



Field Nats News No.223

Newsletter of the Field Naturalists Club of Victoria Inc.
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Patron: Governor of Victoria

Understanding Our Natural World
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September 2012

From the President

Welcome to the September edition of Field Nats News. The beginning of spring is close at hand and will see a number of groups coming out of hibernation, or torpor, whichever the case may be!

Hall Security

During the first week of August, we had a break-in at the hall. While the office remained secure, the donations tin was stolen, containing a few hundred dollars. It is believed. The perpetrator forced entry by smashing into the key safe. Steps have been taken to avoid this happening again and various extra security measures are being discussed.

This is a timely reminder to SIG groups to make sure all doors are locked and the alarm is turned on properly. If you have any queries about how to do this please contact Hali.

Stop Press !!! Solar Panels were installed on the north face of the club's roof on Friday 17th August.

This is a 5kw system of 20 panels which should be capable of providing for all our power needs into the future and more.



The panels were largely funded by donations from our wonderful membership and I would again like to take the opportunity of thanking those who generously supported and finally made possible this long-anticipated project.

John Harris

FNCV inaugural Natural History Photographic competition



Closing date 4 pm
Monday
17th September

There are two categories for both Juniors and Seniors. *Nature Close Up* and *Nature From A Distance*. An exhibition of the best photos will be held on Saturday 13th and Sunday 14th October

For costs, terms and conditions and entry forms, please contact the office or go to the FNCV website. Alternatively for those attending SIG meetings, printed copies are available in the book display case in the hall. (Key in the office).

In addition, photographic mounts of various sizes are for sale—also in the book display case.

Editors. *In celebration of the Club going solar, this edition of FNN is formatted in shades of the colour green. Those who receive a black and white printed newsletter will not appreciate this. Once again we ask you to please consider receiving FNN by email. As well as being in colour and environmentally friendly, this saves the Club printing and postage costs.*

The due date for FNN 224 will be **Monday 3rd September**. FNN will go to the printers on Tuesday 11th September, with collation on 18th.

The capture and handling of all animals on FNCV field trips is done strictly in accordance with the club's research

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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.

September

Monday 3rd – Fungi Group. Meeting - *Cortinarius*. Speaker: Dr Franck Stefani. Research field: Biological Sciences - Molecular Biology DNA barcoding of Australian *Cortinarius* subgenus *Dermocybe* species. Contact: Virgil Hubregtse 9560 7775

Tuesday 4th - Fauna Survey Group. Meeting - *The Bats of Melbourne*. Speaker: Lisa Godinho. Contact: Ian Kitchen 9795 7423

Monday 10th – Marine Research Group. Meeting - For details contact Leon Altoff 9530 4180 AH; 0428 669 773

Saturday 15th – Saturday 22nd - Fauna Survey Group. Excursion - *'Birds, Beaches and Bush'*. Club excursion to Mallacoota to explore the natural history of the area. (Bat trapping only). Shared accommodation in cottages (3-5 people). Deposit required ASAP to reserve a place. All welcome. Contact: Sally Bewsher 9752 1418 or Russell Thompson. 9434 7046 AH

Sunday 16th – Botany Group. Excursion - *Trust for Nature property*. Meet 10.30am Smiths Gully General Store, Kangaroo Ground - St Andrews Rd, near Clintons Rd (Melways 264 E3) Contact Sue Bendel 0427 055 071

Closing date: FNCV Natural History Photographic Competition—**4 pm. Monday 17th September.**

Sunday 16th – Juniors Group. Excursion – Meeting at 11 am at Serendip Sanctuary, Lara. Contact: Claire Ferguson 8060 2474: toclairéf@gmail.com

Tuesday 18th—Collate FNN 224. Starting about 10.30 am. All welcome. Contact Joan Broadberry 9846 1218

Wednesday 19th – Microscopy Group. Meeting - For details please contact Phillipa Burgess 9598 3231 AH.

Thursday 20th – Botany Group. Meeting - *Western Grasslands reserves*. DSE's vision for their management. Presenter: Steve Sinclair ARI. Contact: Sue Bendel 0427 055 071

Monday 24th - FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Hali, 9877 9860 or admin@fncv.org.au

Tuesday 25th – Day Group. Meeting - *Wonders of the Little Desert National Park*. Speaker: Lynsey Poore. 10.30 am for coffee and a chat. Speaker 11 am. Contact Gary Presland 9890 9288

Wednesday 26th - Grey-headed Flying Fox Survey. Meet at Yarra Bend Golf Course carpark Mel 2D G7 at 6 pm. RSVP as a courtesy by phone or email to Megan Davidson 9380 5062: m.davidson@latrobe.edu.au

Wednesday 26th – Geology Group. Meeting - *Exploring the Scablands, Washington State, USA*. Speaker: Dr. Peter Jackson. Contact: Kaye Oddie 9329 0635: koddie@bigpond.com

Friday 28th – Juniors' Group. Meeting – *Life at the water's edge*. Speaker: Leon Altoff, FNCV Marine Research Group Leader. Contact: Claire Ferguson 8060 2474: toclairéf@gmail.com



The policy of the FNCV is that non-members pay \$5 per excursion and \$2 per meeting, to cover insurance costs. Junior non-member families, \$2 per excursion.

