



Understanding Our Natural World
Est. 1880

Field Nats News No.256

Newsletter of the Field Naturalists Club of Victoria Inc.

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September 2015

From the President

Another month of FNCV activity has rocketed by with many enjoyable evenings spent at interesting SIG meetings. The last Fungal Foray for the season was held at Gembrook over a week ago. The working bee was well attended on Saturday and a great deal was achieved. Thank you to all who participated.

We are in the process of acquiring new computers for the FNCV Office so that we can continue to produce quality publications, maintain our databases and continue to communicate effectively with our membership and the broader community. It is essential that the FNCV can meet the challenges of a world that has become utterly dependent upon effective high technology communication. Acquisition of a new, more compatible data projector is also under consideration.

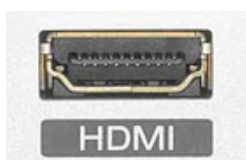
The technological incompatibility between the new notebook computer and the older projector in the hall has given us all some challenges over the past months. This has been due to the software installed on the computer and the damage sustained by the adaptor that connects it to the computer. I have updated the software, simplified the Start Window and purchased a new adaptor. It is not a perfect solution but will work quite well if the adaptor is handled gently when removing it from the projector VGA cable and the HDMI socket of the computer. (see right)

I have removed the screws from the projector cable so that the adaptor cannot be damaged by tightening and untightening them. Once pressed together the plugs are tight enough. I will leave clear instructions with the computer. The later Windows update is much easier to use but must not be tampered with. Many of the settings had been changed prior to the last major problem occurring and this was a factor in the problems we had.

A few days ago I was surprised to see a female mantis sitting on a leaf in my garden. It was an ex-



VGA cable



The deadline for the October issue of Field Nats News will be **10 am on Tuesday 1st September**. FNN will go to the printers on Tuesday 8th with collation on 15th Sept.

ceedingly cold day and quite late to be seeing them about. It didn't seem to be troubled by the cold. *Photo left.*

Don't forget to register for the Biodiversity Symposium as soon as possible so we can plan for seating and catering. Copies of the programme and registration form are available from the office, on the web and as an insert in the August edition of FNN, 255.

Maxwell Campbell

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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

Tuesday 1st - Fauna Survey Group - Meeting: *The work of the Australian Wildlife Conservancy.* Speaker: Zac Lewis, Development Executive, Australian Wildlife Conservancy. Contact: Robin Drury 0417 195 148; robindrury6@gmail.com

Friday 4th to Sun 6th – Fauna Survey Group- Excursion: *Arboreal mammal survey in the Lonsdale Nature Conservation Reserve, near the Grampians.* Contact: Robin Drury 0417 195 148; robindrury6@gmail.com

Monday 7th – Fungi Group - Meeting: Members' Night - Mini conference. Contact: Virgil Hubregtse 9560 7775

Saturday 12th & Sunday 13th – Biodiversity Symposium. Impacts on Biodiversity During the Anthropocene
To highlight and discuss aspects of human impact on the environment; in particular its effect on biodiversity. We will bring together up to 16 experts and practitioners to discuss the complex issues. 9.30am to 5.00 pm. **Prior registration & payment required.** Registration form and details of program are included in the August FNN or on the website. Contact: FNCV office-admin@fncv.org.au Phone 039877 9860

Monday 14th – Marine Research Group - Speaker: To be advised.
Contact: Leon Altoff for details 9530 4180 AH; 0428 669 773

Tuesday 15th—Collate FNN. Starting about 10.00 am. Collation will include the 4 monthly calendar so please come and help us out. Morning tea provided. Contact Joan Broadberry 9846 1218

Wednesday 16th - Terrestrial Invertebrates Group - Meeting: A presentation on the work done by Australian Wildlife Conservancy. Speaker: Zac Lewis, Development Executive, Australian Wildlife Conservancy.
Contact: Max Campbell 0409 143 538; 9544 0181 AH; mcam7307@bigpond.net.au

Thursday 17th – Botany Group—NO MEETING

Tuesday 22nd – Day Group - Meeting: Smoky Mouse and Broad-toothed Rat. Speaker: Phoebe Burns and Stella Shipway
Contact Joan Broadberry 9846 1218. Meet at 10. 30 am for coffee and a chat. Speakers at 11 am.

Wednesday 23rd – Geology Group - Meeting: Cable Bacteria in the Yarra River & Beyond. Speaker: Associate Professor Perran Cook, Monash School of Chemistry. Contact: Ruth Hoskin 9878 5911; rrhoskin@gmail.com

Friday 25th – Juniors' Group 7.30 pm. Meeting: Talk on microscopy, " Seeing small". Speaker: Rod Vance.
Contact: Claire Ferguson 8060 2474; toclaif@gmail.com

Saturday 26th to Friday October 2nd – Fauna Survey Group. Excursion: General fauna survey at Heatherlie in the Grampians. Contact: Robin Drury 0417 195 148; robindrury6@gmail.com Prior registration is essential.

Sunday 27th – Juniors' Group - Excursion: Brisbane Ranges. With Cathy Powers. Contact: Claire Ferguson 8060 2474; toclaif@gmail.com.

