Field Nats News No.237

Newsletter of the Field Naturalists Club of Victoria Inc.
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Monday

From the President

Welcome to the Christmas 2013 edition of the FNN. That said, I would like to take the opportunity on behalf of the Council and myself to wish all of our members a very Merry Christmas and a safe and Happy New Year. It doesn't seem that long ago that I was writing the last Christmas message for the 2012 Dec/ Jan FNN.

This time of year is a busy one on the FNCV calendar and not just because it is nearing the festive season. On Monday 11th Nov, Marilyn Hewish was presented with her ANHM award by Dr Bill Burch, President of the Royal Society of Victoria. She then delivered a wonderful presentation, her topic being *"Hidden Treasures: Moths of Victoria"*. Unfortunately I was not able to be there as I was working in Seymour.

A huge thank you to David Cheal and Patrick Guay for volunteering to organise the Biodiversity Symposium and to June Anton for offering to help with the catering. See FNN p9 for details of the program.

The bi-annual second-hand book sale in October was again a great success with $1250 raised. Thanks to Gary Presland for coordinating the day, to the people who donated books and the like and to the volunteers who helped set up the hall or turned up on the day to lend a hand. See FNN p5

Other events that the FNCV was recently represented at were the Whitehorse Spring Festival and Yarra Yarra Native Plant Show. Both activities promote our organisation to the wider community so thanks must go to Ray Gibson and Sue Bendel, respectively, along with the other volunteers who made our presence possible.

Finally, it has been a while since I included a photo in this section so this month it is a Barking Owl *Ninox connivens* which was photographed beside the Advance Motel in Wangaratta recently during my stay there. The motel owner thought I was more than a little strange when he saw me standing in the middle of the motel carpark "barking at the moon". It wasn't until I explained myself and showed him the photos of the owl that he kind of understood. He still thought I was strange but a little less than the night before!

Merry Christmas everyone and I hope to see many of you at our Christmas Party on 14th of December. If you would like to donate a prize for the raffle, then please leave it at the office or bring it with you on the night.

John Harris

As is usual there will be no separate FNN for January 2014. The due date for copy for February's FNN 238 will be **Monday 6th January 2014.** We will go to the printers on January 14th with collation on the 21st.

The FNCV office will close on Friday 20th December and will reopen on Monday 6th January 2014.

Index	Page

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 2013

Monday 2nd Fungi Group. No monthly meeting.

Friday 6th Fauna Survey Group. Meeting - Christmas Party and Eastern Fauna Focus Review at Braeside Park. Contact: Robin Drury 0417 195 148; robindrury@hotmail.com **Bookings essential, some catering involved.**

Monday 9th Marine Research Group. Meeting – *Annual members' night.* Everyone is welcome to bring along exhibits, items of interest or questions on marine invertebrates. Contact: Leon Altoff 9530 4180; 0428 669 773

Wednesday 11th Grey-headed Flying Fox Survey. Meet at Yarra Bend Golf Course carpark, Mel 2D G7 at 8.15 pm. More information from Rod Van Der Ree (rvdr@unimelb.edu.au), Jo Ainley (j.ainley@unimelb.edu.au) or Ian Kitchen (iankitchen@optusnet.com.au)

Saturday 14th FNCV Club Christmas Party, 6 pm. Come and celebrate a wonderful year . *Full details p9.*

Tuesday 17th No collation this month.

Thursday 19th Botany Group No monthly meeting.

Tuesday 24th Day Group. No monthly meeting.

Wednesday 25th Geology Group. Christmas Day. No monthly meeting but a 'Happy Christmas' to all!

Thursday 26th December - Wednesday 1st January 2014 Fauna Survey Group. Survey - Christmas Camp. For full details contact: Robin Drury 0417 195 148; robindrury@hotmail.com Prior registration essential.

Friday 27th Juniors' Group. No monthly meeting

January 2014

Saturday 4th Marine Research Group. Excursion - *Barwon Heads*: Meet at 6 pm at the car park: Mel 497 D6. Contact: Leon Altoff 9530 4180; 0428 669 773

Monday 6th Fungi Group. No monthly meeting**.**

Tuesday 7th Fauna Survey Group. No monthly meeting.

Saturday 11th Fauna Survey Group. Stagwatch—Come along to an evening stagwatch to search for Leadbeater's Possum and other nocturnal wildlife in the Yarra Ranges National Park. Contact: Ray Gibson 0417 861 651

Monday 13th Marine Research Group. Meeting – No information as yet. Contact Leon Altoff 9530 4180; 0428 669 773

Thursday 16th Botany Group No monthly meeting

Sunday 19th Juniors' Group. Excursion – *Snorkelling Day* Meet 10 am at Black Rock Boat Ramp. For full details contact: Claire Ferguson 8060 2474; toclairef@gmail.com

Tuesday 21st Collate FNN. Starting about 10.30 am. Some folk come earlier. Contact Joan Broadberry 9846 1218

Wednesday 22nd Geology Group. No monthly meeting.

Friday 24th Monday 27th Fauna Survey Group. Survey - Fauna Survey camp. For full details contact: Robin Drury 0417 195 148; robindrury@hotmail.com Prior registration essential.

(Continued on page 3)

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 only.

(Continued from page 2)

Monday 27th FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Wendy 9877 9860 or admin@fncv.org.au

Tuesday 28th Day Group. Meeting - ***Exploring Svalbard, Arctic Norway.*** Speaker: Sally Bewsher. Meet at 10. 30 am for coffee and a chat. Presentation at 11 am**.** Contact Gary Presland 9890 9288

Friday 31st Juniors' Group. Meeting 7.30 pm– ***Council members' talks.***

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*: Ms Jess Longmuir, Miss Maisy Rondel, Mr Henderick Rondel, Ms. Ros Metzke, Dr Mark Boland, Mr Santiago Boland, Mr Euge Coscarelli, Ms Niki Smith.*

NOSTALGIA

Ah, nostalgia! I found a 1971 "The Bird Lover" put out by the Gould League of Victoria, at the FNCV Book Sale on Saturday. Reading through it this morning brought back so many memories of my school and Field Naturalist days in the '50's. And what a beaut little magazine it was! I found the articles most interesting - "Watching a Lake Grow" described how the author's father-in-law build a number of lakes on his farming property, and the author, Alan J Reid, documented the birds (and a platypus) which gradually returned to the area. Graham Pizzey's terrific article on the Wedge-Tailed Eagles he observed over time was so evocative.

There were articles on the dangers of DDT and other pesticides, how to encourage birds to your garden, reports from both Field Naturalist Clubs (Kananook Bird Club seemed to be particularly active) and from schools, a letter section, poems, and lots of bits and pieces. A wonderful 32 pages of relevant and evocative reading for both children and adults. And I still have my Gould League badge somewhere in my archives! I'd be interested to know if these magazines are still issued and if the Gould League is still active in schools.

