

September-October 2016

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PROGRAMME

General Meeti	ngs:
September 19	Dr Douglas Kerlin
October 17	Ms Tanya Pritchard
Excursions:	
September 17	Mapleton National Park
Sept 29-Oct 3	Bolivia Hill, via Tenterfield
October 9	Enoggera Creek, The Gap

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June/July

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Long Excursion 2017

Deadline for News items - **15**th of each even numbered month.

The Queensland Naturalist is published twice per year. ARTICLES to the EDITOR, Dr. Peter Woodall at journal@qnc.org.au General meetings are held on the third Monday of the month, between February and November, starting at 7.30 pm, in the Royal Geographical Society of Queensland building at 237 Milton Road, Milton. This is near the corner with Baroona Road and next to the Castlemaine Perkins (Fourex) Brewery and the Theological College entrance lane. Entrance in Milton Road, with side ramp. Parking available in adjacent streets. For those who park in the Theological College car park, please put a \$3 donation in the box at the meeting reception. Milton railway station is directly opposite the building and there is a pedestrian underpass from the station under Milton Road.

Daytime meetings will be held occasionally at the Queensland Museum from 12:30 to 1:30 pm.

GENERAL MEETINGS

Monday 19 September Dr Douglas Kerlin *What will a koala recovery look like?*

We all know that Koalas are in trouble. A decade ago, the Koala Coast and Pine Rivers in Southeast Queensland were two of the strongholds for Koalas, but these populations have been obliterated by habitat loss. A recent Queensland Government report concluded that, since 1996, Koala numbers have declined by 80% on the Koala Coast, and 54% in Pine Rivers. Similar declines are occurring across the Country. But rather than focus on the negatives, instead, let's ask the question: What will a Koala Recovery look like? Drawing on recent studies, Dr. Douglas Kerlin Chief Ecologist from the Australian Koala Foundation will outline a vision for Koala conservation and discuss steps the local community should take to help restore Koalas to the landscape.

Monday 17 October Tanya Pritchard The Queensland Trust for Nature

Tanya joined QTFN in March 2014 to manage their Nature Refuge Certification program and coordinate the assessment and management of land owned by the Trust.

The mission of QTFN is to acquire and increase the value of privately held land under conservation and to protect and enhance the unique biodiversity of Queensland for future generations. Tanya will talk about the Trust's vital work in protecting Queensland's biodiversity through the use of their revolving fund as well as their research and education activities. With only 5.23% of Queensland protected by National Parks, private conservation and ownership of land is essential to help maintain the State's biodiversity. Conservation is the responsibility of the whole community, not just government. Tanya will discuss the critical role of private land owners in biodiversity conservation through the identification and protection of important habitat and how individuals can help make a difference.

Roster for general meetings

September 19

19 Reception: Supper:

October 17: Reception: Barbara Odgers Supper:

If you can assist at meetings with reception or supper, please advise a Councillor.

MEETING REPORTS

General Meeting: 18 July Between the Tides Myriam Preker

The intertidal area between extreme high and low tide, while narrow, extends for thousands of km globally. The area changes temporally throughout the month, even within one day, and it changes with tidal height and geomorphology e.g. steep coast compared to mud flats.

The intertidal community varies with latitude, wave exposure and substrate types eg coral reef compared to rocky shore with kelp.

Wave exposure/shock affects marine organisms e.g. *Verrucaria* sp., a marine lichen, can be seen as a black coloured band in the splash zone, wider on points where waves strike vigorously whereas in calmer places seawater may lap against trees. Brown algae *Postelsia palmaeformis* grow only on exposed points.

Zonation. Colourful bands of varying width, dominant organisms compressed into narrow bands by the tides and competition e.g. barnacles, mussels and Laminaria zone dominated by various species of brown algae.

Multiple physical factors determine the upper limits of organisms such as duration of exposure to air and wave shock e.g. barnacles live high on rocks at the extreme upper range of the tide, are covered only briefly some only 2 days a month. They can only breathe and feed when under water and are exposed to extreme heat from underlying rock, and so are almost terrestrial. Adaptations include a hard outer skeleton, a trapdoor which closes tightly and light colour e.g. *Chthamalus antennatus. Cellana tramoserica* clamp down tightly to prevent water loss. Resistance to water loss can be morphological, physiological, behavioural and reproductive.



The chiton Liolophura gaimardi shows morphological adaptation

by having eight overlapping shell plates held together by a tight girdle the chiton can fit firmly to the rock surface so preventing water loss.

Physiological adaptation can be seen in *Porphyra perforata* an alga which grows high on rocks and can dry out to an extreme degree, becoming crinkly and crunchy – losing up to 70% of water and then taking it back up quickly when immersed.

Behavioural adaptation - *Planaxis sulcatus*, forms dense clusters with smallest individuals in middle and some water held underneath. Also the operculum can be closed and the animal sits on the tip of its shell rather than its foot to limit exposure to hot rock. *Grapsus albolineatus*, has exposed gills so seeks protection in cavities. *Onithochiton quercinus*, another intertidal chiton, forages but returns to its home site on rock where it reuses a crevice into which it can fit tightly.

Reproductive adaptation is found in *Actinia tenebrosa*, which lives in crevices brooding its few young in its body cavity which are then expelled and settle in the surrounding sheltered area. *Anthopleura elegantissima*, the aggregating anemone, reproduces by longitudinal fission, i.e. asexual division in high intertidal zones only whilst sexual reproduction predominates in the lower reaches.

The lower limits of the zones are mainly determined by biotic interactions rather than physical factors, which are very complex including competition for space, food and predation.

The barnacles, *Balanus* and *Chthamalus*, illustrate competition for space. Chthamalus survives if transplanted into lower zones but only if *Balanus sp* has been removed as *Balanus* otherwise overgrows and kills the small *Chthamalus*.

