Field Nats News No.248

Newsletter of the Field Naturalists Club of Victoria Inc.
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Understanding Our Natural World
Est. 1880

Office Hours: Monday and Tuesday 9.30 am - 4 pm.

December 2014 /January 2015

From the President

Dear members, welcome to the December-January 2015 edition of Field Nats News. May I take this opportunity to wish you all a very Merry Christmas and a new year full of opportunities to get out into the bush, beach or wherever else to experience or natural world, whether it be in Australia or overseas.

The year has been full of events as usual. Last night saw the awarding of the Australian Natural History Medallion to Dr Tom May from the Royal Botanic Gardens for his work on mychology and the Fungimap project. (photo below). Unfortunately I was unable to attend this night due to work commitments in north-east Victoria. That said, I would like to thank Gary Presland for hosting the evening and Barbara Burns and Su Dempsey for their wonderful work of preparing an excellent dinner and setting up the hall so it could be enjoyed in comfort. (Further report p 8.)

A couple of reminders about events that are coming up in the next few weeks.

The Biodiversity Symposium themed "Farming and Conservation" is to take place on Saturday and Sunday 22nd and 23rd of November. While there are still plenty of spaces for the presentations on Saturday, the Sunday bus trip is filling pretty fast. Please contact the office to grab a spot.

The Club Christmas get together is on Saturday 13th of December (see p12 for details). Can I ask SIG representatives to please send Wendy six photos from your 2014 activities to be included in the presentation for the night, by 10 am Monday 8th December.

Once again, my best wishes to all members and your families during this festive season.

Thanks to the FNN editorial team for your efforts during the year. You do a fantastic job!

John Harris, President

Photo: J. Broadberry

As is usual there will be no separate FNN for January 2015. The due date for copy for February's FNN will be **10 am Monday 5th January 2015.** We will go to the printers on January 13th with collation on the 20th.

Very best wishes for a joyful Christmas and a productive and satisfying New Year, from FNN to our valued readers and wonderful contributors.

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CALENDAR OF EVENTS

All meetings are held at the FNCV Hall, 1 Gardenia St. Blackburn at 8 pm., unless otherwise indicated. On days of extreme weather conditions, excursions may be cancelled. Please check with leader.

December 2014

Monday 1st – Fungi Group: No monthly meeting

Tuesday 2nd - Fauna Survey Group Meeting: ***Christmas break up*** at Blackburn Lake Visitors' Centre from 6.00 pm. Bring a plate to share (salad or dessert) and your own meat and drinks. Contact: Su Dempsey 0437 172 333

Sunday 7th – Juniors' Group Excursion: ***Visit Kinglake with ranger Tony Fitzgerald*** Contact: Claire Ferguson 8060 2474; toclairef@gmail.com

Monday 8th - Marine Research Group Meeting: ***Annual Members' Night*** This is the final meeting for the year when our members bring along items of interest and questions looking for answers. Contact: Leon Altoff 9530 4180:0428 669 773

Saturday 13th – from 6.30 pm. Christmas Party: Join us for a round-up of the year, a prize-filled raffle and Christmas cheer. Full details page 12.

Tuesday 16th—No collation in December.

Thursday 18th – Botany Group: Meeting: ***Members' Night*** Bring plants or photos of interest and have an update on the grassland at Clyde. Contact: Sue Bendel 0427 055071

Tuesday 23rd – Day Group. No monthly meeting

Wednesday 24th – Geology Group. No monthly meeting - **Christmas Eve**

Friday 26th – Juniors' Group. No monthly meeting - **Boxing Day**

Fauna Survey Group—No Christmas camp

January 2015

Monday 5th – Fungi Group. No monthly meeting

Tuesday 6th – Fauna Survey Group. No monthly meeting.

Saturday 10th - Fauna Survey Group: Stagwatch: ***An evening survey to look for Leadbeater's Possum, gliders, owls and other nocturnal wildlife***. Contact: Ray Gibson 0417 861 651

Monday 12th – Marine Research Group. No monthly meeting

Thursday 15th – Botany Group. No Monthly meeting.

Monday 19th - FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Wendy, 98779860 or admin@fncv.org.au

Tuesday 20th—Collate FNN: Starting about 10 am. Morning tea provided. All welcome. Contact Joan Broadberry 9846 1218

Saturday 24th – Juniors' Group: Excursion: ***Beach day.*** Meet at Blairgowrie Pier at 11am. Bring swimming and snorkelling gear. Contact: Claire Ferguson 8060 2474; toclairef@gmail.com

Saturday 24th to Monday 26th - Fauna Survey Group: Survey - ***Checking nest boxes in Rushworth State Forest.*** Contact: Ray Gibson 0417 861 651. *Prior registration of at least one week essential.*

Tuesday 27th – Day Group: Meeting: Meet at 10. 30 am for coffee and a chat. Speaker at 11 am**.** Contact Gary Presland 9890 9288 for further details of program.

Wednesday 28th – Geology Group: No monthly meeting

Friday 30th – Juniors' Group Meeting: ***Council member talks.*** Contact: Claire Ferguson: Claire Ferguson 8060 2474; toclairef@gmail.com

The policy of the FNCV is that non-members pay $5 per excursion and $2 per meeting, to contribute to club overheads. Junior non-member families, $2 per excursion only.

Members' news, photos & observations

We always have space for member photos and natural history observations. Please share with us what you have noted in your daily life, travels or garden. Email: fnnews@fncv.org.au by the first Monday in the month.

