



LAND FOR WILDLIFE

Southeast Queensland

Newsletter of the Land for Wildlife Program Southeast Queensland

APRIL 2007

NEWSLETTER

Lantana and Frugivores

Most Land for Wildlife landholders in South East Queensland (SEQ) deal with lantana (*Lantana camara*). Lantana is regarded as the most significant invasive weed in SEQ and we are familiar with its ability to dominate tracts of land, regardless of soil, landform or ecosystem. Lantana can form monocultures that reduce the diversity of native plants and habitats for wildlife.

Landholders have adapted management techniques to control lantana depending on conditions on their properties. As such, there are many site-specific and innovative methods being used.

Despite the ecological threats posed by lantana, a range of native animals utilise lantana as food and shelter. A recent study showed that twenty-three species of fruit-eating (frugivorous) birds are known to eat lantana fruit in SEQ. Such birds include the Australian Brush Turkey, Brown Cuckoo-Dove, Wonga Pigeon, Rainbow Lorikeet, King Parrot, Rosellas, Lewin's Honeyeater, Figbird, Satin Bowerbird, Pied Currawong and Silvereye.

Unfortunately, some of these birds are also key dispersers of lantana seed. Seed dispersal is an important ecological process that allows plants to reproduce and colonise new sites. Frugivores often move about the landscape following fruit availability, and assist the dispersal of fleshy-fruited plants by carrying and spreading their seeds.

The recent study compared characteristics of 427 native plant species to lantana traits. Traits included length and timing of the fruiting season, fruit colour, fruit size, fruit type (eg. berry, capsule) and plant form (eg. shrub, climber).

Many native plants have small, purple to black fruits like lantana. However, few native species fruit as reliably as lantana. Ripe lantana fruit can be found all year round. Few native species are able to adapt their growth forms like lantana



Figbirds are commonly-seen frugivores in SEQ.
Photo by Wayne Ellis.

does. Lantana can grow as a thicket-forming shrub in open conditions or like a scrambling climber in forests.

From the perspective of a frugivore, it is important for lantana to be removed incrementally to allow for native plants to mature and produce fruits. However, there is a balance between removing weeds gradually, and keeping weeds that continue to set seed and potentially infest neighbouring regeneration sites.

Results showed that the native species with the closest characteristics to lantana is Native Peach (*Trema tomentosa*), which, like lantana, is poisonous to stock. Other common species in SEQ with similar traits to lantana include Red Ash (*Alphitonia excelsa*), White Bolly Gum (*Neolitsea dealbata*) and several vine species. A complete list is available from your local Land for Wildlife Extension Officer.

Despite lantana providing food and shelter for some wildlife, a diversity of native vegetation will provide more habitat diversity and will attract a wider range of native animals. If you are removing lantana, it is preferable to encourage natural regeneration. However if your site is isolated and you need to replant, then you may wish to include some plants with similar fruiting traits to lantana.

References

Gosper, CR and Vivian-Smith, G (2006) Selecting replacements for invasive plants to support frugivores in highly modified sites: a case study focusing on *Lantana camara*. *Ecological Management & Restoration*, 7, 197-203.

Article by Deborah Metters.

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editorial

Welcome to the autumn edition Land for Wildlife newsletter for SEQ.

A Letter to the Editor (published in our January 2007 newsletter) promoting the value of birdbaths combined with a news story about birds dying in England because of unhygienic bird feeders, prompted me to write a short article. While writing about this 'minor' issue, I found myself thinking of climate change and how it will affect all facets of the natural and human world.

Since attending the Queensland Landcare Conference in August 2006, the urgency of climate change finds its way into my thinking daily. I distinctly remember Prof. Bob Miles and Dr. David Hilbert speaking matter-of-factly about climate change and the changes that are, and will, occur in our environment. The sobering facts were further driven home by the film *An Inconvenient Truth*.

Climate change is hardly a new topic - I remember studying it at university in the early 1990's. Our 'leaders' have talked about it for decades - either denying its existence or trying to get someone to listen.

Last year, the Bureau of Meteorology estimated that the current rate of global warming is equivalent to a town moving northwards 100 kilometres each year. Humans are an incredibly adaptable species - residing in and visiting nearly all ecosystems on the planet. However, many other species are not so adaptable.

The article by Stephanie Reif addresses the multifaceted issues that are being expressed through climate change. Possibly Land for Wildlife landholders will see the affects of climate change more markedly than urban dwellers, as you will see the ecology of plants and animals change on your property. I would further suggest that Land for Wildlife members have a greater interest in, and interact more with, native wildlife than other urban and, possibly, rural landholders. Therefore, Land for Wildlife members

may be best placed to monitor the ecological changes that will occur as a result of climate change.

There is ample evidence of natural systems already responding to climate change. Polar, tropical, high altitude and marine environments are responding on both species and community levels. For example, some bird migrations are changing, some plants have changed flowering times and some animals are moving to higher or cooler regions, where possible.

As well as native animals moving, if they can, it is expected that 'undesirable' species such as weeds, pest animals and disease vectors (eg. parasites, bacteria and mosquitoes) will also move. It is a good time to start monitoring species on your property, especially migratory or seasonally-dependent species and track the changes yourself.

This edition also covers other issues apart from climate change. Gayle Drabsch writes about a Land for Wildlife property that was successful in bringing back woodland birds by encouraging natural regeneration.

Susan Finlay provides some tips on revegetation in dry times, and Nick Clancy provides some advice on using fire rakes. Penny de Vine highlights a community champion, and Land for Wildlife member, who has been instrumental in monitoring and reducing wildlife fatalities on roads.

I hope you find this edition of interest and are inspired to continue conservation work on your property. The benefits hopefully lie in seeing a Richmond Birdwing Butterfly, or a Speckled Warbler or a Red-necked Wallaby. Happy spotting!

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Landholder Registrations, Land for Wildlife SEQ - 02/04/2007

Registered Landholders	Working Towards Registration	Total Area Retained	Total Area under Restoration
1981	406	39,947 ha	2,792 ha

fauna profile

The Speckled Warbler - an indicator species

Article by Gayle Drabsch
Land for Wildlife Extension Officer
Gatton Shire Council

The Speckled Warbler (*Chthonicola sagittata*) can be found in a wide range of eucalypt-dominated vegetation that has a grassy understorey from central Queensland through eastern New South Wales to south-west Victoria, mostly on the hills and tablelands of the Great Dividing Range and on the drier sections of the coast.

Their 120 mm length includes 45 mm of tail which in flight, displays a black band with a white tip. Upper body parts are grey with dark stripes while the dark crown has light streaks; their dark eyes standing out against a pale face. Males have a broad black streak above a white eyebrow while females have a similar chestnut streak. Underparts are cream with bold black streaks.

Usually found feeding in pairs or small family groups, Speckled Warblers hop briskly over the ground foraging for insects and small seeds among the grass, leaf litter, logs and rocks. They are often seen feeding alongside other small ground feeding birds such as Yellow-rumped Thornbills, wrens and finches.

Speckled Warblers have a harsh chatter especially when disturbed as well as a subdued warbling song. They are also accomplished mimics.

Breeding from September to March, three to four chocolate-red eggs are laid into a dome-shaped nest made of dried grasses and bark strips, and lined with softer materials such as fur and feathers. The nest is built into a slight hollow in the ground with a side entrance to allow them to walk directly inside. It is carefully hidden in matted grass, tangled debris or amid the roots of a low bush.