Ruth Hoskin

SCIENCE TALENT SEARCH

Claire Ferguson

I attended the Science Talent Search at La Trobe Uni Bundoora on Wednesday Nov 6th to represent the FNCV who were sponsors of the event. Wendy Gare had read out a lovely thank you letter which was sent to the FNCV council last month from one of the boys who had received a major bursary from funds donated in memory of the late Dr Noel Schleigher. He said that he would like to meet us at the presentation and show us his prize winning book

The boy is William Browning from Trinity Grammar. He is in Grade 5, and wrote & illustrated *"Dr Dingo's Planetary Explanatory*", a book about Earth's tilt, rotation and how the seasons work. I managed to find him and his parents and read his amazing book with beautiful illustrations. He spent a lot of time and effort on the book and said how hard it was to keep within the 300 word limit. I have given him information about our club and hope to see him at one of the Juniors' meetings.

The competition has many divisions including experimental research, working models, inventions, scientific wall charts, video productions, creative writing, games, computer programs, science photography and class project. Check out the website. Do you know any children (grandchildren?) who might consider entering next year?

http://www.sciencevictoria.com.au/sts/exhibitDay.html

Of interest: 2015 is the 135th Anniversary of the FNCV.

Thank you to those who volunteered to help at the Maroondah Festival.

Sue Bendell, Ray Gibson, Andy Brentnall, Su Dempsey, June Anton. Apologies if any names have been omitted.

South Eastern Australia Naturalists Association (SEANA)

SEANA is urgently seeking a volunteer to take on the role of **Website Coordinator**. If you can help out please contact SEANA secretary,

Phil Rayment
P.O. Box 719
Traralgon 3844, Latrobe Valley FNC
03 51741730

Current website: http://home.vicnet.au/~seana

Geology Group

Travis Park's presentation to FNCV, Geology Group 27th August 2013

"Fossil Marine Birds: A Fragmentary Tale"

Penguins at Mt. Gambier? A penguin 1.35 metres tall? A sea bird with a toothed bill and a 6 metre wingspan? These were some of the interesting fossil marine birds described by Travis Park at the August meeting of the Geology SIG. Travis' PhD research focuses on fossil cetaceans, but he is currently working on a paper about his Honours research, which is exploring Australian Penguin fossils.

To introduce his talk, Travis explained that Australian fossils of marine birds have been found around the coast of Victoria and Western Australia in particular, as well as pelican fossils found at Cooper Creek. Most of the evidence of these birds is fragmentary because of the delicacy of bird bones and because the marine formations where the fossils were preserved are constantly eroded.

Marine birds were defined as birds which make their living from the sea (therefore including the loon which nests on inland lakes). These birds tend to be long lived, attain sexual maturity late, and have fewer offspring which are usually hatched in colonies off shore. The five groups of sea birds were described as albatross and petrels, penguins, storks, pelicans and cormorants, and loons.

Most Australian marine bird fossils are penguin bones, but these are often poorly preserved and mostly consist of humeri. The robustness of penguin bones allows for strong attachment points for muscles. There are 11 fossil penguin sites in Australia, six in Victoria, four in South Australia (including one in inland Mount Gambier) and one site in northern Tasmania. They range in age from *Pachydyptes simpsoni* which lived about 35 million years ago (ma)to *Pseudaptenodytes macraei* which lived 5-6 ma and was found in inland Victoria. The latter has an unusual humerus with a smooth curve on the outer margin. The former is the most complete fossil penguin yet found in Australia. And the 1.35 metre tall Penguin is called *Anthropodytes* – this giant penguin lived 20 ma and its fossil bone was found in Victoria.

Travis described the many sea bird and mammal fossils found at Beaumaris, including the *Drominithids* – giant terrestrial birds.

The *Pelagornis* was a particularly interesting fossil bird which showed characteristics of pelicans, albatross and ducks, and had a most unusual 'toothed' beak. (see Figure1). The 'teeth' were not formed by enamel or dentine but were projections of the beak which would have helped to hold slippery prey in its beak. It also had an amazing wingspan of 6 metres (compared to the largest albatross wingspan of 3.5 metres). The *Pelagornis* bone (the distal end of the tibiotarsus) shows this fossil is similar to a complete skeleton found in Chile. Thanks to Travis for a most interesting talk about marine birds. With some species we were already familiar with the modern bird, but a number were new to us and appeared strange at first sight.

Ruth Hoskin

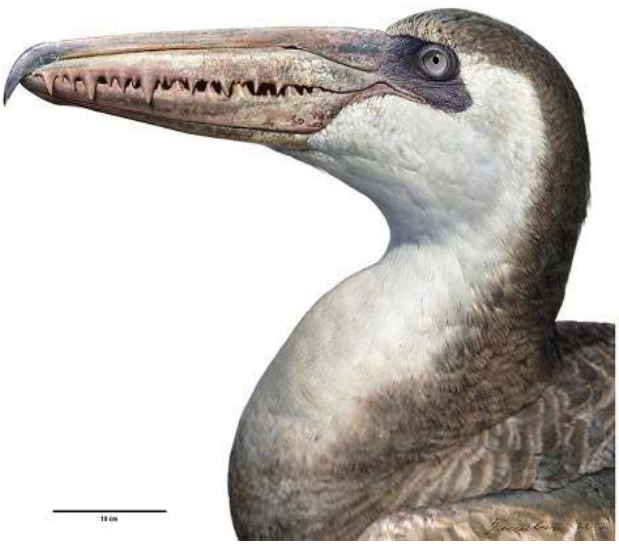


Fig. *Pelagornis* with its unusual 'toothed' beak.

Christmas and New Year greetings to all who contribute to and enjoy Field Nats News

Once again the editorial team would like to express their thanks and appreciation to all those who have supported FNN during 2013.

Without meetings, excursions and camps arranged, reports written, photos taken, news shared, calendars checked etc., there would be no Club Newsletter. We understand and appreciate the time and effort that goes into all these activities. You have well and truly earned a rest in December. Best wishes for a safe and relaxing break.

Thanks to the editorial and layout team who put together FNN 237

Joan Broadberry
Wendy Gare
Sally Bewsher
Platon Vafiadis

"The Flourishing Forests of the Aurora Australia: The Fossil Flora of the Chatham Islands"

Dr. Chris Mays, School of Geosciences, Monash University

25 September 2013

Dr. Chris Mays is a palaeobotanist interested in the evolution of plants, their palaeo-ecological interactions and palaeoclimates. Chris', and his colleague, Associate Professor Jeffrey Stilwell's, recent studies were of a subantarctic fossilised forest 100 million years old, when there was no ice and the polar regions during Cretaceous Earth were warmer. Chris' talk expanded on this research and the implications for the future.