Welcome

Warmest greetings to these new members who were welcomed into our club at the last Council meeting*: Anthea Fleming, Emma Tew, Ken Griffiths, Rhys Freeman, Andrew Docherty, Katie Docherty, Elizabeth Whitford, Ilena Whitford, Genevieve Whitford, Jake Whitford and Adam Whitford.*

If you find injured wildlife:
Wildlife Victoria
Ring1300 094 535
or **Help for Wildlife**
0417 380 687
They will connect you to your nearest suitable wildlife shelter

PUT THESE NUMBERS IN YOUR PHONE NOW.

Possum Fights Back

On 26 September at about 10 am, I happened to look out a window, and on my driveway I saw a raven trying to grab the tail of a baby Ringtail Possum! I went out to investigate and shooed the raven away. The possum scrambled off the driveway onto the neighbour's lawn. The raven advanced on the possum again, but the snarling possum chased the raven away. I picked up the little possum and placed it on a branch of a low, bushy tree, and, as expected, it tried to bite me and its claws were sharp also! Checking an hour later I could see no sign of the possum or the raven.

Peter Fagg, Blackburn

Thanks to the volunteers who staffed the FNCV stall at the Whitehorse Spring Festival on 19th and 20th October:

Ray Gibson, Su Dempsey, Gary Presland, Ruth Hoskin, Cecily Falkingham, Andy Brentnall & Claire Ferguson.

They report a lively and interesting time presenting the work of the Club to the local community.

2014 Science Talent Search

A sum of money was donated to the FNCV in memory of our dear friend Noel Schleiger (1926-2013). This has been used to support the Science Talent Search program. This scheme provides recognition and awards to primary and secondary school students for their science projects.

Barbara Burns attended the exhibition and presentation day on Monday 27th of October and reported on the astonishing variety and high standard of work displayed. This included research, wall charts, games, creative writing, working models, video productions and photography. The FNCV has received a number of lovely letters from students who received awards.

In total, the money donated, created 25 minor bursaries and 8 major bursaries. This went to a total of 41 students at 25 primary and secondary schools or collages.

GEOLOGY COMMITTEE

Interested persons are invited to join the Geology Group Committee to help organise speakers for meetings, excursions and FNN reports, as present member, Kaye Oddie, is standing down from the Committee. Please contact Ruth Hoskin (9878 5911) or Kaye Oddie (9329 0635) if you are interested in contributing to the Geology Group in this way.

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the FNCV.

This animal is only a dot in the photo, but it was an exciting dot for me as it was a platypus observed swimming under the footbridge at Finns Reserve, Templestowe. They are regularly seen there. Late afternoon is a good time.

Joan Broadberry

GEOLOGY GROUP
CHRISTMAS CAKE RAFFLE

The Geology Group is holding a Xmas raffle of a beautiful Christmas Cake Tickets on sale at Geology meetings Oct 22 & Nov 26 $3 per ticket or two tickets for $5
Raffle drawn Nov 26th

Geology Group

Geology Group Meeting
24th September 2014

The geomorphic effectiveness of urbanisation

Speaker: Dr. Geoff Vietz, Waterway Ecosystem Research Group, University of Melbourne

Dr. Geoff Vietz showed us the stark reality of the damage to waterways caused by urbanisation. He also held out some hope with a number of possible ways to repair waterways and reduce future damage.

The problem is two-fold:

- Too much rainfall goes straight into the drainage system rather than being infiltrated or evapotranspired close to where it falls.
- The increased flow in urban streams comes in sudden bursts, greatly increasing its erosive power.

Geoff's research investigated the relationship between 'effective imperviousness' of the catchment and the geomorphic condition of streams around Melbourne. 'Effective imperviousness' combines the proportion of impervious surface in the catchment with a measure of how quickly rainfall gets into the drainage system. The research shows that it only takes a small increase in imperviousness to degrade a stream's bed and banks severely. Other research shows that a small increase in imperviousness will also cause severe degradation of a stream's ecological condition. A stream in good geomorphic and ecological condition will have connectivity with the flood plain, vegetated benches, undercut banks and overhanging vegetation, wood in the stream, patches of organic matter, varying velocities and depths and mobile substrates.

Geoff also pointed out that urban steam degradation also threatens people's engagement with the environment, comparing the way we used to love to play 'down the creek' as kids, with the unattractiveness of a straight rock-lined drain.

The usual solutions are counterproductive in the long run. A rock embankment which may protect a road, path or house will only increase the stream energy and make the problem worse somewhere downstream.

Mullum Mullum Creek, badly eroded.

What's to be done? We need to:

- Disconnect impervious surfaces from the stream. At home, install water tanks and use the water for e.g. a raingarden. On a larger scale, reduce the efficiency of connections within the drainage system, e.g. wetlands that slow the flow and filter the water. Replace kerb and gutter with swale drainage. Provide a wide floodplain where the watercourse will naturally twist and turn.
- Provide bed-load sediment. Flash flows quickly remove most sediment, leaving bed and bank lined with rock or clay. A range of sediment types is necessary for ecological health and sediment in the stream also helps to slow down the flow. It's important to protect headwater sediment sources. Ideally there would be enough width in the floodplain to allow local flooding (which would reduce more serious flooding downstream). A moderate amount of bank erosion is beneficial, allowing for channel migration. If all else fails, sediment replenishment is even being considered.

Little Yarra River, in good geomorphic condition.

Some of these measures can be taken by individuals, but the big ones require big money and some can only be achieved in new urban developments. Some developers are including good waterway design and using it as a selling point, but clearly stricter standards for all urban waterways have to be imposed and enforced.

Graham Patterson

From the Office…..