Black-eared Cuckoos and Horsfield's Bronze-Cuckoos are known to use Speckled Warblers as hosts for their young.

In the Lockyer Valley, a Land for Wildlife property has been deliberately managed to encourage colonisation by woodland species including the Speckled Warbler. This property had been farmed and grazed for generations and when the



current owners purchased their 3 hectares almost 20 years ago, only a few isolated eucalypts remained. They set about increasing the amount of native vegetation on the property by excluding stock, permitting natural regeneration of eucalypts and wattles, and also planting a native garden around their house.

Within 5 years, small stands of eucalypt and wattle saplings had established and created a leaf litter layer on the ground. At this time, Speckled Warblers were first observed on the property. Encouraged by the appearance of several woodland bird and mammal species, they contacted the Lockyer Catchment Centre for assistance to commence native tree planting projects to compliment the natural regeneration.

A few years later, more woodland bird species such as the Eastern Yellow Robin, Rufous Fantail and White-throated Honeyeater had moved in as well as several native mammals including Squirrel Gliders. At the time of writing, Speckled Warblers have been present on the property for 14 years and now reside there year round and produce young annually.

Though not listed as threatened under the *Nature Conservation (Wildlife) Regulation 2006*, the Speckled Warbler has been recognised as declining in density over its range due to habitat destruction and fragmentation. Grazing can contribute to the loss of the moderately dense ground cover that the warblers require.

Birds of the Darling Downs – A Land Manager's Guide classifies the Speckled Warbler as one of the indicator species used to monitor the effects of management practices on bird diversity.



Speckled Warblers.
Photographs used with permission.

As a species that responds to habitat condition, its presence can indicate that your management practices are sympathetic to retaining the biodiversity values of native vegetation.

The following recommendations may encourage warblers on your property:

- Maintain and protect large and diverse areas of remnant vegetation.
- Maintain and/or establish corridors and “stepping stones” of native vegetation between remnants.
- Maintain and/or re-establish complex understorey and ground cover of litter and logs.
- Control feral predators (cats and foxes).
- Control and reduce firewood collection.
- Reduce grazing in woodland areas.

References

- Ford, G. & Thompson, N. (2005). *Birds of the Darling Downs – A Land Manager's Guide*. North East Downs Landcare Inc.
- Frith, H.J. (Ed.) (1977). *Reader's Digest Complete Book of Australian Birds*. Reader's Digest Services Pty. Ltd., Sydney.
- Garnett, S. T. & Crowley, G.M. (2000). *The Action Plan for Australian Birds 2000*. Environment Australia.
- Pizzey, G. & Knight, F. (2003). *The Field Guide to the Birds of Australia*. Harper Collins.
- Simpson, K. & Day, N. (1993). *Field Guide to the Birds of Australia*. Viking O'Neil, Penguin Books Australia Ltd., Victoria.
- Slater, P., Slater, P. & Slater, R. (2001). *The Slater Field Guide to Australian Birds*. Reed New Holland.
- Trouson, D. & M. (2002). *Australian Birds – A Concise Photographic Field Guide*. Bluestone Press, Seaford, Victoria.
- <http://www.users.bigpond.com/LesMikeBrooker/hosts.htm>

climate adaptation

Climate Change and Its Implications for Managing Your Property's Bushland

Article by Stephanie Reif
Land for Wildlife Extension Officer
Maroochy Shire Council

Climate change is certainly a topical issue with scientists indicating we are already experiencing the effects of climate change. Almost daily we hear figures on how our average temperatures have risen and talk of the changes climate change will have in Australia. Many landholders have made changes to their lifestyle so they can reduce their greenhouse gas emissions. There are many sources of information available for people to explore actions they can personally take to reduce their contribution to climate change. This article intends to explore actions landholders can undertake on their properties to make them more able to withstand the impacts of climate change.

It is now acknowledged that climate change has started to occur even if we further reduce greenhouse gas emissions. Both maximum and minimum temperatures in Queensland are increasing. Queensland's annual rainfall has dropped, especially in coastal areas south of Cairns, and will continue to decline. Overall, Queensland will get hotter, nights will be warmer, there will be less frosts, more extremely hot days, longer hot spells, higher bushfire risks, less rain in southern coastal areas and less soil moisture. The results of these new climatic conditions will be reflected in changing ecological processes in our own backyards.

In the 1980's and 1990's discussions on climate change focused mainly on how to reduce greenhouse gas emissions as the sole solution to climate change. Since then discussions have started to emerge that talk about adaptation to climate change and mitigation of the effects of climate change, whilst still recommending that we substantially reduce our greenhouse emissions. This trend has allowed scientists and land managers to discuss how we should manage our natural environment to ensure that biodiversity best adapts to climate change. The following article gives a brief outline of the discussions to date and for those who want more information a number of references are given below.



It is unclear how weeds, such as this invasive Blue Trumpet Vine (Thunbergia grandiflora) will respond to climate change. Photo courtesy of Maroochy Shire Council.

Ecosystem resilience

Current thinking encourages us to build resilience in our ecosystems so they can better withstand the impacts of climate change. So what does resilience mean? Resilience is a measure of how well an ecosystem copes with and recovers from stress and disturbances such as bushfires, cyclones, weed invasion etc. Basically the healthier an ecosystem the better it will withstand additional stresses resulting from climate change, and the healthier an ecosystem the more resilient it is thought to be.

It is important to allow the natural processes occurring in ecosystems to continue with minimal intervention on our behalf. One way to increase the resilience of ecosystems is to decrease the amount of disturbance to them. For example remnant bushland along a creek being invaded by environmental weeds with no attempt at weed control, would be thought of as less resilient than a similar area where weeds are being controlled.

To build resilience in our ecosystems we need to undertake three activities:

1. Provide habitat areas in adequate amounts (this may include provision of new habitat areas);
2. Limit other threats to our existing habitat areas and;
3. Be adaptive to new recommendations as our knowledge increases.

We need to allow species to adapt to climate change, monitor and conduct research into these changes and be able to implement strategies to protect species that are particularly vulnerable to climate change.

Specific actions for landholders

To make our properties more resilient, we need to continue to increase the health of the bushland on our properties. We will also need to look at our properties overall and try to get them as environmentally healthy as possible. These activities may involve controlling weeds, revegetating watercourses, fencing remnant bushland from grazing, planting corridors and providing or creating habitat for rare and threatened species. We may also have to undertake specific projects in our local areas to provide habitat for species particularly threatened by climate change.

Retaining and reinstating habitat areas

It is important to remember that retaining native vegetation on your property keeps the carbon stored in the vegetation out of the atmosphere. Apart from the very obvious benefit planting trees has on reducing the amount of carbon dioxide in the atmosphere, providing additional areas of habitat on your property will provide more habitat at the landscape scale, so that animals have more habitat areas to utilise especially when moving through the landscape. Encouraging natural regeneration of bushland where suitable also traps carbon and provides further habitat areas. Connecting patches of bushland by planting corridors or establishing bushland in a cleared landscape will provide stepping stones that wildlife will potentially need to use to migrate to areas of more suitable habitat.

Watercourses

Revegetating creek and river-side vegetation will become more important as these areas form natural corridors in the landscape. Increasing variability

in rainfall is predicted to occur with climate change. This may result in heavier rainfall events that will mean erosion could potentially be worse along riparian areas. Riparian areas are already known to be refuges for animals in drought periods and with the predicted increased variability to our rainfall patterns, riparian areas will become even more important to wildlife during prolonged droughts.