Monday 28th - FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Wendy, 98779860 or admin@fncv.org.au

REMINDER: VOLUNTEERS NEEDED—Whitehorse Festival, Sunday 18th October, Whitehorse Civic Centre 10-4 pm
Music from the Wetlands: Sunday 15th November 11.45—5.30 pm. 1 View St. Alphington. **Contact the office.**



The policy of the FNCV is that non-members pay \$5 per excursion and \$3 per meeting, to contribute towards Club overheads. Junior non-member families, \$4 for excursions and \$2 per meeting.

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: *Tim Burt and Ryan Hemmens*

<u>For Interest:</u>	<u>6 monthly comparison</u>	<u>New members</u>	<u>Lost members</u>
	1/1/2014 to 1/7/2014	50	102
	1/1/2015 to 1/7/2015	83	56

Thanks to all those who attended the FNCV working bee, Saturday 25th July 9.30am—2.30 pm

Barbara Burns (organiser)
Robyn Goode
June Anton
Ray Gibson
Max Campbell
Peter Fagg
Kathy Himbeck
John Harris
Philippa Burgess
Alexander Sterpin

Jobs Done: Back garden planted with native tube stock; Rubbish picked up; Garden weeded; Bushes trimmed; Dead tree cut up; Tree plus other clippings mulched and put on garden; Paving near water tank re-laid; Store room door fixed; Drawer fixed in office; Hall and office dusted; Max and John worked on computer system in the hall; Paths swept; Rubbish emptied

Barbara Burns

VISITORS

On Tuesday 28th July it was an absolute delight to meet Eulalie Brewster, who visited the FNCV Club rooms, with her daughter Alison and son Leo Lubransky.

Eulalie joined the FNCV in 1944 and became an Honorary Member in 1984. Living in the country, she has seldom been able to get to our Blackburn home.

Eulalie's mother joined the FNCV in 1918 which means there is an unbroken line of family membership coming up to 100 years.



CONGRATULATIONS TO WENDY AND SU ON RECEIVING 2015 DEAKIN COMMUNITY AWARDS

Wendy Clark (left) was nominated by the FNCV for the 2015 Deakin Community Awards because of her outstanding contribution to the Club over the last 40 years. She was the youngest President between 1982-85, took on a second Presidency between 2001-4 and was Secretary from 1978-82. Wendy took over the Juniors' Group in 1999. Her work was instrumental in building it to the thriving membership of over 50 families it enjoys today. Congratulations Wendy.

Su Dempsey (right) was nominated by the Jeffery Street Association. She has been on the committee for a number of years, has been President and is currently the Treasurer. Su and Peter Dempsey live in a unique and interesting Blackburn street. To find out more please ask them about it. Congratulations from FNN.





Geology Group

The Geology of Ile de La Reunion

*Talk given by Rob Hamson
on Wednesday 22 July*

I was asked if I could repeat the talk I gave to the Day Group on 24 February for the Geology Group and happily complied though pointing out that the slides would be much the same. Joan Broadberry wrote an excellent report of the first talk which is in FNN No. 251 and gives a rounded picture of the island and its natural history. In this second talk I went into more detail on the geology.

Reunion is in the Indian Ocean about 700

km from Piton de la Fournaise which started about 530ka.

Piton de la Fournaise is one of the most active volcanoes in the world. The most recent eruption lasted from 4th February to 30th May this year. The five most active volcanoes in the world are Reunion, Kilauea (Hawaii), Mount Erebus (Antarctica) and Stromboli and Etna in Italy.

In terms of explosivity, Reunion is ranked placid to mild (Hawaiian-Strombolian) on the simple chart of types of sub-aerial eruptions:

Hawaiian
Strombolian
Vulcanian (named after the Italian island of Vulcano)
Pelean (Mont Pelee erupted in 1902)
Plinian (e.g. Vesuvius 79AD as observed by Pliny the Younger)

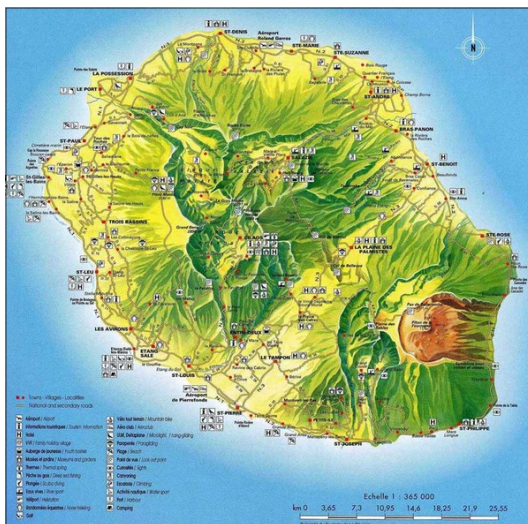
Though all Reunion's recent eruptions have been basaltic lava flows (i.e. Hawaiian type), there is evidence of explosive eruptions in the past (i.e. Strombolian). One such event 4,700 years ago may have had a VEI (Volcanic Explosivity Index) of 5, the same as the 18/5/1980 eruption of Mount St Helens. Ash-fall deposits (see photo) are related to such explosive events and successive stages in caldera collapse at 250ka, 35ka and 5ka. One of the "ramparts" formed by caldera collapse can be seen in the photo of Plaine des Sables. This is a plain not of sand but of lapilli, fragments sized 2-64mm which have been thrown out of volcanic vents during eruptions.