Thank you very much to Pieter Boschma for repainting the sign on the front wall of the building. It was tatty and peeling, but now it looks really smart and lifts the appearance of our hall.

There are occasionally items which we no longer need and our members have not wanted either, and we're thinking that eBay might be the best option for selling them. For example the fax machine, which was hardly used, and refill rolls for it which cost $50 each, need to go. Would anyone be interested in handling the sales? You could either use your own eBay account, or set one up in the Club's name (although as the number of items would be very low, it might not be worth the effort required to do that). The net profit after fees would be returned to the Club. Please let me know if this appeals to you.

The office will be closed for Christmas from 17th December until 12th January, when I'll be back refreshed and ready for 2015.
Best wishes to you all for a happy and safe festive season.

Cheers, Wendy

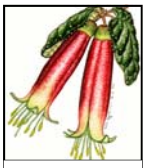
Optics Central Affiliate Program

When FNCV members purchase binoculars, microscopes, telescopes etc from Optics Central, 6% of the total amount (excluding shipping) will be a store credit to the FNCV.

Members will need to key in the Coupon Code: FNCV3130.

There is no minimum order and no limit on items.

Their address is 8/23 Cook Rd. Mitcham, phone 1300 884 763.



FNCV FUND RAISING CHRISTMAS RAFFLE

Your support is essential to this venture. Please get involved. The money raised by the raffle will be used to upgrade equipment at the Club and assist towards the regular maintenance of your Clubrooms.

Booklets of 10 tickets are now ready to be distributed at FNCV meetings and excursions or contact the office. Telephone 9.30—4 pm Monday or Tuesday or email any time, admin@fncv.org.au

Tickets are $2 each

Many thanks to those who generously donated prizes.

1st Prize: $300 voucher from Optics Central Superstore, Cook St. Mitcham. Choose from a wide range of binoculars, telescopes, microscopes and supporting accessories. www.opticscentral.com.au
2nd Prize: five beautiful books on Natural History donated by Andrew Isles, the Natural History specialist bookshop, Prahran. www.andrewisles.com
3rd Prize: $75 voucher from "Master Your Camera" for expert tuition in digital photography or towards a photography course www.MasterYourCamera.com.au
4th Prize: $50 voucher from your local Good Guys, Home HQ, Whitehorse Rd. Nunawading.
5th Prize: Hamper of field-naturalist friendly goodies for all ages.

INSTRUCTIONS:
Return Stubs, unsold tickets and cash to the FNCV office by:

MONDAY DECEMBER 1ST 2014

Or mail stubs and unsold tickets with a cheque payable to FNCV Inc to FNCV, PO Box 13 Blackburn 3131 (NO CASH IN POST) **or** to arrange return of money by direct credit contact the office on 9877 9860 or Su 9878 6829.

The raffle will be drawn at the FNCV Christmas Party, Saturday 13th December 2014.
All winners will be notified.

Fungi Group

FUNGI GROUP FORAY, WOODLANDS HISTORIC RESERVE, 6 JULY 2014

Vegetation: Hills Herb-rich Woodland
This week it was dry in the woodlands and we found few fungi; most of them were small or dried up and decayed. However, excitingly, we discovered a fungus we had not seen before - resembling *Lamprospora tuberculata* growing in the moss. This is a minute (1-3mm) yellow-orange-brown disc with a membranous margin. Fortunately, Paul George remembered seeing it in Fuhrer (*A field guide to Australian fungi* by Bruce Fuhrer 2011, no 506), who writes "Discs 1-3mm across, more or less flat with a distinct membranous margin scattered to gregarious amongst mosses of several species, particularly *Campylopus* sp. (that Graham Paterson recognised), and occasionally liverworts. The genus name Lamprospora, meaning 'beautiful spores' refers to the large globose spores, covered with tubercles…spore print white." There were quite a lot scattered about the moss beds. Fortunately for us, when Jurrie Hubregtse did a microscopical examination of a specimen, instead of finding the 'beautiful' large, round, ornamented spores' he found ellipsoidal-fusoidal (spindle-shaped) and smooth spores, so the fungus is not even a *Lamprospora* sp. However, Bruce Fuhrer (pers comm.) thought that the spores suggested an *Octospora* sp. which has similar macroscopic features, and we were able to correct our initial misidentification of *Lamprospora tuberculata*.

Octospora sp. Photo: Jurrie Hubregtse

Fran La Fontaine found *Pilobolus* sp. growing on macropod dung – another minute species, a couple of millimetres tall. It is like a translucent white pin with a black spore capsule on top. According to Prof. Richard Fortey (BBC Scotland documentary, *The Magic of Mushrooms),* the 'Hat Thrower' (*P. crystallinus*) is the fastest organism in the world. When the nutrients on the dung have been used up, the spore sac must be projected onto clean grass where it will be eaten by macropods. Once eaten, the spores pass through the digestive tract unharmed and are deposited into a fresh substrate of dung, thus perpetuating the asexual lifecycle. For projection the *Pilobolus* uses water droplet acceleration to fire the black capsules which reach speeds of up to 40 mph (c90 kph) in two millionths of a second, against a pull of 20,000 gravities. This projects it for a distance of a thousand times its own length. Apparently the orientation of the stalk towards the early morning sun guarantees that the sporangium is shot some distance from the excrement.

