TASMANIAN FIELD NATURALISTS CLUB INC.

established 1904

BULLETIN

http://www.tasfieldnats.org.au

Editor : Don Hird. (email dgh52@westnet.com.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.

Thurs. 4 May	7.45pm: Michelle Treloar will speak about <i>Skates</i> (stingray-like animals) in the Tasmanian context.
Sat. 6 May Excursion	<u>9.00am</u> : Depart from the Museum the Education Dept. Woodbridge Marine Discovery Centre facility. A levy may be necessary as this interesting centre is not usually open to the public on weekends and an fee may be entailed.
Thurs. 1 June Meeting	7.45pm: Sarah Munks, a zoologist working with the Forest Practices Board, will speak about Platypus and issues of stream disturbance

TBA, possibly Nierinna Creek near Margate.

From the Treasurer:

2006 Subs. are now overdue if unpaid. If a red cross (and/or note) is on your Bulletin envelope you are overdue for at least this year.

Family Membership \$35; Single Membership \$30; Concessional Membership \$25 Any queries please phone Anna on 6239 6326 or email on Anna.McEldowney@utas.edu.au

The Tasmanian Naturalist:

Articles are needed now. Our journal appears annually in October and includes a range of articles around the theme of natural history. Editor: Simon Grove Simon.Grove@forestrytas.com.au

Articles can range from short reports to extended scientific articles accessible to interested members of the general public. Refer to previous issues of the *Naturalist* for examples of style and suitable content.

Website Update

The TFNC website at *www.tasfieldnats.org.au* has been overhauled in recent times. It now has a brief summary of news and coming events such as meetings and excursions right on the front page, which we hope to keep up-to-date.

The *excursion photo gallery* now covers most of the recent excursions, and the *Bulletins* have been re-organised.

Club policy is for passengers to pay the driver a donation towards petrol and car running costs on Club field trips. A round trip up to 100km is a \$5 trip per passenger and a long trip, over 100km return is \$10 per passenger. Distance is taken to be the distance that the passenger travels with the driver, usually from the museum.

Excursion: Forest near Francistown, and Mystery Creek Cave

Weekend 4^{/5th} February, 2006 – report by Janet Fenton, amendments by Arthur Clarke

Many club members enjoyed Arthur Clarke's presentation about cave fauna at our February meeting. Following this we were most privileged to spend a weekend with Arthur on his 27 hectare property at Francistown near Dover, including a visit to Mystery Creek Cave at Ida Bay, to inspect some cave creatures first hand. The property is located at the end of a valley and is surrounded by State Forest and private forest (Gunns Timber Company). After a warm welcome including coffee and cake, after viewing a range of native birds and hawking dragonflies in their garden, Arthur and his partner Robyn led our party of seven naturalists into a section of their forest up the Bates Creek gully; they call it the "Lyrebird Gully". We all gasped at the size of the huge tree ferns (*Dicksonia antarctica*) - one specimen was estimated (by Alan Jackson) to be 400-450 years old. Some of these leaning giants had keel

shaped structures under the trunks formed from aerial roots, while the trunks of others joined, where their roots matted together. Many were decked with a variety of epiphytic ferns. The E. regnans mixed forest gave way to sassafras-dominated rainforest further up the gully. We sadly missed our mycologists in this wonderful habitat of agarics, boletes, coral and jelly fungi. After about an hour, we were joined by our eighth naturalist, Qug, who rode her new motorbike slowly to Francistown, brandishing her "L" plates, then hearing our distant voices tracked us up the gully. Sandstone overhangs or crevices and the underside of huge logs provide habitat for the Tasmanian Cave Spider (*Hickmania troglodytes*), a population of bush glow-worms and the endangered cave cricket: Micropathus kiernani. The cricket, known only from four sites in a very localised area, was first discovered in a sandstone cave at Francistown in February 1973; this Type Locality is now on the Gunns Timber property. A large white almost oval-shaped Hickmania egg-sac hung above its web which was slung in a horizontal net between cliff and logs. Lyrebird scratchings were everywhere and we heard them calling from time to time. Qug saw a female lyrebird crossing the driveway near the property gate as she arrived. Holes in the soil banks and trunks of some tree ferns, lined with a little web around the top, were the homes of lidless trapdoor spiders.

Arthur led us up the steep side of the gully to the site of a c. 1940s sawmill, where chunks of sawdust were still apparent and an introduced Rowan tree was growing. Two native trees: Stinkwood *Zieria arborescens* and Native Pepper *Tasmannia lanceolata* had huge leaves here. We spotted a large bush cricket clinging to the underside of a Native Pepper leaf and an unusual wasp-like ant on a *Pomaderris apetala* leaf, as well as a chrysomellid beetle and a ladybird beetle carapace. Penny Greenslade had previously collected a new species of springtail (Collembola) from this site.

