Field Nats News No.220

Newsletter of the Field Naturalists Club of Victoria Inc.
1 Gardenia Street, Blackburn Vic 3130
Telephone/Fax 9877 9860
www.fncv.org.au
email: fnnews@fncv.org.au

Editors: Joan Broadberry 9846 1218
Dr Noel Schleiger 9435 8408

Understanding Our Natural World
Est. 1880

Reg. No. A0033611X

Patron: Governor of Victoria

Office Hours: Monday and Tuesday 9 am-4 pm.

June 2012

From the President

Well, it's nearly June! With May came the Annual General Meeting, with all the formalities such as Financial and President's Reports, election of Office Bearers and other necessities to run the club for the next 12 months.

Can I firstly take this opportunity to thank the Council of the past 12 months, and Hali, for the great job they have done under somewhat trying times, especially after the fire last June. We had a number of Councillors and SIG representatives retire at the AGM and I would like to personally thank Noel Schleiger, Ray Gibson and Victoria Aitken for their contributions over many years and in Noel's case, decades. While some have left, new councillors have come on board. I would like to welcome Roger Needham and Ruth Hoskin who are sharing the job of representing the Geology Group and Robin Drury as the new Fauna Survey Group representative.

In addition I would like to thank Ian Kitchen for taking on the role of Vice President and Andy Brentnall for stepping into the role of Secretary.

One of the more pleasant duties at the AGM is to make presentations to the Environment Fund recipients. The Environment Fund supported a number of different projects this year from research into mange in wombats and methods to reduce its impact, to IT equipment for meetings, research into the endangered *Pomaderris vaccinifolia*, the production of education leaflets about bats and the purchase of cameras for field work. We also had short presentations from last year's recipients on how the grants had benefited their organisations or projects.

We are most grateful to Gary Presland for conducting the election of the new Council at the AGM and for his very interesting talk on Aspects of FNCV History.

Finally, thanks to those people who replied to my query about the caterpillars that have been eating my Callistemons. One member suggested that they may be the larvae of Goat Moths. I will have to keep an eye open for any further developments in this saga.

John Harris

FNCV Council 2012/3

President: John Harris
Vice Presidents: Ian Kitchen
Vacant
Secretary: Andy Brentnall
Treasurer: Barbara Burns
Councillors: Joan Broadberry
Sally Bewsher
Julie Rewell (Assis. Treasurer)
Three vacancies for general councillors.

SIG Representatives:
Botany: Sue Bendel
Fauna Survey: Robin Drury
Fungi: Jurrie & Virgil Hubregtse
Geology: Roger Needham/Ruth Hoskin
Juniors: Claire Ferguson
Marine Research: Leon Altoff & Audrey Falconer
Microscopy: Ray Power
Terrestrial Invertebrates: Alan Yen
Day Group: *Vacant*

*Deadline for the July issue of FNN, will be **10 am Tuesday 5th June.** FNN will go to the printers on 12th June and collation will be on the 19th, starting 10– 10.30 am.*

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

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.

June

Sunday 3rd – Fungi Group. ***Fungi Foray*** - 10.30 am Baldry Crossing, Greens Bush, Mornington Peninsula National Park. (MEL Edition 37. 254 G6). Contact: Virgil Hubregtse 9560 7775

Monday 4th – Fungi Group. Meeting - ***Fungi under the Microscope***. Speaker: Virgil Hubregtse, Fungi enthusiast. This is a talk only. The follow up workshop will be held in August. Contact: Virgil Hubregtse 9560 7775

Tuesday 5th - Fauna Survey Group. Meeting - ***'Islands That Were: Fossil Insights into the Sad History of Human Impacts on Indo-Pacific Islands'.*** Speaker: Nick Porch. Deakin Uni. Contact: Robin Drury 0417 195 148; robindrury@hotmail.com

Saturday 9th – Mon 11th - Fauna Survey Group. No FSG camp this June.

Sunday 10th – Fungi Group. ***Fungi Foray*** **-** 10.30 am, The Beeches, Lady Talbot Drive, Marysville.
(MEL edition 37,X910 T11). Contact: Virgil Hubregtse 9560 7775

Monday 11th – Marine Research Group. ***No Meeting due to long weekend.***

Friday 15th – Sunday 17th – Fungi Group. ***Fungi Foray*** **-** Weekend foray to the Cann River area in East Gippsland. Cann River Vic roads Edition 4 Map 69 D7. Proposed areas; Saturday - Drummer River (Map 69 F6 area) and Lind National Park (Map 86 H3); Sunday – Bemm River (Map 86 H6). Contact: Ed Grey for further details 9435 9019.

Sunday 17th – Juniors Group Excursion – Meet at 2.00 pm for a walk in Sherbrooke Forest. Contact: Claire Ferguson 8060 2474; toclairef@gmail.com

Tuesday 18th - Collate FNN 221 - Starting about 10.30 am. Some people arrive earlier. Contact Joan Broadberry 98461218

Wednesday 20th - Terrestrial Invertebrate Group. ***Meeting - Members' Night.*** Bring along specimens, photos and anything else of interest for identification and discussion. Contact: Alan Yen 0409 194 788

Thursday 21st – Botany Group. Meeting - ***Evolution of Acacia*** and some interesting news on how we managed to keep the name Acacia. Presenter: Dan Murphy, RBGM. Contact: Sue Bendel 0427 055 071

Saturday 23rd – Botany Group. Excursion - ***Australian Garden, Royal Botanic Garden Cranbourne***. Meet at reception in the visitor's centre at 10.30am, for a guided tour to the Australian Garden Stage 1 and an introduction to the Australian Garden Stage 2, which is still under construction. Contact: Sue Bendel 0427 055 071

Sunday 24th – Fungi Group. ***Fungi Foray*** **-** 10.30 am Blackwood Carpark at Garden of St Earth, Jack Cann Reserve, Simmons Reef Road (MEL Edition 37 X909 E11). Contact: Virgil Hubregtse 9560 7775

Monday 25th - FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Hali, 9877 9860

Tuesday 26th – Day Group. Meeting – ***'History of Science in Museum Victoria'.*** Speaker: Bec Carland, Museum Victoria. 10.30 for an 11.00 start. Contact Gary Presland 9890 9288

Wednesday 27th - Geology Meeting. Meeting - ***New Zealand North Island Volcanics***. Speaker: John Bosworth, Life Member, Mineralogical Society of Victoria; Volunteer Geosciences Dept, Museum Victoria.
Contact: Ruth Hoskin 9878 5911; rrajh@optusnet.com.au

Friday 29th – Juniors' Group. Meeting – ***Reptiles.*** Speaker: Simon Watharow, Author and Editor. Come and hear Simon speak about reptiles. He will be bringing some exhibits as well. Contact: Claire Ferguson.