The Chatham Islands were the chosen study site to look at the subantarctic floral ecology. Why the Chatham Islands? Because, during the Cretaceous period 145-66 Ma, the islands were the highest latitude fossil locality at 75-80°S, within the polar circle. They were part of the ancient Zealandia subcontinent, but now are closer to New Zealand, forming an archipelago 860km east of New Zealand.

Stratigraphic logging of plant species was studied at two locations – Waihere Bay and Tupuangi Beach. These are coastal outcrops, former delta environments with sheetflood deposits and leaf litter horizons. Macrofloral fossils (tree trunks, foliage, leaves) were a useful tool, however, palynology, the study of fossil pollen and spores, was a major technique for the logging of the plant species. This is because pollen and spores are widespread and abundant (up to *millions* in a gram of sediment), chemically stable and physically tough. They are characteristic for the different plant types – ferns, gymnosperms, angiosperms – and provide a snapshot of the floral ecology. Chris showed illustrations of many of the different pollen and leaf fossils.

The stratigraphic sampling was over a height of 0-300m, covering the mid-Cretaceous epochs: Cenomanian (around 95Ma) and Turonian (around 92Ma). What was found was that conifers dominated; ferns were common but rarely dominant and flowering plants (angiosperms) remained a minor component. In numbers: conifers comprised 23 species out of a total of 28 gymnosperms; ferns 24 species; lycopods (e.g. clubmoss) 11 species; bryophytes (e.g. mosses, liverworts) 8 species; and angiosperms 13 species.

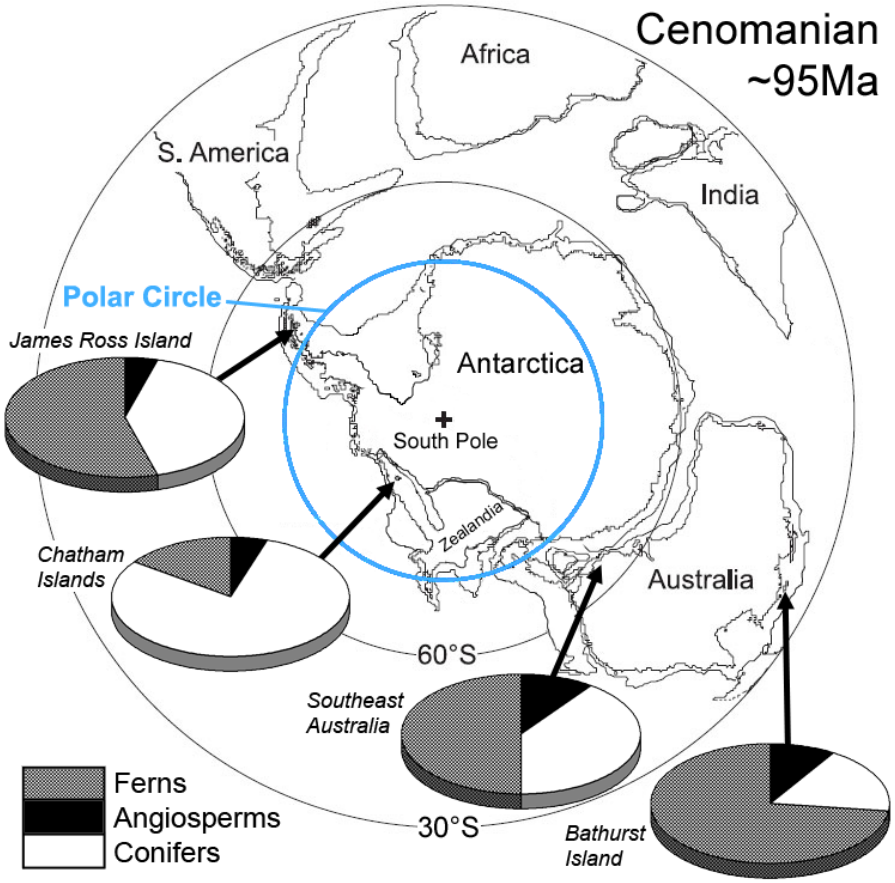
The Chatham Islands results were compared with other studies of contemporaneous southern hemisphere sites, including James Ross Island, SE Australia and Bathurst Island, and it was suggested that the conifer abundance was a function of the latitude and climate. The seed plant (conifer) dominance at high latitudes was associated with a lower abundance of non-seed plants (ferns, lycopods, bryophytes).

Chris then described changes in angiosperms in time and in comparison to the other plant groups, again using pollen data. From the Cenomanian to the Turonian, there was a doubling in number of species of angiosperms. All other plant groups appeared to suffer at the expense of this diversification, and this *relative* decrease has been typically interpreted as out-competition by the newcomer angiosperms. However, when the *absolute* values were analysed, there was no observed competition against fern species diversity. Contrary to previous thought, the entire trend can be explained by an overall increase in species richness, rather than ecological competition between plant groups.

Chris concluded by suggesting that the interesting Chatham Island results lead to similar phytogeographical analysis of other mid-Cretaceous localities of different latitudes.

The audience expressed their appreciation of Chris' presentation in the usual way.

Kaye Oddie



Data compiled from Norvick & Burger (1975), Nagalingum *et al.* (2002), Mays (2011), Dettmann & Thomson (1987); Map from Mukasa & Dalziel (2000)

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

This newsletter is printed on recycled paper.

Australian Natural History Medallion Presentation

The Australian Natural History Medallion 2013, was awarded to Marilyn Hewish for her contribution to ornithology and entomology. It was presented by Dr. Bill Birch, AM President of the Royal Society of Victoria. (Photo left)

The presentation was held at the FNCV on Monday 11th November. After Marilyn had expressed her thanks to the many people who have supported her work, she gave a beautifully illustrated talk entitled " *Hidden Treasures: Moths of Victoria*".

This event was very well attended and in particular we enjoyed the company of many of our friends from the Geelong Field Naturalists Club. Thanks to Sally Bewsher, Barbara Burns (left) and Gary Presland who did a great job with the catering. **JB.**

FNCV Secondhand book sale, 12 October 2013

The bi-annual secondhand book sale has netted the Club $1250. This might seem like a modest return for what was a lot of effort, particularly since the previous two sales resulted in about $1700 each. However, in the past few years used books have become difficult to move and there is so much available on the 'net now that many people think (wrongly I feel) that there is no need to buy old books. So $1250 isn't a bad effort, and that much more than we had before the sale.

I would like to thank all of the people who assisted with the sale, beginning with those members and friends who donated things to sell. Thanks also to those who helped with one or more of the tasks: sorting and pricing of books, selling books, and packing up the remaining stock: June Anton, Sally Bewsher, Hazel Brentnall, Joan Broadberry, Barbara Burns, Peter Fagg, Claire Ferguson, Ray Gibson, Ross Hoskin, Ruth Hoskin, Sheina Nichols and Emily Noble. A big 'thank you' is due to Sue Bendel for taking away the many books and magazine that were left over.