Predation is illustrated by *Morula marginalba* which eats barnacles voraciously and *Pisaster ochraceus*, a voracious predator, which can eat up to 80 adult mussels, *Mytilus californianus*, each year. Species richness is increased by predation because it stops a single species such as mussels, dominating the community. Starfish wasting syndrome caused by a virus isolated at Cornell University in 1940 was found in the autumn of 2013 in the Aleutian Islands and by 2014 had spread to Baha, California causing rotting of starfish in a widespread and devastating epidemic.

The lower intertidal zone is exposed infrequently e.g. *Macrocystis integrifolia* is only exposed when spring tides coincide with good weather and solstice. Some species of Laminaria have long stipes to hold their fronds up in water whilst *Egregia menziesii* keeps its fronds up with small air-filled floats, thus forming a dense three-dimensional habitat.

The long-lived red sea urchin *Strongylocentrotus franciscanus* lives over 30 years and some over 200 years. Their exploding populations, due to lack of predation by sea otters, can be a problem as they feed on kelp and large algae, damaging the stipes so they get washed off rocks. Now their only predators are starfish and large



rock lobsters which only eat small individuals.

Sponges, bryozoans and some small animals don't tolerate drying which is worse if the low tides occur in the middle of the day. *Cryptochiton stelleri*, lives in crevices during day, foraging at night.

Conditions in tide pools depend on the size of the pools and their location in the intertidal zone. In high intertidal pools the water is only exchanged occasionally and salinity may be high or drop after rain. Organisms in large tidal pools low in the intertidal zone may experience conditions that are similar to those living in the subtidal zone.

Day Meeting: 27 July Microbats of Lamington Plateau Melanie Venz

Melanie spoke about microbat monitoring in Lamington around Green Mountain, O'Reilly's Guesthouse and Duck Creek Road over the last week of January each year for 21 years. The survey started as a side project to that of the Hastings River mouse study taking place there. Trapping was by multiple harp traps on 4-5 nights of the week in high altitude complex notophyll forest and in tall open forest 12.8.14 and 12.8.16. No low altitude vine forest was monitored. Melanie described how different species use various strata of the vegetation from high above to just above the canopy to within vegetation gaps, among and below the canopy and along creek lines.

About 300 harp trap nights captured 3,000 individuals of 16 species plus 4 megabats and an additional 2 species from Anabat recording and 1 species from a culvert.

Most commonly caught and from all sites was the large forest bat *Vespadelus darlington* comprising almost half of all catches with next most common being the Eastern forest bat *Verspedlus pumilis*.

The little bent-winged bat *Miniopterus australis* was the next most common. This is a cave rooster and breeder, and a regionally significant maternity colony occurs locally.

The Eastern bent-wing bat *Miniopterus schreibersii*, a high flyer, was caught only at the top of Moran's Falls. Gould's long-eared bat *Nyctophilus gouldi*, a solitary rooster, was reasonably common in the traps while the lesser long-eared bat *Nycotphilus geoffroyi* was only captured once in Duck Creek Road. The Eastern false pipistrelle *Falsistrellus tasmaniensis* was reasonably common. Eastern horse-shoe bats *Rhinolophus megaphyllus* tend to evade harp traps but were found roosting under the guesthouse! Intriguingly the golden-tipped bat *Kerivoula papuensi* was thought to be extinct 100 years ago since it evaded mist nets but is quite commonly caught in harp traps. An attractive bat, it has a distinct odour and flies relatively slowly along creek lines plucking spiders from webs.

The large eared pied bat *Chalinolobus dwyer*) was infrequently caught (<10) though found on Anabat recordings. Eastern tube-nose bats *Nyctimene robinsoni* were heard in rainforest but not caught.

An idea of demographics was obtained by examining the degree of fusion in wing joints (unfused joints characterise sub adults up to 2 years). The forest bats and long-eared bats had high proportions of juveniles.

General Meeting: 15 August Members' Night



Congoo gecko *Strophurus congoo*, Vanderduys 2016 Zootaxa.

The first presentation was by **Harry Hines** who spoke about some of the 30 or so new species of terrestrial fauna in Queensland that have been described within the last five years. The significance of the Cape Melville (CM) boulder fields has been further highlighted by the work of Dr Conrad Hoskin who discovered the following: blotched boulderfrog *Cophixalus petrophilus*, one of three frogs endemic to the area, CM leaf-tailed gecko *Saltuarius eximius* which appears to be restricted to a very small area at the head of a single gully, CM shade skink *Saproscincus saltus*, with its unusually long legs which may be an adaptation to boulder fields, CM rainbow skink *Carlia wundalthini* and CM bar-lipped skink

Glaphyromorphus othelarrni. Dr Hoskin and collaborators also recently described McIlwraith bar-lipped skink *Glaphyromorphus nyanchupinta*, Bamboo Range rock skink *Liburnascincus artemis*, three new species of rainbow skinks: *Carlia decora*, *C. rubigo*, and *C. inconnexa* as well as the Kroombit treefrog *Litoria kroombitensis*. Dr Andrew Baker and collaborators described three new species of marsupials: buff-footed antechinus *Antechinus mysticus* (from SEQ and MEQ), the silver-headed antechinus, *Antechinus argentus* from Kroombit Tops and Blackdown Tableland and the blacktailed antechinus *Antechinus arktos* from the highest parts of the Mount warning caldera.

Dr Terry Reardon and collaborators have reviewed the free tailed bats and described the northern free tailed bat

Amelia's two-lined dragon *Diporiphora ameliae*. Angus Emmott, http://www.abc.net.au/news/2012-11-26/newspecies-of-dragon-lizard-found-in-western-





Fassifern blind snake *Anilios insperatus*, Venchi, Wilson and Borsboom 2015 Zootaxa

Mormopterus lumsdenae which Club members saw during the Princess Hills long excursion and Cape York free-tailed bat *Mormopterus halli* named in honour of Dr Les Hall, a recent recipient of the Queensland Natural History Award.