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
Welcome

Warmest greetings to these new members who were welcomed into our club at the last Council meeting:

*Laurie Burchell, Sunny Yao, Yu Qi Yang, Daniel Wilksch,
James Garden, Lyn Allison, Dr. Kylie Annett.*



HELP NEEDED TO IDENTIFY FUNGI

These fungi growing on my place were so spectacular that I am keen to discover their name.

Colin Douglas,
Blue Johanna Rd.,
JOHANNA

cdouglas@activ8.net.au

LETTER TO THE EDITORS

Dear Editors,

Rebecca Carland's story (FNN 222 p11) of Eric Wilkinson's 'rediscovery' of Leadbeaters Possum brings to mind the 'discovery' of another Victorian marsupial—the Long-footed Potoroo.

Like Eric, I was a member of the Mammal Survey Group and a FNCV member. I also shared Eric's passion for wildlife. I did see Eric's possum on an ash stag near Marysville and saw many other Victorian taxa on other surveys. I always felt quite chuffed to see an animal for the first time, especially a native.

However, never did I entertain the notion that I myself could bring in a new species. But that did happen! Circa April 1970, while returning to Melbourne from East Gippsland, I saw a local potoroo which had recently been road-killed. Because the animal was not damaged and was much larger than the local *Potorous tridactylus*, I brought it back to Melbourne and gave it to Fish-

eries and Wildlife Department as a fresh specimen for certain identification.

As well I did. That potoroo was determined not to be *Potorous tridactylus*, but became the type specimen of *Potorous longipes* which has since been found in East Gippsland and southern N.S.W. in very low numbers. *

Would the new species have been found if someone had not brought it in for identification, or even if it had joined the hundreds of other unrelated road kills on the Princes Highway?

I learned the lesson. If you are not sure, bring it in to the experts. If it happens to be a newie, you will enjoy the experience much as Eric and I did, (and add to knowledge).

Regards from Colin Hutchinson
(ex NPS Investigation Officer)

* John Seebeck wrote the description

CLUB VOLUNTEERS URGENTLY NEEDED

to staff a FNCV information stall at the

Australian Plants Expo

Eltham Community &
Reception Centre
801 Main Rd, Eltham
(Melways 21 J6)

10 am - 4 pm Saturday
8th September

12.45 - 2 pm Sunday
9th September

Sue Bendel is organising a roster. It is suggested pairs of volunteers do shifts of 1—2 hours. Please contact Sue ASAP

0427 055 071



Geology Group

NEW ZEALAND NORTH ISLAND VOLCANICS

Talk by John Bosworth

Museum Victoria

27th June 2012

The Geology SIG members were treated to a fascinating talk with a wonderful PowerPoint presentation by John Bosworth on 27th June. The presentation covered a wide range of topics from Plate Tectonics to volcanic rock geology, and described in detail the 3 main volcanic areas in the North Island of New Zealand.

John is a foundation and Life member of the Mineralogical Society of Victoria, and volunteers in the mineralogy section of Museum Victoria. He is also an active member of Birdlife Australia.

He answered one of the questions that have puzzled me – why the North Island had volcanoes whereas the South Island doesn't. The complex story of plate subduction differs between the North and South Islands and is obviously continuing to influence New Zealand's geology. The North Island is riding on the Indian-Australian Plate and is being stretched and twisted as the Pacific Plate is subducting under it to the East. This activity began over 30-25 million years ago firstly in the Waipoua area and then the Coromandel Peninsula. But south of the South Island, the I-A Plate is subducting under the Pacific Plate. There is no subduction in the South Island but the two plates are sliding past one another in a north/south direction creating the Alpine Fault which effectively splits New Zealand into two independently moving halves. In the South Island this is seen in significant uplift as well as continuing earth movements. The Canterbury Plains are still sinking and the Alps rising, and New Zealand is moving eastwards and northwards at a relatively rapid rate (in geological terms!). John described in detail the 3 volcanic areas – all of which are still active.

Auckland. Within 20 kms. of Auckland, 49 volcanoes have erupted over the past 150,000 years with Rangitoto as the largest and most recent eruption 600 years ago. There is still a hot spot 100 kms under Auckland which has a high likelihood of causing further eruptions.

Taranaki (Mt Egmont) is the most southern of a line of older volcanoes. It began erupting 120,000 years ago with the last eruption in 1755 and it is likely to erupt again in the next 100 or so years. It is a 'classic' strato-volcano with a steep central cone surrounded by a gently sloping ring plain. It is noted for pyroclastic flows, lahars and landslides.



Taranaki (Mt. Egmont) Photo: J. Bosworth

Taupo Volcanic Zone where New Zealand's most active volcanoes and geothermal features are situated, stretches 20-40 kms wide and 240 kms long from Ohakune to White Island. The major active centres are Tongariro, Taupo, Maroa, Okataina, Rotorua and White Island. These were described in detail in the talk which included a history of eruptions – particularly recent ones, and a description of the signs which point to changing activity levels e.g. levels in crater lakes, changes in vents, pyroclastic, lava and/or ash eruptions.



