



Understanding  
Our Natural World

# Field Nats News No.288

Newsletter of the Field Naturalists Club of Victoria Inc.

1 Gardenia Street, Blackburn Vic 3130

Telephone 03 9877 9860

P.O. Box 13, Blackburn 3130 [www.fncv.org.au](http://www.fncv.org.au)

Newsletter email: [fnnews@fncv.org.au](mailto:fnnews@fncv.org.au)



Editor: Joan Broadberry 03 9846 1218

Founding editor: Dr Noel Schleiger

Reg. No. A0033611X

Patron: The Honourable Linda Dessau, AC  
Governor of Victoria

Office Hours: Monday and Tuesday 9.30 am – 4 pm.

August 2018

## From the President

It has been a very cold month so I was quite surprised to see an active, female False Garden Mantis *Pseudomantis albofimbriata* (brown form) stalking prey in the shrubs in my garden (Photos 1 and 2). In my experience, 19 June is late for these insects to be out and about; particularly when the temperature is circa 2–3°C. There was very little to eat other than an occasional calliphorid fly. The only other notable insect visitors included a nice specimen of *Thalaina clara* (Geometroidea, Ennominae) (photos 3) on 15 June. It was very cold and sluggish and an easy subject to photograph. I also noticed an active ladybird beetle (*Harmonia conformis*) (photo 4) on my lettuces on 23 June which gave me cause for concern. On closer inspection I noticed numerous small, Argentine Ants attending a growing population of fat aphids which were being eaten by the ladybird. I am hoping for a plague of ladybirds.

Max Campbell



Photo 1. A seemingly cold-tolerant *Pseudomantis albofimbriata*



Photo 2. Quietly preening and cleaning despite the cold.



Photo 3 *Thalaina clara*

Photo 4. *Harmonia conformis*, also active in the cold weather.



The deadline for FNN 289 will be **10 a.m. on Tuesday 7 August**. FNN will go to the printers on 14th August with collation on Tuesday 17th.

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This newsletter is printed on recycled paper.

## 2018 Biodiversity Symposium

The 2018 Biodiversity Symposium will be held on **Saturday 25 and Sunday 26 August**. The subject this year will be 'Introducing the FNCV'. On Saturday each SIG group will give a brief presentation on its activities and aspirations for the future. There will be a luncheon provided and all activities will be at our Hall. On Sunday there will be an FNCV picnic and get together at Maranoa Gardens. Attendees will bring their own food and beverages.



## CALENDAR OF EVENTS

*All meetings are held at the FNCV Hall, 1 Gardenia St. Blackburn at 8 pm., unless otherwise indicated.*

### August 2018

**Monday 6 – Fungi Group : Meeting: *If it's yellow, let it mellow: yellow-staining Agaricus diversity and toxicity in southern Australia***

Speaker: Grace Boxhall is a Masters student at the University of Melbourne and has just finished the research component of her degree. This is the follow-up from her presentation last year

Contact: Carol Page: 9857 6388; cpage356@gmail.com

**Tuesday 7 – Fauna Survey Group Meeting: *Mammal surveying on the islands in Shark Bay, Western Australia***

Speaker: John Harris, Ecologist/zoologist, Wildlife Experiences

Contact: Robin Drury: 0417 195 148; robindrury6@gmail.com

**Saturday 11 – Juniors' Group: Excursion: *Tree planting at Yellingbo Nature Conservation Reserve***

Meet at 10am at the depot shed, Shield Road, Yellingbo. Bring gloves, gumboots, water, sunhat and wet weather gear.

