WILDLIFE DIARY

May 2007

Great Finds

Bobuck, Short-eared possum, *Trichosurus caninus*, unfortunately found dead on Cleveland – Redland Bay Road at intersection of Eprapah Creek. However, a great find and great to know they are in this area. It was a black form which makes the find even more impressive.

Crested Hawk, Pacific Baza, *Aviceda subcristata*, they are out and about, very noisy, some exceptionally long calls being recorded. It is the breeding season.

Research by a UQ PhD student is finding **Squirrel glider**, *Petaurus norfolcensis* on a number of southern bay islands.

An uncommon bird **Varied Sittella** *Daphoenositta chrysoptera* was recently sighted on Tingalpa Creek.

POPULATION MATTERS

In the last 200 years the population of our planet has grown exponentially, at a rate of 1.9% per year. If it continued at this rate, with the population doubling every 40 years, by 2600 we would all be standing literally shoulder to shoulder.

Prof Stephen Hawking - The Universe in a Nutshell (2001)

Short-eared Possum

Short-eared Possum, *Trichosurus caninus*, the black form of this species appears to be common between Lamington NP/Border Ranges in the south and Bulburin/Granite Creek in the north. Once described as common in the coastal scrub of SEQ by Fleay (1960) there now only appears to be a small number remaining. One such population is found in the West Mt Cotton region, particularly along the upper catchment of Tingalpa Creek. It should be noted that significant areas of rainforest have been lost in the West Mt Cotton area. About 1978 a large area of rainforest was cleared near the quarry north of what is now Venman's National Park (Brisbane Wildlife Survey, 1983).

Shell less or almost land snails

An unusual family of land snail is Helicarionidae and amongst this family is a group of curious snails, the semislugs, which are renowned for their very reduced shells and their sometimes spectacular colours. One very common species in the Greater Brisbane area is *Fastosarion virens*. Another much rarer species is the interesting rainforest semi-slug *Fastosarion aquila*, which has an extra flap of tissue that covers the shell and when the animal is active it acts as a secondary breathing surface. This snail can absorb oxygen directly from the atmosphere much like frogs.

Did You Know ?

Did you know in SEQ the human population is increasing at about 2.9% per annum resulting in 75km² of bushland and agricultural land being used for housing and other urban purposes each year? That's 60,000 ha cleared by 2026 (about ½ a Moreton Bay), little wonder 80% of the Moreton Bay Catchment has been cleared and certainly one of the main reasons why our waterways and catchments are declining in health.

The 2006 Healthy Waterways Report Card showed overall the health of SEQ estuaries and freshwater streams were declining in health. Of the 46 grades delivered 14 went down, 25 remained the same and only 6 went up.

Did you know that sex change is not uncommon in reef fish, with hundreds of species able to undergo gender reassignment once during their lives? Sex change in both directions, that is bi-directional sex change, is highly unusual and so far only known in a few species. Most sex-changing fishes, such as coral trout and red throat emperor, start life as females and turn into males as they grow larger; there are more benefits available to big boys, such as having a harem and fertilising many females at once. A few, mainly monogamous fishes like clownfish, will start life as males and turn into females. Even stranger is the commensal fish known as the pearl fish (*Carpus sp*), which lives inside the anus of the sea cucumber during the day and emerges at night to feed. Now that's a close relationship.

Great Walks

Some of the best walks have been the shortest. Picking a spot near a tree studded creek like Tingalpa Creek and Avalon Road, one can watch for hours the wildlife go by both in and out of the water. However, did you know you can help attract some species by the simple rattle of a match box half full of matches or a half hearted whistle to attract a variety of bushland birds? Though not a common occurrence today I remember often chopping wood as a child and having the Rufous and Golden Whistlers enter into a calling competition with each axe blow. There are many simple little ways to attract more of our wildlife friends when out on a walk, why not let us find them.

WWW

Time to save Mt Cotton from the Super Quarry
http://www.superquarry.com.au/

Climate Change – IPCC – latest updates
http://www.ipcc.ch/

Ants online – great web site
http://www.ento.csiro.au/science/ants/

Population issues – we must now address
www.population.org.au

Coral

A little known fact to many on the mainland is that Moreton Bay supports a significant coral community. Within Moreton Bay there are 40 species of coral and at Flinders Reef, located in the northern oceanic section of the bay, 119 species have been recorded. Moreton Bay's corals are biogeographically distinct from those of the rest of the Indo-West Pacific region, as the particular group of species present in Moreton Bay are unlike any other reported. This uniqueness is a result of an overlap of tropical and sub-tropical species. While massive and brain coral are prevalent inside Moreton Bay, particularly *Favia speciosa*, branching staghorn species can be found at Flinders Reef and Myora. There is a general gradient from a dominance of massive coral in the southwest of the bay to branching coral in the northeast of the bay. A similar situation exists with soft coral; *Alclonium sp*. is dominant in the southwest while *Xenia sp*. and *Sarcophyton sp*. predominate in the northeast.

Peel Island is a great place for corals, and is renowned as having the greatest diversity of coral within Moreton Bay. The northern areas of Peel Island are the best locations to find coral. While corals are known for their beauty and for the habitat they provide for many sea creatures, they have proven valuable to science. Corals are excellent historical archives. Just like trees, they place down bands, a high density (summer growth) and low density (winter growth) band represents one year. The coral skeletal features also show up environmental conditions and by using a UV light environmental conditions can be determined at the time the coral skeleton was laid down. Recent core samples taken during the Healthy Waterways Moreton Bay study showed quite clearly the flood event of 1974 and the peak discharges from the Brisbane River in 1988, 1989 and 1990. Such flooding and associated sediments, nutrients and freshwater have had a significant negative impact upon the coral. The shallow nature of the bay doesn't help and as a result water temperatures range from 15º - 27ºC, with minimums of 13ºC and maximum of 32ºC, such extremes impact upon coral distribution.

Even so there are coral colonies dated over 200 years old still present in Moreton Bay, they are primarily species known as massive and brain corals, surviving most likely due to their adaptation to extremes and their ability to rid themselves of silt by producing copious amounts of mucus. Unfortunately, tipping the scales against the coral survival was coral dredging, ceased in Moreton Bay in 1997, bushland destruction and increased urbanisation, therefore causing increased silt and stormwater pollution and anchor damage. But the most significant decline in Moreton Bay's coral was due to the drop in the sea level that occurred about 3,000 years ago.

Between 6000 – 3000 years ago the reefs of Moreton Bay were equal to the Great Barrier Reef of today now we only see the relics of these once mighty reefs. They are readily visible along the foreshore of Ormiston and they are worthy of strong protection for scientific and educational purposes.

So how can you help protect Moreton Bay's remaining live and relic coral reefs you may ask? Currently the Queensland Government is carrying out a 10 year review of the Moreton Bay Marine Park. The review will give each and everyone of us the opportunity to have our say about the future of the marine park. This is a good opportunity to raise your concerns about coral in Moreton Bay. If you would like to pass on your ideas and or concerns please send them to the Environment Minister. Write and or email. Hon. Lindy Nelson-Carr, Postal : PO Box 15155, City East Qld, 4002 Email : EandM@ministerial.qld.gov.au

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.

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Wildlife Preservation Society of Qld Bayside Branch
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bayside@wildlife.org.au
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