Understanding Our Natural World

Field Nats News No. 298

Newsletter of the Field Naturalists Club of Victoria Inc.
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July 2019

From the President

Vale Raymond Harold Power 10/2/1929 - 16/5/2019

Ray was one of our soul mates, so to speak, and his life, interests and activities were aligned with his fellow naturalists. His family always thought him to be a little eccentric and the attributes that categorised him thus, would I suspect, make many members of the FNCV eccentrics. He was much loved and appreciated by his family. His niece Amanda and nephew Trevor spoke glowingly at the memorial service of their interesting uncle. I believe he lived a full life until the last couple of years of incapacity which would have been very frustrating for him. Vale Ray Power.

Max Campbell

The deadline for FNN 299 will be **10 am on Tuesday July 2nd.** FNN will go to the printers on the 9th with collation on Tuesday 16th July

Ray Power was an active and valued member of the FNCV for 34 years until his recent death at 90 years of age. Ray joined the Club on 5th April 1985. He was elected to council in April 1993, serving as a council member until May 2002 and as a representative for the microscopy group from 2002 until 2014. One of Ray's most significant roles in the FNCV was as convenor the microscopy group, a position he held for 16 years from May 1993 until June 2009. Between 1993 and 2010 Ray published 38 reports in *Field Nats News* detailing microscopy group meetings, and gave a talk to the group in October 2002.

In 1993 leading up to the move of the club from the Herbarium to its permanent home in Blackburn, Ray was a member of the Relocation Working Group and later, in 1996, a member of the negotiating committee when it was decided to make an offer on the Blackburn property. In November 1997 he became involved in collating *Field Nats News,* a role he continued until January 2014. This entailed ensuring the newsletters were sorted into appropriate categories, completing the required Australia Post paperwork and delivering the trays to the Post Office. Although he had to travel a long distance from Mernda, Ray was always a willing helper at Club functions.

A service to celebrate the life of Ray Power was held on Monday 27th of May 2019 at the historic Carome Homestead, (Photo right) now a restaurant, on the banks of the Plenty River at Mernda. The homestead and farm were Ray's family home. It was fitting that the service was conducted in the beautiful house where he grew up. Ten members of the Club attended and many more sent their condolences. Ray's niece Amanda gave the welcome. Eulogies were delivered by his brothers, John and Keith and his nephew Trevor. FNCV Vice-President, Philippa Burgess, pictured with Ray, spoke eloquently of his work with the FNCV, and her appreciation of all that she learned from him in their shared world of microscopy.

Taken from the order of service,

> *'The three brothers were always a trio and Ray will be sadly missed by his younger brothers John and Keith. For Ray's nieces and nephews, Uncle Raymond was that character Uncle we all had, the Uncle who did things his own way. Uncle Ray had many interests and shared these with us from fishing to gardening and cooking. He was also the Uncle who got into trouble at the dinner table from the Aunts for showing tricks to the kids! Ray often had a wry smile, a story and some sage advice, he will forever remain in our hearts and live on in all our memories.'*

A tribute to Ray Power will appear in a future edition of *The Victorian Naturalist.*

Joan Broadberry with thanks to Gary Presland

Contents

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.

July 2019

Monday 1st - Fungi Group Meeting: Speaker Bruce Fuhrer, mycologist, author and photographer. Bruce will share some of his vast knowledge against a background of outstanding images. Contact: Carol Page 9857 6388; cpage356@gmail.com

Tuesday 2nd - Fauna Survey Group Meeting: *Diversity and conservation of Victoria's galaxiid fishes*
Speaker: Dr Tarmo Raadik, Senior Scientist in Applied Aquatic Ecology, Arthur Rylah Institute for Environmental Research
Contact: Su Dempsey 0437 172 333

Sunday 7th – Fungi Group Foray: *Mount Worth State Park* Meet at 10.30 am at Mount Worth State Park Seaview (Melway Map X912 U8. Vic Roads Map 97 B6). Meet at Moonlight Creek picnic area:
https://parkweb.vic.gov.au/__data/assets/pdf_file/0004/691330/Visitor-Guide-Mount-Worth-State-Park.pdf Google maps https://goo.gl/maps/tSqZbnfFo2o GPS reading at carpark: 38 º 16' 58'' S 146 º 00' 28'' E
Contact: Carol Page 9857 6388; cpage356@gmail.com; ON DAY OF FORAY ONLY 0438 446 973