White Island

tions.

The Taupo eruption 1800 years ago was one of the most powerful in the world for the last 5000 years, destroying forests within a radius of 80 kms. Its ash flowed eastwards 100-150 kms. to the sea at the Gisborne area. John also described the 1886 Mt. Tarawera eruption which destroyed the pink and white silica terraces that were a major tourist attraction of the area, and killed over 100 people in this sparsely populated area.

John showed photos of his visits to some of the volcanic areas off the usual tourist route e.g. the Rotokawa Geothermal Field. He also visited White Island where ash layers date back 16,000 years and which regularly erupts although the

eruptions are not usually large. Visits to the island can only be made with one of the organized tours and visitors are required to wear hard hats and carry gasmasks because of the dangerous acidic gases continually being emitted.

This was a most informative talk well appreciated by the large audience and we express our thanks to John.

Ruth Hoskin



Microscopy Group

Eye Diseases & Diagnosis Speaker: Dannilla Grando

The Microscopy Groups' March meeting was presented by Dannilla Grando, medical diagnostic microbiologist and project leader for Biotechnology at RMIT, with a PhD in Golden Staph.

She spoke on 'Eye Diseases and Diagnosis' and of the importance the microscope plays in quick and accurate diagnosis.

Dannilla spoke on several eye diseases, each accompanied by illustrative photos and instructional videos taken through the microscope.

The first step in microscopical diagnosis relies on a well-collected and substantial sample corneal scraping from the eye that can then be stained using 'Grams staining method'. This differentiates bacterial species into two large groups – Gram Negative, (pink/red) and Gram Positive, (purple/blue). A fairly instant diagnosis can then be achieved, resulting in the correct anti-biotic being administered. Sample scrapings are also cultivated in agar jelly. The samples are fed on e-coli, and tested for the presence of bacteria, fungi and amoeba.

Acanthamoeba Polyphage has spikes that act as legs and allow it to move across the agar plate to eat the e-coli. This takes 4 days to develop on the agar plate, so stained samples identified through the microscope is the quickest form of diagnosis. Acanthamoeba is a free living amoeba commonly found in the environment that can cause several rare but severe illnesses. These amoebas are everywhere! Dust, soil, lakes, rivers and hot springs and can enter the body through a wound or via the nostrils. They can then disperse to the lungs, brain and spinal

cord. Their size is 10 – 20 microns across. Most people will be exposed to Acanthamoeba during their lifetime, the majority do not get sick. Infections typically occur in people with a weakened immune system.

Acanthamoeba Keratitis is a rare but serious eye infection that can cause impairment or blindness. Dust under a contact lens can scratch the eye. The amoeba then senses a weak area to attack. The importance of strict hygiene for contact lens wearers could not be stressed enough.

Pastuella causes 'pink eye' in cattle and sheep and is also known as 'cat bite/scratch fever' resulting in abscesses, ulcers and conjunctivitis.

Gas Gangrene is a bacteria found in soil and bowel flora, resulting in an anaerobic infection producing toxins that kill cells resulting in the need for corneal transplants. River Blindness is caused by a parasitic worm. Black Fly larvae; Onchocera Volvulus, which enters and migrates through the body, releasing bacteria. These larvae can live in the body for 14 years; symptoms can appear 1-3 years after infection. 99% of the 18 million people infected live in Africa, 270,000 are blind! There is now a safe effective yearly drug dose available.

Trachoma is an infectious eye disease caused by Chlamydia Trachomatis and is a major cause of blindness in aboriginal communities and developing countries. It is passed on via contact with mucus secretions through sharing towels or wash cloths and is treated with antibiotics.

Dannilla was an enthusiastic, entertaining speaker, well able to present her work in a clear and easily understood manner, prompting a great question and answer session, so much so, that we are now all experts!!

Phillipa Burgess



Library News

The following recently received issues of periodicals contain articles that may be of interest to members:

- *Muelleria* 30(2) contains a revision of *Bossiaea* in eastern Australia and a description of five new eucalypts from Victoria;
- *Australian Bat Society newsletter* no. 38 has a wide range of short articles on bats;
- If you are interested in the 'underground' plant *Thismia*, an article in *Kew Bulletin* 67(1) has a description and great photos of a newly described species from Thailand;
- *Australian Wildlife* Vol.3/2012 looks at managing mangle in wom-bats;
- *Journal of the Adelaide Botanic Gardens* Vol.25 contains a revision of the plant genus *Stellaria* in Australia, including a key to all species. There are also two articles on *Hibbertia*;
- *Proceedings of the Royal Society of Vic* 124 (1) comprises papers from the joint VNPA and RSV Symposium on Fire and Biodiversity in Victoria, held 24/25 October 2011.

These periodicals are displayed in a rack in the library. You can borrow periodicals in the rack, as well as previous issues. Don't forget to fill in the borrowing book.

Gary Presland
Honorary Librarian



Fungi Group

**FNCVFUNGI GROUP
FORAY (3)
3rd JUNE 2012**

Baldry Crossing, Greens Bush, Mornington Peninsula National Park

Recent rains had seen Main Creek rise over the bottom part of the car park. Despite this, numerous fruit-bodies of the orange peel fungus *Aleuria aurantia* at all stages from small cups to large (ca 50mm diameter) flattened undulating specimens were found on the recently flooded ground.