Skinks of the *Eremiascincus fasciolatus* species group has a new species in SW Qld *E. phantasmus* and the Congoo gecko *Strophurus congoo* is a phasmid gecko living in spinifex in central Queensland. Amelia's two-lined dragon *Diporiphora ameliae* is a spinifex dwelling dragon in the Winton area, discovered by Angus Emmott, whose property the Club will be visiting during the upcoming long excursion. Three new *Tympanocryptis* species were described including Condamine earless dragon *T. condaminensis* from the eastern Darling Downs and *T. wilsoni*, named in honour of Club member Steve Wilson, from grassland around

Roma. The Fassifern blind snake *Anilios insperatus*, known only from a single specimen found in 1992 at Mt Walker, is less than 10 cm long, with a head width of 2.2 mm, described in 2015, is one of our most poorly known vertebrates.

The second speaker was **James Hansen** who showed slides of "Known and Unknown Native Plants Used in Landscaping". James' selection of stunning photos of native plants was taken by Mr. Lawrie Smith, AM.

James spoke about the need to match garden plants to the locality, considering factors such as climatic zone and soil type. Plants can be used to create specific features such as a welcoming entry and create particular ambiences such as a sunny bushland garden. Trees can provide different forms with a variety of bark, flowering habits, aroma and attractive fruit. James showed photos illustrating these features, for example broad-leaf lilly pilly *Acmena hemilampra* with large bunches of white fruit, tree warath *Alloxylon flameum*, with spectacular flowers, native gardenia *Atractocarpus fitzalanii* with fragrant flowers and fruit and lemon myrtle *Backhousia citriodora* with fragrant flowers and useful fruit. Other attributes shown by plants include the attractive foliage of the weeping heath myrtle *Baeckea fruitescens*, peeling bark of hillside wild may *Leptospermum luehmannii*, and potential food plants such as the peanut tree *Sterculia quadrifida* and chain fruit *Alyxia ruscifolia* with edible fruit.

Many of these plant species will be on sale at the Native Plants Queensland Spring Flower and Plant Show at Mt. Coot-tha on 17th and 18th September

The final presentation by **Greg Neill** was on the Sub-Antarctic islands of Australia and New Zealand. Greg reported on his trip in 2012 from Hobart to Macquarie Island and the New Zealand Sub-Antarctic

islands, ending in Bluff at the southern tip of New Zealand.
Whilst at sea he saw pelagics such as prions and albatrosses.
At Sandy Bay on Macquarie Island there were close views of Royal Penguins *Eudyptes schlegeli* and King Penguins *Aptenodytes patagonicus*. Since the eradication of rabbits Poa grasses are recovering as is silver leaf daisy *Pleurophyllum hookeri*, and Macquarie Island cabbage *Stilborcarpa polaris*. There were elephant seal calves *Mirounga leonina* on the beach and the egg-stealing brown skuas *Stercorarius antarcticus*. At Lusitania Bay 170,000 breeding King penguins were seen which indicates their good recovery after the end of sealing.

On Campbell Island brown rats Rattus norvegicus virtually



eradicated the megaherb flora such as Ross lily *Bulbinella rossii* and the one-metre-high Campbell Island daisy *Pleurophyllum speciosum*, which is now recovering well. Once the Brown Rat was eliminated from the island in a 2001 baiting program, the Campbell Island flightless teal *Anas nesiotis* was reintroduced and the Southern royal albatross *Diomedea epomophora* now breeds near the board walk.

On Auckland Islands there are the remains of human settlement for coastwatchers in WW2. Orchids and Southern rata *Metrosideros umbellate* were seen here.

The group walked the perimeter of Enderby Island seeing lightmantled albatrosses *Phoebetria palpebrata*, Auckland Is shags



Phalacrocorax colensoi, yellow-eyed penguins *Megadyptes antipodes*, Auckland Is Flightless Teal *Anas aucklandica*, Auckland Is snipe *Coenocorypha aucklandica* and red-crowned parakeet *Cyanoramphus novaezelandiae*. There was Southern rata forest with megaherbs and placid seals. At the completion of the walk a beach visit to a NZ fur seal *Arctocephalus forsteri* nursery was a satisfactory completion to a wonderful day.

Overall Greg and Annette travelled 1800 nautical miles and saw 12 species of albatross, 6 penguins for a total of 72 bird species and 223 species of plants.

Photos: Three King Penguin Chicks with backs to the wind and Mega Herb field, Col Lyle Campbell Island.

EXCURSIONS

Fees apply for weekend camps - \$2 per adult per night, plus other camping fees, if applicable. Registration for all excursions is with the Leader or contact given.

Those participating in any Club activity do so as volunteers in all respects and as such accept responsibility for any injury to themselves, however incurred. The Club or its officers cannot accept any liability or responsibility.

September 17th Mapleton National Park – Linda Garrett Circuit

Saturday 9:00 am. Leader Gretchen Evans. (0400772602).

Register by emailing excursion@qnc.org.au, or contacting the leader directly.

This circuit leads through rainforest, a palm grove and tall wet eucalypt forest dominated by blackbutt, turpentine, brush box and flooded gum. The circuit is quite short, so we will extend it along part of the Great Walk. This is a popular outing location for the Queensland Mycological Society (see their website for details and some beautiful photos of fungi). Fungi could be few in September, but it is likely that there will be plants in flower and a good abundance of bird life.

There are no facilities at the park, with the nearest toilets back in Mapleton.

After the walk we will drive back to the lily ponds at Mapleton for a BYO picnic lunch.

Directions: From Brisbane, drive to Mapleton. Turn off at the Map

leton Pub and drive past the row of shops, then turn right into Delicia Road. Follow the road for approximately 2 km. You should pass the Mapleton Resource Recovery Centre ("rubbish dump") and then the Mapleton cemetery both on your left. Just after the cemetery turn right where you will see a green National Park sign saying Linda Garrett Circuit. Allow about 1 hour and 15 minutes travel time from Brisbane CBD.

September 29th - October 3rd (Qld. Public Holiday) - Bolivia Hill, via Tenterfield.

Kookaburra Camping and Caravan Park, Cnr New England Hwy and Castlecrag Rd, Bolivia.

Leaders: Neil Fordyce and Janet White. Please register by emailing excursion@qnc.org.au.