Sunday 7th – Juniors' Group Excursion: *Mount Worth State Park*, 10.30 am to 3.30 pm with Fungi Group
See Fungi Group entry above for details. Contact: Esther Schouten juniors@fncv.org.au

Monday 8th - Marine Research Group. No meeting: *Winter Break*

Saturday 13th - Fauna Survey Group Activity: *Equipment maintenance day* at the FNCV Hall commencing at 10. 30 am
Contact: Peter Homan 0407 525 103

Tuesday 16th - Collate FNN 299: 10 am in the hall. All welcome. Contact the FNCV office 9877 9860; admin@fncv.org.au

Wednesday 17th - Terrestrial Invertebrates Group Meeting: *To be advised.*
Contact: Max Campbell 0409 143 538; 9544 0181 AH; mcam7307@bigpond.net.au

Thursday 18th – Botany Group Meeting: *Rare Plants in Victoria* Speaker: John Eichler, well-known FNCV member.
Contact: Ken Griffiths botany@fncv.org.au

Sunday 21st – Fungi Group Foray: *Dom Dom Saddle, Yarra Ranges National Park Maroondah Highway, Fernshaw.*
Meet at 10.30 am in the Fernshaw carpark .
https://parkweb.vic.gov.au/explore/parks/yarra-ranges-national-park/things-to-do/dom-dom-saddle-picnic-area Google maps https://goo.gl/maps/QJ1dYLJcfbP2
(Melway Map X912 S1. Vic Roads Map 80 C3) Contact: Virgil Hubregtse 039560 7775; jhubregt@bigpond..net.au

Monday 22nd - FNCV Council Meeting 7.30 sharp: Please send apologies or agenda items to Wendy Gare at the office admin@fncv.org.au

Tuesday 23rd – Day Group Meeting: *Garden Arthropods.* Speaker: Maxwell Campbell, FNCV President. Meet at 10.30 am for coffee and a chat, speaker at 11 am. Contact: Maxwell Campbell 0409 143 538; 9544 0181 AH; mcam7307@bigpond.net.au

Wednesday 24th – Geology Group Meeting: *Our Mesozoic Menagerie: Australia's Dinosaurs*
Speaker: Dr Stephen Poropat, Research Associate at The Australian Age of Dinosaurs Museum of Natural History at Winton; Post-doctoral Researcher, Swinburne University. Contact: Ruth Hoskin 9878 5911; 0425 729 424; rrhoskin@gmail.com

Friday 26th – Juniors' Group Meeting: 7.30 pm *Pollination* Speaker: Maxwell Campbell, FNCV President
Contact: Zoe Burton/ Esther Schouten juniors@fncv.org.au

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

Members' news, photos & observations

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

Welcome
Welcome

Warmest greetings to the following new members who were welcomed at our last Council meeting.

Ari Kohn, Chris Kohn, Paul Elliott, Karlo Lucic, Sierra West, Toby West, Matt West, Cormac Kelly and Kim Wormald

Piptoporus australiensis
(Curry Punk)

Photos: C. Falkingham

This attractive fungus is usually found on dead Eucalyptus trees. It is commonly known as Curry Punk and is a polyporus bracket fungi. It sometimes appears on fire-damaged wood. The fruiting structure has pores not gills, the top of the fungus is pale creamy beige and underneath it is bright orange. It has no stem and is attached laterally to its host. I found my specimen in a dry sclerophyll forest in the Mullum Mullum Valley, Donvale on an old dead tree stump. It has a strong Curry smell and a fairly wide distribution, occurring in W.A., Tasmania, Victoria, S.A. and in two locations in Northern Queensland. According to '*The Field Guide to Australian Fungi'* by Bruce Fuhrer it appears to be immune to insect attack. Would this be due to the curry-like odour? It is usually solitary or in small numbers. It weeps a saffron-yellow juice when wet. According to Tony Young in 'Common Australian Fungi A Naturalists Guide', the juice is excellent for dyeing. I wonder if it was used by early Europeans as a dye for fabric or if it was used by Aboriginal people to flavour food? If anyone can comment on this I would be very grateful.

Cecily Falkingham, Donvale.