Gary Presland

Library News

Recent acquisitions

The library has benefited from the recent secondhand booksale, with a few volumes being transferred to our holdings before they were put out for sale. The following books, acquired in this way, have been accessioned and in due course will be catalogued:

- *The Field Naturalists Club of Ballarat 1952–1977*;
- *Wattles of Ballarat*
- *Discovering Ballarat's bushland*
- *Herpetology in Australia: a diverse discipline*
- *Green grows our garden: a centenary history of horticultual education at Burnley*

Recent periodicals:

- *Australian Birdlife* 2(3) reports the exciting rediscovery (with photos) of the night parrot, not seen alive since a specimen was shot in 1912.
- *Emu* 113(3) is devoted to a range of articles on the fairy-wrens (Maluridae).
- *Wildlife Australia* 50(3) includes items about particularly long-lived plants and animals, and Australian megafauna.

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 closes for the Christmas/New Year break at 4 pm on Tuesday 17th and reopens on Tuesday 7th January 2014.

Gary Presland
Honorary Librarian

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

Fungi Group

Correction & Apology:
FNN 234 September, Fungi Foray Woodlands Historic Reserve p7/8. The photo by Pat Grey on p7, should have been labelled Possibly *Galerina Unicolor*. The photo on p8 by Richard Hartland, should have been labelled *Hjortstamia crassa*.

Mycena kurramulla Photo: Bill Leithhead

FUNGI GROUP FORAY
14 July 2013
Upper Yarra Reservoir
Doctors Creek Track Area

Mist and low cloud over Mt Donna Buang promised a wet day for the 10 members, but the morning stayed fine and was not too cold. On arrival at the picnic area car park, actually in front of the vehicles, was a group of yellow agarics. In the young stage, the caps were a dense yellow with a green tinge, yellow gills and yellow stem, the older fruit-bodies were yellow-brown with a brown umbo and often radially splitting. This is the yellow form of *Cortinarius austrovenetus* (*Dermocybe autroveneta*, see *Australian fungi illustrated* by I.R. McCann. 2003, p20). This species is quite variable in colour with caps from dark blue-green to yellowish but always with a darker umbo.

We noticed that the deer had continued their destruction of the area. Even more of the walk has been trampled, understorey destroyed and trees and shrubs pushed over. There were also large wide deep trails made by the animals as they move through what is left of the bush.

The fungi were not numerous and rather cryptic, so we had to hunt for them. We found one fruit-body of *Hebeloma victoriense*, with a large-sized cream to buff cap, pink gills (from maturing spores) and ring. A collection had been made in 2006 (when the fruit-bodies were numerous) in response to the request from Dr Bettye Rees, a NSW mycologist, for specimens and photos to help with her study into this genus.

On a piece of fallen eucalypt bark were minute white *Mycena* fruit-bodies. The minute size of cap and stem, the frosted (mealy) cap and the white knobs of young fruit-bodies pointed to *M. piringa*. However, the bark substrate as opposed to Eucalyptus, as mentioned in the literature (CA Grgurinovic, *The Genus Mycena in South-Eastern Australia*, 2002, pp 270 & 279), poses a problem in that it points to *M. minya* that grows on bark, but it is a larger species (up to twice the size) and the young fruit-bodies are greyish-white mealy knobs which these are not. These two species are very similar but from the minute size and white knobs of young fruit bodies, our species is more likely to be *M. piringa*.

The not *Syrobasidium brefeldianum* Photo J. Hubregtse

There were not many *Mycena* species, but we saw the two very similar-looking ones: in the litter, some rather old specimens of *Mycena kuurkacea* (Bleeding Mycena), where the broken stem 'bled' red drops and on a tree a beautiful group of *Mycena kurramulla* which has arched decurrent gills, edged in red but doesn't bleed.

Several fruit-bodies of *Crepidotus crocophyllus* illustrated the variation in appearance shown by this species. Most had yellowish smooth caps, but one was covered with fine reddish-brown hairs. The surface colour of this species ranges from whitish to yellowish-brown and the texture from glabrescent (hairy when young, smooth when mature) to densely fibrillose (covered with fine hairs).

We again found what we have called *Sirobasidium brefeldianum* (see *A field guide to Australian fungi* by Bruce Fuhrer 200 no 454) that are white gelatinous pustules up to 3 mm diameter. However, Jurrie Hubregtse, in his process of verification of this fungus for ***The Fungi CD*** found that microscopically it differed from *S. brefeldianum* described in the literature and, when he contacted Dr Tom May for some answers, mentioned that "The spores, are 3.8-4.8 x2.5-3.1 microns in size, they look as though they are conidial spores, which I believe is inconsistent with this fungus being a basidiomycete.". (Pam Catcheside from South Australia, after looking at the fungus, found the same features). Dr May replied "I have no idea as to what genus you have found, but you are right that the lack of clamps and the presence of conidia does not fit with *Sirobasidium brefeldianum* as described in the literature you cite. *Sirobasidium* has a yeast phase, but I can't find mention of a conidial form. I am only familiar with the fungus from Bruce's photo, which your material does resemble quite closely. So, I guess it is possible that the photo is mis-identified. The original determination possibly came from Gordon Beaton. There are only two published records from Australia - Bruce's book and a list by Jim Willis of fungi at Corranderrk. There are two specimens in MEL, one from Corranderrk (the basis for the Willis (1978) record) and the other from the Fungimap Tarkine Expedition." Another interesting puzzle for us.

Patches of the purplish *Hypoxylon* aff *plancentiforme* were growing on a standing dead Olearia species. These released a characteristic green-brown pigment in 5KOH. Growing just above was an orange crust with a distinct pimpled surface and pale whitish margin. At first glance this looke-like one of the orange *Hypoxylon* species but the absence of ostioles (exit for the spores) ruled this out. This is most likely

(Continued on page 8)

(Continued from page 7)

one of the many Corticioid fungi.

Late in the day two species of *Hypocrea* were found on standing dead sapling. The yellow *H. victoriense* (*H. sulphurea*) with clearly visible ostioles formed a small patch. The red-brown *H. rufa* was accompanied by its anamorph – the blue-green mould *Trichoderma viride*.

A delicious Devonshire tea with home-made scones and jam plus hot drinks brought the day to a pleasant end.

Pat & Ed Grey

FUNGI GROUP FORAY
July 21st 2013
Bunyip State Park, Mortimer Reserve: Wet Sclerophyll Forest

We were deeply disturbed to see the amount of damage that the deer were causing along the nature trail. At Upper Yarra Reservoir they have destroyed most of the vegetation along Doctors Creek Track. It is very sad to see the devastation of our beautiful native bush in so many areas, caused by the destructive nature of the deer.