This camp is to a private camping ground situated in the Bolivia Hills area, approximately 40 km south of Tenterfield. If Neil and Janet are not available to lead this camp then Peter and Lynette Haselgrove have offered to step in. It is envisioned that day outings will be conducted from the campsite. These will likely entail

An outing to an area of exposed granite on the same property as the campsite

A day outing to Boliva Hills Nature Refuge, which is located on the other side of the New England Highway to the campsite.

A potential day trip to Torrington State Recreation Area

Other activities might include

Searching for birds' nests for Birdlife Australia Nest Record Scheme.

Photographing and identifying frogs and dragonflies in the two dams and creek.

Spotlighting for gliders.

Neil hopes to have made a decent walking map of the property.

The area surrounding the camp has a very high floristic diversity and endemism. There are seven threatened plant species in the area, being Bolivia Hills stringybark *Eucalyptus boliviana*, Bolivia wattle *Acacia*

pycnostachya, Boliva homoranthus *Homoranthus croftianus*, Bolivia Hills pimelia *Pimelia venosa* and Bolivia Hills boronia *Boronia boliviensis*. There should be a lot of wildflowers out after a good damp winter. Animals of interest include the border thick-tailed gecko *Uvidicolus sphyrurus* and potentially spotted tailed quolls.

The location is 313 km from Brisbane or about 3.5 hours travel time. Commercial camp fees apply of \$15 per site for two adults with kids being \$5 per night. The \$2 QNC club levee will apply per adult per night also. The camp has hot showers and modern amenities. Please note that the campground is situated at around 950 metres elevation and that frosts are likely. Members are welcome to arrive from Thursday lunch time.

October 9th Enoggera Creek, The Gap

Sunday 2.45 for 3pm - 5pm Walking with Life Exploring our Living Catchments series Leaders : Stella Field (Yoorala St East Group Convenor, SOWN (Save Our Waterways Now) and Helen Schwencke

Register by email: excursion@qnc.org.au with the subject: WWL Yoorala St 9.10.16 OR Contact Helen Schwencke 0423 127 492 OR through QNC's Meetup website http://www.meetup.com/Walking-with-Life-in-our-catchments-Nature-Excursions/ (become a member first)

The creeks draining the Catchment: Enogerra, Fish and Ithaca Creeks, are over 23 kms in length and feed into Breakfast Creek. Enogerra Creek arises above the Enoggera Reservoir and parts consist of reasonably intact rainforest. The revegetation sites along the creek below the reservoir provide an important corridor into the suburbs. The extensive work that has been done by SOWN groups over the last 20+ years make for a great spot to explore with lots of lovely little places and some remnant original vegetation.

Directions: Go down the driveway of 98 Yoorala St. (UBD Map 157 L2, entry opposite Turana St). Check out the Community Garden when you arrive.

For more information visit: http://www.saveourwaterwaysnow.com.au/default.asp

June 24 – July 9 Long Excursion 2017 Central West Queensland

The trip for 2017 will be to two properties in Central West Queensland. Leaders: Peter and Lynette Haselgrove

The first is Noonbah, a grazing property owned by Angus and Karen Emmott. Noonbah is SW of Longreach near Lochern National Park. We expect to spend five days there during which time we will be naturalizing both on the property and in Lochern. Our hosts are very keen and extremely knowledgeable naturalists and will, therefore, be able to guide us to special places. You might like to have a look at their Facebook page: https://www.facebook.com/Noonbah-Station-261800947197668/?fref=ts

Our camp will be in and around an unoccupied fully furnished five-bedroom house. The main bedroom has a double and a single bed and ensuite. There is a separate bathroom, separate toilet, laundry, washing machine, kitchen with upright stove/oven, fridge/freezer, telephone. Karen and Angus have offered us the use of this house, however we as a club feel that we should make a contribution and have suggested \$10 per person per night to stay in the house. A family (with children) might like to have exclusive use of the main bedroom and ensuite and in this case it might be a bit more per person. Campers can set up around the house and use the facilities for \$5 pp per night.

After our time at Noonbah, we will stop over in Longreach for lunch and to restock supplies and then travel to a Bush Heritage property, Edgbaston Reserve, near Aramac where we will camp for about five days. However, people are free to spend a night or two in Longreach if they wish and travel to Edgbaston on the Monday.

At this early stage Bush Heritage have not decided just what we will do but the aim is for the club to help as much as possible with routine monitoring, depending on people's particular skills or interest. The staff are also proposing to establish reference/survey/monitoring sites that can be the focus for Nats to undertake systematic or opportunistic surveys/monitoring collecting. For the latter the sites would be identified on the ground and a member say with an interest in birds could go there and undertake a standard bird census and fill in a data sheet which would go to Bush Heritage. Likewise, if someone interested in plants visited the site they could opportunistically collect fertile material and lodge with the Herbarium, with the species ID being added to the list of plant species recorded from that site. Mammal and invertebrate surveys are also options. A guided tour of the artesian springs will be organised. Anyone wishing to stay on a few days longer to complete any tasks is welcome to do so.

Everyone will camp around the converted shearing shed. Power is available with limited outlets (i.e. not to be relied on). Very basic cooking facilities are provided, e.g. BBQ inside shearing shed. More details about facilities will be provided but BH hope to have a flushing loo and hot shower constructed in time for our visit. There is also a washing machine available if you are down to your last clean shirt.

A 4wd vehicle is required as roads can become impassable very quickly after small amounts of rain.

We will be self-catering for the whole trip.

The trip will be limited to 40 adults plus children, unless we get too many.

This is just a preliminary notice for those who wish to arrange holidays for that period. An application form and more details, including other costs involved, will be in the next News, No. 329 Nov-Dec.

EXCURSION REPORTS

July 1st to 4th Aroona, Mt Mort QNC Wildlife Survey 2016 at Queensland Trust for Nature Property

Aroona is a 2000 ha property recently acquired by the Queensland Trust for Nature, that straddles the Little Liverpool Range, south-west of Grandchester (see www.qtfn.org.au/aroona-nature-refuge). There have been no detailed flora or fauna surveys of the property, nor of the adjoining Mount Beau Brummel Regional Park. A



An adult female long-nosed bandicoot captured in an Elliott trap, Stephen Monteith. search of the Queensland's WildNet database using a latitude/longitude rectangle that encompasses Aroona and Mount Beau Brummel Regional Park returns less than 80 species (mostly birds), which includes only eight plant, two mammal and no butterfly, reptile or amphibian species.