Registration needed please. Leader: Sue Bendel, Botany Group leader

Contact: Patricia Amaya: juniors@fncv.org.au

**Sunday 12 – Fungi Group: Foray: *Cathedral Range State Park***

Final foray for the year: Meet at 10.30 am at Ned's Gully car park (Mel Ed 45 Map X910 T9)

Contact: Carol Page: 9857 6388; cpage356@gmail.com USE ONLY ON DAY OF FORAY; 0438 446 973

**Sunday 12 – Fauna Survey Group: Survey: *Tile check for reptiles on the Mornington Peninsula***

Contact: David De Angelis: 0409 519 829; ddeangelis@latrobe.edu.au

**Monday 13 – Marine Research Group meeting:**

Speaker: *To be advised*

Contact: Leon Altoff, AH 9530 4180; 0428 669 773

**Wednesday 15 – Microscopy Group: Meeting:**

Speaker: *To be advised*

Contact: Philippa Burgess, 0409 866 389

**Thursday 16 – Botany Group: Meeting: *Fighting back: restoring Australia's biodiversity***

Speaker: Leah Royle, Australian Wildlife Conservancy

Contact: Ken Griffiths: botany@fncv.org.au

**Wednesday 22 – Geology Group: Meeting: *Reading the stories in rocks: a "virtual excursion" to interesting sites Non-geologists welcome!***

Speaker: Leon Costermans, Botanist and Geologist.

Contact: Ruth Hoskin: 9878 5911; 0425 729 424

**Sat 25 & Sun 26 – Biodiversity Symposium:**

*Details to be advised* Speakers 9.30am to 4.30pm Saturday; Lunch & morning & afternoon tea included. BYO picnic on Sunday. For more details see Field Nats News, p. 11 below, or our website. **Prior registration & payment required**

Contact: FNCV office: 9877 9860

**Tuesday 28 – Day Group (10.30am): Meeting: *The Big Five animals and more in Southern Africa***

Speaker: Mark Smith who has travelled widely in Africa

Contact: Joan Broadberry: 9846 1218

**Friday 31 – Juniors' Group: Meeting: *Party Night – Marine Life theme and 'Thank you' to Claire Ferguson***

Bring a plate of party food, and wear a marine costume. There will be games and prizes!

Contact: Patricia Amaya



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

## Members' news, photos & observations

We always have space for member photos and natural history observations. Please share with us what you have noted in your daily life, travels or garden. Email: [fnnews@fncv.org.au](mailto: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:** Miss Ara Lee; Mr Arvin Lee; Ms Janette Han; Miss Amelia Mendes; Mr John Edwards; Mr Richard Paine; Mr Luke Boontjes; Mr John Goldie; Mr Trevor Parker; Ms Wendy Probert; Mrs Carol Challis.

### Notes from the Office

Dear Members,

The Blackburn Lake committee has generously donated to the Club an excellent whiteboard which they no longer use in their community centre. Our old whiteboard is therefore excess to requirements and so is available, free of charge, to any member who would like to take it. It is large, and measures 195 cms high and 195 cms wide, with heavy duty frame and castors.

If you are interested, or if you know of any community group who would like to take it, please let me know in the office ph 9877 8040 or [admin@fncv.org.au](mailto:admin@fncv.org.au)

Wendy Gare  
Administration Officer



Further to Cecily Falkingham's note in FNN 287, regarding stick insects, she has provided the above photograph of the unidentified she saw in the Mullum Mullum Valley. If any of our readers can identify this Phasmid, Cecily would be pleased to have a name for it.

### Notices

**Congratulations** to Phil Bock who was awarded a Medal of the Order of Australia (OAM) in the most recent Queen's Birthday Honours list. The award was made for Phil's 'Service to geology, Marine Biology and the Community'.

#### Errata

The Editor regrets an unfortunate error that occurred in the notice regarding Bob Rowlands, in FNN 287. Bob's late wife was Joan, not Jane as reported. We apologise for any hurt this error may have caused.

### Vale Loris Mitchell

Loris Mitchell passed away on 20 May 2018; she was a member of FNCV from January 1990. She was an active participant in a number of Club's activities, including the Open Day in July 1995, to show off the FNCV's new home, and the Day Group that began in 2009. Loris was related by marriage to a former President of the Club, Stan Mitchell. The FNCV extends its condolences to Loris' family.