Although cold and windy, the day stayed fine. Our small group welcomed three visitors – Mary Thorpe, Chorh Hock Soo and his son Wei Jie 9 y.o., from Glendal Primary School who had been given a school assignment on fungi and was keen to see fungi and to write down names.

Numbers of species were found behind and adjacent to the toilet block. Most were on wood – the orange *Pycnoporous coccineus*, the Split Gill *Schizophyllum commune*, *Fomitopsis lilacinogilva*, the Rainbow Bracket *Trametes versicolor*, greyish discs of *Mollisia* aff. *cinerea* and on a dead tree-fern frond the yellow-discs of *Lachnum pteridophyllum*.

Lachmum petridophyllum Photo: De'ana Williams

This kept the group occupied for some time but finally we got to the open, grassy area where two good specimens of the Wood Blewitt *Lepista nuda* were found with the distinctive violet gills, although numbers of them had collapsed. These were in the same location (under *Eucalyptus viminalis*) where the large group was seen on the the foray of 9th of June. One of the most common fungi found on the day was *Clitocybe clitocyboides*, including the ones under a *E. viminalis* that were much larger than we have seen before. Virgil Hubregtse had this to say "The huge Clitocybe-like fungi at the base of the eucalypt are *Clitocybe clitocyboides*, despite their different size and darker colour. The greyish *Clitocybe* sp.in the grass that we thought might be a different species of *Clitocybe*, is also *C. clitocyboides*, as are the ones that match the photo in Bruce's book". However, most of them were the usual colour and grew in the open, grassy area and amongst litter through the forest where their pale, smooth, waxy caps and decurrent, white gills were distinctive.

Lachnum virgineum Photo: De'ana Williams

Just through the entry to the Nature Walk the resupinate crust fungus *Hyphodontia flavipora* was growing on the fibrous bark of a living eucalypt (*E. radiata* or *E.viminalis*) and favoured the spaces in the coarse bark. While not common, we have seen this species at the Cathedral Range and at this site on this tree at Bunyip on each foray. There is some evidence that this fungus is a plant pathogen. The fertile surface has orange-brown, angular pores with torn edges (like broken teeth) while the margin is white and fringe-like.

On a dead, standing Hazel Pomaderris *Pomaderris aspera* was a spectacular display of the bracket fungus *Antrodiella zonata.* This was growing in overlapping layers of fan-shaped shelves arising from a resupinate base and the bright, orange colours stood out in the clear light. The smooth upper surface of the shelves was an apricot shade while the fertile, lower surface was yellow, the pores irregular, torn like broken teeth and small to 3 per mm. This saprotrophic fungus inhabits a wide range of dead, woody substrates including conifers as well as Australian native tree species.

The most numerous fungi were the various species of *Lachnum* - minute hairy, stalked discs - whose discs measured about 1 mm diameter and where the woody substrate is important in determining the species. *Lachnum pteridophyllum* grows on the spiky dead frond stalks of Rough Tree-fern *Cyathea australis*. It has a pale lemon smooth disc (just under 1 mm diam) and is covered with dense white hairs on the outside receptacle and stalk. The similar-looking *L. lachnoderma* grows on eucalypt bark. The disc is more yellow and is slightly larger in diameter (just over 1 mm) and ages from cup-like to a flat irregularly-shaped disc, the outside covered with dense white hairs. Another distinguishing feature is the stalk, which is very short, in some cases almost non-existent. The third species *L. virgineum* is white, as might be expected by the name and grows on eucalypt wood and bark. It is again slightly larger than the two yellow species and is cup-shaped and the outside receptacle and stalk is covered with very dense white hairs.

There were also lots of Golden Curtain Crust *Stereum ostrea* growing along a number of fallen logs and it was interesting to see a Tubaria sp. growing on an old fruit-body

A special thank you to De'ana Williams who has provided such a lot of beautiful photos for many of the foray reports.

Pat & Ed Grey

FUNGI GROUP FORAY
28 July 2013
Baldry Crossing, Greens Bush, Mornington Peninsula National Park: Heathy Eucalypt Forest

We were very distressed to see the amount of deer damage in 'the dell' (a small Melaleuca swamp 38° 25' 8" S 144° 57' 28" E). A lot of the under storey has been destroyed and they have made wide trails throughout the area. Deer are destroying the bush in a great number of areas. On our foray at Upper Yarra Reserve, Doctors Creek Track, we saw that most of the understorey had been trampled and destroyed, while at Bunyip SP, Mortimer Reserve the nature trail vegetation is being trampled down. Parks Victoria Ranger – Gembrook - Andy Musgrove commented re Bunyip SP, Mortimer Reserve that "Deer are certainly ever present in the Park (I know well as a Sambar hind ran in front of me in my car on the way home from work one day and wrote my car off). Challenging to control in numbers. However, there is a strategy being discussed with Parks Victoria about controlling deer on public land, which is at the preliminary stages. We will engage in this process because of our issues at Gembrook and keep you posted on any outcomes (may not be for a while however)".

This was our last foray for the season and once again we were lucky with the weather – a fine, dry day. Fungi were very scattered, almost solitary and we had to search hard for them. Two *Russula* species were found on the track in the morning, *R. persanguinea* had been kicked to pieces but retained the red cap, white stem and white gills. The second species was a whole specimen of *R. purpureoflava* which was showing its age as the cap was a khaki-green. However, it did have the characteristic yellow gills and pink blush on the stem.

We most often see the 'spine' fungus *Steccherinum ochraceum* in the resupinate form, but on a rotting branch a group was showing the shelving form (effuso-reflexed). The upper surface was brown, concentrically zoned, hairy, and projected to 20 mm. The fertile surface, found under the cap or flat on the substrate, was covered with densely-packed (3 per mm) pale ochre spines.

On fallen Eucalypt logs were two species of *Hypoxylon*. *H. howeianum* was present as old blackened, small cushions on the same log as on previous forays. *Annulohypoxylon bovei* var. *microspora* was spread along a separate log and was characterised by a flat disc surrounding ostioles and looking like small volcanoes and a crowded growth habit. It was identified as *A. bovei* var. *microspora* by the eucalypt substrate, because *A. bovei* is confined to *Nothofagus* sp.

In the afternoon, fungi were more colourful. On the way into the dell, individual bright yellow *Lichenomphalia chromacea* (Yellow Navel) were scattered on a number of alga beds. In the 'dell' we saw a single fruit-body of the stunning mauve *Hygrocybe lewellinae (*Mauve Splitting Waxcap). The cap had just started to split radially, and the dark mauve stem contrasted with the cap. A large group of blue *Cortinarius rotundisporus* (Elegant Blue Webcap) were found deep in the dell and fruit-bodies showed all stages of development from young caps of deep metallic blue (and just a hint of yellow in the centre) to old brown caps with just a hint of blue.