Such explosive activity points to some of the magma having more felsic composition with a source material of continental crust. Indeed the geological map shows a small patch of syenite, an intermediate plutonic rock at the bottom of the Cirque de Cilaos. A search of the internet brought up only one reference to continental crust

Reunion Update: Apart from finding the debris from Malaysia Airlines Flight MH370, Reunion is also in the news with the latest volcanic eruption from Piton de la Fournaise which began on 31st July and is attracting sightseers.

making up part of Reunion - a hidden micro-continent beneath Reunion and Mauritius named Mauritia which detached from Madagascar and India as they drifted apart 60 million years ago.

66 million years ago India was passing over the Reunion hotspot and a massive hot mantle plume head gave rise to the outpouring of basaltic lava that became the Deccan Traps, one of the largest volcanic features on Earth. At the same time the Seychelles Plateau detached from India and Madagascar. Associated with the huge volume of basalt, 512,000 cubic kilometres, was an equally large emission of carbon dioxide causing the temperature of the Earth's atmosphere



Reunion Island. Source: mappery.com

km east of Madagascar and 200 km southwest of Mauritius. In 2011 UNESCO designated 40% of the island a Natural World Heritage site under the title "Pitons, Cirques & Remparts" (peaks, basins and cliffs). Its spectacular scenery owes its origin to being over the Reunion hotspot which has given rise to a huge basaltic shield volcano: Piton des Neiges, now extinct and much dissected by erosion, which rises 7000m from the sea floor to a height of 3071m above sea level. Current volcanic activity is now concentrated 30km to the southeast at the 2631m Piton de la Fournaise (peak of the furnace). Submarine volcanic eruptions began some 8-5 million years ago with Piton des Neiges appearing above sea level some 2 million years ago. It was active till about 430ka (ka = 1000 years ago) overlapping with eruptions



Plaine des Sables and caldera wall. Photo: Rob Hamson

to drop 2°C. Together with the asteroid that hit the Gulf of Mexico at this time, this is considered a major cause for the extinction of the dinosaurs.

The Deccan Traps may sound a curious name. The Deccan is a plateau in west-central India and trap is a name used for rock formations consisting of multiple layers of flood basalt. Such formations produce step-like hills and the word 'trap' is derived from the Swedish word for stairs (trapp). The term has been in use since the 1790s.

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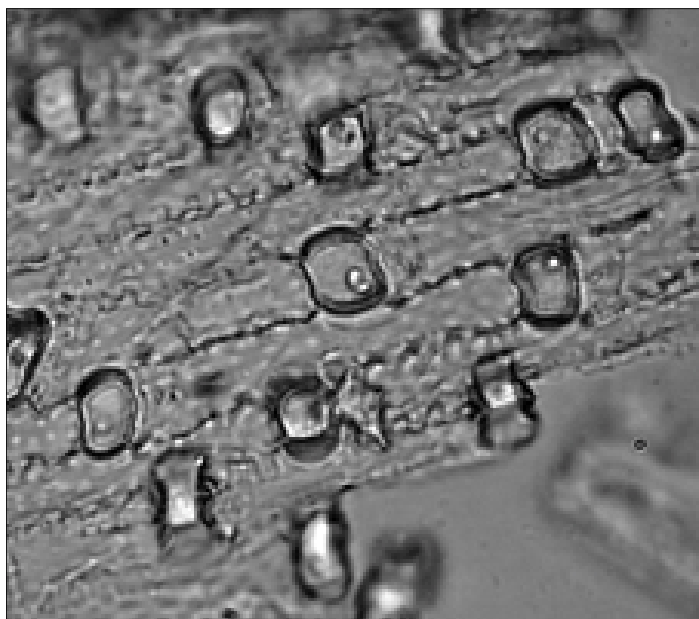
Another curious name I came across while studying the geological map was 'mascareignite' under the list of useful minerals, none of which are mined, by the way. It is obviously a local name as the island group of which Reunion is part is called the Mascarenes. Mindat.com records only one location in the world for this mineral: Reunion. It is in fact a soil composed largely of the opaline silica of bamboo phytoliths, the microscopic specks of silica that all grasses contain. It has accumulated from burnt bamboo over the past several thousand years. This must owe something to the local juxtaposition of lush vegetation and the frequent volcanism igniting it.

I enjoyed giving this talk to both the Day Group and the Geology Group and appreciate the interest shown and many questions asked.

Rob Hamson



Ash deposit. Photo: Gillian Harrowfield



Bamboo phytoliths. Source: Jeff Parr. Ecos Science for Sustainability 14/9/10



Library News

In a move that is probably a sign of the times, the Royal Society of Victoria (RSV) has opted to publish their journal *Proceedings and Transactions* available on the 'net in open access. This means that anybody can access the journal simply by going to the RSV website and clicking on the appropriate link. Articles can then be downloaded, in PDF.

That's all very well, I hear you say, IF you have access to the 'net; which, brings me to the point of this story. Recognising that not all members have the facility or ability to track down items on the 'net, the Librarian is offering to do this, on request and within reason. Through his many digital connections it is no great matter for him to find and print copies of articles in any journal held by either the State Library of Victoria, or the University of Melbourne Library. (This is assuming, of course, that the desired article is in an issue that has been digitised.)

If you are interested in taking advantage of this service, please do not hesitate to give the Librarian a call.