Weed management

Having relatively intact bushland in a mostly weed-free condition will better enable bushland to cope with climatic changes. It is not known how individual weeds will respond to climate change. Some weeds may extend their ranges, others may become more or less weedy and some exotic species not known to be weedy may become so. Having intact vegetation will mean fewer opportunities for weeds to colonise. Having the weeds on your property under control will mean your property will not be a source of weeds to surrounding areas.

Revegetating with locally native species and limiting your use of exotics will mean current and future environmental weeds will not be using your property as a refuge. Becoming more familiar with the native and exotic species on your property will help you identify new weed species which may spread from northern Australia as a response to increasing temperatures. Native species may also extend their ranges and privately managed bushland will be important areas for these plants to establish.

Soil management

As a result of predicted hotter and windier conditions, evaporation will increase which, in turn, will reduce soil moisture. Unpredictable heavy rainfall events combined with reduced soil moisture will increase the risk of soil erosion and flooding. Healthy soil is the building block for healthy ecosystems. Loss of topsoil leads to a loss of fungi, vegetation and wildlife. It is therefore important to maintain vegetative ground cover to protect the soil from wind, water and evaporation. To encourage healthy soil and vegetative ground cover consider fencing bushland areas from stock and in pasture areas, and adopt stocking rates that maintain pasture cover to above 70%. Also ensure that grasses, herbs, and other ground covers are included in revegetation.



Fire management

Implementing fire management strategies will become more important for properties with fire prone vegetation. It is predicted that climate change will increase the risk of prolonged droughts and more days with fire weather conditions (high temperatures and low humidity) will increase the risk of wildfires. This will mean landholders will have to be even more careful to manage the impacts of fire on their property's vegetation. Undertaking the activities recommended by the SEQ Fire and Biodiversity Consortium and others will minimise the detrimental impacts of fire on biodiversity. For example, implementing a mosaic pattern of burning will reduce the chance of hot damaging wildfires. Whilst retaining dead wood in the environment and protecting old habitat trees by raking around the base of trees will lessen the impacts of fire on biodiversity. Landholders can complete an Individual Property Fire Management Plan available from the SEQ Fire and Biodiversity Consortium website or from your Land for Wildlife Extension Officer.

Thoughts for the future

As with other changes humans have made to our environment some species will benefit from climate change whilst others will not. Many weeds may have an increased advantage over native species whilst some already threatened species will become more threatened and may go extinct. Maybe some of our native species will flourish similar to how urban environments have benefited the native Noisy Miner to the detriment of smaller bird species.

Revegetating waterways and fencing out stock will become more important to protect soil due to climate change. Photo courtesy of Maroochy Shire Council.



Climate change may further negatively impact on threatened and declining species including the Richmond Birdwing Butterfly. Image courtesy of Greg Downes, Land for Wildlife Buderim.

There is still a lot of uncertainty as to how ecosystems and species will be affected by climate change. Keeping up to date with climate change science should be a priority for all involved in nature conservation activities. Observations by landholders will be important for making decisions on a local scale.

One thing to be sure of is that the more resilient you make your property the better it will be able to support our native plants and animals in the future. The more work you put in now controlling weeds, revegetating creek lines and protecting the soil, the easier it will be to manage your property in the future. Your property can be part of a proactive on-ground solution to climate change.

Further Reading

(all available on the internet)

Building resilience to climate change for Australia's species and ecosystems, World Wildlife Fund Australia.

Climate change: the challenge for natural resource management (2004) Queensland Department of Natural Resources and Mines.

National Biodiversity and Climate Change Action Plan 2004-2007 (2004) Australian Government Department of Environment and Heritage.

Migratory species and climate change - impacts of a changing environment on wild animals (2006) UNEP/CMS Germany.

Climate Smart Adaptation: What does climate change mean for you? (2005) Queensland Government.

fauna profile

Richmond Birdwing Butterfly, Part 2: their host vines

Article and uncredited photos

by Deborah Metters

Land for Wildlife Regional Coordinator

SEQ Catchments

The January Land for Wildlife newsletter presented Part 1 on Richmond Birdwing Butterfly ecology. This article (Part 2) focuses on the ecology of the host vines, their propagation and conservation efforts in South East Queensland (SEQ).

Larvae (caterpillars) of the Richmond Birdwing Butterfly are fussy eaters. They will only eat the leaves of two species of plants. These plants are both native vines found in sub-tropical rainforests of SEQ and northern coastal NSW. Both vines are commonly called Richmond Birdwing Vines. *Pararistolochia praevenosa* naturally occurs in lowland forests <600 metres in elevation, while *Pararistolochia laheyana* occurs in high-altitude sub-tropical rainforests over 600 metres in elevation.

The distribution of Richmond Birdwing Vines has declined dramatically in SEQ since European colonisation. Consequently, the abundance of the Richmond Birdwing Butterfly has also sharply declined, and disappeared, from many areas. Butterflies used to be seen flying down the Queen Street Mall. Habitats for the vines are becoming more fragmented and the prolonged drought has led to further declines.

Community and scientific concern over the decline of the Richmond Birdwing Butterfly has led to outstanding recovery efforts in propagation, distribution and re-establishment of host vines. The vines have an intricate ecology that must be taken into account when conducting any recovery activities.

The 'coastal vine' *Pararistolochia praevenosa* occurs mostly along riparian corridors on basaltic soils. It can also occur uncommonly on shales and sandstone soils. It grows in heavy shade and also in open conditions as long as there is good soil moisture and no fire.

The 'montane vine' *Pararistolochia laheyana* grows on rich volcanic soils (mostly basaltic) along the ridges around Springbrook and Lamington National Park.



Flowers

Flowers of both Richmond Birdwing Vines are pollinated by one species of midge (*Forcipomyia* species). This is an example of coevolution with high degrees of ecological specificity between plant and animal. It is not yet known if there are any benefits to the midge in being the sole pollinator of these vines. There is no nectar, but there is a smell that may trick male midges into entering the flower. The tubular flowers of the coastal vine are small (about 2.5 cm in length) and have a bend in the middle preventing larger insects from accessing the pollen and the reproductive organs. Flowering occurs mostly between September and December.

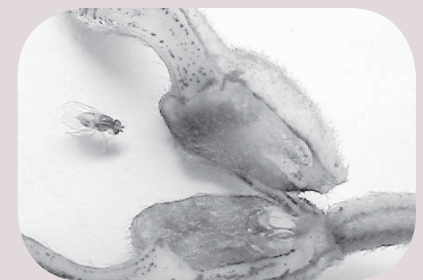
Fruit and seeds

Successful pollination of *Pararistolochia praevenosa* produces a fruit which becomes soft and bright yellow when ripe in autumn. The fruit contains 25-60 seeds and drops to the ground when ripe. Seeds are only viable if they are kept moist. Thanks to the Australian Brush Turkey, the seeds of the Richmond Birdwing Vines are distributed and buried through the forest. Brush Turkeys eat the pulp of the fruit and bury the seeds by scratching. Seeds will not survive if eaten by turkeys. Brush Turkeys are the only known agent for dispersing the seeds.

Pollinating midges breed and live in wet leaf litter. Land for Wildlife landholders, Ray and Pam Seddon, have been propagating the host vines to enhance the natural vine population on their property. Ray and Pam have also planted many *Lomandra longifolia* plants as it is believed that these clumping rushes provide breeding habitats for the midge.



Nick Clancy, Ray Seddon and Pam Seddon near a Richmond Birdwing Vine on the Seddon's Land for Wildlife property.