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.

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 of the month.

Welcome

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

Suzette Hosken, Sandra Rodrigues, Peggy Cole, Gillian Ambrose, Megan Ambrose, Jessica Ambrose, Naomi Ambrose, Michael Ambrose, Denise Chevalier, Max Sargent, Paul Taylor, Peter Berbee, William Roshier, Joseph Roshier, Neil Roshier, Yvonne Roshier, Gill Best, Ellena Best, Lydia Best, Russell Best, Mark O'Brien, De'ana Williams, Gregory Donoghue, Vicki Webb, Bridget Whelan

Future Directions Can you help?

Fundraising Team.
We need help to increase the Club's revenue through fundraising, sponsorships and grants. We ideally would like 3 people who would be willing to help me with this important job.

Marketing Team.
It's time that our Club becomes more visible and well known. We need help with the marketing, advertising and publicising of our club. If you have some time to help me with this I would appreciate your input.

Neither of these teams will require a large commitment of time, but both are very important for the future of the Club.

Call Hali in the office on Monday or Tuesday 9am to 4pm or email at admin@fncv.org.au. Thank you.

Donations for Hall

Thank you to the people who have responded to my request for items for the hall. These items will be used in the running of the kitchen and the hall generally. If you could put one item from the list in your shopping trolley and bring it to the hall when you are in next it would be greatly appreciated. This month's donations are:

Biscuits (packet) always needed.
Long Life Milk
Pine o clean wipes (for bin)
Peppermint Tea
Green Tea
Or
Gift vouchers from Office Works, Coles or Safeway.

Thanks, Hali

Extracts from SIG reports given at the last FNCV Council meeting.

Fauna Survey Group - Meeting Tuesday 3rd April 2012:
Mike Sverns who is a Senior Wildlife Investigator with DSE, spoke on the subject of Regulating Wildlife Trade in Victoria.
Stagwatch. Saturday 21st April 2012
This was the last trip for this season and attended by 9 members. No Leadbeater's Possums were seen but Sugar Gliders were abundant.

Juniors' Group - At our March meeting we had guest speaker Danielle Stokeld from Melbourne Uni, who spoke about her research on various turtles including the Red Slider Turtles at Blackburn Lake Sanctuary. The Juniors were involved in the running of a stand at the Rhododendron Gardens Family Day in Olinda on April 3rd. It was a beautiful day and we met many families who were interested in our club.

Our Easter camp was in Wedderburn this year, on private land in a Woodland environment and in the apex of the Gold Triangle of Victoria. There were 47 adults and children camping and involved in the various activities including visiting nearby Mt Egbert and dam, The Nardoo Hills Heritage Reserve (led by Jeroen the field officer) and Melville Caves area. We saw many interesting flora and fauna including tadpoles, frogs, echidna, kangaroos, Ringtail Possum, Jacky Lizard, Greenhood Orchid and an Eastern Spinebill.

Terrestrial Invertebrates Group - The TIG had a very well attended meeting last Wednesday when Dr Ken Walker, the Senior Curator of Entomology at Museum Victoria, gave a captivating introduction to native bees in Australia. He described the morphological adaptations that Australian bees had to make them unique and to

STOP PRESS For photos which we cannot fit into the newsletter we have instituted a "bonus" photo page 13. Only available with the email version of FNN. Another reason to get your FNN by email! Please contact Hali.

Reports from some of the recipients of the Environmental Fund 2011

At the recent FNVC AGM, Bev Brown (right) presented an example of the Bat Rescue Kits that were funded by the Environment Fund in 2011. She explained some of the contents and told us where the kits were being used.

Ian Kitchen gave a quick demonstration of the scales that the Fauna Survey Group were funded for last year.

Photo: J. Broadberry

Geology Group

Western Port Geology Excursion

March 3rd— 4th 2012

The Geology Group held a two-day outing to Western Port Bay over the weekend of March 3rd and March 4th 2012. Our excursion leader was Dr. Eric Bird, Geostudies, University of Melbourne and former Professor of Geography, University of Melbourne and author of "*The Coast of Victoria – The Shaping of Scenery*".

The starting point for the excursion was **Flinders** (See Map ref 1) where 21 Vic Nats and visitors met on the Saturday morning, in not-so-promising cool and rainy weather. Dr. Bird gave an overview of the physical features of Western Port Bay which, like Port Phillip Bay, occupies a sunkland with the Tyabb Fault marking the south western margins of the Bay. Older volcanic rocks (Older Basalt) formed 40-70 MA outcrop on the coast between Flinders and Somers.

Western Port Bay has not always existed in its present shape as sea level has risen and fallen relative to the land, many times in the past. The sea flooded into the sunkland most recently to reach its present level about 6,000 years ago. The bay has two entrances, one on either side of Phillip Island: a western, deeper entrance and a narrow, eastern entrance. Ocean waves enter the bay and refract around West Head at Flinders and sand of marine origin is washed in along the coast by longshore drift as far east as Sandy Point. The ebbing tide picks up this sand and sweeps it back to form a sandy shoal known as Middle Bank, located between Somers and Cowes, and even back to Point Leo where longshore drift again sends it east. Sediment in the northern half of the Bay is mostly composed of mud.

Our second stop was **Shoreham Beach** (2) with its sandy swash beach, basaltic cliffs, extensive shore platform and deep beds of sea grass (*Amphibolis antarctica*). On the extensive shore platform repeated wetting and drying by the rise and fall of the tides has caused differential weathering of the Eocene basalt - whereby less resistant rock along joint lines has weathered away leaving harder corestone boulders to accumulate on the beach and platforms. The outcome of volcanic activity was also seen in the reddish coloured rocks which resulted from iron-rich volcanic ash being hardened on contact with lava and around the bluff in Honeysuckle Bay, where volcanic bombs were embedded in the cliff face – evidence that a volcanic vent was close by.