Torongo Falls, *Claussenomyces australis* Photo: Pat Grey

Back on the upper track a few yellow *Clavaria amoena* (Yellow Tongues) brightened the understorey. We also saw several individual brown polypores, *Coltricia cinnamomea*, whose caps had a silky lustre created by the shining radial surface hairs. This is the first time that we have seen this species on this season's forays.

Hygocybe lewwllinae Photo: Paul George

Late in the afternoon, on the track along the creek, a rotting branch held old specimens of a *Biscognauxia* sp. infected with the red fruit-bodies of a Nectria sp. This find lead in two interesting directions. Firstly the *B.* sp. had lost the surrounding bark through which it would have erupted and was lying on the surface in flat patches. Examination showed inconspicuous perithecia, ostioles slightly higher than the surface, carbonaceous tissue below the black surface and around the perithecia, tubular perithecia and no pigment released in 5% KOH. The most likely species is *B. capnodes* which has been reported from a Eucalypt host (mycology.sinica.edu.tw/Xylariaceae). In addition tiny fruit-bodies (less than 1 mm diameter) of a bright red *Nectria* species were in scattered groups on the *Biscognauxia* surface. The *Nectria* genus has been split up and while *Nectria* is retained for some species, others have been placed in *Cosmospora* which itself has had further division with some species placed in *Dialonectria* (Grafenham et. al. in Studies in Mycology 2011; 68: 79 – 113). There are some 30 species known in the southern hemisphere so my spore analysis (broadly elliptical with one septum in the centre, 12.5 – 15 x 6 – 6.5 microns, slightly brownish) was not much help given the difficulty in finding descriptions. Perhaps best to stick with *Nectria* species for now!

(Continued on page 10)

(Continued from page 9)

The Fungi Group has had a great deal of support from its members to make this a successful Fungi Foraying Season. Thanks go to Jurrie Hubregtse 'our leader' , and for his research and microscopical work; Virgil Hubregtse for her research, microscopical work and proof reading of the report and species list; Paul George for proof reading the report and species list; Bruce Fuhrer for his research and help; Heino Lepp for his research and help; Ed Grey for the reports, research and microscopical work; Pat Grey for the species lists and reports; and thanks to the following for submitting photos – John Eichler, Scott Ferguson, Paul George, Ed Grey, Pat Grey, Richard Hartland, Jurrie Hubregtse, Virgil Hubregtse, Bill Leathhead, Ivan Margitta, Carol Page, John Patykowski, Bob Rowlands, De'ana Williams.

Ed and Pat Grey

Addendum

Remember those Green jelly-like discs we saw at Toorongo Falls, 12 May 2013?

Pam Catcheside, Honorary Research Associate at the State Herbarium of South Australia, has now done research on them with the following result: "It seems to fit *Claussenomyces australis*. The very gelatinous excipulum, asci 35-40 x 4-6 microns; ascospores 5-7(9) x 1.5-2.5 microns and paraphyses slightly longer than asci, tips slightly swollen, a few branched all fit well. I am attaching a paper that was very useful" - Four Inoperculate Discomycetes from Victoria, Australia by G Beaton and G Weste, Trans Br Mycol Soc 71 (2), p215. This is part of what was said in the paper:

Claussenomyces australis G. Beaton sp.nov.

Apothecia superficial, scattered or caespitose; disk to 25 mm diam, convex, flat or distorted, ivy green when fresh, drying black; receptacle truncate-obconical with broad attachement to the substrate, smooth, concolorous with disk when fresh or dry; .....Known only from the type collection of which Dennis (pers.com., 1963) remarked 'Will key to Coryne but not like any Coryne I know'. However, because of the totally green apothecia and the wholly gelatinized tissues it clearly keys in Korf (1973) to Claussenomyces Kirschst. (=Corynella Boud.).

I have omitted the microscopical detail but will send the paper if anyone wants it.

Pat Grey

Extracts from SIG reports given at the last FNCV Council Meeting

Fauna survey Group

Presentation by Maxwell Campbell

At our October meeting our very own Max Campbell presented us with a wide ranging discussion on the use of remote cameras. Max provided us with an excellent range of images from a variety of cameras and techniques. He also provided coverage of a wide range of issues relating to this survey method. Of particular interest were the different techniques and time frames developed for specific purposes as opposed to the more generalist approach.

Survey at Hattah-Kulkyne

In early October some 35 members and visitors converged on the 'The Boiler' on the Murray River. Included in our number were members of the Monash University Biological Society. The weather was variable to say the least. It commenced with a warm and relatively pleasant weekend, but this was followed by a couple of weather fronts containing rain and strong winds.

The species of the week were bats, reptiles, birds and amphibians (mostly Pobblebonk Frogs). The area contains a rich parrot life. Included in the reptile finds were a number of species of legless lizard.

Eastern Parks Fauna Survey

The following is a summary in the above survey.
The camera deployments are proceeding, with over a third of spring-summer out.
October frog surveys nearly completed and two planned for November
Bat and spotlighting survey planned for Cup weekend.
Reptile habitat training complete, tiles to cover all sites available and funds available for remaining tin. Deployment to commence shortly.

Fungi Group:

The FNCV Fungi Group held its final meeting for 2013 on October 7, with 10 members present. The purpose of this meeting was to plan our activities for 2014, which we managed to do.

Geology Group:

A full house of members and visitors were treated to a fascinating talk from Ashleigh Hood who described her field trips and PhD research about the Precambrian Reefs of the Flinders Ranges. Her talk was brilliantly illustrated and interesting to all - she showed some spectacular aerial photos of the Mt Tatley 1 km. high barrier reef formed between 658 to 635 million years ago. This appears to be the earliest example of a barrier reef discovered so far and consists of 7 different clearly discernible layers. She also described the animal life found in the reef - stromatolites dominated in the upper reaches but strange microbe formations were found in the deepwater sections. A most interesting evening which was very well attended.

Thanks to those who helped collate and label FNN 236

This is definitely not a satisfactory way to express appreciation, but as I was away in Broome it seems that no list was made. You know who you were and, as always, we thank you for volunteering your precious time to do this important task **JB**

Program for FNCV		**Biodiversity Symposium**	**2013**
Saturday 23rd		***Speaker and topic***	
9.45	**Registration & Morning Tea**		
10.15	John Harris—FNCV President	Welcome	
10.30	Gary Presland (*Melbourne University*)	On boggy ground: differing perspectives on wetlands in early Melbourne.	
11.00	Paul Boon (*Victoria University*)	The ecology and rehabilitation of wetlands fringing the Gippsland Lakes.	
11.45	Damian Cook (*Rakali*)	Restoring and re-vegetating wetlands.	
12.15	Mike Weston (*Deakin University*)	The influence of cover on nesting Red-capped Plovers; is there a trade-off between thermal environment and predator pressure?	
12.45	**Lunch**		
1.30	William Steele (*Melbourne Water*)	Attempting adaptive management of a site with multiple biodiversity values.	
2.00	Richard Loyn (*Eco Insights*)	Artificial wetlands as waterfowl habitat and drought refuge: the Western Treatment Plant as an outstanding example.	
2.30	Patrick-Jean Guay (*Victoria University*)	Are vehicles 'mobile hides'? A test of the 'cars cause less disturbance' hypothesis.	
3.00	**Afternoon Tea**		
3.30	Doug Frood (*Pathways Bushland & Environment*)	Barmah, ecological gradients and issues for management.	
4.00	Andrew Greenfield (*Mallee CMA*)	Mulcra flooding. dream to reality (10 years in the making).	
4.30	**John Harris—FNCV President**	**Close**	