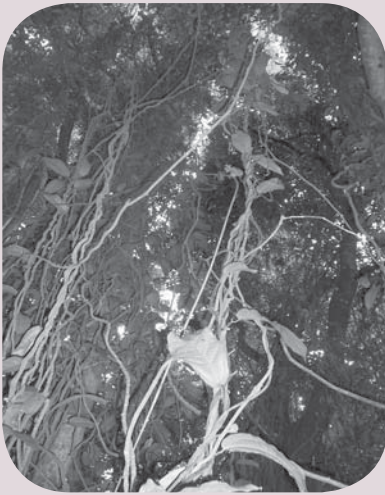
Flowers and pollinating midge of the Richmond Birdwing Vine (*Pararistolochia praevenosa*). Photo by Ray Seddon.

There are examples where the Richmond Birdwing Vine has been planted and is growing well, but is not setting fruit. In these scenarios it is likely that the pollinating midge has disappeared from that area. It is possible for the midge to be re-introduced into an area if required.

Vine identification

Many vines are notoriously difficult to identify in a rainforest with the leaves, flowers and fruit high up in the canopy. Thankfully, *Pararistolochia praevenosa* maintains many leaves on the entire stem near to the ground, even in mature plants. The leaves are alternate with twisted petioles (the small leaf stem). The twist in the petiole and often in the leaf itself helps the vine to cling onto supporting plants. There is a small ridge around the stem at the point of leaf attachment. *P. praevenosa* is multi-stemmed and often climbs up its own stems. The stem of *P. praevenosa* is also quite distinguishable with its light brown fissured texture.

Most 'look-alike' vines have opposite leaf arrangements or swellings on the leaf stem. These are clear indicators that the plant is not a Richmond Birdwing Vine.



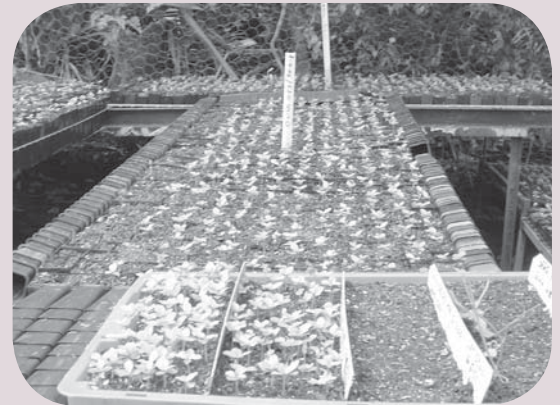
Pararistolochia praevanosa vine climbing up into the canopy. Photo by Nick Clancy.



Flowers of *Pararistolochia praevanosa*. Photo courtesy of the Richmond Birdwing Recovery Network.



Richmond Birdwing Butterfly pupae on *Pararistolochia praevanosa*. Note the twisted petiole of the leaf.



Propagation of the Richmond Birdwing Vine on Ray and Pam Seddon's property.

Vine predators

Apart from Richmond Birdwing caterpillars, other invertebrates utilise Richmond Birdwing Vines. A moth causes spot defoliation and some insects eat the leaves, such as larvae of the Clearwing Swallowtail or Big Greasy butterfly (*Cressida cressida*).

Viable populations

An individual vine needs to produce about 50 leaves before it will support a Richmond Birdwing caterpillar. Based on observational data, a minimum of 30 vines, that are at least 5-8 years old, are required to support a viable colony of Richmond Birdwing Butterflies. This amount may still not be enough to prevent in-breeding depression if the colony is very isolated in the landscape. Given that a quarter of all vines planted may not survive, it is recommended that at least 60 vines are planted at one site if the aim is to establish a colony or become a part of a birdwing corridor.

Propagation

Several Land for Wildlife landholders have led the way in propagating Richmond Birdwing Vines. Propagation techniques vary and have been refined over the past few years.

Christine Hosking propagates vines on her Land for Wildlife property in western Brisbane. She mixes the Richmond Birdwing Vine seeds into slurry with water. This is then poured onto potting mix in polystyrene boxes and covered with another layer of potting mix. The boxes are covered with plastic to retain humidity. Ray Seddon plants seeds directly into tubestock on his Land for Wildlife property near Mt. Mellum. Patience is required as seedlings appear 8-12 weeks after sowing. It then takes another 20 months before the vine is ready to plant out. The vines need to be protected from direct sun, wind and frost at all stages of propagation.

Pararistolochia praevanosa can also be propagated using cuttings, but seeds provide improved genetic strength.

Planting

Vines should only be purchased from reputable nurseries and all vines should be tagged with an authorisation permit in accordance with Queensland legislation. Richmond Birdwing Vines can be planted all year round but need to be kept moist and protected from strong winds, frost and fire.

When planting, do not tease out the roots and do not press down the soil after planting. The root tips are very sensitive. Water in plants with at least 10 litres of water. Mark the planting location with flagging tape or with support structures such as dead bamboo poles or coloured bailing twine.

It is important to remember that in a rainforest environment, light is a key determinant of growth patterns and growth rates. Naturally in rainforests, many plants will 'wait' until there is a break in the canopy. When the light does arrive, plants respond quickly and grow upward. When they are in the 'waiting' phase, they may remain thin and may branch out horizontally. So when planting Richmond Birdwing Vines, it is crucial to consider light availability, soil moisture and protection from hot or dry winds.

References

- Richmond Birdwing Recovery Network. Program and Abstracts of workshop on 22 November 2006.
- Personal communication, Dr. Don Sands, Honorary Research Fellow, CSIRO.

property profile

The Fassifern Field Naturalists' Native Scrub Plot

Article and photographs by
Pam Goodwin and Wendy Dunn
Fassifern Field Naturalists Group

The beauty and diversity of local scrub remnants prompted members of the Fassifern Field Naturalists Club to encourage the protection of native flora with a community planting project. In 1988, the club proposed to the Boonah Shire Council that they take responsibility for planting scrub on the steep slopes that were part of the cow paddock Council had acquired to develop into the Boonah Bicentennial Park. The site was almost a cliff, with boggy conditions at the base, with poor soil, exposed to winds, subject to frost and infested with weeds.

The clearing of lantana, cestrum, asparagus, celtis and other weeds commenced in 1988. Planting of local trees began in 1989. The emphasis was on local trees which produce fruit or seed for native birds. Seeds were gathered from around the district, propagated in backyard nurseries and planted out over the years by members at numerous working bees.

Fast growing Melaleucas and Acacia are planted at the bottom of the slopes to protect and shelter the more delicate species from frosts. Within the plot a number of endangered plants once found locally have been planted. These include rare and endangered species such as *Corynocarpus rupestris*, *Planchonella eerwah*, *Brachychiton turgidus* and *Acacia brunioides*. Over a hundred different species of plants have been planted.

At the request of residents on Mount Carmel who did not wish to have their views blocked by trees from our plot, we decided the higher slopes could be planted with heath type vegetation and small Grevilleas to provide food and habitat for small birds. Eventually pathways will be established through the scrub for viewing and enjoyment of the many species of trees.

By June 2001 the plot had been granted Land for Wildlife registration and it was also a registered 2 hectare search area for the Birds Australia Atlas project.



The Plot in 1993.



The Plot in 2006.



Setting the sign in place, 1997.