Back in the rainforest gully with its massive tree ferns, we followed it upstream, as far asa rock-face that would be a waterfall in wet weather. Sampling in small water-filled pools here produced aquatic amphipods, caddis fly larvae, stonefly nymphs and a crane fly larva. Not far away we found a large adult crane fly. Kevin Bonham showed us two *Caryodes* land snails in the act of scraping the carapace of a dead *Caryodes* snail shell, as a ready source of calcium. Good recycling!

We retraced our steps back to the old sawmill site, thence down a benched track that was once a horse and tractor driven tramway. The dry sclerophyll forest and scrubby bush was dominated by *E. obliqua* and *Pomaderris apetala* with understorey plants such as *Caprosma* (native currant); *Monotoca glauca*; *Gaultheria hispida*; *Blechnum* ferns; *Goodenia ovata*; *Olearia stellulata*; *Pimelea drupacea*; Native cherry *Exocarpos cupressiformis*; *Clematis aristata*; *Billardiera longiflora*; Soloman's seal *Drymophyla cyanocarpa*, *Dianella tasmanica* and *Senecio* sp. We also found a stink-horn (or "starfish") fungus *Aseroe rubra*, *Pelargonium* sp. and soft bracken.

After a late lunch we went on another excursion, this time sampling from a small lily-pond near the house and a larger dam some 400 metres further up the hill. In the lily-pond we found copepods, stonefly nymphs; mosquito, dixid midge and chironomid larvae; bivalve mollusc pea shells (Sphaeriidae); hydrobiid gastropod *Potomapyrgus*; trichopteran larvae and a dead *Caoborus* larva. (A native hydrobiid snail *Fluvidona* was also found here by Winson Ponder in 1988.)

We walked uphill through *Eucalyptus obliqua* and *regnans*, Musk *Olearia argophylla*, Native Pepper *Tasmannia lanceolata*, *Dianella tasmanica*, *Clematis aristata* and *Acacia dealbata*.

The top dam (elevation 720 feet) revealed bugs (family Velliidae) on the surface tension and notonectids in the water. Corixidae, *Berosus* (a scavenging beetle larva) and large diving beetles (Dytiscidae) were collected along with water mites. There were numerous dipterans including, the larvae of dixiids, ceratapogonid midges, chironomids and trichopterans, plus adult damselflies and caddis flies. A common froglet (*Crinea signifera*) was heard calling and a leaf-hopper bug and longicorn beetle were found near the waters edge. Kevin found a few more land snails, bringing his tally up to 13 for the day and came up with another natural history action vignette while he foraged among the leaf litter - *Argonomertes australiensis*, the nemertean that projects its brightly coloured pharynx forward by a body length or two when disturbed. Kevin demonstrated the action with a pink specimen, and later found a yellow one. We also saw a long-jawed spider (F. Tetragnathidae) and its web spread across stalks of *Juncus* beside the dam, capturing small dipteran flies, midges and mayflies. The flat, forested area above the dam was quite wet, and had been burnt sometime in the distant past, now supporting *Melaleuca squarosa* and *E. obliqua*. Massive old fallen logs and huge stumps left by loggers suggest the size of the trees once growing here.

We sampled award winning Bates Creek Winery liqueurs before dinner, enjoying the company and atmosphere of the valley house. Amply stoked, we headed out into the Lyrebird Gully again, this time by torchlight, to see the "cave" fauna under logs and sandstone overhangs. *Hickmania*, the cave spider, was most impressive in the night, hanging under its net strung horizontally between sandstone outcrops and logs, and fairly untroubled by the peering eyes and torches of so many field nats. We saw 18 in all, three of these being female. Clusters of glow-worms shone from dark hollows and we spotted a number of cave crickets: *Micropathus kiernani*. We photographed another large cranefly and a moth, and heard a Southern Boobook calling from the timber along the side of the valley.

About midnight we crashed into welcome, comfortable beds and slept like rocks until a Grey Thrush whistled in the morning. From our vantage point under the verandah basking in Sunday morning sunshine with breakfast and coffee, we watched Beautiful Firetail Finches, a Dusky Robin, Superb Blue Wrens and Silver-Eyes at work in the garden. Also around the house were Green Rosellas, Forest Ravens and Scarlet Robins.

For the caving trip we said goodbye to Betty and Qug, but gained one (Neil), making a party of eight heading to Ida Bay. Arthur had obtained permission to take us into Mystery Creek Cave, presently closed on account of recent flood damage and rock-fall. Arriving at the car park we saw a Macleay's Swallowtail. Arthur recognized this as the rare western Tasmanian sub species *Graphium macleayanus moggana* Couchman, 1965. A short walk along the old Ida Bay Railway - used to cart limestone from the original Blaneys Quarry site to Deep Hole -, brought us to the abandoned quarry under the northern slopes of Marble Hill. Arthur pointed out different cycles of karstification evident to the geologist's eye. Fossil caves known as "palaeokarst" could be seen as areas of ancient, now fossilised cave fill surrounded by limestone in the quarry face.