## Fungi Group reports

### Some highlights from the FNCV Fungi Group forays near Anglesea, 31 May – 4 June 2018

During this very enjoyable extended weekend, members of the Fungi Group forayed in five areas, namely Gherang Gherang Bushland Reserve (Gherang), Sheoak Picnic Area (Lorne), Lake Elizabeth (near Forrest), Stevensons Falls (near Forrest), and Cecil Track (Anglesea). Although there weren't as many fungi as we saw last year, we were fortunate to find some that we rarely see. A selection of the most interesting species are mentioned below.

#### Thursday 31 May – Gherang Gherang Bushland Reserve

We visited this area in the afternoon and were surprised to see several large white fruit-bodies that looked like some sort of stalked puffball. However, when checked three days later it was clear that they had lamellae (gills), and were in fact *Cortinarius australiensis*. Other much more typical fruit-bodies were found nearby. The presence of a membranous annulus on the stipe (stem) is unusual for a *Cortinarius*, and is an identifying feature of this species.

Also surprising, was a very large group of *Gymnopilus allantopus* with much bigger fruit-bodies than we usually see, but still retaining the characteristic white 'stitching' near the pileus margin plus the pattern of white fibrils on the stipe. We were pleased to find *Austeria* (formerly *Antrodiella*) *citrea*, a fungus that we see only rarely. Its upper surface is bright citric yellow and the lower, spore-bearing surface is white to pale yellow and covered in minute pores.



Young *Cortinarius australiensis*. Photo: Jurrie Hubregtse.

#### Friday 1 June – Sheoak Picnic Area

The most exciting find here was a single fruit-body of *Gymnogaster boletoides* in a gully beside the road. The pileus of this unusual fungus is reduced to a small reddish disc, and the yellow fertile surface turns blue when handled or bruised. This fungus was first discovered by Joan Cribb at Mount Glorious in Queensland in 1956, and appears to be endemic to Australia. Not far from the *Gymnogaster*, tiny yellow Ascomycete discs with spiky margins and very short stipes were growing on a twig. At this stage identification is eluding us.



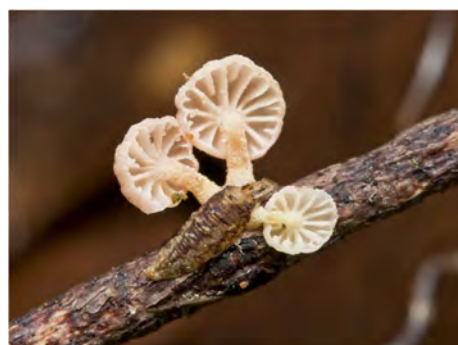
*Gymnogaster boletoides*. Fruit-body showing stipe. Photos: Jurrie Hubregtse.



Tiny yellow ascomycete with spiky margin. Photo: Jurrie Hubregtse.

#### Saturday 2 June – Lake Elizabeth

This location yielded far fewer fungi than we saw last year. Large, conspicuous fungi included *Lepista nuda*, a species of *Melanoleuca*, *Gymnopilus junonius*, *Cortinarius austrovenetus* and *C. clelandii*. The tiny *Mycena roseoflava* was growing on thin twigs, and *M. albidocapillaris* on rachises of tree fern fronds. Yellow-stiped *Hygrocybe* fruit-bodies, some bright red and others brown with a yellow margin, were growing close together on an earth bank near the lake.



*Mycena roseoflava*, lower surface Photo: Jurrie Hubregtse.

**Saturday 2 June – Stevensons Falls and Forrest**

A spectacular *Aphelaria* was the centre of much attention here, because we hardly ever see this fungus. *Tapinella panuoides* was also a new species for some of us. This fungus has lilac mycelium that isn't particularly obvious. It was a pleasure to find *Leucopaxillus lilacinus*, since this is another fungus that seems to be uncommon.



*Aphelaria* sp. Photo: John Eichler.

**Sunday 3 June – Cecil Track**

A good range of fungi was seen along this track, including several types of *Mycena*, one of the most beautiful being a very tiny one with a pileus about 3 or 4 mm across. There are many similar-looking species that are difficult to distinguish from one another.



*Mycena* sp. Photo: John Eichler.

