figure 4. Floating colonies of RIFA

Figure 4 provides observed evidence of how some RIFA colonies migrate from one area to another. The silver coloured objects are actually winged reproductives which usually take flight a certain annual climatic events.
Such floating aspects can greatly assist the dispersal conditions of RIFA. These characteristics have ensured the survival of a number of RIFA colonies.

## Red Imported Fire Ants

### Pest Status

*S.invicta* have caused concerns wherever they have been detected. These concerns include animal health issues (e.g. Humans, Domesticated animals, Livestock), environmental concerns and displacement of other animals (Reptiles, Birds, Livestock, Mammals). In the United States in particular Texas, monitoring and surveillance programs have targeted RIFA for many decades. To date treatments have been moderately successful, however a significant number of ant colonies are discovered each year. hence their RIFA Program is intensive.

For obvious reasons the main impact from RIFA is the painful sting (Fig. 5.). For example staff working with RIFA are often subjected to work hazards, often being stung several times by RIFA.

These stinging effects cause health problems for staff. After being stung, several hours later, small pustiles appear on the skin surface. If these pustiles are accidentally broken secondary infection can cause significant health effects.

RIFA have another sinister habit, in which they devoid entire areas of all animals. As an invasive ant species they continually forage for food and moisture, particularly as their work includes colony survival. The displacement of all animals from areas invaded by RIFA is not only a concern of the pest ant species but becomes a significant environmental disaster.

All other animals are affected in the area and many keep clear of the RIFA site. Animals such as small insects (ants, moths, beetles, bees, flies, bugs), reptiles (skinks, lizards, snakes), birds (various species) native animals (local animals) and livestock (cattle, horses, sheep, goats) are affected. Many of these animals assist the geographical ecology and surrounding environment. Without them certain plants die through lack of pollination. RIFA infested areas become sterile environments where ecological disasters are observed and little native vegetation remains.

### Australia Invasion

In 2001 RIFA were detected around Fishermen's Island in Brisbane (SE Qld). Since then RIFA have slowly migrated towards western regions of Brisbane and eventually to Ipswich. Some years later a second RIFA site was identified at Curtis Island in the Gladstone region. It's believed that the Curtis Island RIFA site is a different RIFA species (clarified with DNA results) and that this infestation is now eradicated. A new map 12th November 2014 of RIFA in the Gladstone region has been updated.

Department of Primary Industries (DPI), then Department of Employment, Economical Development and Innovation (DEEDI) and lastly to Department of Agriculture, Forestry and Fisheries (DAFF) have been the major organisation providing monitoring, surveying and treating of exotic RIFA species. Even with significant name changing and the cost of RIFA program in excess of $220 million dollars, RIFA remains active in South East Queensland (SEQ).

Further monitoring and inspections in the SEQ region now show that RIFA have now been detected in the Mutdapilly area. DAFF staff believes that this is the most outer limit of RIFA and are confident of controlling RIFA from spreading further. A new map dated 30th August 2014 depicting the restricted and unrestricted areas of RIFA has been provided as a separate sheet (see attached).

Figure 5.

Evidence of pustiles on the skin surface

In 2001 RIFA were detected around Fishermen's Island in Brisbane (SE Qld).

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# Red Imported Fire Ants

New technologies have been employed in combating RIFA such as aerial surveillance, thermal imaging, detection dogs and physical inspections by DAFF staff. While these appear to offer a solution to the RIFA problem, more work and surveillance is required in early detection of RIFA.

If you suspect that you have found RIFA contact the **DAFF RIFA team (13 25 23)** and they will respond accordingly. However failure to acknowledge RIFA on any site can incur large fines.

**Reference**

http://www.desertmuseum.org/invaders/invaders_fireant.php (accessed 21Nov2014)
http://idtools.org/id/citrus/pests/factsheet.php?name=Ants (accessed 21Nov2014)
https://www.daff.qld.gov.au/plants/weeds-pest-animals-ants/invasive-ants/fire-ants (accessed 21Nov2014)

http://bugguide.net/node/view/30113/bgpage (accessed 21Nov2014)

http://entnemdept.ufl.edu/creatures/urban/ants/red_imported_fire_ant.htm (accessed 22Nov2014)

Shattuck, S.O. 2000. Australian Ants: Their Biology and Identification. CSIRO Publication. Collingwood, Victoria. Australia.

**Find out about your legal obligations if you are moving items in a fire ant restricted area.**

## Purga Nature Reserve by Cr. Heather Morrow, ICC

A report dated 25th August 2014 was presented to Council concerning the utilization of the Purga Nature Centre including: 1. Current utilization and visitation of the centre
2. Traffic counts
3. and promotion

A number of properties were purchased between 1996 &1999 through the Ipswich Enviroplan levy to form the Purga Nature Reserve. The reserve is approximately 138 hectares in area and contains one of the largest remaining stands of endangered Swamp Tea-tree in South East Queensland. The reserve is also an important habitat area for koalas.
Following acquisition, a boardwalk, walking trails and park facilities were constructed to encourage visitation and use of reserve for passive nature based recreation activities.