We undertook a preliminary survey, targeting birds and small terrestrial mammals at four sites and fungi across the whole property, over the period 1-4 July 2016. The outing was attended by 13 adults and five children Club members as well as a handful of QTFN staff and volunteers. Fauna survey sites were chosen for ease of access but ranged from open grassy woodland and forest to a moist gully containing a well-developed rainforest component. We deployed 160 Elliott traps, four cage traps and several camera traps and conducted diurnal bird censuses, owl call playback spotlighting and limited harp trapping for bats. Fungi were targeted during the survey with about 50 specimens collected for submission to the Queensland Herbarium. Much of the time was taken up with establishing and servicing trap sites but two half day walks were undertaken, one

up the rainforest gully to a small but impressive waterfall and the other to the summit of Mount Beau Brummell.

Small mammals captured during the survey were: yellow-footed antechinus *Antechinus flavipes*, common dunnart *Sminthopsis murina*, long-nosed bandicoot *Perameles nasuta*, common brushtail possum *Trichosurus*

vulpecula, Gould's long-eared bat *Nyctophilus gouldi*, bush rat *Rattus fuscipes*, pale field-rat *R. tunneyi*, eastern chestnut mouse *Pseudomys gracilicaudatus*, fawn-footed melomys *Melomys cervinipes* and house mouse *Mus musculus*. Other mammals recorded of interest was a single squirrel glider *Petaurus norfolcensis* spotlighted and scats of the threatened brush-tailed rock-wallaby *Petrogale penicillata*.

In total we recorded 105 species, comprising one arachnid, two insect, two amphibian, three reptile, 61 bird, 17 mammal, 22 fungi and 75 plant species. A large amount of mammal skeletal material, including skulls and jaw bones was retrieved from an owl roost on the cliff beside the rainforest waterfall. This material is currently being sorted and identified.

We hope to undertake further surveys at other times of the year to target flora, herpetofauna and bats and to assess seasonal changes in birds and fungi. Thank you to all who participated and made this an enjoyable and productive outing! *Harry Hines and Tanya Pritchard* (QTFN)



The spectacular fungus *Pleurotus* sp. growing on the trunk of *Xanthorrhoea* sp., Susan Nelles.

June 19th Headwaters of Rocky Water Holes Creek/ Wilcox Park

Heavy rain dampened most people's enthusiasm for this activity. Since there was heavy run-off, the Rocky Waterholes part of the activity was abandoned. Four of us, decked out in rain gear, and blinkered by rain hoods, spent a brief gap between the heaviest downpours walking in Wilcox Park. It was too damp for note taking or photography, and although the rain was light for the duration, mist obscured much of the view. The walk was enjoyable, and a number of different fungal fruiting bodies were observed. *Helen Schwencke*

July 17th Blunder Creek, Durack Exploring our Living Catchments - Oxley Creek Catchment

Twenty people including four children set out to explore a small patch of remnant bushland along Blunder Creek at Durack. There are no marked paths in this area, so we threaded our way between the trees and other vegetation. There was a somewhat unusual "growth" of real golf balls in some spots. The site is part of an interesting remnant wetland system that hasn't been badly disturbed, at least recently, so the ground covers were a complex assortment of algae, lichens, small herbs, sedges, grasses and diverse other species. Invasive weeds were starting to take hold along the creek edge. Unfortunately, large, curiosity inspiring, well-used holes in the creek banks, seen near the water line on the reccy trip, were under about a foot of water due to recent rain and so were no longer visible. *Helen Schwencke*

August 7 Mt Elimbah (Mt Saddleback) National Park

About a dozen members and two children spent a relaxed few hours rambling through the woodland and rocky heath areas of this small park. We were delighted to be joined by Rowena Thomas, one of the authors of the recently published QPWS' "Ranger Field Guide – Native Plants of the Glasshouse Mountains National Park" whose contribution to our botanising was greatly appreciated.



The larger trees of the woodland included Smudgee Angophora woodsiana, Brown bloodwood Corymbia trachyphloia, Blackbutt Eucalyptus pilularis, Scribbly gum E. racemosa, Grey ironbark E. siderophloia and Brush box Lophostemon confertu. Black She-oak Allocasuarina littoralis was in flower as were Brisbane black wattle Acacia leiocalyx and Prickly wattle A. hubbardiana. Dwarf banksia Banksia oblongiflia and Prickly-leaved paperbark Melaleuca nodosa occurred widely. Feather sedge Ptilothrix deusta dominated much of the understory.

Also found in the understory were longleaf matrush *Lomandra longifolia*, many-flowered matrush *Lomandra multiflora*, mountain or soft bracken *Calochlaena dubia*, wiry panic *Entolasia stricta* and kangaroo grass *Themeda triandra*. Plants flowering included bush iris *Patersonia sericea*, pointed leaf hovea *Hovea acutifolia*, *Westringia eremicola*, three-nerved willow hakea *Hakea florulenta*, *Goodenia*

rotundifolia, daisy goodenia G. bellidifolia, twiggy zieria Zieria minutiflora, hairy bush pea Pultanea villosa and Myrtle pea Pultanaea myrtoides. Wombat berry Eustrephus latifolius, scrambling lily Geitonoplesium cymosum, slender dodder Cassytha filiformis and crinkle bush Lomatia silaifolia were also seen.





The rocky pavement area was dominated by a low shrub land of small-fruited tea-tree *Leptospermum microcarpum* and Fringe myrtle *Calytrix tetragona*. However, of particular interest here were two rarer shrubs, Glass House Mountains Tea-tree *Leptospermum luehmannii* and velvet hopbush *Dodonaea rupicola* both classed as Vulnerable. Other plants noted included mountain seringia *Seringia hillii*, dwarf boronia *Boronia polygalifolia*, rock fern *Cheilanthes sieberi*, sundew *Drosera peltata* and a patch of about twenty small waxlip orchid *Glossidia minor*. Flat-leaved grasstree *Xanthorrhoea latifolia* was common here, as well as in the woodland. A few people climbed to the summit of the mountain where they found *Acacia juncifolia* growing. In total of 87 plants were identified.