From a vantage point at **Balnarring Beach** (3), we could see the effects of the cyclical processes in sand build up and erosion and the groynes and granite rock walls constructed in attempts to address these natural processes of erosion. Eric also described the sand movements around Merricks Creek, which is within 200m of the beach. However, a sandy spit formed by longshore drift has pushed the mouth of the creek 2km away to the east.

Rock platform, Shoreham Iron-rich hardened volcanic ash rock (foreground). Basaltic boulders (background)

Later on, further examples of the shifting sands of the Bay were viewed: at **Somers** (4), erosion of a sandy lobe has caused the yacht club to construct protective granite boulder walls and at the **South Beach Foreshore** (5), where sand has moved on from the shore platform leaving it exposed.

At **Jack's Beach, Bittern** (6), in the northern part of the Bay, we were into the realm of the mangrove (*Avicennia marina*) near its southern limit (which is in Corner Inlet) and, following past clearances, it is very slowly regenerating. Very tightly folded outcrops of Silurian sandstone occur on the beach and offshore on Sandstone Island.

At **Yaringa Beach** (7), we walked about 500m through eucalypt forest, tea tree thickets and saltmarsh to view mangroves from an elevated position beside an abandoned harbour trench. The mangroves stretched 150-200m out on the tidal flats of the Bay, giving an indication of the pre-European state of this part of the Bay. As the weather deteriorated into more intense rain, we ended the first half of our outing at this point and proceeded to San Remo where most were staying overnight.

The second day of the excursion, Sunday March 4th, promised much finer weather and we gathered at the **San Remo** pier looking forward to another interesting day exploring the Western Port coast.

At the **San Remo Back Beach** (map ref 12), from the lookout we could view the eastern entrance to Western Port Bay and across to Cape Woolamai with the sandy beach along Cleeland Bight, formed by longshore drift created as waves refract around Cape Woolamai.

At the end of the Back Beach road, part of the cliff and the shore platform are composed of basalt which has been tilted by uplift along the Bass Fault which meets the coast here. Corestones developed in the shore platform as a result of weathering and a small boulder beach has resulted. Abutting the basalt to the south is Cretaceous sandstone, part of the Otway group of sediments containing coal, clay and shale. At this point it is arkose sandstone which has very high feldspar content. Some stones eroded from the sandstone have mixed with the basalt corestones on the boulder beach.

At **Bass Landing** (14) we viewed the delta of the Bass River which protrudes into Western Port Bay and extends inland as far as the Bass Fault, seen as a line of hills to the east. Mangroves and saltmarsh line the river and the DSE has had some success trying to eradicate the

(Continued on page 5)

(Continued from page 4)
introduced, invasive plant *Spartina*.

Bluff Road/Reef Island (15)
From the end of Bluff Rd we could see basaltic Kennedy Point and Reef Island to the south and sandstone Cobb Bluff to the north. Behind the beach between these two points is a bluff 3-4m high which is evidence of a higher sea level in the past. To the west of Bluff Rd there is an uninterrupted 25km stretch of water which, when the westerly wind blows, enables waves of up to 2m to develop. Such waves remove the finer sand from the beach leaving coarser, buckshot gravel. Baxter Sandstone overlies basalt in this vicinity and the buckshot gravel (granules of hydrated iron oxide) forms in the subsoil or B horizon.

At our next stop, **Coronet Bay** (16), Baxter Sandstone also overlies basalt. The sandstone is iron rich (ferruginous) has developed a hard, iron rich crust. The sandy beach arises from the erosion of the sandstone of Cobb Bluff and crushed sea shells, resulting in a high calcareous content.

Settlement Point, Corinella (17)
On a high point overlooking the channel between Corinella and French Island, we learnt that the shore platform is composed of basalt; its uneven edge is due to differences in its resistance to weathering and erosion; Pelican Island between Corinella and French Island is a basalt outcrop; the vertical cliff, devoid of vegetation, indicates active erosion by the sea; angular boulders also indicated recent erosion; and an aboriginal midden on the cliff has developed over the last 6,000 years since the sea last rose.

Grantville (18)
In 1839 Captain J. Lort Stokes on his exploration of Western Port Bay noted the mangroves here were easily accessible from the sea. In the 1840's they were harvested and burnt to produce barilla ash for sodium carbonate, used to make soap. The mangroves have not redeveloped naturally and attempts to re-establish them have not always been very successful or supported by local residents. Mangroves help to reduce erosion of the shoreline and since their removal expensive stone walls have had to be built to protect property.

Stockyard Point (19) at the southern end of **Jam Jerrup** beach is developing as a recurved spit with sand coming from the rapid erosion of Red Bluff (Baxter Sandstone) at the northern end. In the 1800's the presence of mangroves offshore here prevented such erosion.


