

TASMANIAN FIELD NATURALISTS CLUB INC.

established 1904

BULLETIN

<http://www.tasfieldnats.org.au>

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The Tasmanian Field Naturalists Club encourages the study of natural history and supports conservation. We issue our journal *The Tasmanian Naturalist* annually in October. People of any age and background are welcome as members.

Phone Janet Fenton (03 6239 6443) for further information, or write to GPO Box 68, Hobart, 7001.

Programme

General Meetings start at 7.45 pm on the first Thursday of the month, in the Life Science Building at the University of Tasmania. Outings are usually held the following weekend, meeting outside the Tasmanian Museum and Art Gallery entrance in Macquarie Street. Bring lunch and all-weather outdoor gear.

If you are planning to attend an outing but have not been to the prior meeting, please check details. Phone Janet Fenton 03 6239 6443 or email Don Hird. Unforeseen changes sometimes occur.

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| Thu, 7 Sep | Meeting 7.45pm in Life Sciences building, University of Tas. Our guest speaker will be Peter Thompson of CSIRO with ' <i>Phytoplankton stories from around Australia</i> '. |
| Sun, 10 Sep | Excursion to 50 acres of bushland adjacent to Pulchella Nursery on the Tasman Highway near Buckland. Meet at 9am outside the Museum in Macquarie St, Hobart. We will then drive to Pulchella and park at the Wildlife Gardens at 10am. |
| Thu, 5 Oct | Meeting 7.45pm in Life Sciences building, University of Tas. Liz Turner, of the Tas Museum, will describe 'Comparative work following in Baudin's tracks'. The explorer's observations in his 1802 expedition journal are compared with Liz's present findings. |

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| 6,7&8 Oct | Flower Show by Aust Plants Society in Hobart City Hall. We will have a display featuring life under rocks. |
| Thu, 2 Nov | Meeting 7.45pm in Life Sciences building, University of Tas. Lesley Kirby, director of the Royal Tasmanian Botanical Gardens, will be our guest and her talk will be 'Looking forward and looking back: the Botanical gardens' |
| Sun, 5 Nov | Excursion to the new Tasmanian Seed Conservation Centre in the Botanical Gardens, Hobart. Meet at the main top entrance at 9:15am. |
| Thu, 7 Dec | Meeting 7.45pm in Life Sciences building, University of Tas. As this is the last meeting in 2006, instead of a guest speaker we will have 'members night' when members are invited to give short presentations. |
| Sat, 9 Dec(?) | Excursion and end-of-year picnic. Details yet to be decided. |

Get Well Julia

Early in September we heard that Julia Scott was in hospital with a badly fractured leg. A naturalist even under the most trying circumstances, Julia, leg up in plaster, was noting the birds she could see or hear from her hospital window. The bird count reached 9 while she was in Calvary. Julia has now moved to St Johns in Cascade Rd South Hobart - visitors welcome! Mary King made some glorious native flower arrangements which we gave to Julia on behalf of the TFNC. Julia, the Club sends special wishes for your recovery.

Wildflower Spectacular

To be held 6th - 8th October, City Hall, Hobart

"Rocks, Plants, Soils - What Grows Where and Why", the Australian Plants Society 2006 show promises to be better than ever. The topic gives TFNC a chance to make a display featuring life important to the soil and life found under rocks. These animals and fungi tend to be out of sight and out of mind for most people.

This wildflower show will be our "excursion" for October, so please come and visit the TFNC corner. If you can volunteer 2 hours of time to man the display, please ring Janet Fenton, who is coordinating the roster, on ph. 6239 6443

Nierinna Creek Outing, 4 June 2006:

[Report by Anna McEldowney]

A group of 12 Field Nats met on a cold misty morning near Margate to visit what Kevin had assured us was definitely NOT a World Heritage area. At first the plant list was mainly made up of introduced and weedy species, while the wildlife was predominantly goats and horses .

The track follows the creek closely and several large dams beside the creek remain from previous farming activities. It was in one of these that we saw a platypus, seemingly unconcerned by our presence and our inevitable noise. However, after the track crossed the creek the vegetation became more "native" despite skirting several residential properties and as it climbed higher was less disturbed. Just before the end of the track was a "Fairy Dell", a delightful mossy spot by the creek with ferns. Robyn and I walked back from here (35 mins) while the others did a car shuffle. Janet, Geoff and John continued on up Nierinna and Tabors Roads to Tramway Hill, where they lunched at "Sheila's Shed", a facility provided by the Tramway Hill Landcare group. They followed a short path in the Tramway Hill Reserve, where there was a large *Eucalyptus globulus* with an *E. obliqua* growing out of it (mis-labeled). Janet reported grand views of the Channel from the top of the hill.

Thanks to John for the bird list, Kevin for the snail list and Janet and Geoff for the creek invertebrates and the Tramway Hill report. Come back Genevieve and David! – the best we can do is say there were lots of fungi although we did manage to identify a large area of *Marasmius* on fallen bark at the base of a large eucalypt and a cup fungus (*Plectania?*)

People attending:

John Reid, Geoff and Janet Fenton, Don Hird, Robyn Kramer, Kevin Bonham, Abby Throssel, Michael, Penny, Sam, Harry and Ben Driessen and Anna McEldowney

Bird list:

Starlings, Blackbirds and Silvereyes were seen at the start of the walk, and also an immature black swan on the dam below Burnaby Drive.