Though not large, our scrub area is now quite impressive and the mass planting of local species is providing habitat for a variety of wildlife: birds, marsupials, reptiles, insects, butterflies and the micro-life of the forest floor. Fruiting and flowering trees are attracting more and more birds on a seasonal basis. So far, eighty six species of birds have been sighted. Some of the fruiting trees have self-sown in the leaf litter and native ferns once hidden by lantana and asparagus are thriving amongst the rocks in the shade of the trees.

Enthusiastic club members, some of whose input has been exceptional and tireless, with help from time to time from other groups, have worked at clearing, planting, weeding, collecting seed, propagating and watering.

Boonah Shire Council has supported the project through making the land available, laying a water pipe to the site, loaning equipment and donating materials from time to time.

We have had some very positive feedback from other groups, clubs and individuals who have visited our plot. The scrub is clearly visible from the road and draws a lot of interest from the community and visitors. It is marked by an impressive sign made of an old log with the name of the plot and club carved initially by a woodworking member and installed and painted at a working bee.

Copies of our Field Naturalists Club brochure are available at the Information Centre in the park. This encourages visitors to learn about local plants which can only be found at various other 'out of the way' places throughout our district.

practicalities

Rake a well-earned break

Article and photographs by Nick Clancy
Land for Wildlife Extension Officer
Caloundra City Council

If you are planning to undertake a fuel reduction or ecological burn on part of your property in the near future, below are a few things you may wish to consider incorporating into your preparations.

Old trees with hollow trunks and limbs are crucial habitat features for many species of native wildlife. These older trees often have 'pipes' running up through the trunk of the tree. When these 'pipes' ignite they are a major concern to fire fighters as they are difficult to extinguish, and left unchecked can burn for days. Once ignited a tall hollow tree will send flames up the inside of the trunk which acts like a chimney, increasing the flame height and increasing the potential for embers to cause spot fires beyond containment lines. For this reason, burning hollow 'pipe' trees are often felled so that the risk of spot fires or re-ignition is reduced, and unfortunately another (upright) habitat tree is lost.

The decision fire fighters often face is to either fall a burning hollow tree, extinguish the flames and go home, or stay up all night and watch for potential spot fires. After many hours of hot and smoky work it is understandable why the decision taken is usually the former.

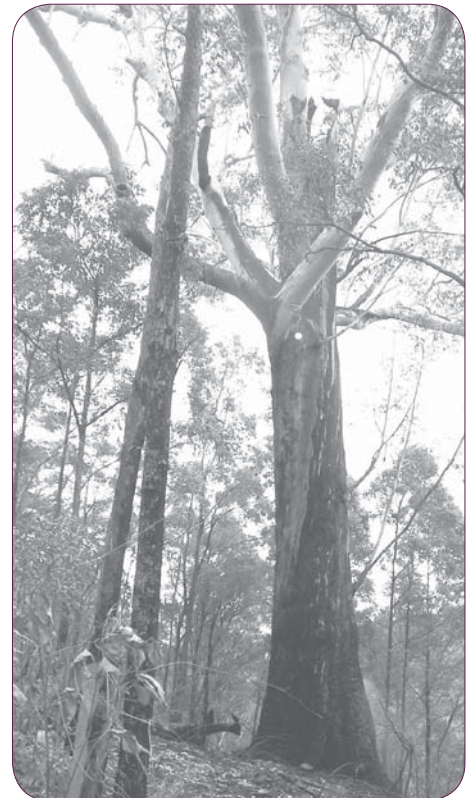
Spending more time preparing prior to a planned burn can reduce the likelihood of this scenario. By raking flammable fuels such as leaves, loose bark etc from around the tree it is much less likely to ignite. In this way the habitat tree stays upright for the foreseeable future and everyone can hopefully knock off a bit earlier as the smouldering chimney doesn't have to be watched in case of re-ignition.

Hollow logs lying on the ground are also important habitat and refuge for fauna. These habitat features are also best raked around prior to conducting a controlled burn. If working on steep slopes do not rake leaf litter into a pile down slope of the hollow tree or log, rather spread it out to the sides and up slope.



A Rake-hoe or McLeod tool (shown) is a very useful tool for undertaking fire preparation activities such as chipping preparation containment lines and raking around assets you want to protect such as fence posts and habitat trees. The pronged side of the tool is used for raking coarse debris such as bark and sticks, while the 'blade' side is used for scraping back smaller debris to bare earth. This tool is not just limited to fire management activities it also comes in handy for chipping out weeds, track construction and track drainage works such as constructing 'whoa-boys'.

For more information on managing fire on your property please visit www.fireandbiodiversity.org.au or ask your local Land for Wildlife Extension Officer for a fact sheet.



This Blackbutt (Eucalyptus pilularis) is hollow through the centre. The 'chimney' continues to smoulder well after the fire event. Strong winds can easily re-ignite the tree, potentially leading to spot fires and a fall from grace for a centuries old habitat tree.

property profile

“Kindilan”

*Article by Gavin Hammermeister
Land for Wildlife Extension Officer
Redland Shire Council
Photos courtesy of Redland IndigiScapes Centre.*

Kindilan is an Aboriginal word meaning “place of joy” which is exactly what this property strives to achieve. Kindilan as the property is known has been owned by Guides Qld since 1949. The Guides Qld organisation is affiliated with Guides Australia which is a member of the World Association of Girl Guides and Girl Scouts. The property is located in the southern end of Redland Shire at Redland Bay and is 83 hectares in size which makes it one of the largest Land for Wildlife registrations in the Redlands. The property is totally vegetated except for 3 hectares where the Guides have their offices and conference facilities.

From within the property, Guides Qld operates the Kindilan Outdoor Education and Conference Centre. The centre specialises in outdoor education packages and adventure training for school, corporate and community groups. They have both private accommodation and conference facilities. Some of the activities they offer include high/low ropes, abseiling, archery and other environmental activities. There is also a large dam on the property where they undertake water based activities.

Some of the environmental activities that take place on the property include information on creeks and waterways, bush art, board games with environmental messages, the Kumanka trail bushwalk, interpretation and orientation.

Kindilan was one of the earliest registrations in the Redland’s Land for Wildlife program, joining in June 1999. The property forms significant linkages with neighbouring Council reserves and National Parks bolstering the available protected habitat in the southern end of the Shire’s Koala corridor to over 350 ha.

The majority of the property’s remnant vegetation is the Endangered Regional Ecosystem (RE) 12.11.23 – Blackbutt and Scribbly Gum Open Forest. This vegetation type covers about 65 hectares of the property while the remainder of remnant vegetation are the Not-of-concern RE’s 12.11.5j – Scribbly Gum Open Forest and 12.3.6 – Qld Blue Gum Forest and Melaleuca wetland. The remnant vegetation is in excellent condition with little or no weed incursion. There are many large Blackbutt and Scribbly Gum specimens on the property, with a great deal of these providing excellent habitat in the form of hollows.

The Kumanka trail bushwalking circuit within the property is 3 km in length and takes about 1 hour to complete at a comfortable pace. This circuit takes in the large dam on the property plus many large Blackbutt and Scribbly Gum trees as well as the Forest Red Gum and Melaleuca wetland. At the half way point of the walk the circuit winds its way up to the highest point on the property which has views across the Southern Moreton Bay Islands, North and South Stradbroke Island and the skyline of the Gold Coast.

Around the offices and conference facilities there has been some weed invasion as is typical with any form of disturbance. Weeds include lantana, Easter Cassia, Umbrella Tree, Camphor Laurel



An example of one of the many hollows within the property. This one is in a Scribbly Gum.



The dam (above) and Scribbly Gum forest (below) on Kindilan.



and Singapore Daisy. Kindilan has its own grounds person who undertakes regular weed control activities within this area to limit the spread into the remnant vegetation.