FNCV Christmas Party

Saturday December 14th

Join us around 6 pm in the FNCV Hall

Relax and enjoy a special end of year BBQ with friends and members from all FNCV Special Interest Groups and celebrate another wonderful year of activities. Please feel free to invite partners and family members to share this evening with us. There are three reminders:

The Club is providing meat, bread, and nibbles. **Could members please bring a salad or a sweet to share. BYO drinks**. The admin will co-ordinate the catering, see below.

As we have done in the past we are planning a pictorial presentation looking back at the year's activities. ***SIG leaders are requested to have about 10 images from 2013 to the FNCV office by Friday December 6th.*** *Use memory stick or email – please keep the size of emailed files down.*

We will also be holding the traditional raffle. **Donations for prizes would be much appreciated**, e.g. wine, knick-knacks, plants, books etc. Look deep into your 'present drawer'. Deliver to the office or (preferably) bring them with you on the night.

*Please **RSVP** to Wendy, our office administrator by December 6th (03) 9877 9860 or admin@fncv.org.au and let her know numbers attending and food you are bringing.*

NEWS FROM THE FNCV BOOKSHOP—Kathy Himbeck

The FNCV Bookshop is currently under new management and over the next few weeks you will see an increase in the number and range of titles on display in the bookshelf at the club rooms. We aim to only stock those books that will sell, but we can order in particular books on request. Watch this space and I will keep you informed when new titles come in. Also in the coming weeks you will find a list of some of the books of natural history theme that are available on the FNCV website www.fncv.org.au For all of your FNCV Bookshop queries please email: bookshop@fncv.org.au The position of FNCV Bookshop is voluntarily run so please be patient for a response, but your emails are most welcome.

Books can be picked up at the office on Monday or Tuesday, during any SIG meeting at the club rooms or the book can be posted out with an additional postage and handling cost. We will accept EFT transaction, cheque, cash or credit card.

Does anybody have a copy of the FNCV publication 'Roadside Geology: Melbourne to Ballarat' by Dr Noel Schleiger that they would be happy to sell to the FNCV Bookshop? We have a person who is eager to purchase a second-hand copy. This title is currently out of stock and at this stage we are not going to print any more. Please contact the FNCV Bookshop.

Christmas is only just around the corner and what better gift to give than a book! We even have a couple of children's titles on the bookshelf, so come into the club rooms and have a look. If there is a particular book that you would like that is not on the bookshop, email the bookshop and we may be able to order it if our suppliers have it in stock and can provide you with a discount. If you would like a book that is published by CSIRO Publishing, then we should be able to order it for you. The Office Administrator is sending out a list of some of the current publications. There are many others. Check the internet.

For two special gift items see below:

Ludwig Becker 2014 Calendar

This beautiful 2014 calendar produced by the Royal Society of Victoria, features some of Ludwig Becker's images of the Burke and Wills expedition. With accompanying text by Dr Doug McCann, the 420mm x 594mm sized limited edition calendar will make a sensational Christmas gift.

If you would like to purchase a copy ($29.95 + Postage &Handling) please contact the FNCV Bookshop at bookshop@fncv.org.au, complete the order form (insert in FNN 236) or contact the FNCV Admin (03) 9877 9860.

Postal Address: Locked Bag 3, Blackburn Victoria, 3130

CHARLES FRENCH—A HANDBOOK OF THE DESTRUCTIVE INSECTS OF VICTORIA, PART VI

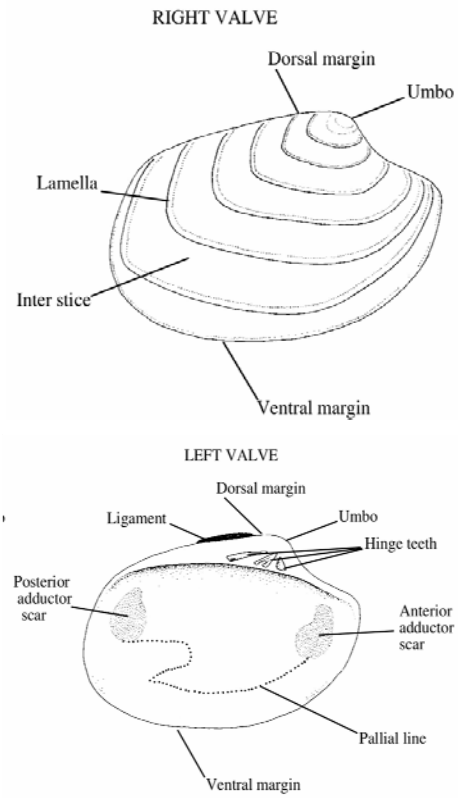
The 'holy grail' of Victorian insects FOUND AT LAST & IN PRINT!

The sole outlet for this book is the Field Naturalists Club of Victoria. For further information, email bookshop@fncv.org.au
Cost $90

Marine Research Group News

Report on the MRG meeting Monday 14 October, 2013: Michael Lyons, President of the MRG, spoke on the topic

"Victorian Intertidal Bivalves".



The Bivalvia are a diverse, abundant and ecologically important molluscan class. They come in a variety of shapes and sizes but all have shells consisting of two (usually similar) valves that are joined together at the dorsal margin by a hinge. The hinge consists of a flexible ligament that can be internal to the shell (eg. Pectinidae) or external to the shell (eg. Veneridae) and a series of interlocking teeth.

There is great variability in the formation of the hinge and this feature is important in classification and identification. In life the valves are drawn together by adductor muscles, which, when relaxed, allow the valves to open. The vast majority of bivalves are found buried in sand, others are found cemented to or attached by means of a byssus to hard substrate. Some species burrow into soft rock or wood. Some are found on algae or seagrasses, or simply lying on top of the substrate and some even possess a rudimental ability to 'swim' (such as the scallops). Bivalves are primarily filter feeders. Species that bury in the sediment feed by extending inhalant and exhalent siphons above the substrate to pump water for filtering. Groups such as mussels & scallops are also of commercial value.

