

## Environmental Buzzwords



Following on from the last newsletter, here are a few more environmental buzzwords to get your head around...

**Edge effects:** refers to all the effects/influences external land uses have on an area of vegetation, regardless of size or intensity e.g. feral animals entering the area or contamination through water flow.

**Ecosystem Services:** Processes by which the natural environment produces resources useful to people, akin to economic services. They include: provision of clean water and air; pollination of crops; mitigation of environmental hazards and; pest and disease control.

**Remnant:** A small fragmented portion of the former dominant vegetation that once covered the area before being cleared.

**Remnant Vegetation:** Native vegetation that has never been cleared for human land use, and, under legislation, vegetation that has regrown to at least 50% of its original cover and 70% of its original height.

**The triple bottom line:** When you hear the words 'triple bottom line', it is referring to the environment, the economy and society and the sustainability of each. It is the three realms which people aim to meet when forming and performing environmental management plans/projects/strategies.

If you have any words you would like to know the meaning of, please contact us at [ameliar@qmdc.org.au](mailto:ameliar@qmdc.org.au)

### Did this newsletter reach you at your new address?

If you have changed your postal address, phone number or email address, please contact the Queensland Murray-Darling Committee to tell us your new details. Phone (07) 4637 6201.

Land for Wildlife website: via Queensland Murray-Darling Committee website, [www.qmdc.org.au](http://www.qmdc.org.au) (follow link under *vegetation*)

If you would like to arrange a Land for Wildlife assessment on your property, please contact the Land for Wildlife representative nearest to you.

Lyn Pullen  
Regional Vegetation &  
Biodiversity Coordinator  
Toowoomba  
P (07) 4637 6250  
F (07) 4632 8062  
E [lyn@qmdc.org.au](mailto:lyn@qmdc.org.au)

Kate Steel  
Native Vegetation Officer  
Roma  
P (07) 4622 2993  
F (07) 4622 6060  
E [kates@qmdc.org.au](mailto:kates@qmdc.org.au)

Holly Hanlon  
Native Vegetation Officer  
Goondiwindi  
P (07) 4671 7980  
F (07) 4671 2966  
E [hollyh@qmdc.org.au](mailto:hollyh@qmdc.org.au)

Renee Moore  
Vegetation & Biodiversity Officer  
Charleville  
P (07) 4654 7382  
F (07) 4654 7284  
E [biodiversity@southwestnrm.org.au](mailto:biodiversity@southwestnrm.org.au)

Alison Goodland  
Grassy Ecosystems Project Officer  
Toowoomba  
P (07) 4637 6286  
F (07) 4632 8062  
E [alisong@qmdc.org.au](mailto:alisong@qmdc.org.au)

## contacts

For general information about Land for Wildlife, please contact the Queensland Murray-Darling Committee on 07 4637 6201, or go to [www.qmdc.org.au](http://www.qmdc.org.au)

Compiled by the Queensland Murray-Darling Committee Inc, with the assistance of the Land for Wildlife representatives.

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## The size and shape of the bush—connecting our landscape

Hello Land for Wildlifers and welcome to another edition of the Land for Wildlife newsletter across the Queensland Murray Darling Basin.

Once again the year is off to a flying start, with the festive season a distant memory— we hope everyone had a relaxing and enjoyable Christmas period. For QMDC, December meant saying goodbye to Emily Rogers, our Industrial Placement student from the University of Queensland. Emily was an invaluable help in updating our membership records, producing extension materials and developing strategies to help us improve the Land for Wildlife program in our region. She was also a pleasure to have as part of the team and we wish her all the very best for her final year of study.

In this edition our feature article 'A fragmented world Part 2' is a continuation from the last edition. In this part, the importance of size and shape of vegetation remnants is discussed. This edition also sees the continuation of the Who Am I? section and there's a few more environmental buzzwords on the back page.

On behalf of the Land for Wildlife team here at QMDC, we wish all our members a happy, safe and WET 2007.

Alison Goodland  
Regional Land for Wildlife Coordinator

### WHO AM I? - Insect species

Can you identify this native species of insect?

#### Clues:

- I am a native Australian species of insect
- I am mainly white in colour, with black and yellow in parts
- I often get confused with foreign species that look very similar to me
- I migrate from north to south down the eastern coast of Australia during Spring
- I like eating nectar from vines and shrubs such as the Wait-a-while vine
- I like to flutter by...