On a fallen log were two fruit-bodies of *Mycena carmeliana*. The young specimen clearly showed the orange-brown disc at the base of the stem where it enters the substrate. It should have a strong ammonia-like odour, but none of the forayers mentioned it. The cap is flattish, pale grey-brown or whitish and viscid, the stem is pale brownish. There is a similar-looking species, but with a white or pale brown disc that we have seen at the Blackwood and Greensbush forays. Both have the same structure (but not colour) as the blue Pixie's Parasol *Mycena interrupta.*

The beautiful deep purple crust, *Hjortstamia crassa,* (seen here last year), had dried to brown lines on the burnt log. It was no longer purple, with a fuzzy surface (no sign of pores), that had mauve to pale lilac margins that formed very furry shelves. The large earthball, *Mycenastrum corium* Tennis Ball Puffball (as IR McCann calls it in 2003 in *Australian Fungi Illustrated,* p101), was past its best and only the whitish lobes of the old fruit-bodies remained. Some had the remains of the dark brown spore mass positioned in the centre. Interestingly, it is apparently a puffball of desert and semi-desert regions, and occasionally of coastal dunes (*A field guide to Australian fungi* by Bruce Fuhrer 2011, no 335). Most of the many brown boletes were infected with the Bolete Eater *Hypomyces chrysospermus,* a mould that changes from white to yellow – we saw both the white stage and the yellow form. But, in contrast to the dried up *Limacella piterika* 'Slimy-fella' of previous forays, this year we saw young 'gloopy' fruit-bodies. There were several *Polyporus gayanus* found on fallen branches. This is a spongy semi-circular species with an orange-brown, finely ridged upper surface, a creamy pored lower surface and a much-reduced stem that attaches to the substrate.

Finally, a spider, possibly the Sac Spider *Miturga* sp. was keeping watch on our activities.

Philobolus sp. Photo: Fran La Fontaine

Correction for Woodlands Report on 6th of July 2014

Graham Paterson emailed re moss – "There was a bit of *Campylopus* sp. around where the *Octospora* was, but the moss in Jurrie Hubregtse's photo was the more common one …. I think it might be *Rosulabryum billarderri*".

Pat & Ed Grey

FNCV FUNGI GROUP FORAY 13 JULY 2014 Badger Weir, near Healesville

Vegetation: Wet Forest, most commonly dominated by Mountain Ash *Eucalyptus regnans.*

I was horrified to see the amount of trampling damage by deer in the undergrowth; it was particularly noticeable along Stringybark Track. These feral animals must be removed before they completely destroy the undergrowth and prevent re-growth, thus destroying forever the forests as we know them.

On the foray we found some unusual (for us) fungi. For the first time in years we found a group of Orange Fans *Anthurus archeri* (Fungimap Target species), which are very distinctive with orange-brown, dry, smooth and leathery caps and widely-spaced gills concolorous with cap. They were laterally attached to a small dead branch by a narrow attachment. In the car park, on a dead branch, we saw a group of black jelly globules which did not fit a description of any *Tremella* sp. that we knew. When they caught the light they seemed to have a hint of purple. John Eichler thought it might be *Exidia* sp. In the field it was difficult to see any warts/small, peg-like projections, but in John's photo there are rough projections seen. So it may be an *Exidia* sp. Paul George suggested (the uncommon) *Ascotremella* sp. because the base appeared to have a single attachment. He later went on to say "My photos tend to show purplish-brown rather than blackish colours; surface slightly pruinose, with small lumps, but not particularly warty; lobed rather than disc-shaped. We did observe a single point of attachment, rather than an array of fused discs.

I appreciate the similarities to *Exidia glandulosa* in the photo in Gates & Ratkowski, *A Field Guide to Tasmanian Fungi (2014)* by Genevieve Gates and David Ratkowsky, p.177. However, there is also an image of *Exidia glandulosa* in Phillips, Mushrooms, 2006, p.349, which shows a photo of discs rather than lobes and described as 'pendulous, disc-shaped, at first with tiny scattered warts, often becoming fused; blackish; gelatinous, upper surface felty'. For comparison, Laessoe, Mushrooms, 1998 p.283 describes *Ascotremella faginea* as '... gelatinous, irregularly shaped blobs, ..almost brain-like... It is attached to the substrate by a short stem-like point, 2-4 cm diameter'. Laessoe also says the 'spores [are] produced all over surface of the fruit-body' which may account for its powdery appearance. Arora, Mushrooms Demystified, 1986, p. 877, describes the species as 'larger [than 1-4cm], raisin-coloured, gelatinous ... lobed or brain-like.' There is also a reference to *A. faginea* in Fungi of Switzerland, p. 152, which I don't have to hand at the moment [Pat Grey – this book says 'irregularly rounded and lobed individual fruiting bodies grow crowded together and form a cerebrifom gelatinous structure with a short stalk-like part for attachment. The entire fruiting body pink to violet, dull when dry, shiny when wet … growing single'- we saw several specimens on the branch]. However, as Jurrie's dad used to say: "Things aren't as they seem". The most salient character is that Ascotremella is an ascomycete (spores in an asci) and Exidia is a basidiomycete (spores on a basidium)". This shows the importance of making a microscopic examination when field identification is not possible.

The rare *Chromocypella muscicola* Photo: R Hartland

Richard Hartland found the rare *Chromocyphella muscicola* (photo above) which was new to us: minute cup (2-3mm), hangs down pendulously from a mossy substrate; the cup is whitish on the outside and greyish, with no gills on the interior, which often shows mature brown spores; unlike most other cups it is a Basidiomycete and obligate on moss (*A Field Guide to Tasmanian Fungi* (2014) by Genevieve Gates and David Ratkowsky, p170). Virgil Hubregtse was able to confirm the species after microscopic examination and mentioned that interestingly, the fungus was found in Jehosaphat Valley during an FNCV excursion in 1987 (*The Victorian Naturalist* Vol. 106 no. 2, 1989, pp. 54-55.). This fungus parasitises mosses. In addition, Richard also pointed out a very rare fern – Long Fork-fern *Tmesipteris obliqua* found on a Smooth Tree-fern *Dicksonia antarctica*, the leaves are arranged spirally along the stem and there is a short point on the end of each leaf. This is not a true fern, but a very primitive plant which lacks true roots (*Sherbrooke Forest, its flora and history* by Friends of Sherbrooke Forest Inc. 2000, p87).