Recently acquired monographs

The Library has recently added the following books to its holdings:

Flora of Australia, volumes 39 (Alismates to Areles); 51 (Mosses); 56A (Lichens 4); and 57 (Lichens 5) (CSIRO Publishing: Collingwood);

Patterson, G (2015) *Coastal guide to nature and history 2: Mornington Peninsula's ocean shore, Western Port, Phillip Island & French Island*. (Coastal Guide Books: Briar Hill);

Garnett, ST & Franklin, DC (Eds) *Climate change adaptation plan for Australian birds*. (CSIRO Publishing: Collingwood)

Recent periodicals:

Australian Wildlife Vol.3 (2015) has an article on the brush-tailed rock wallaby and another calling for a total ban on hunting of sea-turtles and dugongs, even under native title.

The latest 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.

Library collections now on the website

A reminder that you can now search the library's collections on the FNCV website. Click 'About us' à Library and you will be able to download searchable lists of books, periodicals, maps and photos.

Gary Presland

FNCV Annual General Meeting 3rd May 2015, Minutes

Welcome

John Harris welcomed 21 members and three visitors.

Apologies

There were 10 apologies: Sue Bendel, Geoffrey Paterson, Linden Gillbank, Robert Wood, Colin Douglas, Darcy Watchorn, John McClumpha, Edward and Hazel Brentnall, Faye Campbell

Minutes of 2014 AGM

Motion: to accept the Minutes of 2014 AGM as true and accurate record of the events.

Moved: Max Campbell

Seconded: Andy Brentnall

Motion Carried.

President's Report

As per President's report from Annual Report 2014.

Motion: to accept the President's Report for 2014

Moved: Barbara Burns

Seconded: Sheina Nicholls

Motion Carried

Treasurer's Annual Accounts year ended 31/12/2014

Treasurer presented the annual accounts to the AGM.

Motion: to approve the Annual Accounts presented to the meeting as giving a true and fair view of The Field Naturalists Club of Victoria Inc's financial position as at 31 December 2014 and of its performance for the year ended 31 December 2014.

Moved: Barbara Burns

Seconded: Andy Brentnall

Gary Presland asked about the Local History Grant not appearing in the statement. Barbara replied that the grant was not included in the profit report for the year ended 31 December 2014 but was included as a liability in the balance sheet. This was because, for the year ended 31 December 2014, none of the proceeds of the grant had been spent.

Barbara also extended her thanks to Wendy Gare for the great work she has done running the office.

Motion Carried.

Appointment of Auditor

Motion: to accept Susan J Harkin as Honorary Auditor for 2015.

Moved: June Anton

Seconded: Andy Brentnall

Motion Carried.

Notice: Special Resolution

Motion: That this AGM of The Field Naturalists Club of Victoria Inc. approves the new structure for calculation of the membership fees based on a percentage of the Single Fee, which will be increased periodically to commence on 1st July 2015, as recommended by Council.

Moved: Ruth Hoskin

Seconded: Sheina Nicholls

Much discussion was had before the resolution was finally passed. This discussion included:

- Russell Green suggested that the formula be applied every 2-3 years rather than yearly as it would produce very odd amounts if done yearly.
- Gary Presland asked to check the cost of overseas postage and to make the overseas institutions more based on this cost.
- Kathy Himbeck asked for clear guidelines as to remote/country postcodes, hence defining the country membership category
- It was also suggested that there should possibly be a category for overseas members who receive The Victorian Naturalist via email.

These discussion points would be referred to Council. Motion carried.

Environment Fund Recipients and Reports

As per Environment Fund report from Annual Report 2014

2015 Recipients:
*Andrew Christie,
Darcy Watchorn,
John McClumpha*

Andrew Christie attended the meeting and gave a brief description on his research into tube-worms.

Of the 2014 recipi-

ents, John Harris gave a brief presentation on his company's stygofauna research in south-west Victoria. The research will be published in The Victorian Naturalist at a later date.

2014 Recipients:

- Yarren Dheran Nature Reserve - LED TV , \$981
- FNCV Botany Group - Conservation of the Maroon Leak Orchid, \$752
- Nature Watch, VNPA 'Caught on Camera' - Camera and fittings, \$800
- FNCV Microscopy, TIG & Juniors' - 3 stereoscope dissecting microscopes, \$990
- Biosphere Pty Ltd, Dr Graeme Lorimer - Illustrated Identification Key for Victorian Stipoid Grasses, \$1000
- Wildlife Experiences - John Harris, Kathy Himbeck, Colin Clay - Investigation into the stygofauna of the Port Campbell limestone Aquifer, \$945.

Presentation of Long Term Member's Certificates

5 members have been awarded certificates of Long-term Membership in recognition of being a member of the FNCV for a continuous period of 40 years. Congratulations and thank you to you for making such valuable contributions to the club:

Elaine Meehan , Alan Monger ,Linden Gillbank Robert Wood, Colin Douglas

Elaine Meehan and Alan Monger attended the meeting and were presented with their long-term member certificates Both gave short speech on

(Continued on page 12)

Alan Monger & Elaine Meehan
receive Long Term Memberships.