Native hens were calling around the second dam.

Birds seen in the bush around the track:

Grey Shrike Thrushes
Forest Ravens
Green Rosellas
Blue Wrens
Strong-billed Honeyeaters
Black-headed Honeyeaters
Yellow-throated Honeyeater
Tasmanian Scrubwren
New Holland Honeyeater
Female Golden Whistler
House Sparrows and Silvereyes
Beautiful Fire-tailed Finch
A Wedge-tailed Eagle

At Tramway Hill:

Eurasian Coots
Pacific Black Duck and an Australasian Grebe in the local dams
Plenty of Tasmanian Native Hens
Masked Lapwings
Scarlet Robin.

Creek invertebrates:

Mosquito larvae were seen in a pool in the creek's lower reaches, while further up the creek at

the "Fairy dell", several different species of Trichopteran larvae and two different chironomids were found as well as some high spiralled aquatic snails likely to be *Potamopyrgus*.

Snail list:

Caryodes dufresnii, *Prolesophanta nelsonensis*, *Elsothera ricei*, *Roblinella gadensis*, *Paralaoma caputpinulae*, *P.halli*, *P. mucoides*. Most of the *Caryodes* in the gully at the western end of the walk were very old. Kevin has seen populations like this before, but not often. Also saw the introduced slugs *Deroceras reticulatum*, *Lehmannia nyctelia* and *Limax maximus*, and we collected an odd-looking pseudoscorpion.

Plant list:

Introduced species:

Waterlilies

Erica lusitanica

Rubus fruticosus

Crocsmia

Vinca major

Typha sp.

Poplars *Populus* sp.

Willows, *Salix* sp.

Conium sp. (hemlock)

Cotoneaster

Acacia retinoides

Native species:

Eucalyptus globulus

Eucalyptus obliqua

Eucalyptus viminalis

Pultenaea juniperina

Goodenia ovata

Acacia dealbata

Coprosma quadrifida

Bursaria spinosa

Exocarpos cupressiformis

Acacia verticillata

Ozothamnus spp.

Dicksonia antarctica

Polystichum

Clematis aristata

Cassutha spp.

Melaleuca squarrosa

Epacris impressa

Olearia argophylla

Acaena novae-zelandiae

Pteridium esculentum

Pomaderris apetala

Acacia melanoxylon

Viola hederacea

Necklace fern

Bedfordia salicina
Lomatia tinctoria
Dianella tasmanica
Gonocarpus spp.
Coprosma hirtella
Pimelea nivea
Banksia marginata
Diplarrena moraea
Lomandra longifolia
Tetratheca pilosa
Acacia myrtifolia
Leptospermum spp.
Distichlis distichophylla
Correa reflexa
Pultenaea daphnoides
Callistemon pallidus

Excursion to Mt Canopus Observatory, 5 Aug 2006:

[report by Geoff Fenton]

Twenty-four of us were shown over Mt Canopus Observatory by Dr Stefan Dieters, a physicist at the University of Tasmania, specialising in optical and x-ray astronomy. The observatory is near Mt Rumney to the east of Hobart.

The most notable feature as you arrive at the site is the aluminium dome. Stefan ushered us all inside under the dome – we all fitted in surprisingly easily – and introduced us to the main instrument, a 1 metre aperture Cassegrain telescope. The telescope is up on a massive polar mount that was made in the 1960s by an ordinance manufacturer in Victoria. Stefan explained how this mount is used to keep the telescope pointing steadily at any desired star or galaxy while the earth rotates on its axis. He also pointed out safety to prevent the astronomer – at the end of along tiring night – from accidentally crashing the telescope into fixed parts of the mount; and arrangements for keeping the opening in the dome synchronised with the telescope's line of sight.

The sensor at the 'small end' of the telescope is 512x512 pixel CCD array similar to that in digital camera, but extremely sensitive and with no imperfections. The CCD is cooled to –50 degrees C by anti-freeze solution and a Peltier effect cooler. This enables 10 minute exposures to show down to 19th magnitude stars. This is 13 magnitudes more sensitive than the naked eye – and the sky glow from Hobart is the limiting factor.

The telescope is actually controlled from a little room (which couldn't fit us all at once!) full of computers and electronics. Our two youngest naturalists were privileged to push the buttons to move the telescope a degree or two.

The telescope is used for various astronomical research projects. Perhaps the most exciting at present is collaboration in a Paris based planet search for extra-solar planets. These have only been known of for about ten years. In this case the "micro lensing" technique is being utilised, where the gravity of a star along the line-of-sight acts as a giant lens to help focus light from an object even further away.

Another recent project was measuring the extent and properties of Pluto's atmosphere, and yet another is observing a binary star whose period is changing in an unexplained manner.

Stefan showed us the spectroscopy room with its massive frame on isolation mounts for supporting optical components. This is currently being upgraded to be fed by an optical fibre from the telescope and for the light to be recorded electronically.

After the tour, Stefan brought a 10 inch reflecting telescope out to the car park, and we all had a look at the craters on the moon.