Eric Bird & excursion members

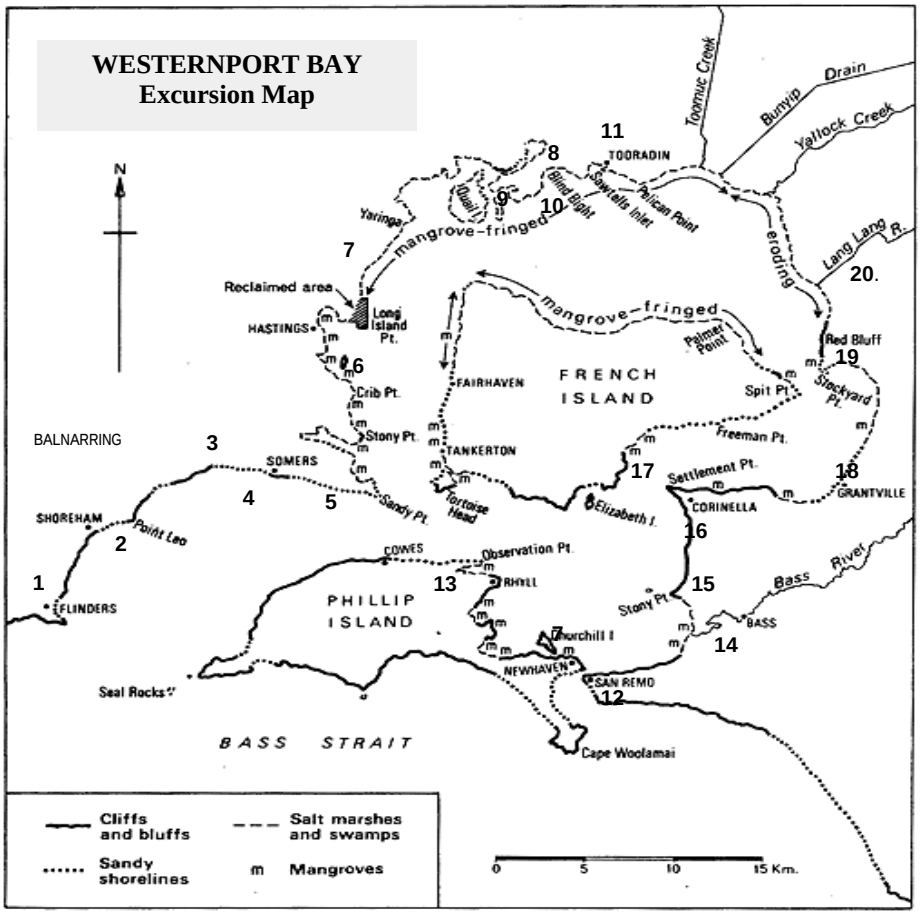
With permission, we accessed the Lang Lang Caravan Park and drove to the top of Red Bluff hoping to be able to see the tidal divide here, where the seawater coming via the eastern entrance to Western Port Bay meets seawater coming via the western entrance. Unfortunately, however, the tide was a little too high. The tidal divide extends from a point just north of the mouth of the Lang Lang River across the Bay to Palmer Point on French Island. Creek-like channels flow westwards and eastwards on either side of the watershed (cf Melway page 18).

Our closing walk was along the **Lang Lang Beach** (20) to view the erosion of Red Bluff close up.

My closing comments to this most interesting weekend are that it is amazing how an expert can read the story told in the rocks, and that we were all very grateful to Eric and his wife Juliet for the time, energy, and enthusiasm they devoted during and in preparation for the weekend and for the wealth of knowledge they imparted to us.

We are also indebted to Kaye Oddie for organising this event. More photos: email bonus page 13.

Roger Needham



Fungi Group

FNCV FUNGI GROUP FORAY
15 APRIL 2012
Toorongo Falls, nr Noojee

A mild sunny morning greeted 15 enthusiasts gathered at the Toorongo Falls car park. After last week's hot and dry weather we wondered whether we would see many fungi, but we were amazed at the variety of species seen, even though many of them were still immature.

Jurrie Hubregtse made collections of two rare species – *Helvella fibrosa* (syn *H. chinensis,* Stalked Hairy Cup), a small (height to 60mm) grey-brown stalked cup. It is a cryptic species hidden amongst the litter, but once we got our 'eye' in, several groups were noticed along the litter-strewn earth bank at the side of the track. The second collection was made of the impressive *Grifola colensoi* whose 'bouquet' of brown-capped, white-pored fruit-bodies stood proudly on the ground near the base of a tree. Each rubbery, fruit-body develops from a common white stem.

Most spectacular, however, were the large number of tree bases, stumps and logs that were covered with tiers of *Omphalotus nidiformis* (Ghost Fungus). Some were huge, cream fan-shaped fruit-bodies with decurrent gills, others had shades of dark colours on the cap and some caps were very dark indeed. If we had come at night the area would have been brightly lit with a glowing white light. This light is produced as the result of a chemical reaction that takes place in the presence of oxygen. A protein luciferin reacts with oxygen under the influence of the enzyme luciferase with the end products then decomposing and releasing energy in the form of light.

At the start of the walk to Toorongo Falls, there was a very small area of Myrtle Beech and Tree-Ferns where we saw one small red species, but it was not *Mycena toyerlaricola* found only in Temperate Rainforest, but *Cruentamycena visidocruenta* that, on closer inspection turned out to be growing on Mountain Ash bark litter. It had a darker red dimple in the centre of the cap (not domed) and a glutinous stem (not dry). Recent DNA study has separated this species from the *Mycena* genus and found it to be closely allied to *Panellus stipticus.* An interesting point was that although we saw several throughout the foray, they were just single fruit-bodies, all of which had a cap diameter of approximately 10mm. Usually they are in clusters of fruit-bodies and have smaller cap diameters.

Photo *Ramariopsis crocea* Photo: Carol Page

Several agaric species were seen with a yellow powdery coating. These were infected by one of the *Hypomyces* spp which parasitise a number of basidiomycetes. We usually see a yellow infection on Boletes where the infecting species is *H. chrysospermus* Bolete Eater, but there are a number of species that infect a range of fungi. David Arora (Mushrooms Demystified p 882) mentions *H. lactifluorum* Lobster Mushroom (orange) and *H. luteovirens* (green) infecting Russula and Lactarius; *H. hyalinus* (white to pink) infects Amanita. Thus, it is not known which species had infected the agarics we saw. Apparently the *Hypomyces* sp. mycelium lives with/on the mycelium of its host and fruits at the same time.

Small scatterings of white (with pale yellow) mealy spikes were discovered. Paul George carefully removed the clump of soil around the base of one example to reveal a larva which the species had parasitised. This was a *Cordyceps – C. takaomontana* that used to be known as *Paecilomyces tenuipes*. This spiky form is the anamorph (asexual) stage and the mealy substance on the spikes are the conidial spores. The yellow clubs of the teleomorph (sexual) stage appears to be very rare in Australia and to be confident of identification, the host larva needs to be identified. Another impressive Cordyceps seen was *C. bassiana (*syn *Beauveria bassiana)* or Icing Sugar Fungus. It covers the outside of a caterpillar or other grub with white mycelium, making it look as though it is covered in icing sugar. Again this is the anamorph form, which is a virulent parasite and attacks a broad range of insects. Because it can be readily cultured it is widely used for biological insect control. These fungi are known as entomopathogenic fungi. The conidial spores usually attach to the external body surface of insects, spores then germinate and grow as hyphae into mycelium. This then colonises the cuticle, and finally penetrates the insect's body where it takes up all the available nutrients and ultimately kills the host.