Fungi Group

**FUNGI GROUP FORAY,
MACEDON, SANATORIUM
LAKE, 24 May 2015**

**Vegetation - Wet messmate/gum
forest and introduced species (pine,
poplar, holly etc).**

Under pine trees, in two separate areas, were groups of the introduced, white clubs, Wrinkled Coral *Clavulina rugosa* (below). These were found in both the branched and contorted forms and distinguished from the similar *C. subrugosa* and *C. coralloides* which only grow in native forests. A yellow multi-branched coral above ground height to 70 mm width to 5.5 mm was in scattered groups in deep litter. The basal stem was white to 25 mm long, branches erect and stain brown when bruised. We first thought that it might have been a pale *Ramaria anziana*, but several characteristics went against this - the brown staining on the branches, the lack of pinkish colourations on stem or branches, dichotomous to trichotomous branch tips, indicated that it was the Yellow Coral *R. lorithamnus*. Peppery Corals *Artomyces* spp. were found on rotting logs and branches throughout the foray. Several specimens were collected to differentiate between *A. austropiperatus* and *A. colensoi*. There is some conjecture that despite the size and structural differences these are variants of one species - *A. austropiperatus*, but this work is still in progress.

We saw a lot of Yellow Jelly Bells whose colour varied from pale yellow to gold. They have a smooth soft jelly-like fruit-body which is shaped like a shallow bell

Clavulina rugosa, Photo: Ed Grey



with a short stalk-like attachment to the wood substrate. In the field, according to McNabb, the two species of Yellow Jelly Bells *Heterotextus miltinus* and *H. peziziformis* are differentiated by fruit-body size. *H. miltinus* has a 4-10 (15) mm diameter, and projects to 9 mm, whereas *H. peziziformis* has a diameter of 2-5 mm and projects to 3 mm. There are other microscopical differences. (R. F. R McNabb (1965) **Taxonomic studies of the Dacrymycetaceae V. *Heterotextus* Lloyd. New Zealand Journal of Botany Vol. 3, pp. 215-222).**

Richard Hartland found a group of *Cordyceps robertsii* and one *C. gunnii* under the same Silver Wattle *Acacia dealbata*. *C. robertsii* looks like a thin, spiky dark-brown stick or fern stem with a lighter top and were quite difficult to see in the gloom of the forest. Some of the fruit-bodies were branched. This was the first species of *Cordyceps* to be noted from Australasia (1831). *Cordyceps* internally parasitise the living larva of certain insects. After the larva dies its entire body cavity, except the alimentary canal, becomes filled with the fungal mycelium, so that the body again fills out to its former size and rigidity and becomes decay resistant due to the anti-bodies manufactured by the *Cordyceps*. The avoidance of the alimentary canal may be because it has no nutritional value or that it contains toxins harmful to the *Cordyceps*. After the mummification of the host, the fungus produces its long, stalk-

like fruiting body. This generally follows the insect's own burrow to the surface and its length varies according to the depth of the host below. The host larva would have been the large Victorian Swift Moth *Oxycaenus di-*

remptus. *C. gunnii* would have infected the same host. (P Grey & R Barker. 1993. **Cordyceps or Plant eats Animal!, The Victorian Naturalist vol 110. 2. p 98ff).** Jurrie Hubregtse tried to dig one up, but unfortunately the thin structure broke, and the insect was not revealed. The fruiting body was a thick, dark club, which ran smoothly into the yellow stem. We found these again in the afternoon under a Silver Wattle.

Numbers of older, black, woody Red-staining Polypore *Amauroderma rude* (photo below), were seen growing on tree stumps. However, one young specimen was found with a brownish cap and white pores which stained brown, not red when scratched.



Amauroderma rude

Photo: Richard Harland.

There was great interest in one yellow-capped species growing in the ground. The cap had a fibrillose margin, and yellowish gills, and a yellow stem was densely squamulose. We thought (hoped) that it might be a *Cystoderma* cf F69, but a look under the cap revealed dark spores. So it was obviously a *Hypholoma fasciculare* growing on buried wood. This species was found in various places always looking somewhat different from the 'norm'. Virgil Hubregtse noted that 'The tiny white shells (on the thick bark of a rotting log) which we thought might be some sort of *Crepidotus*, are a *Clitopilus* species. Pileus: width 5 mm; crepidotoid; translucent stri-

(Continued on page 10)

Extracts from SIG reports given at the last FNCV Council Meeting

Fungi Group: Since the last Council meeting the Fungi Group has held one meeting and six forays.

At our July meeting Sapphire McMullan-Fisher gave a highly informative and interesting presentation about fungal ecology, emphasising the important role of fungi in the environment. Twenty-five people attended, and all enjoyed this presentation.

The forays were held at Wanderslore Sanctuary, Launching Place; Woodlands Historic Park; Greens Bush; Neds Gully; Langwarrin Flora and Fauna Reserve; and Whites Corner, Gembrook (three years post-fire). The forays were well attended and attracted a number of visitors.

Geology Group: Rob Hamson gave a most interesting talk about Reunion Island to the Geology SIG on 22nd July. Reunion Island is situated in the Indian Ocean about 800 kms east of Madagascar. It has a particularly interesting geological history as it sits at present over the hot spot that is surmised to have caused the Deccan Traps massive lava flows 66 million years ago as India passed north to collide with the Asian land mass. Its mountains are over 3,000 metres high with inaccessible cirques and steep ravines. Parts of the island have exceptionally high rainfall. Piton de la Fournaise at 2,632 m is one of the world's most active volcanoes and last erupted in February this year. Piton De Neiges is the older and higher mountain at 3,070 m. and is now dormant. As this island is not well known, it was a particularly interesting talk.