Weta

Photo: B. Burns

I regularly travel to New Zealand to visit my daughter and grandchildren. On my most recent trip in April I finally got to see a live, wild Weta. I found this iconic New Zealand species in the garden of my families house in Carterton, a town about two hours north of Wellington.

Weta is the common name for a group of insects endemic to New Zealand. They are a type of giant cricket which are becoming scarce, with many of the 70 species classed as threatened or endangered. Weta, (weta is a word like "sheep" that has the same form when singular or plural), are flightless, nocturnal, mostly herbivorous and despite their fearsome appearance harmless. They are one of the oldest insect species, with fossils dating back to the Triassic period.

My find, a male Wellington Tree Weta's body, was about five cm

(Continued on page 4)

(Continued from page 3)
long with a leg span of eight cm and very long antennae. It is dwarfed by the Giant Weta. The biggest Giant Weta ever recorded was a female which weighed 71 grams, heavier than a sparrow, had a body length of 10 cm and a leg span of 20 cm making it amongst the largest insects in the world. The Maori name for the Giant Weta, wetapung, means 'god of ugly things'

Weta are found in a variety of habitats including grassland, forests and caves. Tree Weta commonly live in preformed holes in trees, called galleries. A gallery may house up to ten adult females and one male. In order to help conserve weta New Zealanders are encouraged to set up weta motels in their gardens by drilling holes in fence posts or blocks of wood. Tree Weta communicate by stridulation: pegs on their hind legs are scraped over comb-like ridges on the side of their body. This produces a chirping sound that they hear through ears on the sides of their front legs.

Tree Weta eggs are laid during autumn and winter and hatch in spring. Like all insects weta need to shed their exoskeleton periodically to grow. Once they hatch they must pass through at least 10 moults before they reach adulthood, This process takes one to two years and then the adult lives for a further 6 to 10 months.

Though weta had native predators including birds, reptiles and bats before the arrival of Europeans, introduced species such as cats, hedgehogs, weasels and rats has resulted in increased predication pressure. Habitat loss is also a big problem. Government programs to prevent extinctions include captive breeding and relocation to predator-free offshore islands. Generally these programs are working well. Ironically the invasive gorse bush that spread widely after has provided an accidental refuge, particularly for the Giant Weta being introduced as a hedge plant in the 1800s, being too dense and thorny for predatory mammals to get in.

Barbara Burns

The Wingless Soldier Fly

Angus and Sue Martin

One sign of the arrival of autumn in our Camberwell garden is the emergence of adult Wingless Soldier Flies, *Boreoides subulatus,* family Stratiomyidae. (Thanks to Ken Walker, Museum Victoria, for advice on identification). The common name is something of a misnomer, since only the female is wingless (or, in the jargon, apterous). Indeed male and female are strikingly different in appearance and could easily be taken for members of different species. The female is much larger and more robust, with a body length of about 20 mm, and she is indeed wingless. Her stout midriff tapers to a terminal abdominal point. The male is about 12 mm in length and has a slender abdomen and a fully functional pair of wings; at first glance you might mistake him for a mosquito.

Photo by Sue Martin: Wingless Soldier Fly trio

The emergence is obvious because the females like to ascend vertical surfaces such as the brick wall in the photo. We presume (but haven't found evidence) that they produce a chemical attractant which spreads widely because of their elevated position. At any rate males appear on the same surfaces and mating follows. The photo reveals the eternal triangle to be present even in stratiomyid society: one male is in the "correct" mating position but another is clinging to the female's back. Was he displaced by a stronger rival, or is he just confused or clueless?

The eggs are said to be elongated and white, but we can't vouch for this. In a related species they are laid in crevices above or close to accumulations of organic matter; whether this is how it happens in *B. subulatus* we don't know. In feeding, the larvae break down organic matter in the soil and they thrive in compost, which our garden provides in plenty. So don't assume Wingless Soldier Flies to be pests: if you're a gardener they're your friends.