Along the short circuit track was a massed display of red-brown cushions of *Hypoxylon howeanum* (diameter 7mm, height 5-6mm). These were growing on fallen eucalypt logs with some on decorticated wood and some on bark. Occurring at the same time was the brownish branded ropey anamorph stage height 5mm. On one of these logs was the dark blue to dark violet flat sheet with white woolly margin of *Pulcherricium caeruleum*. This corticioid fungus is thin, smooth with scattered tubercles (bumps).

A trip into the 'dell' was productive. On fallen eucalypt bark were extensive sheets of the yellow-brown *Hyphodontia australis* with the characteristic covering of small blunt pimples. These were at an early stage with no surface cracking which occurs at maturity and with drying out. On the 'track' in the place where we have found them on previous forays were somewhat deformed fruit-bodies of the yellow-green, knobably-headed *Leotia lubrica*.

Several fine fruit-bodies of a purplish *Cortinarius* species were seen.

These had deep purple-violet, convex caps (to 50mm), purplish gills turning brownish with released spores (gills in older specimens turn black) and a violet stem. *Cortinarius* sp. aff *violaceus* appears the closest match.

We also saw a beautiful group of *Cortinarius persplendidus* (*Dermocybe splendida*, Splendid Red Skinhead). DNA study has now determined that this *Dermocybe* is now a *Cortinarius* sp. but as the specific name 'splendida' had been allocated to another *Cortinarius* sp., the specific became 'persplendidus' (B Gasparini, 2006, Renaming of three Australian *Cortinarius*, *Australasian Mycologist*, Vol. 25(1), pp. 24-27). The red caps and paprika red gills were very distinctive, but the yellowish stem and

the afternoon we found another stout red *Cortinarius* sp. with a red cap and gills, but a whitish stem and pink basal mycelium. It looked superficially like *C. persplendidus*, but had different coloured basal mycelium. The pink basal mycelium might suggest that it was the red *D. erythrocephala*, (Red-headed Skinhead) but this species has a bright red stem. However, it does look very similar to B. Fuhrer no 78 (A field guide to Australian Fungi, 2005), particularly the zigzag red cortina fibrils remaining on the stem. Although he mentions nothing about the colour of the basal mycelium, he does say that it is 'Found in Eucalyptus/ Leptospermum forest'. Katrina Syme made an interesting observation on *Dermocybe kula* and *D. erythrocephala* when she tested a section of the gills and cap with a 3% KOH solution: *D. erythrocephala* oozed a bright purple colour, while the liquid from *D. kula* gradually turned from a dull purple to brown (Fungimap Newsletter 39,



Cortinarius persplendidus

Pat Grey

bright yellow mycelium at its base confirmed the identity. This species can be distinguished from *Dermocybe kula* (once *D. sanguinea*) which has a blood red stem and pink-red basal mycelium. Along the walking track in

January 2010, p3). It obviously pays to take a KOH solution on forays.

Various *Hygrocybe* species were observed in the area, some of which
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had features which made them identifiable. Paul George pointed out *Hygrocybe lilaceolamellata* which has an unremarkable brown cap and pale brown stem, but very distinctive gills – violet, widely-spaced and decurrent and B Fuhrer (no 120) comments that the spore deposit is pale violet rather than the usual white of the species.

Another beautifully-coloured species had a mauve cap, just slightly lighter than *Humidicutis lewellinae* (*Hygrocybe lewellinae*). It also had distinctive wide yellow gills and a deep green stem. With such features, Paul George was able to identify this species as *H. arcogastata*. *Hygrocybe graminicolor*, the Slimy Green Waxcap (a Fungimap Target species) again had us confused – the light green cap was an unexpected fawn colour but the green slimy stem was characteristic – however, where was the distinctive fine glutinous grey-green thread along the edge of the white gills? Eventually Paul George was able to detect just a small piece and that clinched the identification. The small, chrome-yellow, glutinous *Hygrocybe chromonlimonea* also has

a glutinous thread on the edge of the yellow decurrent gills.

Another Fungimap Target was *Humidicutis lewellinae* (*Hygrocybe lewellinae*, Mauve Splitting Waxcap) with a dense mauve cap and pointed umbo. The cap was beginning to split radially. While looking through the illustrations by AM Young (Fungi of Australia 2005, Hygrophoraceae) I noticed that the radial splitting of the cap occurred on a number of species (but not seen today), e.g. *H. mavis* (pure white), *H. helioides* (green) and *Hygrocybe australutea* (yellow). All these were found in the area where the tea-tree was growing on the sandy soil.

We saw our first *Amanita* species of this foray season - *Amanita umbrinella*. The younger specimens had glutinous, domed brown-grey caps (darker in parts) with adhering white felty patches of the universal veil. The caps of more mature specimens had flattened and turned up at the margin to reveal white gills, and the white stem, flaring towards the base, had a white membranous floppy ring. The volva at the stem base was not visible. B. Fuhrer no 15 illustrates the species. It seems surprising that we have seen no *Amanita* spp before, although many *A. muscaria* (Fly Agaric), *Lactarius deliciosus* (Saffron Milkcap) and *Suillus* spp. are now growing around pine trees.