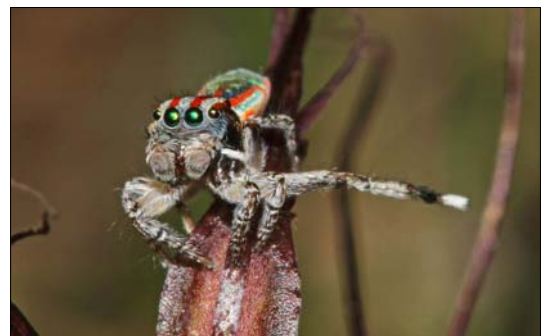
Juniors' Group: Our July 18th excursion to plant habitat for the Helmeted Honeyeater was unfortunately cancelled due to lack of numbers after a particularly cold week.

Our June speaker was Ian Moodie from Whitehorse council on nature photography. He shared the following with us:

- Take photos to share, master the art of photography, an aid to memory, to demonstrate a point, and to possibly make money!
- Take photos of everything that interests you – even yourself when taking a selfie!
- Fungi, rocks, birds, insects, flowers, leaves, patterns and shapes, scenery/landscapes can all make for an interesting photo.
- Use whatever camera you are comfortable using – from a phone to expensive equipment. Post editing is personal choice. Adjusting lighting, cropping or removing distracting objects is usual practice.
- Some photos need to be set up as in a portrait or arrangement whereas others are unplanned and spontaneous.
- Ian showed us some great macro photos he had taken of peacock spiders, web casting spiders, dragonfly eyes and an elbow orchid. He explained considerations for using a flash also the use of time lapse for photographing the sky or waterfalls.

Composition of the photo

- Use a person or object for scale
- Frame with trees, buildings/windows
- Have odd numbers in the photo rather than even eg. 3 birds are better than 2 unless they are close together
- Look for lines that lead the viewer into the photo (paths, flowers, mountains)
- Find a different perspective
- Exposure and focus are important. When photographing an animal always have their eye in focus then the rest of them will appear in focus.



Terrestrial Invertebrates Group

The advertised speaker cancelled some time ago and so a members' night was held. Carol Page kindly showed some photographs from her recent trip to Peninsular Malaysia and Sabah. These were well received, in particular her wonderful images of insects. Other members contributed images and some microscopical movies of chlorohydra in pond water were shown.





Day Group

The Larapinta Trail

Speaker: Geoff Lay

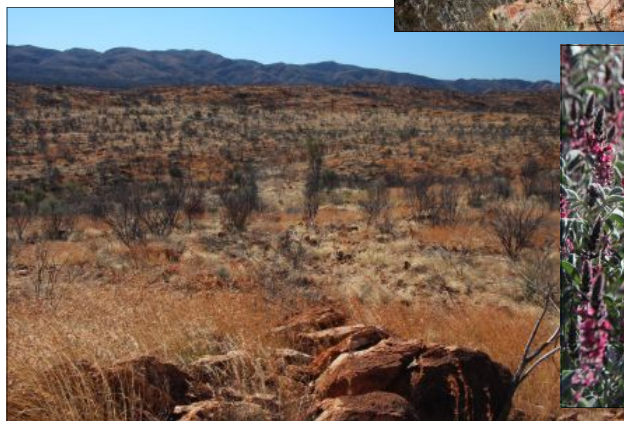
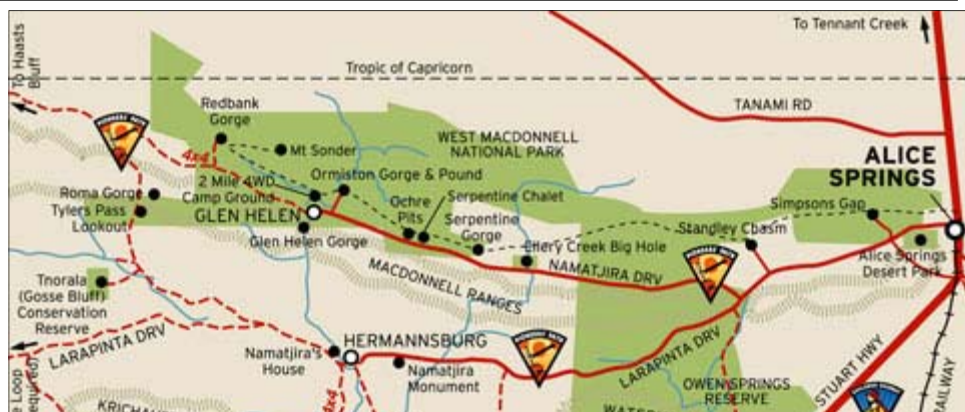
Geoff spoke to July Day Group about a 14 day long distance walk he undertook in Central Australia. The Larapinta trail starts at the old Telegraph Station, Alice Springs. It stretches 240 kilometres, ending at Mt Sonder, its highest point. Geoff travelled with a group of eight walkers, plus two guides.

The Larapinta trail follows the backbone of the West MacDonnell Ranges and encompasses some of the premier attractions of the area, including Simpsons Gap, Ellery Creek Big Hole, Ormiston Gorge and Glen Helen. Construction of the first phase of the trail was begun in 2001. Much of it was built with the assistance of indigenous workers.

Geoff told us it was a challenging walk. The ridgeline is rugged with many dips and climbs. The surface of the trail varies but is generally very rocky and hard on boots. Designated campsites averaged about 20k apart with the shortest distance walked in one day being 11k and the greatest distance 31k. Each campsite is accessible to vehicles and therefore only a day pack and 2-3 litres of water needed to be carried. Comfortable camps, provided with meals, water and toilets were provided each evening, but there were no showers.