Further around the Lyrebird Track, Reiner Richter found a black earth tongue and from his photo it was possible to see a fuzz of short hairs over the stem and head which runs smoothly into the stem. These characteristics identify the species as *Trichoglossum* sp. And, in the grassy area near the car park, Carol Page pointed out other black earth tongues. However, these did not have hairs on the stems or heads. Thus identifying them as a *Geoglossum* sp. with a grooved, rough pitted head which is distinct from the rough stem. Jurrie Hubregtse made a collection and said 'What we found is most likely *Geoglossum umbratile* (photo next page) as our observations are a good match to *Geoglossum umbratile* as described in *Helotiales of Australasia: Geoglossaceae, Orbiliaceae, Sclerotiniaceae, Hyaloscyphaceae* by B.M. Spooner in Bibliotheca Mycologica Band 116. Earth tongues "*Glossums*" (tongues) have been divided into three main genera: *Microglossum* (small tongue), *Geoglossum* (earthtongue) and *Trichoglossum* (hairy tongue). *Microglossum* fruit-bodies are more coloured, tending to green or a greenish hue, than *Geoglossum* or *Trichoglossum* which have black/dark brown fruit-bodies. They are all recognised by their club-like shape, but it is not possible to accurately determine their actual species in field, microscopic study is needed. In the field *Trichoglossum* can be distinguished from *Geoglossum* by the minute hairs (setae, brown lance-shaped cells) that protruded from the surface of the fruit-body giving it a finely bristly texture. *Geoglossum* species have no (hairs) setae in the fertile head or stem and the texture varies from smooth to viscid or only slightly velvety. The fruit-body is club-shaped to spatulate with a fertile, flattened head, often twisted and

(Continued on page 8)

(Continued from page 7)

grooved, that can be distinct from the stalk or merge into it without a sharp differentiation.
Other fungi, of which we have recently become aware, included the attractive very tiny (1-2mm), pale cushions dotted with bright green, wart-like spore-bearing structures *Hypocrea gelatinosum*. *A Field Guide to Tasmanian Fungi* (2014) by Genevieve Gates and David Ratkowsky, p225, first recognised by the group at Silverband Falls in the Grampians. A second species, seen for a second time, was *Marasmius cylindraceocampanulatus*, *A Field Guide to Tasmanian Fungi* (2014) by Genevieve Gates and David Ratkowsky, p115, which despite the long name only has a cap diameter of c5mm. The pale dull yellow cap, which has darker striations and an umbilicus, is rather square-shaped with a flat top and, standing out on a rigid, horny stem, while the gills are widely-spaced and attached at right angles to the cap. Reiner found these growing on Smooth Tree-fern stems, but apparently they also grow on decaying logs.

The most abundant fungus seen was the minute cup *Lachnum pteridophyllum*, with a dense covering of white hairs on the outside of a stalked, yellow cup, and found growing on stems (rachises) of dead fronds of Rough Tree-ferns *Cyathea australis*. However, Jurrie Hubregtse made a collection and in further work discovered that its description does not match that of *Lachnum pteridophyllum* (Rodway) Spooner, comb. Nova as described in Helotiales of Australasia: Geoglossaceae, Orbiliaceae, Sclerotiniaceae, Hyaloscyphaceae by B.M. Spooner in *Bibliotheca Mycologica Band* 116. Jurrrie noted 'There are enough significant differences in fruit-body colour, the size of the asci and ascospores to say that what we found is not *Lachnum pteridophyllum*. [Pat Grey note – Spooner's colour description: disc pale ochraceous and hairs on outside of receptacle pale yellow or yellow-brown seems to be based on dried specimens. This was noted particularly with *Lachnum virgineum* which is described as 'pale yellow, drying orange or pale ochraceous' with no mention of white, used to describe fresh specimens in the *Fungi of Switzerland* (1984), vol. 1 Ascomycetes by J Breitenbach/F Kränzlin, no 228, and as seen by us on forays]. Spooner says that *L. pteridophyllum* is found typically on *Dicksonia antarctica* as well as *Cyathea australis*. In our forays, we have only found it on *Cyathea australis*. Since we have not been able to match what we have found with a known species and, as this species is regularly found on *Cyathea australis*, we could continue calling it *Lachnum aff. pteridophyllum* on the basis that they both live on the same type of substrate.' The detailed and in-depth work on fungi by Jurrie and Virgil Hubregtse has significantly broadened our knowledge of the local species.

Geoglossum umbratile Photo: Ed Grey

An early foray find was two small specimens of the reddish-capped Burgundy Wood Tubaria *Tubaria rufofulva* (Fungimap Target species). Reiner discovered the minute *Torrendiella* sp., *T. eucalypti* with green-yellow discs surrounded by widely-spaced, black, spiky hairs on a number of Blackwood leaves *Acacia melanoxylon*. The hairs were only clearly seen using a stereomicroscope. The dark fringing hairs around the deep orange discs of the Eyelash Fungus *Scutellinia scutellate*, were easily seen with a hand lens and several groups were found on wood. A troop of pretty, tan-coloured *Trametes versicolor* was growing along the length of a fallen branch, just past the entry of the main track to the weir.