The cave entrance was not far beyond this and we trustingly followed the Arthurian legend down the slippery rocks into the dark cavern. Kevin remained above ground where he had a most productive afternoon fossicking for snails and finding a total of 17 species. (See Kevin's separate report.)

Underground the cave was quite cool (6-8°C) and wet. We were awed by "moonmilk", the silvery encrusting excreta of actinomycetes bacteria in water droplets, looking as though

some giant has spilt molten solder over the rocks. Glow-worms were festooned like stars in the cavern ceiling. We were able to see these gnat larvae at close quarters, in their gelatinous tubes suspended in a hammock of silken thread with dangling sticky snare threads and the struggles of a recently ensnared mayfly (Ephemeroptera). Abbie lingered for a while to watch the glow-worm swallowing a section of its thread as it began to haul up its prey,. In a pool we saw a small fish, a cave ecotype of the Spotted Galaxid Galaxias truttaceus, that retains the spots while having less pigmentation generally. Aquatic invertebrates such as stoneflies and mayflies are often washed into the cave as larvae, eventually hatching to become a flying food source for glow-worms and other cave fauna such as Hickmania and the cave harvestman *Hickmanoxyomma caviticum*, the latter feeling its way using its longer 2nd pair of legs like antennae. We saw several specimens of these, and the pupal cases left by emerging stonefly and mayfly nymphs on the cavern walls. The harvestman, Arthur told us, is the top predator, feeding on glow-worms but sometimes becoming entangled themselves in the glowworm snare threads. Other invertebrates seen were the amaurobioid cave spider Tanganoides sp. (Amphinectidae), white aquatic flatworms (Paludicola), hydrobiid snails Nanocochlea pupoidea and a sciarid fungus fly on a piece of wood.

On the cave walls we photographed the marble-like white veins of calcite in the grey limestone, and a textured area called "scalloping" pocked with depressions from the "plucking effect" of flowing water under pressure, when the limestone was submerged eons ago Near the area of a rather awesome rockfall, we ventured down Cephalopod Creek side passage, where recent flood litter from the February 2005 floods had been deposited high up on rock shelves (even more awesome) providing habitat for colonising fungi and small invertebrates. In the litter we observed small spiders, some possibly cave adapted springtails (F. Paronellidae), tiny white organisms likely to be juvenile isopods and a variety of fungi. Arthur told us that amongst the cave animals we missed seeing. there were two species of cave adapted carabid beetles, white and translucent *Anaspides* syncarids, plus aquatic crangonyctoid (paramelitid) amphipods etc. – perhaps a promising subject for the next issue of *The Tasmanian Naturalist*.

Many thanks to our hosts, Arthur Clarke and Robyn Claire for their warm hospitality and for taking us on such great and informative excursions. (Arthur and Robyn wish to add that it gave them tremendous enjoyment having us, being able to share our enthusiasm as field naturalists and learning so much more about the flora and fauna at Francistown.)

Snail report, weekend 4-5 Feb 2006 - Kevin Bonham

Francistown:

I sampled this area frequently in 1987-98 and recorded 11 species. On this trip I added two further species. Caryodes dufresnii, Cystopelta bicolor, Pernagera kingstonensis, Paralaoma halli, Helicarion cuvieri, Discocharopa mimosa*, Roblinella gadensis*, Stenacapha hamiltoni, Allocharopa legrandi, Trocholaoma parvissima, Mulathena fordei. Species marked * had not been recorded at Francistown before.

Mystery Creek Cave / start of Moonlight Ridge Track:

As this is one of Tasmania's most important snail localities with three species known from nowhere else, I decided to spend the outing sampling snails on the surface:

Caryodes dufresnii, Prolesophanta sp. "Marriotts"*, P. sp. "Francistown", Tasmaphena sinclairi, Paralaoma caputspinulae, Trocholaoma spiceri, T. parvissima, Discocharopa mimosa*, Pernagera kingstonensis, Dentherona dispar*, Allocharopa legrandi*, A. sp. "Quarry", Roblinella curacoae, Geminoropa sp. "Hastings"*, G. sp. "Moonlight", Mulathena fordei, Thryasona marchianae, Cystopelta bicolor*. Species marked * had not been recorded at this locality before.