The group walked in June with maximum daytime temperatures at about 18-22° C. Very fortunately there had been good rain previous to the trip. Plant life had responded to the rain and Geoff was able to photograph trees, shrubs, grasses and herbs, most in flower. In addition, he included many photos he had taken of the vegetation of Central Australia on other journeys.

Geoff has an extensive knowledge of the plant life of Australia's arid regions and by including four images on each slide he was able to take us through a large number of genus encompassing *Eucalyptus*, *Ptilotus*, *Eremophila*,



Photos, continued p 10

Actinotus, *Senna*, *Indigofera*, *Mirbelia*,

Callitris, *Grevillia*, *Spinifex*, *Hakea*, *Gastrolobium*, *Cymbopogon* and more. Species of many of these appear in the accompanying images, some quite rare. As well as glorious landscapes showcasing the magnificent scenery of the trail, one of the most enjoyable features of Geoff's presentation were photographs of details such as of the texture of bark, seed-heads and rocks. Geoff kindly supplied FNN with a number of images, most of which are included, as they convey the essence of his presentation, beauty the country and the skill of his photography far better than mere words. Once again, on behalf of the Day Group, I would like to thank Geoff for sharing with us his experiences of the Larapinta Trail and the botanical wonderland of Central Australia.

Joan Broadberry

(*Fungi group, continued from page 7*)
 ate; whitish; finely fibrillose; margin
 turned down. Lamellae: distant, con-
 colorous with pileus but with a pinkish
 brown tinge from spores; generally
 three lamellulae between lamellae.
 Stipe: none as far as I can tell – the
 fruit-body appears to join directly on to
 the substrate. Habit: gregarious.' Virgil
 also pointed out the distinctive very tiny
 whitish species with amber droplets on
 cap, and the white stem that has no ring.
B. Fuhrer (*A field guide to Australian
 fungi, 2011*) calls it ?*Lepiota* sp.
 (F161). He is not sure of the ge-
 nus, and with no ring it may elimi-
 nate a *Lepiota* sp.

We saw several mature groups of
 very healthy Australian Honey
 Fungus *Armillaria luteobubalina*
 forming clusters at the base of
Eucalyptus obliqua. They have
 yellow-brownish caps, darker in
 the centre and made rough like
 sandpaper by the scattering of
 minute scales on the surface. Be-
 low the membranous ring, the
 stem is dark, tough and fibrous.
 This species is parasitic and sapro-
 trophic, and a virulent pathogen
 that kills the plant by invading the roots
 and sap wood (causing white rot) and
 infects a wide variety of eucalypts and
 other plants, both native and introduced.
 Jurrie Hubregtse gave us a timely re-
 minder to clean our boots after we had
 left the area to ensure that we carried no
 pathogenic spores to invade and kill the
 plants at home.

Thanks to the photographers—Joy
 Cluckster, Ed Grey, Pat Grey, Richard
 Hartland, Virgil Hubregtse.

Ed Grey & Pat Grey



Continued from page 9.
 More of Geoff Lay's
 images from his presen-
 tation to the Day Group,
The Larapinta Trail.



**Many thanks to those who helped
 collate and label FNN 255**

Sheina Nicholls
 Keith Marshall
 Hazel Brentnall
 Andy Brentnall
 Neil McLachlan
 Cecily Falkingham
 Ray Power
 Joan Broadberry

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 you.

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

**Thanks to the
 editorial and layout
 team who put
 together FNN 256**

Joan Broadberry
 Wendy Gare

*This newsletter is printed on recycled
 paper.*



Marine Research Group News

Report on MRG meeting Monday 11 May 2015: Melanie Mackenzie, Collection Manager of Marine Invertebrates, Museum Victoria (MV), spoke on the topic “RV *Investigator*: a new vessel for marine research in Australia”

The research vessel *Investigator* is a new Australian ship with capabilities for atmospheric, oceanographic, geoscience and biological scientific research. It is a Marine National Facility (MNF) vessel, owned and operated by the CSIRO. Measuring 93.4 metres in length and 37 metres high, it has 10 internal storeys, extensive laboratory facilities and 43 cabins, capable of housing up to 40 scientists and support staff plus up to 20 crew and trainees. The ship was custom built in Singapore. It has 3 diesel engines and 2 propulsion motors, with a range of 10,000 nautical miles and a cruising speed of 12 knots.



RV *Investigator*. Photo: M. Mackenzie

The RV *Investigator* undertook a trial voyage to Tasmanian seamounts south of Hobart, Tasmania from 7-14th April 2015 to test its scientific capabilities, with Melanie and several other MV scientists participating in the voyage. With benthic biology, the aims were to test equipment, develop and streamline scientific procedures and, in the process, to obtain a sample collection of invertebrates & fish.

The area surveyed was the Huon CMR (Commonwealth Marine Reserve), approximately 100 kilometers south of southern of Tasmania. The Huon reserve covers 12,780 square kilometers. It consists of the outer continental shelf, continental slope and deeper sea bed, and includes most of Australia's largest seamount cluster (123 seamounts in depths of 1,000—2,000 metres). A smaller section of the Huon reserve was voluntarily closed to fishing in 1999 (with the recognition of the negative impact of fisheries

on seamounts).