Thirty-seven birds were either heard or seen and included rose robin, scarlet honeyeater, yellow faced honeyeater and shining bronze cuckoo. Of the three fungi identified, *Pisolithus arhizus* (Horse Dung Fungus) was seen in several locations and had also been noted on reconnaissance visits. Also observed were 3 arachnids, 5 insects, 2 reptiles and 1 mollusc. *Ruth Thomson*

Photos: Bush iris *Patersonia punctate* (Ruth Thomson); The characteristic bark of *Leptospermum luehmannii* (Peter Woodall); Spotted weevil *Rhinotia semipunctata* (Peter Woodall).

August 17-22 Long Excursion 2016 - Cape Hillsborough

A full report on this outing will be in a future edition of QNC News.

Myriam Preker

A total of thirteen people attended the long excursion based at the Cape Hillsborough Nature Tourist Park. We occupied a variety of cabins, tents, and camper sites close to the waterfront. The itinerary was planned to take advantage of the low tides. We explored Division Rocks, a prominent outcropping located to the north of the bay, by both day and night. We hoped to have observed corals feeding but, unfortunately, the water visibility was very poor. We also explored the high-intertidal boulders making up the causeway at the south end of the bay and the rocky shore of Wedge Island. Sally Johnsen shared her knowledge of sand trails identification with us: the highlight was *Astropecten* sp chasing bivalves through the sand.

We also walked one of the Cape Hillsborough National Park trails each day and were amazed at the high diversity of the terrestrial vegetation. Of these, we explored the following:

Beachcomber Cove Track: a track heading into coastal and rainforest vegetation before continuing through a small eucalypt forest and a hoop pine stand.

Andrews Point Track: one of the highlights of this walk was the large number of different fungi.

Yuibera Trail: this track headed through Melaleuca woodland, patches of rainforest and then dipped into a strip of mangroves. Many of the most significant plants used by indigenous Australians were signposted, although not always near a specimen. Remnants of a large fish trap used by the Yuibera people could still be seen in Sand Bay.

Diversity Boardwalk: an easy walk through Melaleuca woodland, open eucalypt forest, vine thickets and a mangrove wetland. Butterflies, including the Blue Ulysses, *Papilio ulysses*, were seen towards the end of the trail and the car park.

We also visited Seaforth, a small, old-style seaside town but decided to explore the mangrove stand and causeway across the mud flats from Finlayson Point, instead of the sand-mud flat of the bay.

Warwick Willmott's new book was a really important reference to have along, as the geology of this area is very important. As if to illustrate this point, many members felt the earthquake that struck north east of Rainbow Beach.

Butterfly (unidentified) on front page is from Cape Hillsborough. (Ed)

The QNC always prides itself on going to interesting places with interesting people. Council is seeking venues and enthusiastic leaders to guide us through 2016. If you know a place that you would like the club to visit, please contact Barney Hines or email excursion@qnc.org.au

Council wishes to remind excursion leaders that a contribution toward reconnaissance costs can be claimed from the Club.

WANTED

Excursions Ideas and Leaders



Welcome to New Members:

Mr Stephen Monteith, Amanda Mergler, Benjamin Montheith and Sophie Mergler, Banyo; Ms Diana Hughes and William Hall, Ferny Hills; Ms Christine Bodey, Anstead; Ms Susan Evans, Auchenflower; Ms Deborah Metters, Goodna; Ms Patricia Woolcock, Hawker ACT;

We hope you have a long and happy association with the club.

Death of Member

Philip Sharpe died peacefully Thursday 11th August at Coolum. Many will remember him with great affection. He was a week shy of his 101st birthday. For many years he worked at the Herbarium and worked extensively on sedges.

Council membership 2016

Council

News

- A vacancy exists for a Junior Vice-President.
- > At the AGM next year, the Club will be needing a new QNC News editor.

QNC News by email or post

If the majority of members were to elect to receive the QNC News as a PDF via email, the publication could be made into a much more interesting and informative document. More and larger photos could be included and the reports on speakers at meetings and outings could be expanded. At the moment the document has to be limited in the number of pages so that the printed version can fit into an envelope.

Another issue is the cost of printing and posting, particularly as postage has increased considerably.

For those who are not highly computer literate I'd like to offer some advice. If you receive the PDF in an email you can save it to a folder so that it is always easy to find. A suggestion is to name the folder "QNC News" and then save the PDF with a title starting with the issue number, e.g. "328 Sep-Oct 16". The files should then be sorted by the issue number and so easy to find.

If you want to have a printed copy of, for example, instructions on an outing you can just print the page or pages that are needed, rather than the whole document. I would suggest printing on both sides of the paper.

You can save your PDF to iBooks and take it with you on your iPad so that directions to outings are easily accessible.

If you do not have an iPad but do have a tablet or phone that can store PDF's and you need advice as to how to save the file to them, please send me an email and I will get the information you need. *Lynette*.



LIBRARY & FACEBOOK

Mrs Leith Woodall

The club's Facebook page is open to the public and can be found at QNC Facebook Page

QNC Library

The club has a small library for members. The library is available at our general meetings. Books may be borrowed for one month. The library catalogue is available on the club website (QNC_LibraryCatalogue.pdf). We receive a number of journals and newsletters which are not kept indefinitely. Recently received issues are displayed at the meetings. There is a coloured dot on each item indicating if it can be borrowed or not. The dot code is:

Red dot - the item is on display only and cannot be borrowed.

Yellow dot - the item can be borrowed but must be returned at the following meeting.

Green dot - the item can be taken and need not be returned.

EXHIBITS

Exhibits for general meetings may be in the form of specimens, books, digital images etc.