Three-branched Coral Fungi were seen – the yellow *Ramariopsis crocea* with a white spore print, growing on a Tree-fern, and the delicate pale *R. ochracea* growing on rotting wood, the latter has a yellow-brown spore print. Of interest was the fact that Bruce Fuhrer first found *R. ochracea* at this location and Ed Grey only found our example by patiently sitting on a rock where it was right in front of him. An unidentified clay-buff coloured coral originally thought to be a *Ramaria* sp. had, however, a white spore print and is most likely a *Ramariopsis* sp. because the presence of a stem, its colour and the spore size indicate that this is not a *Clavaria* or *Clavulina*, but probably a *Ramariopsis* sp. However, the spore size is larger than either *R. cinnamomea* or *R. kunzei*.

Thanks to the photographers for their contribution – John Eichler, Ed Grey, Richard Hartland, Jurrie Hubregtse, Carol Page, Reiner Richter.

Pat & Ed Grey

Congratulations to Dr. Tom May, the 2014 winner of the Australian Natural History Medallion

The Australian Natural History Medallion was presented to Dr Tom May for his contribution to mycology, by Dr Bill Birch, President of the Royal Society of Victoria, on 10th of November.

Tom joined the FNCV in 1984 and is well known to us all. He has contributed greatly to the FNCV through his leadership and continuing association with the Fungi Group and, in particular, by taking on the roles of Vice-president in 1997 and President from 1998 to 2001. The hall was overflowing with friends who attended the presentation.

Tom spoke eloquently of his early interest in natural history and of his gradually increasing focus on fungi. In the course of his address, he paid tribute to many people and organisations. These included his family, his colleagues, Monash University, The Herbarium, The Royal Botanic Gardens, the FNCV and earlier authors and researchers in the area of mycology.

Fungimap had its beginnings within the FNCV. It was launched as a standalone organisation in June 1995.

A detailed citation of Tom's "Journey Amongst Fungi" will appear in a later edition of *The Victorian Naturalist.*

Extracts from SIG reports given at the last FNCV Council Meeting

Botany Group: On Sunday 12th October, two new members and one family of Junior members met in Toolangi. Bernie Mace told them about the forest and how old growth forests provide greater water quality and quantity. Toolangi forest flows into both the Melbourne water catchment and that of the Murray Goulburn. Bernie took us to Dunstans Track but we couldn't walk very far into it as a tree had blown over and blocked the track. We then visited the logging coup named Rusty. Rusty had 101 hollow bearing trees, but because only 4 or 5 of them were Mountain Ash (less than the required 8) Vic Forests logged it anyway. A narrow buffer was left between Rusty and the road, but because it was too narrow many trees blew over in the first strong winds. We then visited Wirra Willa Rainforest walk and observed ancient Mountain Ash and Myrtle Beech. We were treated to a sighting of a rare Pink Robin. Bernie had to leave us at lunchtime. During the lunch break everybody came and had a good look at George the taxidermied Leadbeater's Possum. After lunch I took everyone to the Yea Link tree and we all walked inside this giant. We then visited some Leadbeater's Possum habitat and the site of the Little Red Treehouse. A couch is still tied quite high up in a tree. We then visited the Kalatha Giant before departing for home. An enjoyable day was had by all.

Our last meeting was with Niels Klazenga from the Melbourne Herbarium. Niels connected to the internet and ran us through the use of the Virtual Herbarium. The Virtual Herbarium provides information on classification, distribution and if a plant is rare or threatened. It also has links to the Atlas of Living Australia and the Australian Plant Name Index. Niels then showed us the online keys for the Flora of Victoria. There are 3852 keys to 34032 taxa. I'm looking forward to holidays so I can further explore the Virtual herbarium and the online Flora of Victoria.

Fungi Group: At our meeting on 6 October we planned our activities for 2015. Our first meeting will be on 2 March and it is anticipated that the topic will be 'An introduction to fungi'.

Geology Group: Dr Peter Jackson spoke at the October meeting on "Snowball Earth". He described the hypothesized two global glaciations, plus 3-4 partial glaciations, as "The most persuasive cold periods in Earth's history". He detailed the extensive evidence found around the world and in Australia of, in particular, the two major glaciations which occurred in the Neoproterozoic Era - 750 to 600 mya. Dr Jackson gave a detailed explanation of what may have caused these glaciations, described the extensive evidence of glaciations even at sea level and in the tropics during this period. How life survived this catastrophe and the likely recovery from such extensive freezing was also discussed. A most interesting presentation.

Marine Research Group: At our meeting on the 13th of September, Audrey Falconer spoke about an upcoming paper on *Stauromedusa* (stalked jellyfish) which she is co-authoring with other experts from the Smithsonian Institute, University of Washington, University Sao Paulo and Chiba University. It will be set up the background for Audrey to describe several new species which have been found during MRG field work over recent years.

This was followed by a discussion on the MRG database which records all observations from our field work over the past 40 years and workshopping of a direct data entry and distribution of the survey list via e-mail.
The meeting was attended by 9 members.

Juniors' Group: On the lovely sunny day of October 5th a group of 17 Juniors and adults attended a Melbourne Water Watch excursion to see how our rivers are monitored.We were met by Richard from Melbourne Water, picked up by a bus from our clubrooms in Blackburn and driven to our first stop at Mullum Mullum Creek at Deep Creek Reserve, Doncaster Reserve. There Richard explained that the health of our rivers were judged according to the macro invertebrates that are found living in the water. He showed us pictures of different species we were likely to find and some of their special features – such as gills that look like hairs, number of legs, etc. With a large net, Richard collected a sample for us to sift through - taken from areas of weed in the river and along the banks where they are most likely to be found.