**Boardwalk at Purga Nature Reserve**

Whilst general visitation to the Reserve is low in comparison to other conservation areas, it is used by student groups undertaking environmental studies, bird watching groups and by the Ipswich Koala Protection Society as a koala release site.

The Reserve offers short easy walks for visitors and has become an important area for replanting in co-operation with external partners. In 2008 over 80 hectares of the Reserve were replanted for carbon offsets by Greenfleet. The Powerlink Greenworks Program was launched at Purga Nature Reserve and received $40,000 in funding to rehabilitate a section of Purga Creek.
A recommendation was put to Council that a Fauna Survey be undertaken and a stand alone brochure compiled highlighting the various attractions offered.

## Oxley/Bremer Twinning Project

The OCCA (Oxley Creek Catchment Association) Bremer Twinning Project began in 2014 with a successful launch at the River Heart Parklands in Ipswich on July 17, 2014.

This Twinning Project is auspiced by the International River Foundation (IRF) which began in Brisbane in 1998. The IRF aims to inspire, encourage and reward people who undertake to restore the rivers, lakes and wetlands of our earth. IRF is a not for profit organisation funded by the Brisbane City Council, the Australian Government and companies such as Thiess, BHP Billiton and private donors .The IRF awards a Riverprize for Australia, and also an International Riverprize. For 2014, the Lake Eyre Basin Network won the Australian award, for its outstanding consultative ability and its approach to protection of its natural resources. OCCA won the Australian Riverprize in 2009 for its expertise in bringing industry to the table to work towards the sustainability of Oxley Creek.

For this Oxley Bremer Twinning Project, OCCA firstly prepared a Business Plan which was accepted by the IRF. Then a poster outlining the importance of industry engagement in the care of our waterways was successfully presented at the 17th International River Symposium in Canberra in September, 2014. Prior to that, an approach was made to Ipswich City Council (ICC) inviting them to work with OCCA and a Memorandum of Understanding was signed between OCCA and ICC in April 2014.
In the first instance, Bundamba Creek will have an initial focus of attention as it is undergoing major changes with the development of the Ripley area. However, OCCA looks forward to working with all those with an interest in the Bremer River.

For further details please contact:

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**Oxley Creek—Tributary to Brisbane River**

Anne Clarke visited our last Operational Meeting and the above article is a clarification of the Oxley /Bremer Twinning Project.

**Ripley development plan**

*Environmental groups say changes to land clearing laws would set Queensland back by decades, but farmers say the current legislation ties them up in red tape.*

# Changes to the vegetation management framework in QLD.

**Overview**

The *Vegetation Management Framework Amendment Act 2013* (**the Act**) was passed by Parliament on 21 May 2013. The Act aims to significantly reform the vegetation management framework in Queensland by: 1. reducing red tape and the regulatory burden on landholders, business and government;

2. simplifying and streamlining the vegetation management framework;
3. supporting Queensland's key economic pillars of construction, resources, agriculture and tourism; and
4. maintaining sustainable vegetation clearing practices to protect native vegetation.

The reforms are intended to pave the way for the development of new agricultural areas by providing landowners with the opportunity to clear vegetation without the regulatory burden that exists under the current system. Accordingly, the Act is viewed as a vital component of the Newman Government's aim of doubling the value of agricultural production in Queensland by 2040.

While the changes are particularly relevant to farmers, all landowners ought to be aware of the proposed new rules for vegetation management, as the Act also aims to simplify the mapping of vegetation and streamline assessment for vegetation clearing.

For further information about the changes of the Act please visit:

*http://www.holdingredlich.com/agribusiness-rural-industries/changes-to-the-vegetation-management-framework-in-queensland*

## What are the proposed changes?

**The removal of high value re-growth vegetation regulations**
**The introduction of new clearing purposes**
**The creation of self assessable clearing codes**
**Streamlining State-wide vegetation maps**
**Changes to enforcement, investigation and offence provisions**
**Progress of the Act**
**Where to from here?**

**Qld Vegetation Management**

## Fireweed - Weed of National Significance

**Fireweed in seed**

**Fireweed (*Senecio madagascariensis*)** is a common, poisonous and invasive weed of costal pastures in Eastern Australia.

Worldwide, there are many species of plants that have been given the name 'fireweed'. In Australia, the most likely reason for applying the name to this species is its ability to 'spread like wild fire'. Another possible explanation is its appearance soon after a fire.

Fireweed is a problem because it is invasive, poisonous, and imposes economic costs on producers!

Fireweed has the capacity to:

- invade a range of pasture types
- establish quickly following drought-breaking rain
- grow during winter when pasture production is low
- reduce pasture or forage yield and availability in dense infestations
- produce seeds 6-10 weeks after germination
- produce up to 18,000 seeds during its lifecycle
- spread quickly by wind over long distances
- poison cattle and horses
- impose productivity and control costs on dairy and beef farmers

**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.*

*The Bremer Catchment Management Committee, Gary, Bill, Brian and Marianne is wishing you all a Merry Christmas and a Prosperous 2015.*

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