The seamounts are extinct, remnant volcanoes. They are cone shaped (but not always steep), with bases measuring up to 25 square kilometers, and rising 200—500 metres above the seabed. Seamounts are hard, elevated, current-swept habitats. They are highly biodiverse environments, with over 400 species of corals, sponges, crustaceans, echinoderms, and molluscs. Many of these species are currently unnamed.

Some of the sampling equipment used included the Smith-McIntyre grab, Sherman sled, beam trawl, integrated coring platform (ICP/multi-corer), DeepSea-Bruvs (baited cameras & added bait traps), drop lines (added bait traps), towed camera, and additional acoustic equipment. Melanie showed images of the ship and its facilities, and also of the sampling equipment.



Beam trawl aboard RV *Investigator*. Photo: M. Mackenzie



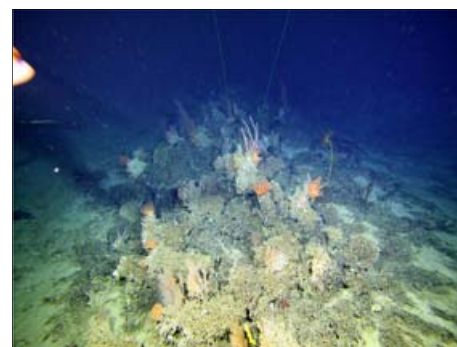
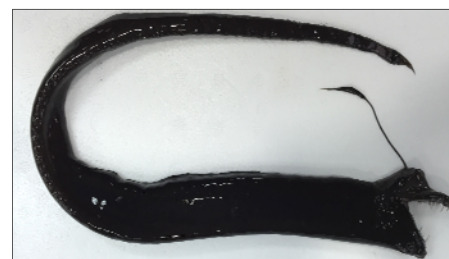
Towed camera aboard RV *Investigator*. Photo: M. Mackenzie.

Melanie then showed images of some of the collected samples, including a variety of fishes, ophiuroids, echinoids, molluscs, holothuroids, stony corals, anemones and a variety of crustaceans.

The tow camera provided good views of the benthic topography, and showed extensive coral gardens in areas which had not been subjected to previous trawling, teeming with life. It also captured seals gliding along the bottom and also a range of interesting fish life.



Coelorinchus kaiyomaru (length to 43 cm) (top) and *Idiacanathus atlanticus* (female to 40 cm, males much smaller) (bottom). Photos: Dianne Bray, MV



Coral gardens on sea floor. Photo: CSIRO

The trial cruise was a great success. It allowed a detailed testing of benthic gear (both old and new) and practice in deployment and retrieval processes, with improvements in knowledge of timing and also angles and cable lengths for optimal descent and retrieval. Occupational health and safety processes in the laboratories and also on deck were thoroughly appraised. Laboratories were assessed and feedback given on a range of issues including layout, storage space, electrical sockets, fume cupboards, saltwater sources, drainage and filters, freezers, and formalin, ethanol and hazardous chemical stores. Scientific processing was tested and included sample sorting and preservation, image capture, data processing and specimen bar-coding. The result was useful information to further streamline the scientific functions of the vessel and also well-preserved specimens and tissue for museum collections.

We thank Melanie very much for her detailed and very informative talk, and for making her powerpoint presentation available for the preparation of this summary.

Platon Vafiadis

From the Office.....



Good news for the office! We're researching getting new computers. The bad news is that our database of members is run on Access 2003 and won't run on the latest version of Access. Do you know anyone who is an Access expert who might be willing to help with an update? It really is an extremely complicated set up and even proficient amateurs would have trouble working on it, so it does need professional treatment.



If you think you can help, or even just point me in the right direction, please let me know.

We have had an email from the group at Donald who are organising the Spring SEANA camp, Friday 25th to Sunday 27th, informing us that the correct email address to use is dhgnhg@gjr.net.au

Ian Kitchen tells me that the FNCV's Facebook friends now number 1,725.

Donations of the following items are always welcome but tea bags and biscuits are top of the list this month - thank you for your generosity!

- Biscuits (please note that plain biscuits tend to be ignored and become stale)
- Tea bags
- Toilet paper (recycled brands preferred please).
- Office paper

Please feel free to contact me at the office if you need any help or information: you can be certain that I welcome any emails or phone calls from you. If I don't have the answer, I usually know who does, and your query will be referred to them. I'm here every Monday and Tuesday, 9.30am to 4.00pm, and occasionally on Fridays. Phone number 03 9877 8040, email admin@fncv.org.au

Regards, Wendy Gare Administration Officer.

(AGM Minutes, continued from page 6)
their involvement in natural history.

Election of 2015 Council:

(UPDATE: Council listed as of July 2015)

Pres: Maxwell Campbell. **Vice Pres:** Philippa Burgess **Secretary/Public Officer:**

Barbara Burns **Treasurer:** Barbara Burns **Assistant Secretary:** Andrew Brentnall

Councillors: Sally Bewsher, Joan Broadberry, Su Dempsey, John Harris.

SIG Reps: **Botany:** Sue Bedel, **Day Group:** Joan Broadberry, **Fauna Survey:**

Su Dempsey, **Fungi:** Geoff Lay, **Geology:** Ruth Hoskin, **Juniors:** Claire Ferguson,

Marine Research: Audrey Falconer & Leon Altoff, **Microscopy:** Phillipa Burgess,

Terrestrial Invertebrates: Max Campbell

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Field Nats News 256



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