Fortunately, the rain eased off for most of the foray. Thanks go to the hardy souls who helped make the day.

Ed Grey & Pat Grey



**FNCV FUNGI
GROUP FORAY,
10 JUNE 2012**

The Beeches, Lady Talbot Drive, Yarra Ranges National Park, Marysville

This year, three years after the 2009 bush fire, more standing Myrtle Beech (*Nothofagus cunninghami*) appear to have died and there was a lot of burnt debris on the ground. So, as was to be expected, most of the fungi found were growing on wood.

John Eichler spotted the most rare find of the day – the small pin-shaped *Chlorovibrissea bicolor* (Two-toned Pin). This small species was growing on a log in the running water of Whitehouse Creek. It grows in groups, is about 20mm tall and has a round yellow head on a dark green stem which has a small basal disc. The name is descriptive - *Chloro* = green, *vibrissea* = nasal hair and *bicolor* = two-coloured. G Beaton and G Weste (1978) have described the various species in the genus of 'pins' that are growing in SE Australia and recorded field characters that determine the species (as well as microscopic details) (Five Small Fungi Newly Recorded from Victoria, Australia, *The Victorian Naturalist* 95, 1978). The one with no green colour is *Vibrissea dura* (Brown-headed Pin) which was seen at the foray to Mt Worth this year. It has a brown head on a yellow stem and is larger (height to 40mm) than *C. bicolor*, slimy and grows in clusters joined at the stalk base. The *Chlorovibrissea* species always have some green colour: *C. bicolor* has a dark green stem and yellow head, and grows on wet fallen logs either totally or partially submersed in running water; *C. melanchlora* (Dark-green Pin) has a completely dark green fruiting body and appears amongst bryophyte

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Cortinarius sp.

Virgil Hubregtse

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covered cracks in large fallen eucalypt logs (the FNCV Fungi Group found this species at The Beeches in 2005 in a moss-covered crack on a fallen log); and *C. tasmanica* (Light-green Pin) which has a light-green fruit-body and grows on fragments of eucalypt debris immersed in water or lying on water-logged ground. There is also a sessile species, *Vibrissea guernisaci*, which has been described from one collection found in the Otway Range on a fallen eucalypt branch under a small waterfall. Several discs were scattered on the substrate, they showed white areas of extruded spores, the grey-white central area is raised above a black margin (Beaton & Weste 1978).



Chlorovibrissea bicolor

Paul George reports: John Eichler spotted a group of tiny yellow blobs growing around the edge of a small piece of rotten wood on the ground. They were slightly turbinate or top-shaped and had darker stalks, but were still quite moist and delicate. I reckon they were the sporangia of a slime mould transforming from the plasmodium, and had not quite finished the process. The spores would not have yet developed at this stage and so it would not be possible to identify them. Later I saw a very large spectacular mass of bright yellow plasmodium that was

streaming over the trunk of an old Myrtle Beech. It covered an area of approximately 2 square metres. Some of these had also formed immature sporangia similar to the ones John found earlier. The yellow sporangia were hanging on thin dark stalks with a single water droplet in each sporangium. The water droplets were probably just a temporary feature, and although beautiful, the sporangia were too young to identify. If you are very keen, it is possible to collect the fragile slime mould at this early stage and store them on moist paper in a covered Petri dish. If the temperature and moisture conditions are right, and they don't get damaged in transit, or infected by fungi, they may develop to maturity within a few days. The trans-

formation is often remarkable to watch as the colours and shapes change and the sporangia eventually split to release the spores and capillitia.

Two brackets that favour Myrtle Beech were found. *Fomitopsis hemitephrus* was on a fallen log. It had bands of white and brown, a lumpy attachment and white pores. Just below the surface of the cap there is supposed to be an orange layer, but when we cut the specimen we could not see it. *Australoporus tasmanicus* forms irregular shelves and characteristically they are usually covered with moss. In this case the bark just covered the attachment and it was possible to see the brown zoned cap with a pale margin.

Along a bank of the Myrtle Loop Walk and half hidden under ferns and growing on the edges of the moss shoots were the white, flattened fruit bodies of *Arrhenia retiruga*. This tiny (to 10mm diameter) flake-shaped fungus has a smooth fertile lower surface. A deviation down to the river found examples of the lilac-pink coral *Clavaria zollingeri* in decaying litter. This has multiple branches, blunt apices and the stems longitudinally grooved. The species is variable in colour from violet to lilac-pink (these specimens were very pale). Near the car-park and alongside a Myrtle Beech were several fruit-bodies of *Laccaria* sp. This species is always associated with Myrtle Beech and is distinguished from other *Laccaria* spp. by its large fleshy size, flattened to undulating pink cap and deep widely-spaced pink gills. One specimen here had a cap diameter of 70mm, but they were old specimens and the pink colour had darkened to orange-brown.