If you take an exhibit to a meeting, please think about also providing a *small piece of written text* to accompany it. Your natural history observations can then be shared with all members via:-

- > The club website email text and photos to web@qnc.org.au
- > Our Facebook page contact Leith for help at facebook@qnc.org.au
- ➤ In the QNC News email text and photos to news@qnc.org.au

This variety of formats allows all members, including non-Brisbane members, to share their experiences.

July Exhibits

- Leith Woodall reported on a request from Dr Karen Richards, for an article on threatened frog-eating beetle in Tasmania (*Catadromus lacordairei*) from Qld Naturalist No 2 1915 showing the importance of this publication.
- ◆ Leith also advised that the Biodiversity Heritage Library is now accessible online free of cost.
- Susan Nelles showed a fungus found on a *Xanthorrhoea* at Aroona beautiful looking specimen awaiting identification.

August Exhibits

- ✤ Peter Woodall spoke about a very striking moth he found at Yerongpilly Station. Extensive internet searching revealed it to be a fruit piercing moth, the fallen bark looper moth *Gastrophoria henricaria*. It is endemic to SE Australia and its caterpillar, which feeds on gum trees and brush box, looks like fallen bark.
- Display of wildlife magazine of Macquarie island

WHAT'S ON!

SMALL NATIVE PLANTS FOR SMALL GARDENS AND HUGE NATIVE PLANTS MARKET

Native Plants Queensland will hold the annual Native Plants Show at the Mt Coot-tha Botanic Gardens Auditorium on Saturday 17th (9-4) and Sunday 18th (9-3) September. Entry \$3. The theme is Small Native Plants for Small Gardens and will feature the amazing diversity of small native plants in a variety of garden styles. There will also be a wonderful display of Queensland's native flora.

Allied groups such as Bird, Butterfly and Frog societies will integrate their displays into the garden themes. There will also be bush foods, revegetation advice, Botanic Artists, and a woodworker.

The huge Plants Market provides an extraordinary range of native plants from favourites to rare and unusual varieties, most of which will not be available in commercial nurseries. Expert advice on plant selection and care is available from growers and NPQ members. Prices are low and tubestock to mature plants are available.

Light refreshments and books will be on sale.

THECA Meeting www.theca.asn.au

General meetings are usually held at The Hut, 47 Fleming Road, Chapel Hill, on the fourth Wednesday of each month from February to November at 7:00pm. (UBD 177 P2). See the website for information on Events.

Queensland Herbarium Seminar FM Bailey Room, at 12 Noon www.qld.gov.au

The Herbarium hosts free public seminars at the Mt Coot-tha Botanic Gardens from noon until 1pm in the second week of the month (February to November) - FM Bailey conference room in the Herbarium building. You don't need to register, just turn up on the day.

12 September The enduring legacy of Queensland botanists: The work of Robert Johnson, George Batianoff, Bryan Simon and Phil Sharpe. Dr Bill McDonald, Dr John Neldner, John Thompson and Ron Booth, Queensland Herbarium, DSITI.
 10 October Interactions between fire frequency and the balance and flow of elements in forest ecosystems

Orpheus Butler, Griffith University

Make a Date with Nature: An introduction to Nature Journaling

Nature Journaling is a fun, relaxing way to connect to nature, improve your observation skills, and gain a better understanding of species and ecological interactions. A nature journal can be as scientific, or as artistic, as you like (or a combination of both). Ecologist / artist / writer Paula Peeters is running a series of Nature Journaling workshops in south east Queensland over the next few months. Each participant receives a free print copy of Paula's book 'Make a Date with Nature: An introduction to Nature Journaling'. BYO materials or purchase a materials pack.

Sat 24th Sep Karawatha Forest Discovery Centre (full day workshop) \$69 Sat 8th Oct Downfall Creek Environment Centre (2hr Focus on drawing) FREE Sun 9th Oct Downfall Creek Environment Centre (2hr Focus on writing) FREE Sat 5th Nov Binna Burra Lodge (full day workshop) \$99 Bookings essential. For more details see www.paperbarkwriter.com/events

or contact Paula Peeters ph. 0408 242 888, email: paula.peeters@paperbarkwriter.com

Forum 2016 Barriers to Biodiversity Conservation at Queensland Centre for Advanced Technologies (QCAT), Pullenvale on Saturday 15 October 2016 Presented by The Hut Environmental and Community Association Inc (THECA).

Keynote speakers: Don Sands, Honorary Research Fellow, CSIRO and Jane Hutchinson, Tasmanian Land Conservancy, Tasmanian of the Year. Visit www.theca.asn.au or phone (07) 3878 5088 or email info@theca.asn.au.

BioBlitz Fraser Island (K'Gari) starting 28th November

The response so far is very encouraging with strong support amongst invertebrate specialists covering fungi, dung beetle, ants, spiders, birds, bees and butterflies. There are though still large gaps in some of the special areas that should be covered. We are particularly looking for fresh-water ecologists to identify as many living species as possible in the creeks, lakes and fens of the area that deserve much closer scrutiny. We would also like a much stronger botanical team because we think there are many new species for Fraser Island waiting to be discovered. Please encourage anyone who may be able to assist us in this ambitious BioBlitz to participate. The registration details are on the web site: fido.org.au

NOTICES

Calendar 2017

Sheryl Backhouse is again creating the club calendar for 2017 and would very much like your photos in high resolution. Photos need to be in "landscape" format. Don't worry if they are not quite perfect in some aspects (perhaps Sheryl can doctor them) as long as the main subject is sharp.

