

WILDLIFE DIARY

November 2012



Great Finds

Lace Monitor, *Varanus varius* very active. Breeding activity observed in Burbank. Very large male sighted.

Brown honeyeaters, *Lichmera indistincta* found nesting in the backyard at Wellington Point.

POPULATION MATTERS

The latest Sustainable Population Australian Newsletter.

http://population.org.au/sites/default/files/newsletters/nl201210_106-web.pdf

Flowers and fruit

Native Frangipani, *Hymenosporum flavum*, a rainforest species has just finished flowering. They have beautiful creamy-yellow flowers in loose panicles. Quandong, *Elaeocarpus grandis*, a beautiful tall tree, growing to 35 metres, with shiny, narrow elliptical leaves about 17cm long. Currently many in West Mt Cotton are covered in their beautiful blue fruit.

What is Seagrass?

Since the time of the dinosaurs, three groups of flowering plants (angiosperms) colonised the oceans. Known as 'seagrasses', they are the only flowering plants that can live underwater. More closely related to terrestrial lilies and gingers than to true grasses, they grow in sediment on the sea floor with erect, elongate leaves and a buried root-like structure (rhizome).

Seagrasses live in the coastal waters of most of the worlds' continents. They are the main diet of dugongs and green turtles and provide a habitat for many, smaller marine animals, some of which, like prawns and fish, are commercially important. They also absorb nutrients from coastal run-off and stabilise sediment, helping to keep the water clear. <http://seagrasswatch.org/seagrass.html>

Dragonflies

With the weather warming up those beautiful and active dragonflies are becoming more obvious. If you ever wanted to know the difference between a Rockmaster and a Duskhawker or an Emperor and a Tigertail then get a copy of the 'Dragonflies of South East Queensland – A field guide', written by Ric Natrass. It is a small book crammed with photos, information and identification keys. There is basic information about dragonfly anatomy and plenty of photos and notes on damselflies as well. It's a book worthy of having on the shelf particular for those curious about our natural world or wanting to know about the small creatures which drive our ecological systems.

Did You Know?

Did you know new evidence reveals that residential dwellings within 300 – 500m of a major road could see their occupiers suffer significant health problems as a result of exposure to air pollution caused by vehicles? Children living within 500m of a major road are at greater risk of developing asthma, while adults face an increased likelihood of lung and heart-related illnesses. The question is what impact is this having on our wildlife? Source: <http://pubs.healtheffects.org/view.php?id=334>

Did you know an EPA (2007) report on the status of the Koala Coast koala population indicated the largest koala declines occurred in the urban footprint because of loss of habitat and permeability? The same report highlighted koala declines are associated with vehicle strikes, predation by domestic dogs and disease, all impacts that arise from urbanisation. These impacts are severe and McAlpine *et al* (2006) suggested high road density in an urban matrix was one of the more extreme impacts on a species movement.

Did you know Flying-foxes or fruit bats are essential for our Australian forest health—through distance pollination and seed dispersal they are true forest makers. While everyone sleeps—flying-foxes make forests! They are the only mammal capable of sustained flight There are over 1000 species of bats in the world and ninety of these are found in Australia Bats are economically important for eliminating agricultural insect pests and for their role in pollinating commercial plants such as bananas, dates, figs, mangoes jackfruit, durian, cashews and more.

Great Walks



If you want to see some of our native land snails then go out after some rain and you will be surprised what you will find in your garden and local bushland reserve. Great finds can be had in rainforests of West Mt Cotton along the tributaries of Tingalpa Creek, along Erapah Creek and Chelsea Road, Ransome.

WWW

Healthy Waterways Report Card

<http://www.healthywaterways.org/HealthyWaterways/2010ReportCardResults/CatchmentResults.aspx>

Data Discovery Portal

<http://portal.tern.org.au/>

Decision Point

<http://www.decision-point.com.au/>

Land Snails

Land snails are significant indicators of both environmental health and biodiversity hotspots. They provide us insights into the management and conservation of our forests and events that have forged varied environments. Given snails are slow to disperse examination of the mtDNA genes can provide us insights into past climate events and help confirm paleoclimate modelling. They can help us better understand the impacts of past climatic events, such as drying events and land bridges. They have also been used in archaeological research on the history of rock shelter occupation in Northern Queensland and Southern New Guinea.

Land snails in Eastern Australia are part of two groups, the neritopsinid and caenogastropod operculate snails, which have with a single pair of tentacles with eyes at their bases. These snails have separate sexes. The other group is the pulmonate (lung-bearing snails and slugs), which is the more numerous snail that has two pairs of tentacles, with the exception of the Athoracophoridae, and eyes at the tip of the upper pair of tentacles. These snails are hermaphrodites.

Interesting to note that most land snails in Australia have their shells coiled in a clockwise direction. What is common amongst them all is their external gastropod body plan. All have a head/foot, a mouth and a shell of some sort, which could be external, internal or something in between.

The Redlands and Greater Brisbane region is lucky to be the home for over 60 species of land snails.

Native snails are interesting. Take the rainforest semi-slug *Stanisicaron virens*, has a bell-shaped shell with a silky, amber-green appearance - 'virens' meaning green. It is thought it may be actually comprised of several species.

The very large **Giant Panda Snail**, *Hedleyella falconeri*, is the largest land snail in Australia; its shell may reach 90mm in height. It also lays the largest known eggs of any Australian land snail with the eggs measuring almost 2cm in diameter. *Sphaerospira fraseri* is another large snail; its shell reaches a diameter of up to 56 mm.

Figuladra mattea with its striking pinkish orange and with a red mantle shows that snails can also be colourful. One of the most striking is the most common, the **Red-triangle Slug**, *Triboniophorus graeffei*. It is 70mm in length a creamy white animal with a prominent red triangular mantle shield.

While many of our snails are detritivores some are not. The family Rhytididae is a group of predatory carnivores. *Terrycarlessia turbinata* for example feeds on a range of invertebrates including other snails and sometimes its own kind! Their radula (toothed tongue- ribbon) has sharp, pointed teeth designed to tear flesh rather than rasp plant or detrital matter.

We unfortunately have a number of introduced snails, and they are pests. The **Asian Tramp Snail**, *Bradybaena similaris* is one such snail. It is a serious vine and market garden pest. Readily distinguished by a whitish to light brown shell, with or without a brown band and can reach a diameter of around 15 mm. The animal is cream to light brown with cream to black optic tentacles. The other notable nuisance is **European Garden Snail** *Cornu aspersum*. This species is a very common garden and agricultural pest originally from Europe, the Middle East and North Africa, but now a widespread invader throughout the world. In Australia, it occurs in many temperate regions, but also in tropical areas where there has been significant alteration of microclimate by human activity – e.g. watering of gardens. The shell, which can reach a diameter of 40 mm, is brown with darker spiral bands, yellow speckles and a flame-like pattern. Individuals can be found living under pots, rocks and timber in gardens, parks, nurseries and on agricultural land. The animal is a light greenish brown colour with a pale stripe on the back of its neck and a greenish grey foot. Source: <http://www.qm.qld.gov.au/Find+out+about/Animals+of+Queensland/Molluscs/Gastropods/Land+snails+and+slugs> (Stanisic *et al*, 2010)

The Native land snail is an excellent environmental indicator. Their presence or absence can tell us a lot about our environment, our climate, moisture refugia and in particular how well we are managing our landscapes.

Never doubt that a small, group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has. Margaret Mead.