The small orange disc fungus (to 15mm) *Scutellinia scutellata* (Eyelash Fungus) was found on wood. The eyelashes were a ring of dark hairs sur-

(Continued on page 7)

(Continued from page 6)
rounding the margin of the disc. One example was looked at using an illuminated high magnification lens that showed steel-blue Springtails feeding in the centre of the disc. Even smaller, minute discs (about 0.5mm), *Lachnum pteridophyllum*, were noticed on a dead tree-fern frond. A 10x hand lens showed a cup with a smooth pale yellow inner surface and a white hairy stalked outer surface. It was subsequently noticed that they grew along the grooved area on the smooth side of the dead tree-fern frond. A similar-looking species, but that grows on eucalypt wood and bark is *L. lachnoderma*.

Sharp eyes spotted another small white species on a piece of fallen bark – *Lasiosphaeria ovina* – which are tiny white globes with a single black ostiole on top or, they could be described as 'a bunch of breasts each with a black nipple'. The black ostiole is an opening through which spores are ejected.

Toorongo Falls is a great place for a foray, and I'm glad that Richard Hartland drew our attention to it. It reminded me a lot of Melba Gully, except for the absence of Myrtle Beech. Many of the fungi species were the same, perhaps the most noteworthy being *Helvella fibrosa (chinensis)*, which was reasonably common. (Virgil Hubregtse)

Thanks to the forayers for their sharp eyes and keen participation.

Pat & Ed Grey

If anyone not on the FNCV Fungi Group email list would like to receive the species list, please contact Ed Grey.

Thanks to the editorial and layout team who put together FNN 220

Joan Broadberry
Noel Schleiger
Platon Vafiadis
Hali Ferguson

FNCV FUNGI GROUP FORAY GEMBROOK 22 APRIL 2012

Two post fire areas - burnt three weeks ago

On a mild morning 13 fungi fanatics gathered for our first post-burn foray. A special welcome for some new faces – Deanna and Mark, Jenny and Fred – and we look forward to seeing them regularly.

We drove down The Pack Track to White's Corner where the Parks Victoria Ranger, Andy Musgrove, explained the process of the burn. White's Corner was a zone 2 burn – i.e. strategic for fire protection. It is on the north face of a range across from the Snake Range, and the burning of Whites Corner area would allow control of any wild fire that came from the Snake Range and threatened Gembrook. Approximately 80% of the 264 hectare area was required burning. It was a cool burn and we could see areas of 'green' amongst the black throughout the site. The process of the burn was interesting: on the first day the site was hand torched from the top; on the second day, in order to complete the burn and cover areas that had previously been missed, a helicopter was used to drop incendiary 'ping-pong' balls. These small balls had been filled with an exploding mix, and then primed by an injection of a substance to start the fire and dropped from the helicopter (using a machine to inject and fire them out). 455 balls were used. Balancing the burn regime is a complex affair and the FEFO specialists are concerned about the ecology. Although work has been done on plants and animals, almost nothing is known about the effects of fire on fungi. They are hoping to fill that knowledge gap, and our group can help them in that. Andy mentioned that shortly after the fire there had been rainfall of about 30mm.

This was going to be an interesting foray, as it was the first time that the group had surveyed a burn site. The burn took place 3 weeks before. Dr Tom May, Senior Mycologist at the RBG, had talked about Fungi and Fire at our monthly meeting so we knew we could expect to see *Pyronema omphalodes, Laccocephalum* spp, and *Neolentinus dactyloides* that appear after fire. On the burnt ground bright masses of *Pyronema omphalodes*, were easily seen – pink-orange patches forming lumpy coatings surrounded by a white mycelial margin. It was abundant at the base of burnt standing trunks and under fallen burnt logs. This is one of the first species to appear after a burn, and stands out because of its bright colour against the black.

Looking carefully on the ground, we saw brown-capped mushrooms that were scattered individually throughout the area. Using a mirror we found that some had white, fractured pores beneath the cap and others had white serrate gills. The pored species would be a *Laccocephalum* sp and we hoped to determine which one by digging it up and recognising the shape of the vegetative food storage receptacle

Laccocephalum tumulosum Photo: Ed Grey

(pseudosclerotium) found buried under the ground. But we didn't, the stem broke off about 200mm under the ground. The fresh ones had brown caps and the largest we saw had a diameter of 130mm. On some caps the brown skin had started to fracture and wash away (the fruit-body felt spongy and exuded water when pressed) to reveal the white flesh beneath.

The other, a smaller species, had serrate white gills which we determined as *Neolentinus dactyloides*, but again we

(Continued on page 8)

(Continued from page 7)
were unable to find the number of finger-like projections of the sclerotium. There appeared to be only an extension of the stem encased in a brown soil-covered skin. Because most of us had never seen these 'fire fungi' before we were not confident about identification, so when got home we phoned the expert, Dr Tom May. He confirmed that the gilled species was *Neolentinus dactyloides*, a species that fruits profusely after fire, and that the pored *Laccocephalum* sp was *L. tumulosum* - for several reasons: its immediate appearance after fire and the size and colour of the cap. Other *L.* spp. have different characteristics. *Laccocephalum hartmannii* does not appear immediately after the fire and is a rare species with yellowish flesh, and the small 'marble maker' *L. schlerotinium* has a small, 20mm diameter, brown, velvety concentrically-zoned cap and does not appear until well after the burn. He also said that large solid pseudosclerotia were often buried very deeply and difficult to reach.

Neolentus dactyloides Photo: De'ana Williams

On the burnt ground were groups of the small (to 40mm) white, star-shaped remains of the puffball *Nothocastoreum cretaceum*. Most stars were empty, but a few had remains of the powdery white spore mass (gleba) and white spores were visible on the ground.