Include details of what the photo is and if it was taken at a Nats outing, then details of this too. Phone Sheryl 07 3289 4198 or send your photos to sheryl.backhouse@bigpond.com

Publications for Sale

There are many publications available from the Club at the front desk at General Meetings, including new books such as the *Rangers Guide to Plants of the Glasshouse Mountains* which costs \$20 and *Butterflies of SE Queensland* by Trevor Ford costing \$8.00. QNC cards are available for \$2.00 each. Other publications include:

Rocks and Landscapes of the Gold Coast hinterland 3rd edition (new) – Warwick Willmott \$18.00

Butterfly Host Plants of SE Qld and northern NSW 3rd edition – John Moss \$10.00

A Brisbane Bushland: the history and natural history of Enoggera Reservoir and its environs \$12.00 Seaweeds of Qld – Alan Cribb \$12.00

Landscapes of the National Parks of Central Qld – Warwick Willmott \$18.00

Rocks and Landscapes of National Parks of Nth Qld - Warwick Willmott \$18.00

Common Wildflowers of Girraween and Bald National Parks - Peter & Leith Woodall \$5.00

Create More Butterflies – Frank Jordan and Helen Schwencke \$20.00

Fungi out West – Chinchilla Naturalists Club \$20.00

QNC cards (no text) - \$2 each, envelope included, selection of images.

Compilation of Quids 1-18 1994-2008 \$5.00

CD's - Collection of 285 calls of Australian Birds - 4 discs by Helen Horton \$20.00

85 Bird calls of SE Qld (1 disc) by Helen Horton \$5.00 Qld Naturalist - Back Issues \$1.00 to members. Centenary Issue Old Naturalists \$5.00.

NATURE NOTE NO. 838

THE TURKEY AND THE SLUG

BY GREG NEILL

While walking around the Araucaria Circuit at the old Brisbane Forest Park HQ at Enoggera Reservoir, I saw a Red Triangle slug, *Triboniophorus graeffei*, on the tail feathers of a brush-turkey (pictured).

I sent my photo to the Queensland Museum and asked which part of the slug is out the front, past the tentacles?

On the other side of the tail, probably attached by the slug's extension, was probably a piece of eucalypt bark. I wondered if this is how the slug ended up on the tail? Presumably there was no food material on the turkey's feather suitable for the slug?

The Museum's reply was:

What an incredible sight to see! Thank you for sharing it with us. I have spoken with our mollusc expert and he suggests that the long protrusion coming out is probably the slug's penis. Slugs' genitalia are

located below the right eye stalk in most species. He is uncertain how the slug came to be perched on the turkeys tail and said it is the first time he has ever seen such a thing.

Maybe a Nats member can supply another scenario of how/why the slug came to be on the bird?

INTERESTING ARTICLE

OF OCEAN CURRENTS

J.A. COVACEVICH*

Beach combing can be both remarkably rewarding and interesting. In 1992 near Cervantes, WA, a very large egg washed ashore and was found by some children at play. The egg was identified as that of an Elephant Bird *Aepyornis maximus* one of the three long-extinct birds known only from Madagascar. Its source could have been only the Holocene sands on that island where many fragments of the eggs are still to be found (Long *et al.* 1998). Here L report three other beach washed finds, less spectacular but remarkable nonetheless.

Here I report three other beach-washed finds, less spectacular but remarkable nonetheless.

Bottle 1 was found (by JAC) in early July 2010, on a beach east of Hopevale Community, some 30 km north of Cooktown, NEQ ($15^0 28^\circ$, $145^0 15^\circ$). It had been thrown overboard from a research vessel while in the waters near the tip of North Island, New Zealand. Its message read:

"Hello, finder of the bottle. My name is This bottle was tossed overboard from this position; top North Island, New Zealand. Would you please send me a postcard stating where and when you found this bottle to New Zealand.

Hope this finds you in good health and I wish you well and next time you find something of value. Date 3^{rd} July 2009. Signed able bodied seaman.

Also enclosed was a full description of the vessel from which the bottle had been set adrift – GRV *Tangaroa* of MAF Fisheries, ... Wellington, New Zealand.

Bottle 2 was found (by JAC) on the same beach in June 2012, almost exactly 2 years after it had been thrown in the ocean near Nikumororo, one of the outer islands of the Kirabati Archipelago ($0^{0}25^{\circ}$, 180^{0} 30' approx..). The message it contained was badly water-damaged. It was possible to discern: *Lonnie, Old Burke, Burke* only. I wrote thus "Lonnie ??, Old Burke, Burke, ?USA. Just a month later I received a letter from Old Burke Rd, Burke, Virginia, USA. Not surprisingly it was a very enthusiastic response:

YIPPEE! I was elated to receive your letter today. Thoughts often turned to that sturdy bottle... tossed into the churning wake of the dive boat Nai'a on June 12, 2010 as our TIGHAR (The International Group for Aircraft Recovery) Amelia Earhart Expedition team left the island of Nikumaroro following an expedition. Our captain thought that the bottles (six) might reach Swain's Island or Samoa ..."

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Bottle 3 was found in late July 2014 near the village of Natokalau, Cicia Island in the Lau Arcgipelago, Fiji. It had been thrown overboard (by JAC) from the trading/tourist vessel *Aranui* in August 2013 near the island Nuka Hiva in Marquesan Island waters. (The Marquesas are the most remote Archipelago in French Polynesia, some 400 km from Papeetee, Tahiti).

The schoolboy who found the bottle and message wrote: I would like to say a few words of welcome to you "Hello" or "Bula Vinaca" once again to you. When I was wandering along the coastline one Saturday morning, I found that bottle, a good smell come out of it and I found your address in it. I want to introduce myself to you. My name is ... and I am attending school here in my homeland in Cicia High School. I'm 17 years of age. I wish you well, accept this letter and you are most welcome to it.

".... And who knows what the tide will bring in" (Broyles, Undated) References:

LONG, J.A., VICKERS-RICH, P. HIRSCH, K. BRAY, E. & TUNIZ, C. 1998. The Cervantes egg: an early tourist to Australia. Records Western Australian Museum 19: 39-46.

BROYLES, W. Jnr. Undated. Cast away: The Shooting script.

*Deceased: October 2015, JAC gave permission for this to be published in the QNC News or The Queensland Naturalist.

WEBSITES OF INTEREST

http://www.arachne.org.au/default.asp

http://westprint.com.au/snakes-of-western-queensland-a-field-guide-by-angus-emmott-and-steve-wilson.html

http://www.brisbaneinsects.com/brisbane_vespoidwasps/PaperWasps.htm

http://www.asnailsodyssey.com/index.php

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