In Victorian waters, bivalves range in size from under a millimetre to over 30 centimetres. The largest Victorian bivalve is the 'fan mussel' *Atrina tasmanica* (Family Pinnidae). Michael then discussed and illustrated a large number of bivalve families, including:

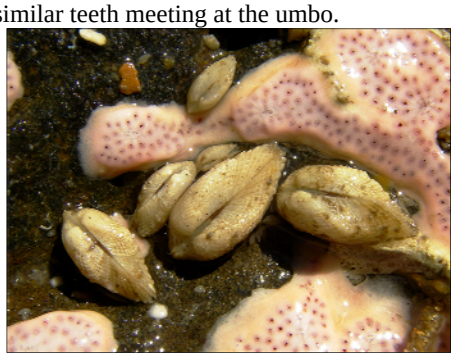
Nuculidae (beaked nut shells): shell rounded anteriorly and produced posteriorly into a short beak.

Solemyidae (date mussels): elongate with thick epidermis extending beyond the shell margin as a fringe.

Mytilidae (the mussels).

Common Edible Mussel (up to 130mm). Photo: Leon Altoff

Arcidae (arc shells): elongate, solid shells with a hinge comprising two long series of similar teeth meeting at the umbo.



***Barbatia reticulata* (Arcidae), *l. to 35mm*, attached by byssus to underside of rock. Photo: L. Altoff.**

Glycymerididae (dog cockles): solid, round shells with hinge with semi-circular row of transverse teeth.

Philobryidae: micro-bivalves often common on algae.

Pteriidae (butterfly shells): includes the delicate *Electroma georgiana*, which attaches to seagrass.

Vulsellidae (finger oysters): elongate with a pearly interior, embedded in sponges or kelp holdfasts.

Pinnidae (fan mussels or razor clams): very large, fragile, wedge-shaped shells, partly buried in sand.

Limidae (file shells): spectacular animals with numerous fringing processes extending beyond the shell.

Ostreidae (oysters): usually attached to rocks with the exception of *Ostrea angasi* which can occur on muddy sea floors.

Pectinidae (scallops): rarely found intertidally.

Anomiidae (jingle shells): attached to the substrate so usually only the top valve is found on beaches.

Trigoniidae (brooch shells): a primitive group with a long fossil record; possess intricate hinges and a nacreous interior.

Lucinidae, Galeommatidae, Cyamiidae, Gaimardiidae, Neoleptonidae, Condylocardiidae: diverse groups of mostly small species.

Carditidae (false cockles): shells solid with scaly ribs, attached to the undersides of rocks.

Cardiidae (cockles): heart shaped, radiating ribs, often scaly.

Mactridae (trough shells): a large family which have a large pit at the hinge line, which in life contains a large internal ligament.

Tellinidae: sand dwelling, flattened and often delicate shells.

Veneridae (venus shells): a very large family with many Victorian species. Some are quite spectacular, such as the frilled venus *Circomphalus disjecta*.

Teredinidae (shipworms): these burrow into timber and so attack wooden ships and jetties.

Pholadidae (angels wings): elongate, fragile species that burrow into soft rock and clay.

Michael (with input from Robert Burn, Jack Austin, Leon Altoff, Audrey Falconer & additional photographs from Joan Hales, David Staples and Blair Patullo, the latter of Museum Victoria), also put together an excellent 80 page booklet *'Victorian Bivalves'*, distributed to the audience on the night. We thank Michael for this excellent talk and work.

Further reading:

http://www.molluscsoftasmania.net/
http://www.ala.org.au/
Cotton B (1961). *South Australian Mollusca – Pelecypoda.*
Edgar GJ (2008). *Australian Marine Life. The Plants and Animals of Temperate Waters.* 2nd Edition.
Gabriel CJ & Macpherson H (1962). *Marine Molluscs of Victoria.*
Grove S (2011). *The Seashells of Tasmania: A Comprehensive Guide.*
Lamprell, K & Whitehead T (1992). *Bivalves of Australia. Volume 1.*
Lamprell K & Healy, J (1998). *Bivalves of Australia. Volume 2.*
MRG of FNCV (2006). *Coastal Invertebrates of Victoria. An Atlas of Selected Species.*

P. Vafiadis

From the Office…

I'm back from a truly wonderful holiday and ready to tackle the rest of the year.

Dates for your diary:
SIG co-ordinators, please note that the Calendar of Events for February to May 2014 has to be ready before Christmas to be sent to the printer. I need to have all your information to me in the next 2 weeks. Final due date Friday 6th December. Don't forget! Please let me know if you are having difficulty with your program.

The office will be closed from 20th December and re-opens on Monday 6th January 2014.

Items required for the kitchen:
Teabags (just the ordinary black type, we have lots of herbal and other types); Biscuits.

Wendy

Goodwill Wine-Fundraiser for the FNCV

The phone number quoted for Goodwill Wines in the last news was **incorrect.**

It should be **5348 2848**

Website:
Www.goodwillwine.com.au

Day Group

On Tuesday 22nd October the Day Group we visited Maranoa Gardens in Balwyn. In spite of an overcast day and threatening rain, twelve members gathered for a tour of the garden led by Cecily Falkingham. Cecily provided us with many interesting pieces of information – including how to recognize male and female she-oak trees and the presence of gall insects on many different plants. We noted that many of the people involved in the early establishment of Maranoa Gardens were also members of Field Nats Committees.

June Anton.

Editor: The following is background information on Maranoa Gardens

Maranoa Gardens was created when John Watson purchased 3.5 acres in 1901 and began his dream to establish a wildflower garden. He planted a diverse range of Australian and New Zealand native trees and shrubs which was an uncommon practice in the early 20th century when garden design was strongly influenced by European trend.

Camberwell Council purchased the gardens in 1922 and in September 1926, they were formally opened to the public. Gradually all non-native plants were removed. The keen interest of early pioneers in Australian plants such as Charles French, Ernest Lord, Arthur Swaby, Ivo Hammet and Frederick Chapman helped to establish Maranoa Gardens as one of the oldest and largest displays of Australian plants in Victoria. In 1962, the original gardens were doubled in size, by expanding east into Beckett Park.

Maranoa Gardens strives to maintain the highest quality, environmentally sustainable landscape practices possible and is designed and managed to:

- minimise the use of water
- minimise the use of harmful chemicals
- enhance the opportunity for biodiversity
- avoid the disruption of natural systems
- avoid the use of locally invasive plants.

The gardens are designed around a main circuit path that leads visitors through a number of zones. Each zone represents communities of plants that are associated with a particular combination of geology, land form, soil and climate. Individual displays are designed using a variety of soil types, mulches, irrigation and existing tree canopy to create a microclimate where plants from other climatic conditions will survive.
Zones represented include:

- cottage garden
- rainforest
- dry sclerophyll forest
- arid zone
- temperate woodland/heathland
- arboretum
- indigenous display.

With some 5000 plants, most of which are named, Maranoa Gardens has been recognised through registration with the National Trust as an important part of Australian gardening

Field Nats News 237

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