When the bugs had been found, we used ice trays to separate them into groups of similar species and counted approximate numbers of each. Each species was assigned a number from 1 – 10 ("signal 2" score) depending on how clean the water needed to be for the animal to survive (with 1 being a creature who would be happy living in raw sewage to a 10 who only survives in pristine waters). At this site we found a small number of a few different species rating between 1 to 5, reflecting an average river health.

We then had lunch before hopping back on the bus to head to our second site, which was the Yarra River at Kangaroo Ground – Warrandyte Road, Warrandyte. We took a second sample there in the fast moving rapids where we found many different species and large numbers of each which reflected a much healthier section of river compared to our first. The highest "signal 2" score of 9 went to *Telephlebiidae* (which Richard hadn't seen for two years) – adults are dragonflies commonly known as 'southern darners.'

Richard handed out various resources that we had used on the day to identify water bugs for us to keep and we viewed a few of the smaller water bugs under our new club microscopes. The coolest bug we viewed under the microscope was the Bullet Caddis and the cutest was the sSleeping Bag Caddis (they attach themselves between two leaves to look like they are in a sleeping bag) – they both had a signal score of 7.

Richard told us he had had an interest in insects from a very young age and had volunteered to do research with Melbourne Water during University (where he was studying Environmental Science) which led to a casual and now a full time position. He passed onto us his fascination with these creatures and we're all keen to join the Water Watch team again!

Day Group

Caught on camera – using motion sensing cameras for wildlife monitoring

The Victorian National Parks Association's NatureWatch program was established in 2007. NatureWatch is a community-based monitoring program that educates and inspires community to be interested in nature, at the same time promoting nature conservation. Volunteers assist with monitoring projects covering three themes – *Phytophthora cinnamomi* in Grass Trees, grasslands and threatened species, and monitoring wildlife using motion-sensing cameras.
The latter project, known as 'Caught on Camera', began in 2012 in Wombat State Forest near Daylesford and Bunyip State Park near Gembrook. After a successful first year we added a new project location in the Wimmera in 2013.

The projects are collaborative, with involvement from local community groups and land managers. In the set-up phase we run a workshop with scientists, community groups and local land managers to ensure our projects are scientifically robust, are of interest to the local community and meet management needs and knowledge gaps.
NatureWatch volunteers are trained in the project methods at the start of the monitoring season each year, at a Community Day event, and then do most of the leg work, setting up the cameras at the monitoring sites.

The behind-the-scenes work of processing the images and managing the data is carried out by volunteers in the VNPA office. Our consultant scientists, who include Richard Loyn and Peter Menkhorst, ensure a sound scientific methodology and assist with species identification, data analysis and preparing project reports.

Each project location has different research aims. Planned and run in partnership with Wombat Forestcare, the Wombat State Forest project is studying the effects of fire regimes on small mammals. Images are collected at recently burnt, intermittently burnt and long unburnt sites within two different vegetation types.
In Bunyip State Park, we are working in partnership with the Friends of Bunyip State Park and with support from Parks Victoria to monitor how small mammals are recovering after the devastating wildfire of 2009. We have sites in burnt and unburnt areas, that cover two different vegetation types.

The Wimmera project is run in partnership with the Hindmarsh Landcare Network (HLN) to assess how wildlife is utilising the revegetation link on private land between the Little and Big Deserts.
The VNPA works with the HLN and private landholders to monitor the wildlife in revegetated areas on their properties.
This year we also ran a successful trial at one of MECU 's Conservation Landbank properties at Minimay near Edenhope.

Training at Hindmarsh

All of the "Caught on Camera" projects have been established with the aim of running them over the long term – for at least 10 years. That's a big commitment from our volunteers but we have no doubt the NatureWatch team is up to the challenge.

It's too early to draw conclusions from these projects, but there have already been some rewarding outcomes. The threatened Brush-tailed Phascogale was recorded in Wombat State Forest and the endangered Southern Brown Bandicoot in Bunyip State Park. Before "Caught on Camera" there were no recent records of these animals in these areas. The new images have helped Parks Victoria staff in securing funding for important protection works.

As part of the 2014 Environment Fund grants, the FNCV has provided support to Caught on Camera. The NatureWatch team is very grateful for this support – the funds provided will help ensure the ongoing success of the project. Thank you FNCV!

Christine Connelly is the NatureWatch and Community Projects Coordinator with the Victorian National Parks Association. Detailed reports for "Caught on Camera" at each location are available online at vnpa.org.au. For further information, or to volunteer, email Christine at christinec@vnpa.org.au.

Christine Connelly

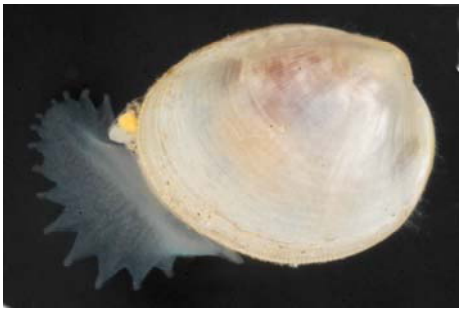
Common Wombat, Wombat State Forest

Marine Research Group News

Reports on MRG extended excursion to the Balnarring region, March 2014 (continued): Shoreham, Westernport Bay, Thursday 6 March, 2014: Highlights here included records of the nudibranch *Burnaia helicochorda*, the beautiful sea slug *Sagaminopteron ornatum* (which is rarely seen intertidally) and a pleasing record of *Haliotis laevigata*.