Many thanks to Carol Page, Neil Tucker and Richard Hartland for organising this event, and to Reiner Richter, John Eichler, Pat Grey and Carol Page for recording the species lists. Thank you also to all the participants for helping to find the fungi.

Virgil Hubregtse

## Fungi Group Foray, Silvan, 20 May 2018

This was our first wet foray for the year, and a wide variety of fungi was present – so much, in fact, that some of us didn't cover much ground! Many of these fungi were species we hadn't seen here before, while a number that we expected to see were absent, so we had a very interesting day.

In grass beside Stonyford Road were several large fruit-bodies of *Macrolepiota clelandii* in excellent condition. Near the start of Olinda Creek Track we found several specimens of *Lactarius deliciosus* growing with pine trees. Numerous wood-inhabiting fungi on a pile of eucalypt logs included the white jelly-like *Tremella fuciformis* (which grows on the mycelium of *Hypoxylon* or *Stereum* species on wood), *Hypholoma fasciculare*, *Hypholoma australe*, *Crepidotus crocophyllus*, *Crepidotus eucalyptorum*, 'Little Ping Pong bats' *Panelus pusillus*, the 'cannon ball fungus' *Sphaerobolus stellatus* and several species of *Mycena*. *Rickenella fibula* was growing in moss on ground between the logs; this fungus is always associated with various species of mosses.

In the area dominated by tall *Kunzea* shrubs, we were delighted to find a tiny mauve *Mycena* that was new to us, growing on thin dead pine twigs. Its fruit-bodies were only 3 mm across, but looked magnificent when magnified. Nearby, also on dead pine twigs, was the grey gilled *Resupinatus cinerascens*. *Lentinellus castoreus*, with characteristically serrated lamellae (gill) edges, was growing on a large piece of dead wood lying on the ground.

Further along the Olinda Creek Track, some forayers were fortunate enough to find *Entoloma albidocoerulium*, which we don't see as often as we used to, and a beautiful pinkish

species of *Laccaria* growing in moss near *Holly Ilex* sp. It was interesting to find three species that parasitise moth larvae in the soil: *Cordyceps gunnii* and *Cordyceps cranstonii*, some of the latter growing on *Ophiocordyceps robertsii*. Other non-gilled fungi included whitish brackets of *Postia lactea* on pine trunks, and yellowish brown 'cushions' of *Trichoderma nothescens* (often misidentified as *Hypocrea rufa*). The invasive Madagascan wood-rotting *Favolaschia calocera*, usually orange but yellow in this location, was conspicuous because of its bright coloration.

Rain set in for a while after lunch, sending about half our forayers home, but those who stayed explored a circuit taking in Messmate Track and Olinda Creek Track. Fungi seen in the more open forest included the glutinous, whitish *Cortinarius austroalbidus*, *Gymnopilus allantopus* (distinguished by the white 'stitching' on the margin of the pileus and pattern of white fibrils on the stipe), and 'hedgehog' *Hydnum* aff. *repandum*, which produces its spores on spines. *Cortinarius abnormis* was present in the more dense, damper forest. This species has a yellowish brown, finely fibrillose pileus with a yellowish margin, and a fibrillose stipe with yellow basal mycelium. It seems to be common in many areas this year.

Thank you to all the participants for finding so many fungi, and to John Eichler for information about the afternoon foray. Special thanks to Torbjorn von Strokirch for compiling the species list.

Virgil Hubregtse



*Entoloma albidocoeruleum*. Photo: John Eichler.



*Laccaria* sp. Photo: John Eichler.

## Fungi Foray at Mount Worth State Park, 17 June 2018

Mount Worth State Park is approximately 125 km south-east of Melbourne, and protects a remnant of the forests that once covered the western Strzelecki Ranges. The upper storey comprises principally Mountain Ash *Eucalyptus regnans*, Mountain grey Gum *E. cypellocarpa* and Blackwood *Acacia melanoxylon*, while Soft Tree fern *Dicksonia antarctica* and Rough Tree fern *Cyathus australis* grow in sheltered gullies. The moist conditions create an ideal habitat for numerous species of fungi.