Many thanks to those who helped collate and label FNN 297

Hazel Brentnall, Edward Brentnall, Andy Brentnall, Neil McLachlan, Sheina Nicholls, Barbara Burns, Joan Broadberry & Cecily Falkingham

FUNGI FORAY

Ada Tree, Yarra State Forest, 28th April 2019

Not getting lost while winding through the tall eucalypt forests east of Yarra Junction, 12 members gathered at the Ada Tree car park for our first foray of the season. Much of this area is wet forest with *Eucalyptus regnans* (Mountain Ash) among other gum trees and large wattles. The gullies are cool temperate rainforest with *Nothofagus cunninghamii* (Myrtle Beech) and *Atherosperma moschatum* (Southern Sassafras) shading a variety of ferns.

As the climate around Melbourne is trending towards the dry of summer extending well into autumn, there had been little rain in the weeks beforehand, except for what had just fallen overnight and had made the hanging fern fronds dripping wet. The wet night also meant I chose not to arrive early and do my normal exploration before others. Compared to previous forays perhaps a little less abundance was on display but the magnificent rainforest had plenty to give and we were kept well occupied under the ancient trees draped with hanging mosses and lichens.

Omphalotus nidiformis Image: Reiner Richter

A moderately common species is the native *Omphalotus nidiformis*. These are known for their bioluminescence, which can be observed if encountering them at night, giving rise to their common name 'ghost fungus'. They are found on wood of many different species, often at the base of trees. On this trip we saw several with darker caps than usual.

There were numerous *Mycena* species about. Even though they are quite common, I can never go past a spotted *Mycena nargan* in good condition or a nice colony of blue *Mycena interrupta*. *Mycena* 'tiny blue lights' was also present and is one of the most common fungi I have recorded, but it is so small that it stays hidden. Its physical characteristics seem to match *Mycena lazulina*, which was described from Japan a couple of years ago, but their genetic testing was contaminated so we don't know if it matches ours (that have had their DNA sequenced recently). The less common *Mycena toyerlaricola* is only found in leaf litter of *Nothofagus*. The photo left shows them on a soft tree fern trunk.

Mycena toyerlaricola Image: Carol Page

The only Cordycipitaceae we recorded were on small spiders. Members in this family of fungi parasitise arthropods, often insect larvae buried in the ground.

We recorded 74 fungi species – some photos have been uploaded to iNaturalist and can be found in the following project link:\

https://www.inaturalist.org/projects/2019-fncv-ada-tree

Reiner Richter

Cordycipitaceae sp. Image: Reiner Richter

Not a fungi, but found on the Ada Tree excursion
Victaphanta atramentaria Image: Reiner Richter

FUNGI FORAY
Mt Worth State Park, *5th May 2019*

Hericium coralloides **Image: Reiner Richter**

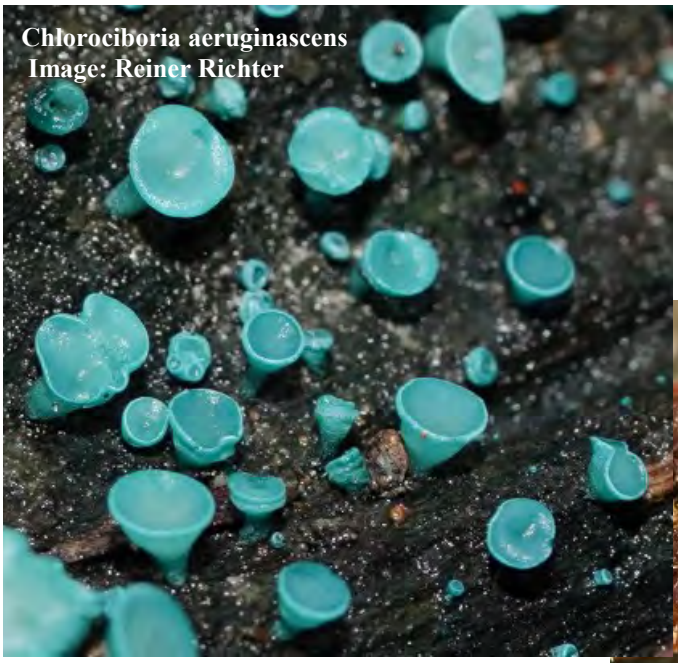
Mt Worth State Park was one of those out-of-the-way places that I passed by and never saw until I joined my first fungi foray there with the Club in 2014. What I missed out on was a fantastic wet forest that even has some southern sassafras and slender tree ferns.