Since joining Land for Wildlife, Kindilan have also joined Redland Shire Council’s Rural Support Program and in the future wish to include SEQ Catchments in this partnership to further enhance the environmental outcomes of the property.

The property also has a quarry as a neighbour which poses some risk as the quarry operations extend right up to the property boundary with Kindilan. These actions have resulted in some erosion and loss of vegetation.

book reviews

Plants of the Forest Floor.

*compiled by Penny Watsfords,
illustrations by Margaret Elliott,
photographs by Robert Price and Lui Weber.*

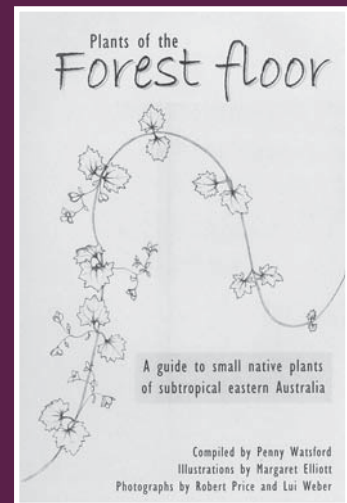
This spiral bound book is compact and value for money. Years of bush regeneration work conducted in the northern rivers region of NSW has focussed on planting canopy species. Where the canopy has been established, the focus can now shift to plants of the forest floor such as grasses, sedges, herbs, ferns and vines. This book is a response to the growing community interest in understorey plants.

Of the thousands of native understorey plants that exist in the subtropical region from Coffs Harbour to Bundaberg, this book details about 80 common species. Black and white line drawings and some basic ecological information accompany each species. I am a visual learner and have always found line drawings challenging, however they are very useful when doing leaf comparisons, as is the

case with rainforest ID books. The page on leaf comparisons for 'groundcovers with roundish leaves' is a good example of how line drawings can help to distinguish similar plants.

The simplicity of the book is well supported by the accompanying CD-ROM which has colour photographs of all plants mentioned in the book. There are about 160 photos on the CD-ROM and they are categorised either alphabetically or according to the corresponding book page or by plant form (grass, groundcover, fern, tufted plant or twiner).

The language of this book is simple and non-botanical. A brief introduction to forest types (rainforests and open sclerophyll forest) and other organisms of the forest floor – fungi, algae, lichen and moss is given in the beginning of the book. At the end, there is discussion about understorey plants that are suitable for pots and urban gardens. Overall, this is a great little book and CD-ROM for anyone interested in learning more about understorey plants.



Published by Nullum Publications, 2006.
Soft cover, 117 pages plus a CD-ROM.
ISBN: 0 9756823 1 8
RRP \$15.00. Available from Barung
Landcare on (07) 5494 3151 or
other environmental book stores.

Book reviewed by Deborah Metters.

Platypus: the extraordinary story of how a curious creature baffled the world.

by Ann Moyal.

I picked up this book from the local library thinking that it would be an account of platypus natural history - how it is related to other animals, its ecology, current conservation threats, as well as some background information on how the platypus was first known to scientists in Europe. I was partly correct but wasn't prepared for the amount of detail that dealt with exactly how the platypus did baffle scientists for decades.

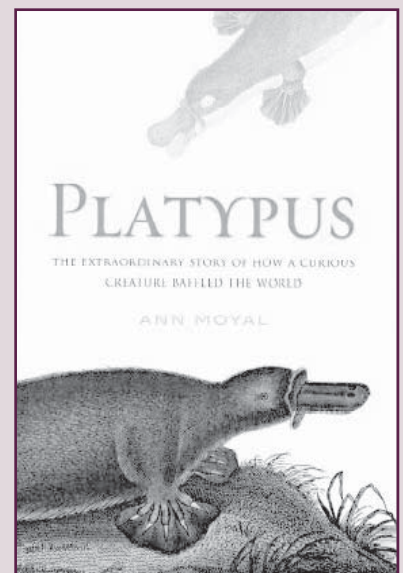
In its fifteen chapters "Platypus" explores the first sightings of the platypus in the wild by Europeans, the English response to first seeing the platypus (that it was a hoax) and attempts to classify the animal. It took an amazingly long 90 years to discover the platypus was oviparous (that it lays eggs which hatch outside the body).

From a scientific history point of view, it explores the rivalry between France and England in the natural history field in the early 19th century and how Australia's natural history was mostly decided by scientists in Britain and Europe (who had

sometimes never been to Australia!).

This book also explores the impact that Darwin's theory of evolution had on the scientific community and the emergence of an Australian scientific community – scientists based in Australia studying Australian animals.

"Platypus" explores all these themes as they relate to platypus and the gradual understanding of a very secretive animal. It gives you the life history information in a chronological sequence as it was discovered. Whilst it gives some information on the conservation of platypuses in the wild, most of this information relates to the early attempts to breed platypuses in captivity. It doesn't really give the reader an insight into current conservation – this subject is covered in other books. However as a science history book it is well put together, reads very well and covers the information that is in its title – the extraordinary story of a how a curious creature baffled the world.



Published by Allen and Unwin, 2001.
Soft cover, 248 pages, colour plates.
ISBN: 1 860508 373 9
RRP \$22.95

Book reviewed by Stephanie Reif.

practicalities

Increasing the Survival of New Plantings

Article by Susan Finlay
Land for Wildlife Extension Officer
Brisbane City Council

To plant or not to plant? That is the question on most bush carer's lips at the moment. It's hot, it's dry and the rain is playing 'hard to get'. Is there any point in planting when new plants might not survive these difficult times? Paradoxically, we have a whole lot of atmospheric carbon waste to mop up. Plants are the obvious weapons-of-choice to sequester CO₂ and cool the planet. We can't give up planting now!

So how do we ensure maximum success rates of new plantings? This article hopes to provide some direction on getting the most from your plantings during this challenging time.

The right plant in the right place...

To help with species selection, take inspiration from what grows naturally on your property and/or locally. Check with your Land for Wildlife Extension Officer or local bushcare group to see if they can provide you with a species list of plants known to grow in your area or work on preparing your own list. The endemic species present in your area are the result of thousands of years of adaptation to the conditions present.

Plant communities depend on the soil type they are growing in so learning of the soil type present on your property, and the species typically found to grow in it, is a great place to start. Mother Nature knows best, so listen to your mother!

Site selection is the next key to success. Steep slopes, highly exposed areas, major weed infestations, shallow, compacted, rocky, sandy or dense clay soils are all significant challenges to planting success. A general rule of thumb is to work from your healthiest habitat remnant out. Otherwise select sites that are easy to access, have few weeds, have healthy plants growing nearby and the most amount of soil moisture (i.e. least exposed to sun/wind such as gullies, shady areas or lower parts of slopes especially those facing south).

If you wish to tackle a highly exposed area consider planting pioneer species that are fast growing and short lived that will create a better micro-climate for longer lived species.



Healthy nursery tubestock plants.

Once you have chosen your site and considered the conditions, you will be better equipped to select suitable plants. Shop for plants that are grown from local seed as these are best to use, or consider propagating your own. A good nursery will also be able to provide expert advice on the specific growth requirements of the plants you wish to use.

Tubestock in 50 mm square tubes are recommended as they often establish faster than larger seedlings. They are also cheaper and require less site preparation. Square tubes also minimise the spiralling of roots.