In contrast to our forays earlier this year, this was our wettest so far. Most people were sensible enough to stay home, but a small party of enthusiastic forayers decided to make the best of it. At first the rain held off, and several fungi were found quite close to Moonlight Creek car park. These included *Gymnopilus junonius* at the base of a eucalypt trunk, *Tremella fuciformis* and *Trametes versicolor* on a log, *Mycena kuurkacea* on Blackwood *Acacia melanoxylon* bark, and *Galerina patagonica* on dead wood.

Along the track to the Giants Loop walk we found Blackening Russula *R. ingwa*, Pagoda fungus *Podoserpula pusio*, *Calocera australis* on a post, *Mycena subgalericulata* (light brown in this location) growing in profusion on the bark of living tree trunks, and Tetrapyrgeos (*Campanella*) *olivaceonigra* on a dead grass stem.

The Giants Loop walk did not appear to support a great many fungi. Some were growing on tree fern trunks. These included numerous fruit-bodies of a *Mycena*, brown with mauve tints and a very strong bleach-like odour that faded soon after picking. A species of *Hydropus* was growing on Blackwood trunks where we have found it before, but this time there were very few fruit-bodies.

Rain started in earnest before we finished the walk, and since it showed no sign of easing after lunch, we all departed.

Thank you to all the participants for finding the fungi, and special thanks to Torbjorn von Storkirch for compiling the species list.

Virgil Hubregtse



*Calocera australis* growing on a post. Photo: Virgil Hubregtse.



*Mycena subgalericulata*. Photo: Virgil Hubregtse



*Mycena* sp. on a tree fern trunk. Photo: Jurrie Hubregtse.

## Fungi Group meeting, 6 June 2018

### ‘Hiding in plain sight: Biodiversity of Australasian deceiver mushrooms’

A presentation by **Travis Heafield** MSc, The University of Melbourne

Travis spoke about his study of Australasian species of *Laccaria*, and described in detail how he discovered that one of these species is actually two.

The term ‘deceiver mushrooms’ is often applied to *Laccaria* species because of their variable appearance. Being hygrophantous, their colour changes when they dry out, making them look like a different species. *Laccaria* was recognised as a distinct group in 1772, when, like all gilled mushrooms, they were known as *Agaricus*. The genus *Laccaria* was erected in 1883 by MJ Berkeley and CE Broome. Distinguishing features include the orange-pink colour, thick lamellae (gills) and white spore print.

*Laccaria* species are found in both the northern and southern hemispheres, and several are native to Australasia. They are epigeous (grow on the ground), while their close relatives *Hydnangium* and *Podohydangium* are hypogeous (grow in or under the ground). All belong to the family Hydnangiaceae, and all are ectomycorrhizal, forming symbiotic relationships with many ecologically and economically important tree species. They do this by forming a mat that surrounds plant roots without invading the root cells, and thus effectively control the movement of water and nutrients from the soil to the roots. Eighty per cent of woody plants grow with fungal partners; the Hydnangiaceae are considered promiscuous, forming relationships with many different hosts. *Laccaria* is reputedly easy to culture and is widely used in mycorrhizal research.

In Canada, *Laccaria bicolor*, which grows with pines, is known to ‘prey’ on springtails (Collembola), using the nitrogen in their bodies to help the growth of its mycorrhizal partner!

Travis’s Masters project aimed to: (1) investigate possible cryptic speciation in Australasian Hydnangiaceae, (2) expand upon previous work to establish species boundaries, (3) look into any biogeographic patterns with regard to species occurrence, and (4) test the usefulness of herbarium specimens of Hydnangiaceae as a source for genetic sampling.

Travis started his project by sampling herbarium specimens. The oldest useful specimen was from 1907, and the newest from 2016. Sixty-nine field collections from Victoria were also tested. Genome extraction, involving the amplification of three common fungal markers (barcodes), resulted in 125 new sequences, of which approximately 82% came from field collections, only about 14% from herbarium collections, and the remainder from preserved isolates (i.e. DNA extracted in previous studies – mostly by Elizabeth Sheedy, but also some by Teresa Lebel – that have been kept at -80°C). Travis used these isolates to sequence other missing genes.)