West Head Flinders (sheltered side), Westernport Bay, Friday 7 March, 2014: A lovely mild day, calm sea, good low tide and many interesting records made for very pleasing field work.

Highlights included the minute fissurellid *Puncturella harrisoni* (shell length 1.2mm) and the pyramidellid *Cinctiuga diaphana* (shell length 1.4 mm), both from *Amphibolis antarctica* seagrass, and the bivalves *Nucula pusilla* (from sediment amongst algal holdfasts, shell length 4.5mm) and *Mysella donaciformis* (from mid littoral sand amongst *Zostera* seagrass, detectable by short linear tracks in the sand surface). The extended foot of *Nucula pusilla* expands perpendicular to the plane of the shell as it is thrust into the sediment and thereby provides an anchor for the animal to drag itself down. The expanded food of *Mysella donaciformis* follows the same plane as the shell (implying that it cannot burrow as deep, although this remains hypothetical until it can be tested).



Nucula pusilla (above) and *Mysella donaciformis* (below), West Head Flinders, 7/3/2014. Photos P. Vafiadis

Other good records included the chiton *Craspedochiton variabilis*, large specimens of the nudibranch *Polybranchia palens*, the turrid *Mitraguraleus mitralis*, the ranellid *Sassia eburnea*, a very clean example of *Nassarius pyrrhus*, and a variety of interesting shrimps and other crustacea.

Nassarius pyrrhus, West Head, Flinders, 7/3/2014. Photo: P. Vafiadis

Merricks Beach, Westernport Bay, Saturday 8 March, 2014: Again, calm conditions and a very low tide produced some fascinating records, perhaps the most outstanding being the sighting of a giant cuttlefish *Sepia apama* temporarily trapped in a large lower littoral pool by the outgoing tide. This was a first for all of us, and we spent some very pleasing time along the edges of the pool observing it as it calmly glided about and changed colour at will.

Above and below: The giant cuttlefish *Sepia apama* changing colour, Merricks Beach, 8/3/2014. Photos: P. Vafiadis.

A variety of microgastropods, crustacea and echinoderms were also seen.

Point Lillias, Port Phillip Bay, Saturday 5 April, 2014. Located on the northern shoreline of Corio Bay, adjacent to the former saltworks land, this was a scenic and quite productive locality that was accessed by a kilometre (or so) walk from the carparking area.

Nice beds of *Zostera* seagrass amongst silt yielded many pill crabs *Bellidilia laevis* and the gastropod *Batillaria australis*. The crabs *Dromia wilsoni* (with a living piece of sponge held over the carapace as camouflage), *Pilumnopeus serratifrons*, *Pilumnus tomentosus*, *Naxia aurita* and the rarely recorded decorator crab *Anacinetops stimpsoni* were also seen.

Pilumnus tomentosus, Pt. Lillias, 5/4/2014. Photo: P. Vafiadis

The stony corals *Culicia* sp and *Plesiastrea versipora* (see MRG page, FNN 246 for a photograph of the latter) were present on submerged rock surfaces, the latter contrasting nicely next to bright yellow encrusting sponges on the rock face. *Bembicium melanostomum* gastropods occupied the rocky crevices of the upper-littoral zone and the worm-like calcified tubes of the sessile mollusc *Serpulorbis sipho* were present on the undersurfaces of submerged rocks. The seastar *Petricia vernicina*, the *Chiton tricostalis*, juvenile pipefish amongst the *Zostera* seagrass, and a blue ringed octopus *Hapalochlaena maculosa* were also recorded.

This concludes the reports on MRG fieldwork for the 2013-4 summer. The final meeting of the year will be written up in the next issue of FNN. The MRG wishes all a happy Christmas and New Year.

Further reading: Edgar GJ (2008). *Australian marine life: the plants and animals of temperate waters.* 2nd ed. New Holland, Sydney, 2008.

Platon Vafiadis

Thanks to those who helped collate and label FNN 247

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Sally Bewsher

FNCV Christmas Party
& drawing of the raffle

Saturday December 13th.
Join us around 6.30 pm in the FNCV Hall

Relax and enjoy a BBQ with friends and members from all FNCV Special Interest Groups and celebrate another wonderful year of activities.

The club is providing meat, bread, and nibbles, please bring a salad or a sweet to share. BYO drinks.

We are planning a pictorial presentation looking back at the year's activities. *SIG leaders are requested to email about 6 images from 2014 to the FNCV office by 10 am Monday 8th December.*

Please RSVP to Wendy our office administrator by **Monday 8th Dec, (03) 9877 9860 or admin@fncv.org.au** and let her know numbers and food you are bringing.

Monitored Smoke Alarms

FNCV has contracted with ADT Security of Mt Waverley to install monitored smoke/burglar alarms in the Club building.

ADT has offered the FNCV a $100 rebate on alarm monitoring costs for each person who signs up for a three year security agreement as a result of reading this promotion.
Phone Aaron Walter 9538 7113
www.adtsecurity.com.au

Their current offer is $199 for an installed security system and monitoring for 3 years at $37.45 per month.

Please let the FNCV office and ADT know if this applies to you.

This newsletter is printed on recycled paper.

WOULD ANYONE VOLUNTEER TO DO SOME EXTRA JOBS AROUND THE FNCV HALL ON A REGULAR BASIS?

We have a cleaner who comes fortnightly and does a great job, but there are a few things that still need attention e.g. cleaning out the fridge, washing tea-towels, freshening up the noticeboards, tidying up things left around. Please contact the office if you can help out. Maybe two people could share the job? *Please contact the office.*

Field Nats News 248

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