Wait-a-while vine (*Capparis lasiantha*)

Answer on page 3



Photo courtesy of Paul Donatiu

**Stanthorpe Flora Recovery Plan approved!**

The Stanthorpe Plateau Threatened Flora Recovery Plan was recently approved by the Federal government and adopted under the *Environment Protection and Biodiversity Conservation Act 1999*. This recovery plan helps protect nine threatened state and nationally listed flora species, several endemic to the Stanthorpe Plateau.

Congratulations to Paul Donatiu, the Rare Wildflower Consortium, QMDC and the Granite Belt community for development of this plan.

**Easter again already!**

While still months away, Easter eggs have already appeared in our shops! But why not try something different, **and support wildlife conservation**, by giving Grassland Earless Dragon chocolates instead. All money raised goes to reptile conservation activities. Chocolates can be pre-ordered from Paula Halford, Mt Tyson District Landcare, (07) 4693 8186.

**Upcoming Events**

**Bushland Management Workshops**

These workshops will provide some guidance on how to approach managing your native bushland, including weed control, bushland assessments and mapping and property planning.

- 9am – 1 pm, Saturday 17 February – ‘Nunyara’, East of Inglewood
  - 9am – 1 pm, Sunday 18 February – 161 Kanga Lane, South of Ballandean
- Workshops are free, with morning tea and lunch provided.

Please RSVP to the State Coordinator on (07) 4923 7543 or 0437 812 784, or email [lhale@qld.greeningaustralia.org.au](mailto:lhale@qld.greeningaustralia.org.au).

**Clean Up Australia Day – 4 March**

Help keep Australia beautiful by making sure your property is rubbish free, adopting a nearby roadside to remove rubbish, or join a local Clean Up Australia Day activity. Check out the web site, [www.cleanup.com.au](http://www.cleanup.com.au), for more information.

**QMDC Land for Wildlife Program Audit**

**Thank you** to all members for your time and support with the phone survey, conducted by Emily, it was much appreciated. Through your feedback we now know what members like about the program, what does not work so well and ideas for future improvement.

For example, most members found the newsletters to be useful and informative, with the most popular sections being property profiles and case studies, followed by plant and animal identification and practical ideas for property management.

In response to this, we would like to start a members section in the QMDC newsletter whereby members can write an article or a letter for the newsletter, profiling their property, an upcoming event or discussing a topic of interest to you.

Mail, fax or email your contribution to Alison Goodland.

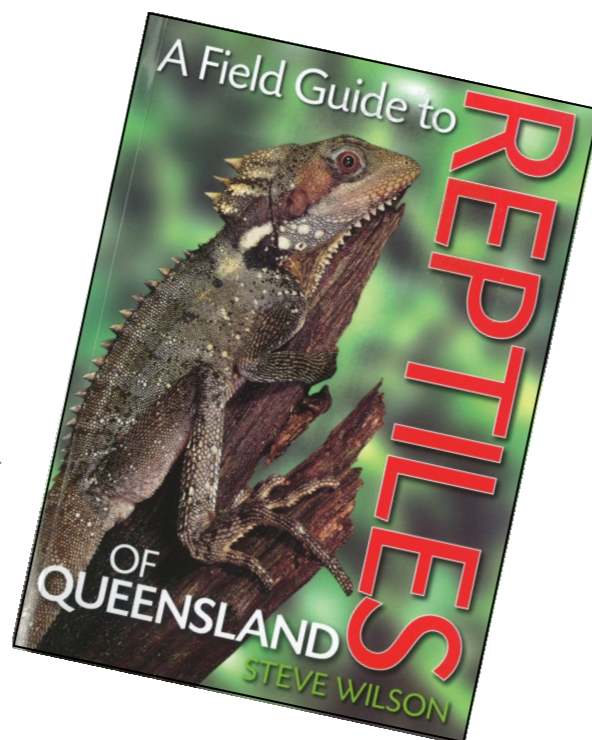
**A Field Guide to Reptiles of Queensland by Steve Wilson**

Looking for help to identify the reptiles on your property? Wanting to learn more about the reptiles in your area? Look no further.