This work revealed that *Laccaria* sp. E is actually two species, which are indistinguishable in the field but genetically different and live in different habitats. *Laccaria* sp. E1A lives only with *Eucalyptus*, *Nothofagus* and *Leptospermum* species in damp forests in south-eastern Australia. By contrast, *Laccaria* sp. E1B lives in three habitats: on the north island of New Zealand it is found in stands of native *Leptosper-*

*mum*; on the south island of New Zealand it is found mainly in native forest under Myrtaceae (such as *Kunzea ericoides*) and introduced *Eucalyptus*; and in Australia it is found under Myrtaceae such as *Eucalyptus* and *Leptospermum* in parks and reserves, but has not been observed in native forest. This *Laccaria* appears to have originated in New Zealand.

Travis’ work demonstrated that (1) comprehensive genetic data can detect cryptic species (it is possible that there are more of these in the Hydnangiaceae); (2) herbarium specimens can’t reliably provide the genetic data; and (3) field work, using the latest classifications, remains an important part of biodiversity research.

Additional work will include: further analysis of data; new approaches for herbarium specimens; protocols for lodging collections (i.e. at the time of lodgement, making a DNA extraction that can be stored for future studies; and also to look more closely at other preservation methods such as freeze drying); writing a paper formally describing *Laccaria* sp. E and other identified taxonomic units; and updating field guides according to the latest taxonomic data.

Many thanks to Travis for a very interesting and informative evening, and for assistance with preparing this report. We are always eager to hear about current fungal studies.

**Virgil Hubregtse**



Distribution of *Laccaria* spp. in Australia. Each point represents a record such as a Herbarium specimen or sighting. (Source: Atlas of Living Australia website at <http://www.ala.org.au>. Accessed 21/08/2016)



*Laccaria* sp. E. Photo: C. Shirley (NZL).



# Botany Group

## Report of meeting, 17 May 2018. Maxwell Campbell speaking on 'Pollination and Pollinators'

Pollination biology and its clear relationship to sexual activity made it a difficult subject in Victorian times. The notion that plants might have sex lives was too much for the genteel society of the time. Research was, to some degree, prevented by prudery, religious beliefs and ignorance. Plants were always considered to be pristine and beyond immoral doings. Understanding was long delayed as a consequence. The invention of microscopes greatly assisted in the objective study and resolution of plant reproduction. As it turns out, plants seem to have tried every form of experimental sex and would put the Kama Sutra to shame.

Life is essentially symbiotic; inter-relationships of dependency can be observed virtually everywhere including pollination biology. Pollination is, in a general biological sense, simply a specialised case of microspore dispersal. In higher plants the seeds, an arrested developmental stage of the diploid sporophyte, are the principal dispersal units. With the breakup of Pangea there developed more, new climatic zones including dry, desert-like conditions to which angiosperms were better able to adapt than earlier plants with their limiting reliance on water and wind for pollination. Angiosperms evolved many, often complex relationships with pollinators that guaranteed their unprecedented radiation and success. The large, tough angiosperm seed facilitated their spread to all environments. This resting, quiescent stage as seeds enabled angiosperms to weather dry periods and cold winters alike. The seeds of *Canna indica*, for example, are so hard and resistant to damage that they were used as ammunition during military campaigns. They happily germinate even after being fired as shot gun pellets. Seeds can last for many years waiting for ideal conditions so they were well-suited to taking advantage of the less hospitable environments present after the breakup of Pangea.

Pollinators didn't simply arise with flowering plants; insects such as beetles were already eating and dispersing the pollen of gymnosperms and cycads and were almost pre-adapted to be pollinators of the later angiosperms. Early pollinators were messy feeders and in the beginning spread pollen from flower to flower by accident. Some cycads today appear to have insect pollinators that may simply be accidental or fortuitous. Beetles still pollinate the primitive angiosperm *Amborella*, which diverged from the main angiosperm lineage some 130 myBP. Once angiosperms appeared circa 140 myBP the planet and its biota were to change dramatically. The various levels of adaptation of both plants and their pollinators that have evolved since then are complex and variable.