A. sp. "Quarry" has only been recorded at this locality so it was useful to get a large sample of specimens. Two other species recorded only at this locality were not seen on this trip. *Geminoropa* sp. "Hastings" has previously been recorded only in small numbers at Hastings Caves and Precipitous Bluff. In this sample it was astonishingly common - hundreds of specimens seen including 40-50 under some individual rocks. The total of 18 species equalled my record for the most species recorded from one locality on one day.

I also collected an undescribed haplodesmid millipede near Mystery Creek Cave. This rare and obscure species (if I've identified it correctly) was previously known from three sites in the southern forests area.

Excursion: Stinking Bay & Denman's Cove, Tasman Peninsula - 5 Mar 2006

Report: Fran Millar

Ten naturalists set out and met three more, Tom and Tina Terry and John Reid, who arrived earlier bird-watching. When snorkelling at Denmans Cove we saw a Banded Stingaree resting on the sandy bottom, and fish including Leatherjackets, Wrasse, Bastard Trumpeter swimming among the kelp. A Swimming Anemone *Phlyctenactis tuberculosa* was attached to some rock or weed.

Qug netted amphipods, copepods and *Potamapyrgus* (an introduced water snail) in Stringers Creek (between Stinking Bay and Denmans), and more amphipods, an isopod and some other tiny unidentified critters in the creek at Denmans.

Janet Fenton identified the lower jawbone we found on the track as a common ringtail.

Vegetation types:

John Davies identified, dry forest dominated by *Eucalyptus obliqua* and *E. globulus* with some *E. tenuiramis* right on the foreshore. Dry scrub dominated by *Banksia marginata* and *Leptospermum glaucescens* - I think both of these were on stony dolerite yellow podzolic soils. *Pomaderris apetala* most of the way. Coastal dune scrub on deep sands behind the beach with *Acacia sophorae* Lots of sedges including *Lepidosperma lateraleae*, *L. ensiforma*/ as well as the woody rasp-wort? *Gonocarpos teucrioides*. On slopes with more protected aspect such as heading into Denmans we came into damper scrub including *Notelaea*, *Tasmannia lanceolata* (native pepper) *Zieria arborescens*, *Pomaderris eliptica* and *Bedfordia linearis* and *B. salicina*. In the driest area there was also a patch of */Allocasuarina littoralis*/ that was sprouting from the base after being fairly thoroughly burnt in the (2004?) fire. Was it among these that we saw the seed head of the hyacinth orchid?

Snails - Kevin Bonham reports:

Caryodes dufresnii, Tasmaphena sinclairi, Prolesophanta nelsonensis*, Bothriembryon tasmanicus*, Paralaoma halli, Trocholaoma parvissima, Pernagera tasmaniae, Discocharopa mimosa*, Allocharopa legrandi*, Allocharopa sp. "MacGregor"*, Thryasona diemenensis, Helicarion cuvieri.

Those marked * were new records for this locality.

Allocharopa sp. "MacGregor" was by far the most significant - only the fourth locality for this rare Forestier/Tasman Peninsulas endemic and a find which almost doubles its likely range. I also saw the introduced slug *Lehmannia nyctelia* and exotic garden slaters in large numbers at the north end of Stinking Bay despite the lack of any obvious major disturbance.

Orchids:

Dipodium roseum (finished), Acianthus exsertus (in bud), Pterostylis (ex-longifolia group) (in bud).

Freshwater fish:

probably Galaxias brevipinnis

Birds:

White- faced Heron, Sea Eagle, Brown Thornbill, Tasmanian Thornbill, Beautiful Firetail Finch, Crescent Honeyeater, Green Rosella, Yellow-throated Honeyeater, Grey Shrike-thrush.

Banksia marginata	Epacris impressa	Goodenia ovata
Carex supressa	Acacia verticillata	Acacia myrtifolia
Eucalyptus tenuiramis	Eucalyptus globulus	Eucalyptus obliqua
Platylobium triangulare	Pultenaea daphnoides	Notelaea ligustrina
Monotoca glauca	Gonocarpus teucrioides	Amperea sp.
Zieria arborescens	Tasmannia lanceolata	Pomaderris elliptica
Bedfordia linearis	Hakea sp.	Leptospermum scoparium
Atherosperma moschatum		

Some plants from the excursion to Stinking Bay/Denmans Cove:

Pygmy-Possum Nest-Box-Study Project

As foreshadowed in previous reports, I am commencing a significant project on the ecology and population biology of the two pygmy-possum species in Tasmania.

Information on reliable recent sightings of pygmy-possums is sought. Part of the study will focus on investigating the effects of silvicultural regimes on pygmypossum populations in the Warra Long-term Ecological Research Area of the southern forests.

Elsewhere habitats of each species will be investigated, together with population information.

Further information : http://tasfieldnats.org.au/PygmyPossum/NestBoxes.htm