About sixteen members tackled the Giants Circuit before lunch, or I should say 'attempted to' as there is too much to explore in the limited time so some people like me only made it by rushing the last bit to be back to the picnic area by the time my stomach demanded. Even getting to the start of the circuit took its time (although not as long as previous seasons) but I still missed a small but no less spectacular *Hericium coralloides* on the underside of a wattle log. With many eyes more gets found, in this case by Attilio Demicheli.

This is the site where I first observed *Mycena lazulina* (tiny blue lights) and there were, indeed, numerous colonies about. I then started searching for the uncommon *Hispidula dicksoniae*, which also grows on dead soft tree-fern frond stems. It wasn't until lunchtime that I finally found some of these tiny beige disks with spiky-looking fringes. This name appears in *A field guide to Australian Fungi* (by Bruce Fuhrer) but the even rarer fungus pictured is a different member of the Helotiales Order, possibly *Crocicreas sp.*

I remember a couple of years ago the *Podoserpula pusio* (Pagoda Fungus) were magnificent. There was one amazing colony under a gum tree with a few dozen multi-tiered towers but I was never happy with my photos. On this day they were only just emerging in the park – you have to take advantages of such rare opportunities.

After lunch we walked along Moonlight Creek Track, the other walking track leaving the picnic area. I couldn't find any sign of *Physalacria* on a tree where they had been previously in consecutive seasons (so once again probably too early). It was however just right for some *Chlorociboria aeruginascens*, which were in perfect condition. I have always been in awe of the photo for *Ascomycetes* in *A Field Guide to Tasmanian Fungi* – something to aspire to but I don't have good lighting and rarely use a tripod (and setting up for a perfect photo takes time).



Chlorociboria aeruginascens
Image: Reiner Richter

For the day we recorded about 65 identifiable species.
The iNaturalist project page below shows more photos, including observations other than fungi.
https://www.inaturalist.org/projects/2019-fncv-mt-worth

Reiner Richter

Hispidula dicksoniae **Image: Attilio Demicheli**

Fungi Group Meeting 6th May 2019

Investigating toxicity variation in southern Australian yellow-staining *Agaricus* in a phylogenetic context

A presentation by Grace Boxshall MSc

"All mushrooms are edible. Some mushrooms are only edible once"
(Terry Pratchett & Bernard Pearson. *The Discworld Almanak: The Year of the Prawn*)

Agaricus xanthodermus showing square profile of pileus (cap) and yellow staining at base of stipe (stem).
Photo: *Grace Boxshall*.

At this meeting Grace gave a comprehensive description of her investigations into yellow-staining and other *Agaricus* mushrooms, as well as the outcomes of this research, which gained her an MSc degree from The University of Melbourne. Back in September 2017, Grace had introduced us to this interesting and challenging work (see *Field Nats News* 280, November 2017), so we were eager to hear the results.

Worldwide, there are estimated to be over 500 *Agaricus* species, which mycologists using DNA analysis have divided into 25 Sections. We are all familiar with the edible 'supermarket mushroom' *Agaricus bisporus*, which belongs in Section Bivelares, but the genus *Agaricus* also contains poisonous species, particularly those that stain yellow when cut or bruised. Grace's main focus was on these 'yellow stainers', which belong to Section Xanthodermatei, and have a distinctive chemical odour, often described as 'phenolic'.

Agaricus xanthodermus is the most infamous species of *Agaricus*, because it closely resembles edible mushrooms: the square shape of the young pileus (cap) and yellow staining on the pileus and at the base of the stipe (stem) are not always obvious, and many people cannot detect the tell-tale odour. This mushroom, along with others in Section Xanthodermatei, is the cause of 80% of all mushroom-related poisonings reported to the Victorian Poisons Information Centre. Such poisonings are increasing in number, rising from 31 in 2014/2015 to 135 in 2016/2017. Yet although this mushroom is known to be poisonous, causing varying degrees of gastro-intestinal irritation, some people can eat it without ill effect, and in Austria it is actually cultivated for food!

Agaricus xanthodermus showing typical appearance of pileus (cap).
Photo: *Grace Boxshall*

Using chemical analysis, phylogenetic analysis, and a combination of both, Grace investigated the levels of toxicity in many collections of these mushrooms, and found that the principal poisons were phenol, hydroquinone and 1,2-dihydroxybenzene, collectively termed 'simple phenols'. Benzyl alcohol, benzoic acid, urea and butyric acid were also present. Interestingly, some samples from other Sections of *Agaricus* did not contain detectable concentrations of these compounds: phenol and hydroquinone—the most poisonous ones—were restricted to Section Xanthodermatei.