The species most frequently seen were growing on dead wood and included: the pink-purple discs and conical cones of *Ascocoryne sarcoides* (Purple Jellydisc); the pink translucent, gelatinous caps of *Plurotopsis longinqua* (*Panellus longinquus*); and large specimens of *Hypholoma brunneum* where, in some cases, the white fibrillose scales on the brown caps could be clearly seen around the margin; and there was also a distinctive *Stereum* sp. growing in overlapping shelves with brown hairy zoned caps and a wide pink margin, underneath was smooth pale brownish but which had a pink margin. Numbers of fallen dead branches of Myrtle Beech bore specimens of *Biscogniauxia* sp. This fungus has the habit of erupting through bark. It shows as a black surface with an inconspicuous perithecial mound containing scattered ostioles. *Biscogniauxia* spp. are bark parasites that persist on fallen, dead material but do not

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Coates Wildlife Tours

Specialists in Nature Tours since 1986

Terrestrial Orchids

10 Day Accommodated Tour - Departs 19th September 2012

Examine some of the exquisite native orchids of W.A.'s south west region.

Lord Howe Island

8 Day Accommodated Tour - Departs 3rd November 2012

Join resident expert, Ian Hutton, to explore this nature lovers' paradise.

New Zealand South Island Wildlife & Wilderness

15 Day Accommodated Tour - Departs 2nd February 2013

See three NZ national parks, the Catlins, Otago Peninsula & Stewart Island.

W.A.'s South West Endemics

8 Day Accommodated Tour - Departs 2nd March 2013

Discover the remarkable bird life that populates this area.

Sri Lanka Wildlife, History & Culture

18 Day Accommodated Tour - Departs 10th March 2013

See the exotic flora, fauna & discover the history of this enchanting island.

Pilbara Reef & Ranges

14 Day Camping Tour - Departs 12th April 2013

Experience Ningaloo Reef, Abrolhos Islands & Karijini National Park.

South Australian Outback

16 Day Camping Tour - Departs 11th May 2013

Explore some of the most spectacular outback locations in the Lake Eyre Basin.

Kimberley Discovery

15 Day Camping/Accommodated Tour - Departs 6th July 2013

Explore the wildlife & gorges of this unspoiled wilderness area.

Kimberley Cruises

11 Day Cruises - three departure dates from May - June 2013

Explore the wildlife & culture of the unique Kimberley coast in style.

Arctic Spitsbergen Odyssey Cruises

11 Day Cruises - two departure dates in July and one in September 2013

Explore this island archipelago & visit the kingdom of the polar bear.

Contact us for our complete 2013 program, featuring the world's most desirable natural history destinations.

Phone: 1800 676 016 Web: www.coateswildlifetours.com.au Email: coates@iinet.net.au

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(Continued from page 8)

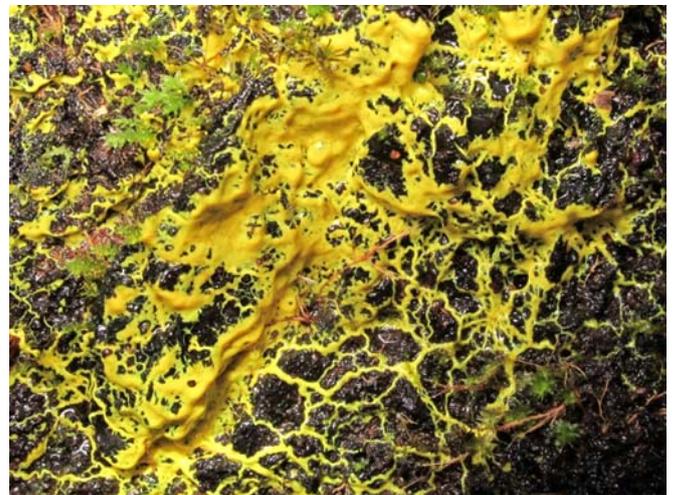
invade this material. Developing within the living bark they have a two-part structure (bipartite) – an outer layer which breaks away as the fungus develops and forces through the host bark and a black, carbonaceous layer which carries the perithecia, which has ostioles containing spores.

For some time now based on the image no. 432 in B Fuhrer 2005, (A field guide to Australian Fungi), we have been listing the orange-red crust with its tinge of purple and white margin as *Gloeoporus taxicola*. Recent microscopical work by Virgil Hubregtse on a sample from The Beeches has shown clamp connections which, according to Cunningham 1963 (The Theleporaceae of Australia and New Zealand, Bulletin 145) and webpage Mycobank, *G. taxicola* does not have. However, Cunningham does point out that *Polyporus merulinus* (now *Ceriporiopsis merulinus*, syn *Tyromyces*

merulinus), see Fuhrer no. 426 and Cunningham 1965, (The Theleporaceae of Australia and New Zealand, Bulletin 164) does have clamp connections as well as spores of a similar size and shape, and which looks macroscopically similar in colour to *G. taxicol*. In contrast J Breitenback & F Kränzlin 1984 (Fungi of Switzerland, vol 2 Non-gilled Fungi) mentions two *Gloeoporus* spp (no 366, no 367) that do have clamps. We will now need to do more research and observe the species more closely.

Ed & Pat Grey

This newsletter is printed on recycled paper.