In a clear burnt area there were a number of small diggings by bandicoots, presumably after truffles. After a lot of scratching around, Jenny did find a small round grey specimen that looked as though it might be a truffle of the 'puffball' type. Interestingly, when I took it out of the collecting box at home, there was a very strong odour, somewhat similar to freshly-cut onions.

Unexpectedly, on a charred log De'ana found a couple of yellow jelly blobs of *Tremella mesenterica*, and what looked like, early stages of the white *T. fuciformis*. Mark's young, keen eyes also picked out two small specimens of a *Cordyceps* sp. that were found protruding some 20mm above the burnt ground. These had a small, orange-tan, club-shaped head on a thin pale stem and had parasitised beetle larvae. These could be identified as *C. menesteridis*, because the similar-looking, but more red-headed, *C. militaris* parasitises butterfly and moth pupae. In a 'green zone' Ivan found *Russula persanguinea* with a rose-red cap, white gills and white stem.

Lunch was at Shiprock Falls carpark where Paul George found good examples of the small (to 20mm), grey stalked discs, *Banksiamyces macrocarpa* on, as one would expect, a *Banksia spinulosa* cone. This is the only species of *Banksiamyces* (a uniquely Australian species) that grows on *Banksia spinulosa* cones, other similar-looking species are smaller and grow on other *Banksia* spp.

The afternoon foray was spent at a second burn site on Hansen Creek Track, again burnt about three weeks earlier. This presented us with a different suite of fungi, *Cortinarius* spp. A few *Neolentinus dactyloides* were observed, but only one *Laccocephalum tumulosum*. Several groups of the sturdy white-capped, white-stemmed *Cortinarius sublargus* were identified by their distinctive brown gills and rusty spores trapped on the veil remnants around the stem. Geoff found another *Cortinarius* sp with rusty-brown dry caps and white silky stems, which, apart from the brown cap, had the same gill structure – no lamellulae, and similar colour spore print, so it is probably the same as the one we called *C. sublargus*.

The tiny pored species that I thought was rather exciting turned out to be badly burnt *Panellus pusillus* (*Dictyopanus pusillus*). A very interesting late find was a group of minute white fruit-bodies on a burnt Hakea nut. A 10x lens wasn't strong enough but under the microscope I could see that the white fruit-bodies were cups (aging to discs) on a long stem and both the outside of the cup and the long stem were extremely hairy. Looking through the Swiss Ascomycete book, the most likely candidate seemed to be a white stemmed *Lachnum* sp., and because of its size *Lachnum tenuissimus (Dasyscyphus tenuissimus)* seemed most similar – 0.6-1mm diameter of cup, attached to substrate by a stalk, colour whitish to cream, furfuraceous downy on the stalk and the margin of the cup set with projecting white hairs. However, outstanding differences of our species was the fact that the stalk was 1-4mm in length, not 0.3-0.5mm and the hairs were very long, and it was growing on a Hakea nut, not a grass. Another mystery!

Thanks to all the forayers and to the kind weather.

Reference: Fungi of Switzerland (1984), vol 1 Ascomycetes by J Breitenback/F Kränzlin

Pat & Ed Grey

Many thanks to those who helped collate and label FNN 219

Keith Marshall
Joan Broadberry
Margaret Corrick
Margaret Brewster
Pieter Boschma
Bill Fenner
Andy Brentnall
Hazel Brentnall
Edward Brentnall
Sheina Nicholls
Bob Rowands

Bat Group

The Australasian Bat Society Conference

Several of us attended this Conference in April. It went from the evening of 11th April to the 13th April and was followed by a field trip to Kinglake.

The ABS is a broad church so even though some of the top bat experts in the country attended most of the content was understandable to the average bat lover. There were many outstanding features of the conference. One was the breadth of research being carried out by the current students at university. Another was the technical advances that are happening.

In the past, the equipment selected part of a bat's echolocation call and tried to convert it into a form that could be recognised as the signature call of that species. This was not without its failings. The new hardware now can use full spectrum analysis that uses the whole call to improve the accuracy of the process. There are also programs that can analyse the data and identify individual bat calls within the data down to species level.

Another piece of equipment demonstrated was a heat sensing camera. These are used in bat work mainly for cave roosting populations, either for counting the roosting bats in the caves or for filming them when exiting the cave. Allied to this new technology is the use of a software program developed by the US Army to track missiles which, with the aid of a computer, counts the bats recorded on the film. We have seen similar cameras used to find Leadbeaters Possums and it was very effective in finding them. This equipment is expensive to purchase so if anyone has skill in sourcing funds for groups like ours, please speak to Hali in the office.

Ian Kitchen

Fauna Survey Group

Fauna Survey Group camp, Dergholm, Easter 2012

Ten people took part in the fauna survey in the Dergholm State Park over Easter, with two new members being welcomed into the fold. Survey techniques included the use of Bandicoot cage traps, pitfall traps, spotlighting and chance sightings. The survey sites consisted of open low forest of Brown Stringybark, with Leptospermum species, *Banksia Marginata, Xanthorrhoea Minor* and a range of other shrubs and herbaceous plants.

Eastern Pygmy Possum Photo: S. Bewsher

One hundred and sixty cage trap nights revealed one Brushtail Possum; a lot of work for such a result. However, after the slog of setting up the pitline, members were delighted with two beautiful specimens of the Eastern Pygmy Possum and two Common Garden Skinks.

Spotlighting in Yellow and Red Gum woodland revealed mostly more Brushtail Possums. Other animals seen and heard were the Sugar Glider at the campsite, Red-necked Wallabies, Grey Kangaroo species and the White-striped Freetail Bat was heard also. Some of the birds seen or heard included quite a number of Emus and a range of Cockatoos. We were disappointed at not seeing the Red-tailed Black Cockatoo, but recorded a range of other, mostly common bird species.

The Boobook Owl was heard on most nights. Other activities included going for walks and exploring some of the very picturesque, old growth Yellow Gum and Red Gum forest, where the White Browed Babbler was seen moving about in the *Acacia paradoxsa*

The weather was mostly fine with moonlit nights. The Dergholm Pub proved to be a great place to get together for lunch at the end of the survey.

Russell Thompson.