Since the diversity of *Agaricus* species in Australia was virtually unknown, Grace investigated which species are present here in southern Australia, and whether a variation in phenol concentration could account for the variation in toxicity. Surprisingly, it emerged that the **habitat** in which *Agaricus xanthodermus* grows has a significant effect on how much poison the fruit-bodies contain. Those growing in grass contained less poison than those growing with native vegetation. In any case, yellow staining is the best indicator of the likelihood of the presence of poison so, Grace advises, 'If it's yellow, let it mellow'.

Agaricus xanthodermus showing yellow staining on pileus (cap).
Photo: *Grace Boxshall*

This research was the first to quantify 3 specific simple phenols in mushrooms, and in the process Grace developed and optimised a protocol for extracting these chemicals. In addition, Grace placed Australian *Agaricus* taxa in 5 Sections for the first time, and discovered 2 new *Agaricus* species.

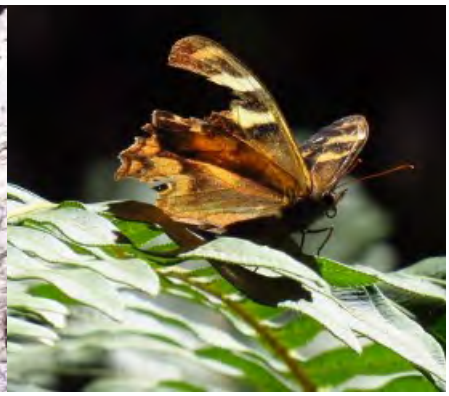
This was an outstanding presentation. Congratulations to Grace on this significant research, and many thanks for a most informative and satisfying evening.

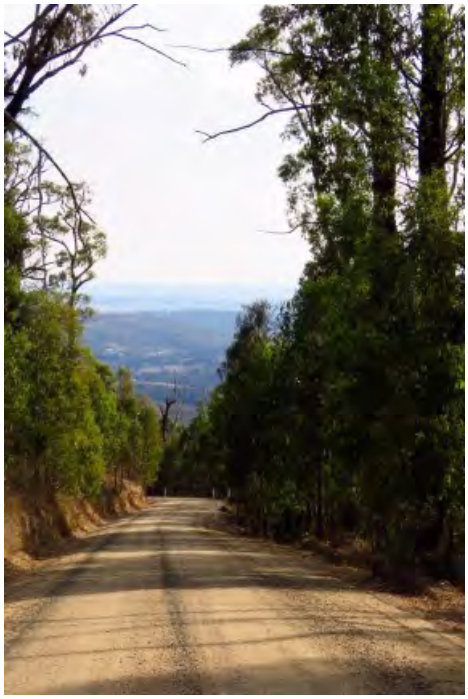
Virgil Hubregtse

TIG excursion to Mt Disappointment 14th April 2019 (*part 2*)

A short report of this excursion was published in the previous FNN (297 p7). Unusually for a TIG report there were no photographs of invertebrates, due to lack of space. Although insects were scarce there were some interesting observations. Found under a log were Bark Cockroaches, *Laxta granicollis*. The sexes are quite different. Female left and male right.

A common species of millipede curled up, and a damaged Common Brown Butterfly are shown below. Finally, although there was no view from the top due to thick vegetation, (the reason it was named Mt. Disappointment,) a view was obtained while driving down the mountain.





Joan Broadberry, Photos: *J. Broadberry*

Thanks to the editorial and layout team who put together FNN 298

Joan Broadberry
Gary Presland
Wendy Gare

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

bookshop@fncv.org.au

for any orders or bookshop queries. If you don't have access to email, the FNCV office will pass on your message. Kathy will then be in contact with you.

From the office Dear Members The office is now up and running again after my fantastic holiday in the Baltics – the sea was like a mill pond, so no sea-sickness to worry about. Colin and I had a great time visiting seven countries and absorbing the vast cultural differences between them. I can recommend it to anyone!

Thank you to Barbara Burns, Andy Brentnall, Joan Broadberry, Su Dempsey and Max Campbell who all helped to fill the gap while I was away.