Terminology covered:

- Polyphily – pollination by many taxa of visitors;
- Oligophily – pollination by some related taxa of visitors;
- The level of adaptation to specific visitors (euphily) is

also variable. Monophily – a single specialised pollinator.

Types of pollination:

Abiotic –

- Anemophily – wind pollination
- Hydrophily – water pollination

Biotic – via animals:

- Insects in general (Entomophily)
- Beetles - Cantharophily
- Flies – Myiophily – there are some claims that flies are the principal insect pollinators.
- Ants – Myrmecophily – notorious nectar thieves – ant guards evolved. Ants deter other pollinators to protect resources so may not be so desirable as pollinators from the plant's perspective.
- Bees – Melittophily
- Moths – Phalaenophily
- Butterflies – Psychophily
- Spiders and other predators such as mantids and reduviid bugs that wait on flowers to catch visiting pollinators may also be pollinators themselves.

Vertebrates

- Birds – Ornithophily – Honey eaters, sun birds and hummingbirds with varying degrees of adaptation.
- Bats – Chiropterophily (eg *Agave* plants)
- Small mammals other than bats (eg Honey Possums)

Primary Attractants include:

- Pollen
- Nectar (*Strelitzia* = 3X soft drink sugar concentration in its nectar)
- Oils
- Protection and brood place
- Sexual attraction (some wasps)

Secondary Attractants:

- Odour
- Visual attraction
- Temperature - thermal
- Motion

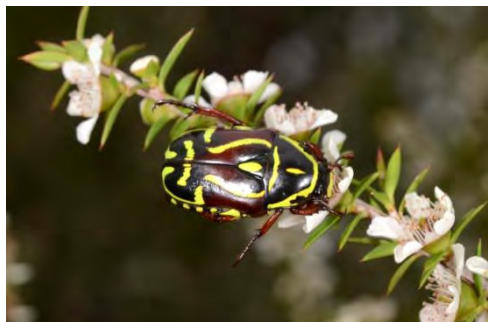
In general plants use deceit, colour, attractants and food rewards to induce pollinators to visit their flowers.

Examples of various adaptations of pollinators were provided including,

- Cuckoo Pint - Wild Arum - *Arum maculatum*
- Titan Arum – *Amorphophallus titanum*
- *Stapelia* spp
- *Rafflesia* spp
- *Orphrys speculum* (*Orchidaceae*) and wasps

- *Xanthopan morgani* (Darwin's Moth) and its orchid *Angraecum sesquipedale*
- *Tegeticula spp* (Lepidoptera) and Yucca plants
- *Salvia spp* and their pollinators (Trigger Plants)
- Buzz Pollinators

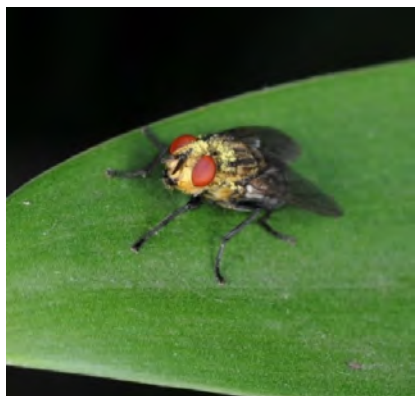
Many images of Australian insect pollinators were also used to illustrate the presentation. [A few of which are reproduced here. *Ed.*]



Fiddler beetle *Eupoecila australasiae*



Lycid beetle, *Porrostoma sp* on Mallee Gum.



Flesh fly, Sarcophagidae, covered in pollen. Flies are important pollinators



Reduviid bug waiting on a flower



## Juniors' Report

### Visit to Mt Rothwell

On Saturday 9 June we had an amazing excursion to Mount Rothwell Biodiversity interpretation Centre. I am pleased to say that participation was great, with a total of 47 members and non members attending this excursion. The vast majority of participants were members, and in many cases, new members! Quite a few of the new families expressed their interest to attend only a week before the excursion (understandably, as they had only recently joined the club). As a result it took a bit of emailing (and time) to put everything in place before this group of new members was able to attend.