Baiting cages prior to setting them out in the bush. Photo: S. Bewsher

Mt Samaria Camera results

At the Fauna Survey Group camp at Mt. Samaria, 13 cameras were deployed for about three weeks. Ten of the cameras set up near an attractant of peanut butter, oats and golden syrup, and three had a meat-based attractant. The cameras were set to take ten second videos with a minimum re-take time of ten minutes. Our two newer cameras also took three still shots.

The meat-based attractants were set up around two metres off the ground and it was hoped that we would see a Spot-tailed Quoll. They were spectacularly unsuccessful. Only one of the cameras yielded anything. The main star was an Agile Antechinus, (photo below), with a cameo role being played by an unknown species of bat. The Antechinus visited the site for ten days.

The other sites were established with the camera fixed to a tree, with the attractant some two metres away in a small cage attached to a garden stake. Images of the following species were recorded:

Black Wallaby, Superb Lyrebird, Bush Rat (see above), Eastern Grey Kangaroo, Laughing Kookaburra, Common Wombat, Sambar Deer and Red Fox.

The runaway winner for the Oscar in the category of most performances went to the Black Wallaby, whose image appeared 110 times and a distant second was our meat-loving Antechinus with 22 appearances. See also photo email bonus page 13

Robin Drury

Minutes of FNCV Annual General Meeting 6th May, 2012

Welcome John Harris welcomed 31 members and 6 Visitors.

Apologies

There were 9 apologies: Virgil and Jurrie Hubregtse, Leon Altoff, Audrey Falconer, Rosalie Strother, Barbara Burns, Kathy Himbeck, Peter Dempsey and Sally Bewsher.

Minutes of 2011 AGM

Motion: to accept the Minutes of 2011 AGM as true and accurate record of the events.
Moved: Sue Bendel, Seconded: Andy Brentnall. Motion Carried.

Treasurer's Report for 2011

As per Treasurer's Report from Annual Report 2011.

Motion: to accept the Treasurer's Report for 2011.
Moved: Julie Rewell, Seconded: Heather Eadon.
Motion Carried.

Members who would like a copy of the annual report please contact the office.

Appointment of Auditor

Motion: to accept Susan J Harkin as Honorary Auditor for 2012.
Moved: Julie Rewell, Seconded: Joan Broadberry. Motion Carried.

President's Report: Summary

As per President's Report from Annual Report 2011.
John spoke about the busy year that the Club had experienced.
He mentioned the new mural in the hall and appealed for donations for the second mural that is planned for July.

Motion: to accept the President's Report for 2011.
Moved: John Harris, Seconded: Bob Rowlands.
Motion Carried.

Future Directions for 2012

John summarised the Future Directions document which was given to all members that were present.

Environment Fund Recipients and Reports 2012 Recipients:

- *FNCV Fauna Survey Group* – 2 Little Acorn Cameras, plus batteries, locks etc.
- *Mange Management Inc* – Reg Mattingley . Notebook computer and screen.
- *FNCV FSG Bat Group* – 2000 Bat Flyers (funded with Manningham Council)
- *Maryborough Field Naturalists Club* – BenQ MX710 projector and bag.
- *John Patykowski* a Deakin Uni Honours student – hire of a portable photosynthesis system for research into *Pomanderris vaccinifolia.* Photo below. From left: Ian Kitchen, Robin Drury, John Harris, Reg Mattingley, John Patykowski. - (J. Broadberry)

Long Term Members (40 year membership)

There were two long-term members in 2011:

- Mr Eric Whiting, Leeton NSW – joined 1/01/1971
- Dr Merna McKenzie, North Caulfield – joined 1/01/1971.

Their certificates will be posted to them, as they were unable to attend.

Election

The election was run by Gary Presland. Membership of the new council is listed p1.

Presentation by Gary Presland.

Gary presented an interesting and informative talk on aspects of the history of the FNCV. He touched on three main areas; excursion, the connections to Museum Victoria over the last 132 years and the FNCV's role in conservation. This interesting talk will appear in FNN 221.

Marine Research Group News

A report on the last two field days of the extended excursion to Portland, Victoria (February, 2012) will follow in future MRG FNN pages.

Malacological conference in late 2012:
The Malacological Society of Australasia will hold its conference for 2012 in Melbourne. The dates are Monday to Thursday 3 –6 December, 2012 at St. Mary's College, The University of Melbourne, Swanston Street, Carlton.

Additionally, Dr. Winston Ponder and Dr. Rosemary Golding of the Australian Museum and Dr. John Stanisic of the Queensland Museum will host workshops on micro-mollusca and land snails, respectively, over the weekend preceding the conference.

Full conference, workshop and registration details are available on the Malacological Society's website http://www.malsocaus.org/index.htm. Put these dates into your diary!

Report on extended field trip to the Inverloch region, March, 2012:

Day 1: Twin Reefs, Bunurong Marine Reserve, Monday 12 March, 2012:
Day 1 began on a lovely, expansive reef which yielded many records. Large numbers of *Ibla quadrivalvis* barnacles were under rocks and, amongst them. large clusters of the bivalve *Lasaea australis*. Interesting opisthobranchs included *Ilbia ilbi*, *Elysia furvacauda*, *Phyllodesmiun macphersonae*, *Echinopsole breviceratae*, *Madrella sanguinea*, *Chromodoris epicuria* and *Polycera janjukia*. Uncommon prosobranchs included the costellarid *Vexilum australe*, *Guraleus alucinans* and the rarely seen micro-gastropod *Ammonicera* sp.

The barnacle *Ibla quadrivalvis*, Twin Reefs, Monday 12 March, 2012. Photo: P. Vafiadis

A variety of chitons including *Leptochiton badius* and the pyramidellids *Syrnola aurantiaca* and *Syrnola* cf. *tincta* were seen. Of the seven crab species recorded, the anomuran *Lomis hirta* was particularly common, and the *Cyclograpsus granulosus* were a beautiful purple colour. Asteroids were relatively few.

Day 2: Inverloch, Bunurong Marine Reserve, Tuesday 13 March, 2012:
The site visited was a rocky reef along the exposed western entrance to Andersons Inlet, with seagrass and algae and also some siltier areas.