The printed and digital versions of FNN 298 are the same this month.

Regards, Wendy Gare
Administration Officer

Facebook: Friends of FNCV are now over 13,000

Extracts from SIG reports given at the last FNCV Council Meeting

Fauna Survey Group Meeting, 7th May.

The speaker for the meeting was Alex Maisey, PhD candidate at Latrobe University, the topic was 'The Superb Lyrebird: Farmer, Firefighter, or Ecosystem Engineer.'

How much Lyrebirds modify the environment by turning soil and leaves in their search for invertebrates was the main focus. Surveys were at Donna Buang, Britannia Creek, and Sherbrooke Forest. To investigate the impact of Lyrebirds experimental three m square plots in ash forest, cool rainforest and wet forest habitat were constructed and three different activities simulated. One plot was cultivated to simulate Lyrebird activity, one untouched, and the unfenced plot was left available to wildlife. The invertebrate levels in the soil litter were measured. The plots with simulated Lyrebird activity but without consumption of invertebrates showed increased levels, the fenced, untouched plots no change, and the unfenced plots a slight increase. Many fine photos and recordings about the life of Lyrebirds were also included in the presentation.

There were no organised survey camps in May. **Ray Gibson**

Geology Group Meeting, 22nd May.

Our own Leon Costermans enthralled the 50 attendees at the May geology meeting. Leon continued his 2018 talk entitled "Virtual Excursions" which was designed to encourage audience members to make their own observations and interpretations of photos of interesting geological exposures, as they would on excursions or in their own travels. The 2018 session had focused on Paleozoic features which show the largely deformed nature of the rocks that underlie the whole of our region. This time we concentrated on post-Paleozoic features (Mesozoic and Cenozoic) in the rocks that overlie the Paleozoic bedrock. Of particular significance are the Mesozoic areas of the Otways and South Gippsland hills formed from volcanic sediments in flooding rivers in a long rift formed as 'Australia' was separating from 'Antarctica'. This has given remarkable coastline sections with intriguing features like cannonball concretions. After the separation, the Cenozoic gave us basaltic volcanics and various types of sediments including conglomerates, sandstones, dune sands and limestones, and also faulting that ultimately produced the present landscape, including Port Phillip Bay. Interesting exposures associated with these were drawn from the Mornington Peninsula, the Port Campbell limestone coastline, and several of our extensive volcanic areas.

This was a most interesting and informative talk, and we are most grateful to Leon for the time spent in preparing and presenting the session. **Ruth Hoskin**

Juniors' Group Evening meeting, 26th April.

Michael Gavin Cook spoke about " Wildlife in the Suburbs", which was all about the wildlife you can expect to find at Cranbourne Bushlands. He showed many photos which were taken by the staff and volunteers . Some of the photos were taken by motion sensing cameras showing day and night image.

Animals shown ranged from birdlife (rainbow lorikeets and others), snakes (copperhead baby), lizards, turtles and mammals, (wombats and their burrows, as well as wallabies) including tracks. Feral predators were also caught on camera. Turtle and wombat gates were shown which enabled targeted wildlife to enter the compound but excluded other animals. Michael also showed a video taken by another volunteer which was made with the help of a drone. It flew from Trig Point to try to identify hard-to-find Sallow Wattles which, although native, are a weed in the bush. Unfortunately the resolution wasn't quite high enough as the volunteer was reluctant to fly too near the tree tops. However, it was enough to give some very good aerial footage of the bushland and observers at Trig Point. With all this information we knew what to expect in our excursion.

Excursion to Cranbourne Botanic Gardens, 5th May.

The excursion was well attended with 27 participants including three non-members.

Patricia Amaya

"*For our excursion, we focused on the area surrounding the cultivated gardens, and walked to the hill above it (Trig Point) and some of the wetlands. Trig Point is the highest point in the area and we had uninterrupted views of the city skyline and could see French Island and the Dandenongs. We then walked to the wetland area through large open fields, dotted with copses of native trees. We saw: Sandhill Sword-sedge; Black wattle; Coast manna gum; Scrambly Coral Fern. We found a huge wombat den, but did not see the resident. We also saw a number of Black Wallabies and Black Cockatoos. We set up microscopes to look at some of the interesting things we had found on our walk, including lichen and moss.*

Leader: Michael Cook

The children carried rubbish bags and collected rubbish as they walked and there was chocolate eggs for all those who helped!"