This book is a comprehensive, easy to use field guide which includes photographs, descriptions, identification keys, diagrams, maps and habitat notes of over 400 species of reptile.

Signed copies are available for \$30 from the Toowoomba Landcare Discovery Centre.

Contact Alison Goodland on (07) 4637 6286 for more information.



**A fragmented world – Part 2**

*Minimising the dreaded edge effect and maximising habitat viability*

By Emily Rogers

The term ‘edge effect’ refers to the influences of external elements on remnant areas of native vegetation. For example, weeds and feral animals (such as cats and pigs) can penetrate vegetated areas, out-competing native species and changing the natural ecosystem. Other, more indirect edge effects can be caused by surrounding land uses. For example, agricultural activities can result in fertiliser and other chemicals washing into remnant vegetation. Likewise, storm water from urban or industrial land uses and climatic events can impact on nearby vegetation.

There are two main factors that determine the degree of an edge effect – *size* and *shape*. These factors determine the amount of edge that an area of vegetation has and, therefore, how much the flora and fauna within a remnant may be affected by edge effects.

SIZE

**Are bigger remnants of vegetation more resistant to edge effects than smaller ones? Will several smaller remnants of vegetation combat edge effects better than a single large remnant?**

The theory of Island Biogeography, wherein the larger an island and the closer it is to the mainland, the higher the number of species it can support, also applies to size of remnant vegetation. However, there are other factors that can impact on remnant vegetation as, unlike islands, these are not isolated, but surrounded by a complex land use system.

So, a simple answer to the first question is ‘yes’, a bigger remnant size is more resistant to edge effects than smaller ones. However, having a number of smaller remnants is also very beneficial as they create corridors for wildlife movement. Having a number of smaller remnants also reduces the risk of fire, and other events, wiping out species of flora and fauna because of the space between patches.

SHAPE

**What is the best shape for remnant vegetation to be to minimise edge effects and maintain more undisturbed habitat for wildlife?**

The adjacent diagram shows three common shapes of remnant areas: circular, square and rectangular. As can be seen, a circular remnant will have less edge and, therefore, more undisturbed vegetated area. On the other hand, a square remnant has more edge that can be disturbed, with a rectangular shape even more susceptible to edge effects.

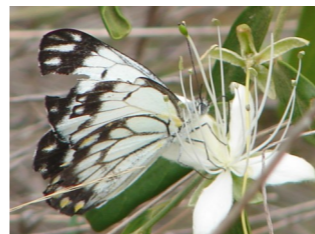
**I’m Caper White Butterfly!**

The Caper White butterfly is a medium sized butterfly with black margins on their upper wings with yellow, black and white under wings.

In Spring the butterflies migrate to where caper shrubs and creepers are common.

They fly inland, west of the Great Dividing Range and maintain a rapid flight about 2-3 meters above the ground during the day, resting on shrubs and trees at night.

The caterpillars of this species occur in very large numbers.



SO REMEMBER...

When planning your vegetation areas, carefully consider what shape best suits the area and remember that a circular or square shape are less prone to edge effects than a thinner, rectangular area and will maintain quality habitat for native plants and animals.

Carefully investigate different plant species before planting, as some may be particularly good ‘edge species’ (i.e. it grows well along the edge of corridors acting as a good windbreak or barrier to edge effects).

Also, remember the importance of corridors as pathways for wildlife movement across the landscape and how sometimes, if planned correctly, having a few smaller remnants is more beneficial to wildlife than having one large, but isolated remnant.

Sources

McIntyre, S 2003, ‘The landscape game: a learning tool demonstrating landscape design principles’, *Ecol.Mgt.Rest*, vol. 4(2), pp.103-109.  
 Wikipedia 2006, ‘Habitat Fragmentation’ <[http://en.wikipedia.org/wiki/Habitat\\_fragmentation](http://en.wikipedia.org/wiki/Habitat_fragmentation)>  
 Environmental Protection Agency/Queensland Parks & Wildlife Service 2006, ‘Wildlife Corridors’, *Queensland Government*, <[http://www.epa.qld.gov.au/nature\\_conservation/community\\_role/landholders/case\\_studies/wildlife\\_corridors/](http://www.epa.qld.gov.au/nature_conservation/community_role/landholders/case_studies/wildlife_corridors/)>