Other influencing factors on planting success are animals that may graze on, uproot or trample your plantings. Weeds may out compete or smother them. Other plants may produce chemicals that inhibit growth (alleopathy) of adjacent plants eg. some eucalypt species.

Plan ahead...

Planting efforts are best made following decent falls of rain. Spring and Autumn are preferred planting times being normally cooler and more moist.

If you have areas that are struggling to grow anything, even weeds, you may need to work on improving the health

of the soil. A few months to a year prior to planting, the site can be specifically prepared to create better growing conditions for selected plant species.

Ripping up the soil with a rotary hoe or similar may be required to loosen compacted soils. This will allow more air, water and micro-organisms to enter the soil and improve the soil health.

Adding a generous layer of mulch (at least 75 mm) will help reduce erosion and weeds, break up clay soil, improve the water holding ability of sandy soils and encourage invertebrates, fungi and other organisms. Mulch reduces evaporation rates, and insulates plant roots from temperature change. If possible, moisten the ground before applying mulch.

Gypsum may be added to heavy clay soils before mulching to help aerate soils, and allow plant roots to penetrate the clay.

How to Plant...

- Prepare the site by loosening the surrounding soil for about 1 square metre to a depth of about 30 cm.
- Dig a hole twice as deep and four times as wide as the seedling container.
- Fill the hole with water and, when drained, half fill the hole with soil.
- Mix hydrated wetting agent (eg. water





Good Birdbath and Bird Feeder Hygiene

Article by Deborah Metters
Land for Wildlife Regional Coordinator
SEQ Catchments

Feeding wildlife is a subject that often incites passionate debate. It would be interesting to know how many of our Land for Wildlife members have a bird feeder or birdbath on their property. Possibly a question for our next landholder survey.

If you have decided to feed wild birds, or have installed a birdbath, this short article discusses some good hygiene principles to minimise the risk of birds catching diseases such as the one that caused bird deaths in England late last year. It's also a good idea to read Tech Note 20 in your Land for Wildlife folder for more background information.

The death of sparrows and finches in England was caused by a parasite that usually only affects pigeons and doves. It seems that hot weather combined with sharing of feeders and birdbaths helped spread the disease.

Given the predictions for hotter climates in Queensland, good hygiene of bird feeders and birdbaths is important. Some guidelines to reduce the risk of bird diseases at feeding and watering stations include:

- Use stainless steel feeding equipment for effective cleaning.
- Regularly wash, clean and disinfect feeders.
- Wash, clean and refill birdbaths at least twice a week.
- Regularly move feeders and birdbaths to different locations on the property.
- Use feeders appropriate for bird species to ensure that the feed is not contaminated by droppings and to limit feed falling to the ground.
- Store feed in airtight containers in a cool, dry place. Discard feed (to landfill) if it becomes contaminated.
- Monitor bird health and stop feeding if birds appear sick or injured.

References

Plant, M. *Wild bird feeding activities on private property: towards best practice*. University of Queensland.

<http://environment.guardian.co.uk/conservation/story/0,,1871512,00.html>



Organise a working bee and use plenty of mulch.

crystals) through loose soil. These hold moisture in the soil for much longer and reduce watering efforts.

- Immerse the seedling in water deeper than the top of its container to soak the soil and remove trapped air.
- Carefully remove the seedling from the container and place in hole with the top of the root mass aligned with the ground level. Back fill the hole.
- Press soil down firmly, making a saucer shaped depression around the plant to collect water. If planting on a slope, build a swale with a mound of soil, rocks or logs on the downslope side of the plant to catch and hold rainwater.
- Give your new plant at least half a bucket of water and put at least 75 mm of mulch on, keeping it away from the stem of the plant; then
- Hand-water with a bucket or watering can once a week for two months until the plant is established.

Avoid the use of fertilisers during dry weather as they may damage the plant if not watered enough. If you must use them, organic, slow-release fertilisers are safer than chemical preparations. Many native plants do not require fertilisers and plants such as Banksias and Grevilleas cannot tolerate increased levels of nitrogen or phosphorus.

Watering...

New seedlings that are planted out and not properly watered during the first few months will rarely thrive and may even die, particularly if neglected during extended dry periods.

Occasional deep watering encourages deeper root growth that will help protect the plant from drying out. To avoid water loss through evaporation, apply water directly to the root area during the early morning or late afternoon and avoid watering if it is windy. Once established, most native plants will grow and thrive in response to rainfall with no additional watering required.

Other tips...

- Plant guards protect new seedlings from grazing, trampling and uprooting. Plastic guards create a mini-greenhouse and pink tinted varieties can increase the availability of red UV light to help stimulate growth. You can make your own out of staked chicken wire or old corrugated signs.
- Large rocks or pebbles around the base of seedlings will help to prevent Scrub Turkeys from digging them up.
- Jute matting will help prevent erosion on steep slopes.
- Rainwater can be collected on your planting site in vessels such as old bathtubs, cattle troughs or 44 gallon drums. Create collection 'roofs' out of corrugated iron.
- Sometimes it's best to not remove all weeds from a site at once. Some weed species such as Wild Tobacco can improve growing conditions for new seedlings by providing shelter whilst other weeds may be providing good wildlife habitat. These are typically less invasive species that can be removed and replaced gradually.

fauna research

Helping Wildlife to Cross Roads Safely

Article by Penny de Vine
Land for Wildlife Extension Officer
Logan City Council

South East Queensland contains many significant bushland areas which are home to a wide range of native animals. Across the region, wildlife corridors provide vital links between these significant bushland areas, as they assist in the maintenance of biodiversity. However, these corridors are often intersected by road networks and as a result animal-vehicle collisions can occur.

Every year, close to 2 million native animals die on Queensland roads. Minimising roadkill and fostering safe wildlife movement across identified roadkill hotspots is crucial. Minimisation of roadkill is becoming increasingly challenging as the population within SEQ continues to grow, along with associated infrastructure (especially roads).

Last year representatives from Brisbane City Council, Department of Main Roads, Environmental Protection Agency, Logan City Council, Redland Shire Council, and the community formed a unique partnership - the 'Wildlife Movement Solutions Working Group'. The group aims to adjust both driver and wildlife (specifically wallaby) behaviour in the Burbank-Mount Cotton area, an identified significant roadkill hotspot.

The group hopes to trial roadkill mitigation measures within the Burbank-Mount Cotton area. Prior to implementing mitigation measures, the group undertook some research into driver behaviour and attitudes towards roadkill. The results of this research will be used to ensure effective design, placement and targeting of mitigation strategies such as road treatments, signage and education material.

Some interesting results from the survey include:

- without prompting, drivers demonstrated a relatively high awareness of animal-vehicle collisions - 75% of respondents strongly agree that they keep a look out for wildlife when driving on roads in the pilot area;



A dead Red-necked Wallaby in a hotspot roadkill area. Note the wildlife UNfriendly fence. Sally Jenyns, Land for Wildlife member, successfully negotiated with the owner of this property to have the bottom of the fence lifted to allow for the movement of wildlife. Photo by Sally Jenyns.

- a majority of drivers (66%) consider animal-vehicle collisions to be an issue on these roads and there is a high degree (80%) of concern for the issue;
- 50% of respondents notice wildlife dead on the road infrequently (0-3 times in the last 3 months), while the other 50% of drivers see it frequently (more than once a month). There is a direct linkage between visibility of roadkill and concern about the issue;
- installing signage, vegetation management and road treatments are supported by 95% of respondents and these measures also had the highest level of perceived effectiveness; and
- almost 50% of respondents say their behaviour would be influenced 'a lot' by the trial zone project, approximately one third said their behaviour would be influenced 'a little' and only 18% indicated that the project wouldn't change their behaviour at all.