Zoe

Day Group

This newsletter is printed on recycled paper.

Eastern Suburbs Fauna, a pictorial essay. *Speaker: Ian Moodie*

Ian Moodie, Team Leader Environment and Education, City of Whitehorse is a talented photographer and naturalist. His presentation, encompassing a wide selection of photos, most taken locally, in the FNCV's 'backyard' so to speak, was a joy to watch. The population of the City of Whitehorse is increasing steadily, but we are fortunate to retain many parks, reserves and green spaces, including Blackburn Lake Sanctuary, Blackburn Creeklands, Antonio Park and Yarran Dheran. Over the years Ian has recorded a remarkable number and variety of natural history subjects. As this was a visual presentation it is impossible to do it justice through the written word. I will attempt a brief summary and include, with Ian's permission, a few images.

Ian began with stunning series of macro-images of invertebrates: bees, beetles, butterflies, moths, damsel and dragon flies, grasshoppers, hover and robber flies, Christmas Beetle (*photo right),* mantids, stick insects, centipedes, scorpions and spiders. He moved quickly from subject to subject but his brief commentaries always added a greater level of understanding. For example, the Cuckoo Bee (*photo right)* follows the Blue-banded Bee and lays its eggs on top of those the former has placed in a burrow with a food source. Hover flies are probably responsible for a greater amount of pollination than bees. A 'buzz pollinator' vibrates its wings to release pollen.

Next was a set of gorgeous images of birdlife. These included: a Powerful Owl with two young, seen at Shepherds Bush; a Southern Boobook photographed at Yarran Dheran only two weeks ago; a fabulous image of no less than seven Tawny Frogmouths; two Great Egrets with nuptial plumes *(photo right)* ; a Red-capped Robin photographed at Box Hill and, observed recently at Blackburn Lake Sanctuary, a Peregrine Falcon feeding on a homing pigeon with a band.

Ringtail and Brushtail Possums, Echidna, Grey-headed Flying Fox, Eastern Grey Kangaroos and Black Wallabies are still to be found locally. Video showing a group of Sugar Gliders (*photo right)* emerging at dusk, gliding and then landing on a large gum, was an absolute highlight of the presentation. The gliders are living in the wall of Ian's house. He was able to confirm that Sugar Gliders have recently been found in Blackburn Lake Sanctuary. Images of reptiles and amphibians taken locally include: Perons Tree Frog, (identified by the cross-shape pupil of its eye, (*see next page)* Blue-tongued Lizard, Eastern Snake-necked Turtle and Lowland Copperhead Snake.

Ian included many stunning photos of native vegetation in his presentation, far too many to name here. We especially enjoyed images of around 30 native orchid species including the Red-beard Orchid, the Large Tongue Orchid and White Fingers Orchid (*see next page).* Most orchids are still to be found locally but in small numbers. Another botany highlight was the seldom-appreciated exquisite flowers of Spear and Red-anther Wallaby Grass. In his commentary Ian reminded us that the genus name for Cherry Ballart, *Exocarpos*, means seed outside the fruit ─ clearly shown in his photograph. The presentation concluded with some lovely photos of fungi highlighting their form and colour.

As I have said Ian is an expert photographer and was asked a number of questions about his equipment and technique. Ian's photos are al-

(Continued on page 12)

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"Wildlife Experiences provided a unique opportunity to discover the fauna and floral diversity of the region which was greatly appreciated. You both went out of your way to ensure everyone got a great experience" – Ann, KD18

(Continued from page 10)
ways beautifully sharp. He told us they are hand-held, always using manual focus. His photos often have an edge, they are arresting and interesting as they tend to show more than just the subject. For example, a robin on its nest, a Bell Miner feeding on lerps or a collage of six species of Ladybird Beetles.

Ian Moodie has been a great supporter of the Day Group, both as a speaker and excursion leader and once again, on everyone's behalf, I would like to express our thanks.

Joan Broadberry, ***all images: I. Moodie***


Perons Tree Frog


Red Beard Orchid
Calochilis robertsonii


Large Tongue Orchid ***Cryptostylis subulata***


White Fingers Orchid ***Caladenia catenata***