Slime Mould

Paul George

SEPTEMBER PROGRAM

The Fungi Group will endeavour to organise a spring excursion if conditions are favourable. Members will be contacted by email. **Contact Virgil Hubregtse 9560 7775**



Day Group

Surviving the Zambesi 24 July 2012

Dr Maria Gibson, a Senior Lecturer at Deakin University, presented a talk about a visit (with her husband, Gary) to Victoria Falls in Zambia and their ten-day canoeing trip on the Zambesi River, in 2011.

Victoria Falls are 1.7 km wide and, as Mary observed, photographs cannot do justice to its scenic magnitude. Although neither the highest nor the widest waterfall in the world, it is claimed as the largest, based on the size of the sheet of falling water. The Falls form part of the boundary between Zimbabwe and Zambia, and are best viewed from the Zimbabwean side.

From Victoria Falls (the town on the Zimbabwe side of the river), they flew to Kariba, in Zimbabwe on the lower Zambesi. They had organised on-line to undertake the 'Classic Long' canoe tour with *Natureways*. Having done the orga-

nizing from Australia, they did not realize—despite hints from the tour company—that they would be on the river during the wet season. The safari started 8 km downstream from the Kariba Dam Wall, at Kariba Gorge, the party consisting of three canoes, with Mary and Gary in one and two guides, each with a canoe.

The course of the river took them on to the river's floodplains and the safari finished at Kanyemba on the lower Zambesi. In this way they covered two National Parks, Mana Pools being classed as remote. Overall, the trip was 230 km, which meant that an average of 23 km was paddled each day. Rest stops were frequent, in part because of the effort required in paddling, and also to ensure that sufficient time was spent enjoying the sights.

Because of the extra volume of water in the system, the sluice gates at Kariba Dam had been opened, resulting in a rise of some metres in the water level of the river. The trip

began badly, with one of the guides becoming separated from the rest of the party for some hours.

A long time was spent waiting on the bank of the river for him to appear.

Throughout the trip the main dangers came from the wildlife. Hippopotamuses were a major concern. At one point along the river a particularly belligerent beast, known as 'Psycho Simon' was known to charge canoes and tip people into the water, whereupon he attacked individuals. He was said to have killed at least seven people.

Elephants close to the water's edge towered over them, when seen from the river. It was the practice when approaching a campsite for one of the guides to beat around the ground cover, in case there was a sleeping crocodile.

When there was a chance of lions in the area, they were told not to let the lions see where people were lying inside the tent. The animals would attack a sleeping person's head, but would hang back if they were unsure. Mary said that lions prowled very closely outside of their tent.

Gary Presland

From the Office.....

Solar Panels

Our wonderful Solar Panels were installed last Friday, one more step towards making our hall carbon neutral. Our 20 panels will provide much more energy than we need and will provide a small ongoing income for the club. The cost of this system has been funded by donations; however we are still short \$500. If you wish to donate to this project contact the office by telephone or email.

Photographic Competition:

Our Photographic competition is well underway. There are competition Entry forms and Terms and Conditions in the book case in the hall. (Key in the office). Photographic mounts of various sizes are also displayed for sale. Otherwise, email (admin@fncv.org.au) or download entry forms from the FNCV website. I would like to thank the four members who have agreed to be judges: Bruce Fuhrer, Wendy Clark, Leon Costermans and Margaret Corrick. If you have any questions please ring the office (9877 9860) on Mondays or Tuesdays between 9 and 4 pm.

Donations for Hall:

This month's donations are:

Biscuits (packets of biscuits are always needed).

Long Life Milk

Pine o clean wipes (for bin)

Toilet Paper Or Gift vouchers from Office Works, Coles or Safeway.

Thanks

Hali





Marine Research Group News

Minutes of MRG meeting Monday 9 July 2012: Melanie Mackenzie of Museum Victoria spoke on the topic “A voyage south; ice, animals and adventure in Antarctica: holothuroid research on the Royal Research Ship James Clark Ross, Cruise JR275, to the Weddell Sea”

Melanie is part of a team of echinoderm workers at Museum Victoria and was invited to join the British Antarctic Survey in an expedition to the Weddell Sea in February-March 2012.

The phylum Echinodermata goes back at least 500 million years. Originally it contained over twenty classes; today there are only five: Asterozoa (sea stars) Holothurozoa (sea cucumbers), Ophiurozoa (brittle stars), Echinozoa (sea urchins) and Crinozoa (feather stars).

Melanie’s particular interest lies in the holothurozoa, the identification of which relies on tube feet arrangement, oral tentacle type and arrangement, and body ossicle types, among other parameters.

The course of the British research vessel James Clark Ross was from South America to the Falkland Islands, and from there to the South Orkney and South Sandwich Islands and subsequently to the Weddell Sea off Antarctica. The path home was via the South Orkney Islands back to the Falklands and back to South America.

The aim of expedition JR 275 was to study Antarctic biodiversity and to document the fauna type and quantities occurring at various depths. It collected benthic invertebrates and a few fish. Fifty six locations were sampled at depths of between four hundred and two thousand metres. Rough sorting of animals occurred on board, with tissue samples for DNA analysis and photography performed where possible before animals were preserved in preparation for more detailed subsequent study.