To compliment the research results, the group has been regularly collecting roadkill data within the trial zone so that hotspot areas can be identified and targeted for mitigation measures. This data may also discover patterns in roadkill victims (eg. age, sex, season, etc.).

Sally Jenyns, a resident of Burbank for over 40 years, collects roadkill data within the trial zone. Sally usually collects data up to 5-6 times every week and has been doing so for over 2 years.

Sally lives on a 29 hectare Voluntary Conservation Agreement and Land for Wildlife property of primarily open eucalypt forest with significant rainforest along the creekline. Numerous Red-necked Wallabies (*Macropus rufogriseus*) visit and reside on her property. There is also a declining population of Swamp Wallabies (*Wallabia bicolor*).



Sally Jenyns collecting data on roadkill in the Burbank-Mount Cotton area - an identified significant roadkill hotspot. Photo by Ben Jenyns.

Without Sally's hard work collecting data and talking with local government representatives, it's unlikely that the Wildlife Movement Solutions Working Group would have formed at all.

Other ways that Sally is helping wildlife to cross roads safely is by talking to many of her neighbours across the trial zone about wildlife friendly fencing, the

hazards of feeding wildlife and being alert when driving in the area. Sally also played a big part in the speed reduction along a section of Ford Road from 70 km/h to 60 km/h.

The Wildlife Movement Solutions Working Group is carrying out some great work in the Burbank-Mount Cotton area, but wouldn't have been able to do a lot of

it without Sally's help. The group has benefited enormously from (amongst other things) Sally's passion, dedication, incredible wealth of knowledge and the years of valuable roadkill data she's collected.

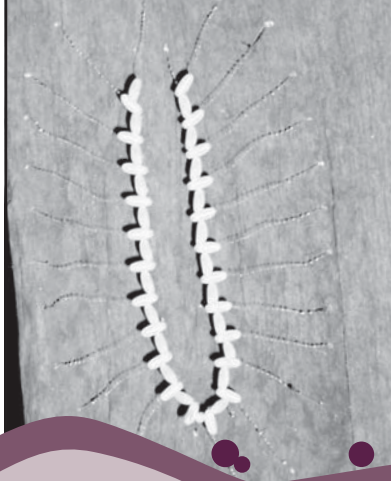
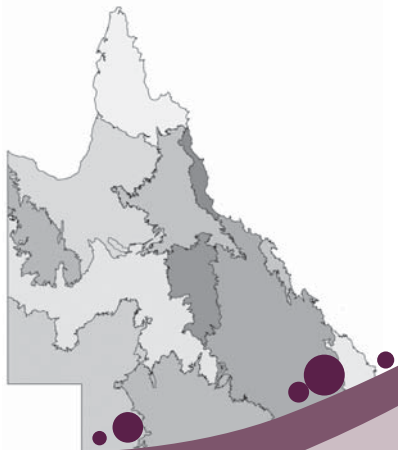
It is hoped that the learnings from the work carried out by the Wildlife Movement Solutions Working Group in the trial zone will be applied to other areas within SEQ. This will hopefully see a change in driver and wildlife behaviour and ultimately a reduction in wildlife mortality rates across the region.

What you can do to help:

- » Always watch out for wildlife on the roadside, but especially from dusk to dawn, and particularly approaching crests, corners or bends in the road and through gullylines.
- » If you do see wildlife by the side of the road:
 - slow down
 - briefly dim your lights
 - sound your horn.
- » If you do hit an animal, or see one that has been hit, call **1300 ANIMAL**.
- » When installing a new fence, make sure it's wildlife friendly (see January 2007 Land for Wildlife newsletter).
- » Don't feed native wildlife. Feeding can cause wildlife to:
 - develop an unnatural reliance on the food you feed them
 - become sick or unhealthy from the food you feed them
 - become more prone to crossing the road at unsafe points
 - lose their natural and reflexive instincts.
- » Be aware of your local wildlife – their health and wellbeing depends on us.



Watch out for animals like this Swamp Wallaby feeding on the side of roads. Slow down, dim your lights and sound your horn to reduce the risk of hitting wildlife. Photo by Penny de Vine.



The characteristic arrangement of lacewing eggs. Lacewings are predatory insects with dragonfly-like wings that are folded along their body. This lacewing species is probably Blue Eyes Lacewing (*Nymphes myrmeleonides*) which is the largest local species in South East Queensland. These lacewing eggs will hatch into grub-like larvae that live in leaf litter. The larvae eventually spin a silken cocoon in which they pupate into adult lacewings. Some other species of lacewing produce antlion larvae which dig the commonly seen conical pits in the ground that trap passing ants. Photo by Nick Clancy.



Letter from the State

Greetings Southeast Queenslanders! Today I would like to highlight an upcoming calendar date – June 5 is World Environment Day. World Environment Day is one of the principal vehicles through which the United Nations stimulates worldwide awareness of the environment and enhances political action.

The World Environment Day slogan selected for 2007 is *Melting Ice – a Hot Topic?* This theme focuses on the effects that climate change is having on polar ecosystems and communities, and the ensuing consequences around the world.

The purpose of World Environment Day is to give a human face to environmental issues; empower people to become active agents of sustainable and equitable development, and promote an understanding that communities are pivotal to changing attitudes towards environmental issues. There are many examples of the Land for Wildlife community changing attitudes and showing environmental leadership.

Another series of bushland management workshops for Land for Wildlife landholders took place in Inglewood, Stanthorpe and Mackay. We had outstanding attendance to the Stanthorpe workshop with over 50 people participating – well done Stanthorpe! A very big thank you to our hosts at Nunyara, Kanga Lane and Padaminka as their properties were wonderful to be able to explore. Another thank you to the Extension Officers for their much needed assistance and support.

And speaking of Extension Officers, there have been a few developments across the state for our Land for Wildlife team. On a sad note, we have had to say farewell to our very knowledgeable Land for Wildlife Extension Officer, Peter Alden, in Whitsundays. Peter has been with the program for many years and has been educating his Land for Wildlifers on many issues for nature conservation. I wish to thank Peter for all his commitment to the program and he will be sorely missed.

I would also like to say thank you to Jane Eales in Mackay. Jane has been supporting the program and doing property assessments on a volunteer basis. We are very grateful to Jane for providing her valuable time to help support the program in the Mackay region.

And some other good news, Land for Wildlife will be supported once again in the Burnett Mary region. The Burnett Mary Regional Group (BMRG) is initiating their Conservation Partnerships program which involves a 3-tiered approach to Nature Conservation on private land – Land for Wildlife, Voluntary Conservation Agreements and Nature Refuge. The programs will be initiated in the Burnett East and Mary Local Government Authority Clusters. They hope to also offer the Land for Wildlife program to those in the Burnett Inland South and Burnett Inland North regions in the near future. So I would very much like to welcome our newest Extension staff to the team – Roger Currie (Maryborough), Marc Russell (Gympie) and Melanie Mott (Hervey Bay). I'm sure they will be bringing some welcome knowledge and support to those regions.

As always, if you wish to receive the State Land for Wildlife newsletter, please contact me and I will add you to the state mailing list.

Lesley Hale

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Land for Wildlife Southeast Queensland is proudly managed by SEQ Catchments (the accredited regional body for Natural Resource Management in South East Queensland) and proudly delivered by the following 14 Local Governments:



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