Robert Burn demonstrated the richness of the matting alga *Derbesia marina*, sampling of which yielded many interesting opisthobranchs including *Tornatina*, *Retusa* and *Cylichnatus campanula*, and also the pyramidellid gastropod *Pyrgiscus fuscus*.

Other interesting records included good numbers of the opisthobranchs *Haminoea maugeansis* on algae, *Elysia coodgeensis* on *Heterozostera* seagrass, one *Hermaea evelynmarcusae* from lower littoral algae, and *Anteaeolidiella foulisi* with egg ribbons on the undersurfaces of lower-most littoral rocks.

The triphorids *Eutriphora armillata* and *Tetraphora granifera*, and an as-yet unidentified cerithiopsid were recorded, and beautiful clusters of the ascidian *Herdmania momus* were also present under lower littoral rocks at the channel edge.

Asteroids were represented by *Parvulastra exigua* (five of them were perfect four armed or square specimens!), *Tosia australis* and *Coscinasterias muricata*. Notable crab records included *Naxia aries* and *Naxia aurita*, and also several pilumnids.

Day 3: Cape Paterson, Bunurong Marine Reserve, Wednesday 14 March, 2012:
A bright, sunny afternoon and again some wonderful scenery greeted us for day three. We slowly made our way out to the elongate lower littoral pool full of the seagrass *Amphibolis antarctica* which had yielded many important and interesting species on our previous visit here (see MRG News, FNN 181, Nov. 2008, p.11).

Interesting records included *Stenochiton pilsbryanus* on the *Amphibolis* leaves, the not-so-commonly seen *Phycothais reticulata*, and the micro-gastropods *Tricolia rosea*, *Pisinna circumlabra*, *Pisinna dubitabilis*, *Ampithlamus incidatus*, *Anabathron lene*, *Eatoniella puniceolinea*, *Eatoniella melanochroma*, *Cystiscus obesulus*, yet-to-be identified cerithiopsids, and also the microbivalve *Micromytilus crenatuliferus*. Other bivalves included *Barbatia reticulata*, *Cardita excavata* and *Brachydontes rostratus*.

Important opisthobranch records included a single, somewhat pale *Trinchesia catachroma* (which according to Robert Burn established a new easternmost record for this species), and an undescribed brownish *Hallaxa* species. The undescribed *Flabellina* sp. 3, *Aegeres exeches*, *Hallaxa michael* and *Doris cameroni* were also recorded.

Interesting crustaceans included the beautifully coloured amphipod shown below and also a single specimen of *Petrocheles australiensis*.

Unidentified amphipod, Cape Paterson, Wednesday 14 March, 2012. Photo: P. Vafiadis

The brittle star *Ophionereis schayeri* and holothuroid *Lipotrapezia vestiens* were present and the uncommon sea star *Petricia vernicina* was also recorded.

Days 4 and 5 (Harmers Haven and Flat Rocks, respectively) will be reported in upcoming MRG FNN pages.

Further general reading:
Edgar GJ. (2008). *Australian marine life. The plants and animals of temperate waters.* Reed New Holland, Sydney.

P. Vafiadis

Definition of FNCV Membership Categories 2012

Category	Definition	Cost
Family Membership	Up to 2 Adults and 4 Children living at the same address.	$90.00
Single Membership	A single, non-concession card holder.	$70.00
Concessional/Country Membership	A holder of a centerlink concession card, age pension, disability pension etc. (Must provide number) Also Country members.	$54.00
Additional Concessional Membership	Joined to a Concessional Membership, must also be a concession card holder and provide number.	$16.00
Student Membership	Tertiary Student, must provide student ID number.	$27.00
Junior Membership	A Primary or Secondary age student.	$25.00
Additional Junior Member	Joined to a Junior Membership, can be parents, siblings etc. at the same address.	$10.00
Schools/Clubs	Other Field Naturalists Clubs, plus schools and education groups.	$75.00
Australian Institutions	Corporate/Business, Tertiary institutions and University Libraries within Australia	$135.00
Overseas Institutions	Tertiary institutions and University Libraries not within Australia	$145.00
Long Term Members	Members with continuous membership of the Club for 40 years are entitled to pay half price for membership.	
Exchange	This category is for organisations that we exchange publications with.	
Free List	We send our publications to these people free.	
Honorary Member	Members who have contributed to the club over many years.	
Life Members	Members who have paid a sum of money to become Life Members.	

As part of the Future Directions exercise, the FNCV Council has been looking at every aspect of the Club.

Over the years the various FNCV membership categories have evolved and changed and there exists a need to publish a complete definition for each category. Note no fees have changed. This table is published for clarity only. Any queries please contact Hali.

Recent outbreak of necrotic enteritis in free-living Rainbow Lorikeets around Melbourne

Since early March 2012, necrotic enteritis is believed to have been the cause of mortality and morbidity in free-living rainbow lorikeets (*Trichoglossus haematodus*) in at least 14 sites in northern and eastern suburbs of Melbourne, Victoria. At one site, over 32 deaths were recorded. A number of these events occurred in locations where rainbow lorikeets were being fed by members of the public.

Clinical signs included diarrhoea, vomiting, regurgitation, lethargy in addition to birds being found dead. Necrotic enteritis is believed to result from intestinal overgrowth of *Clostridium perfringens* bacteria, associated with carbohydrate overload caused by inappropriate hand and supplementary feeding by well-meaning members of the public (McOrist and Reece, 1992). Poor hygiene is also believed to be a precipitating factor. ***It is recommended that free-living lorikeets NOT be hand fed or supplemented with artificial diets.*** **Reprinted from Birdlife Australia website.**

Field Nats News 220

The Field Naturalists Club of Victoria Inc.
Locked Bag 3 PO
BLACKBURN VIC 3130
Reg.No. A0033611X

PRINT POST PP333964-0003

POSTAGE PAID AUSTRALIA

Five photos below from Geology Field Trip to Western Port Bay see

Bonus email page

Basaltic bombs embedded in cliff face. Shoreham Beach

Settlement Point

Jack's Beach. Mangroves with sea grass beds beyond.

Eroding cliffs with basaltic shore platform near Red Bluff

Bass River Delta

Fauna Survey Group remote camera, Mt. Samaria see p 10