Several teams of scientists were on board; Melanie was part of the biology team, but there was also a chemistry team looking at water chemistry (temperatures, salinities, oxygen content, pH levels amongst other parameters) and a geology team that was interested in mapping the sea floor and ice shelves.

Melanie noted that Antarctica is twice the size of Australia. It is the coldest, driest and windiest continent on earth. Temperatures have been recorded there as low as minus eighty nine degrees celsius.

Melanie showed images from the Falkland Islands, which have no trees. Stanley is a very British township. The following were included amongst the many images shown: old wrecks at Whalebone Cove; southern sea lions amongst the shoreline; the Fisheries Department at Fi Pass (which also has a shallow water marine survey group akin to the MRG) with its laboratory and collection store; Gypsy Cove and York Bay; king penguins on the beach; herons; rock shags; Magellanic penguins; upland geese; the Falklands thrush; landmine warning signs (landmines are still present on the islands but are slowly being cleared); the Magellanic snipe; Falkland steamer ducks; Magellanic oystercatchers; local vegetation including balsam bog and diddle-dee berries; local peat; and a gentoo penguin colony one and a half kilometres from Stanley.

Images taken out at sea included whaleblows; wandering albatross, with a wingspan nearly four metres across; waves to seven metres and above in height; and giant petrels.

Glimpses of the life aboard the RRS James Clerk Ross were provided, with images of the ship, sleeping quarters, laboratory and sorting areas, the deck and trawl equipment shown. The vessel was an icebreaker with a strengthened hull. The expedition reached the Antarctic ice shelf at 77.36 degrees south. Safety training sessions pre expedition were extensive and rigorous. The scientific staff worked from 7.00 am to between 6.00 pm to 10.00 pm.

The British ship crew included a lot of Scots and some Irish. In British fashion, the evenings tended to be formal affairs, with dining in the officer and scientist lounge and alcoholic drinks available in the officer and scientist saloon. Attendance required formal dress, and ties for men—quite a contrast to the multi-layered protective clothing, thermal steel-capped boots and fleece-lined hardhats worn throughout the day.

There was also on board a circuit training

course set up on board to afford crew the opportunity of a little recreation.

Melanie also showed images of the collecting equipment including trawls designed for sampling larger fauna, and epibenthic sleds bearing sensitive camera equipment and finer nets designed to gather smaller, more delicate organisms.

Amongst collected material, images were shown of a giant glass sponge, brittle stars, sea spiders (some up to twenty to twenty five centimetres in diameter!) and holothuroids. Amongst mollusca, considerable numbers of scaphopods were collected. Rough identification, sorting, tissue sampling and preserving were all carried out whilst the ship rocked to and fro. All particularly sensitive equipment such as microscopes, had to be strapped down.

Melanie showed a time lapse photographic sequence of a day’s work in the laboratory, giving us a good idea of the working environment.

Other images shown included benthic images from the sled equipment; emperor penguins on the Antarctic ice shelf; minke whales; adeliie penguins, crab-eater seals; snow petrels; scenic views of the Antarctic ice shelf; southern elephant seals (which can dive to greater than 2000 m depths); fur seals and chinstrap penguins.

Nearly two thousand holothuroids were collected during this expedition. These specimens are destined to be eventually sent to the marine invertebrate department at Museum Victoria for taxonomic study and identification. Melanie is part of the team which will undertake this work, under the guidance of Mark O’Loughlin and also assisted by Emily Whitfield and Shari Barmos. The group has already published widely on the holothuroid fauna of Australia and beyond (including Antarctic material in cooperation with the Australian Antarctic Division and British Antarctic Surveys).

We look forward to the results to come from this most recent material, and thank Melanie very much for her most interesting and thought-provoking presentation.

P. Vafiadis



Juniors' Report

The Juniors' had 19 members attend the Dingo Discovery Centre on 8 July. It was a great day weatherwise and a great activity.

June's meeting had Micah (a 16 year old Herpetology member and reptile rescue worker) speak in place of Simon Watharow who was unwell. Micah presented, showed images and answered questions about the various reptiles and amphibians he had experience with and about the work he does with reptile rescue. It was a well attended meeting.

The core Junior Council members met recently to review the Juniors' program and put together a database of possible camping sites. Scouts, SEANA and Trust for Nature will be contacted and we would be grateful to discuss possibilities with anyone within the club.
Contact Claire Ferguson 8060 2474; toclairéf@gmail.com.

Exhibition of botanical paintings by Malcolm Calder

Wanderslore Sanctuary
Annual Open Day

Sunday 21 October 2012
10.00 am - 4.00 pm

Nature walks, sausage sizzle, tea,
coffee & cake

2180 Warburton Highway.

Entrance off the Lilydale to Warburton
Rail Trail between the Home Hotel
and the Launching Place Store.

Many thanks to those who helped collate and label FNN 222

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Hazel Brentnall
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Margaret Corrick
Ray Power

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Thanks to the editorial and layout team who put together FNN 223

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Noel Schleiger
Platon Vafiadis
Hali Ferguson
Su Dempsey

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