I was really happy for these new families to have this opportunity. And this effort was worthwhile, as I could see that all of us—new and old members (including those who had been there before)—really enjoyed this excursion.

We had cold weather, but a great night despite this. The Milky Way was too magnificent to be ignored. Also Venus and Jupiter were easily spotted.

We saw Bettongs, Eastern Barred Bandicoots and Southern Brush-tailed Rock Wallabies (which are on the brink of extinction). Some of us saw a few barn owls flying, looking for prey.

Some members expressed their willingness to come back again and I am happy to organise another excursion next year.

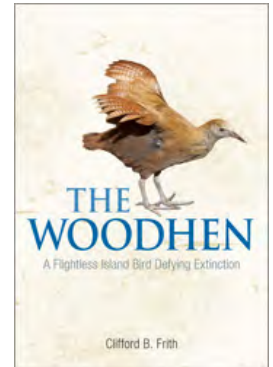
Dr Patricia Amaya



# News from the Bookshop

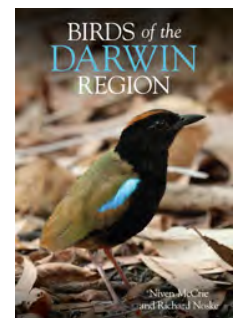
If you are looking for a bargain, then the five books this month are worth a look. Bought whilst on sale, the discounts have been passed down. Stocks are limited, so to grab a bargain, send me an email or come into the clubrooms. These titles and all other books that have been discounted are marked with a 'Special' sticker. Whilst you are at the clubrooms you will notice a slight change in the books on the bookshelf. To make room for the ever growing collection of books we have on display, the secondhand books are no longer on the shelf, but a list will still be available in the catalogue. Come into the clubrooms and have a look at the full range of books available on the shelf or to order or inquire about a book, please send an email to me, at, [bookshop@fncv.org.au](mailto:bookshop@fncv.org.au) and I will reply as soon as I can. Happy reading, Kathy

**Woodhen (C. Frith)** tells the fascinating success story of the saving of the globally significant, iconic, flightless Woodhen of Lord Howe Island. This unique large rail, a highly endangered Australian bird, was at the brink of extinction with just 15 individuals found in 1980, when bold and risky actions were taken to save it. The book begins with the discovery and ecology of Lord Howe Island, then it details the history of the Woodhen and describes the trials and tribulations associated with saving this species. The text is accompanied by numerous photographs and drawings. (HB, 240 pp., 2013) RRP \$39.95, Members **\$31.95**



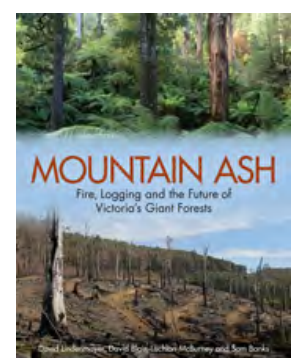
**Australian High Country Raptors (J. Olsen)** covers raptor species that regularly breed in the high country above 600m, from Goulburn in NSW down to the hills outside Melbourne. The author explores the nature of these striking animals, beginning with a description of habitats and vegetation types in the high country and explaining which raptors are likely to be seen in each habitat type. It continues with sections on finding and watching raptors, raptor identification, hunting styles, food, breeding and behaviour and conservation. Illustrated throughout with photographs and drawings, this book offers readers a chance to look into the lives of Australia's fascinating birds of prey. (PB, 336 pp., 2014) RRP \$69.95, Members **\$36**

**Birds of the Darwin Region (Noske & McCrie)** is the first comprehensive treatment of the birds of Darwin, where seasons are defined by rainfall rather than temperature. The book includes descriptions of 258 regularly occurring species and 65 vagrants. Stunning colour photographs adorn the accounts of most species along with distribution maps and charts of the seasonality of each species. (PB, 464 pp., Sept 2015) RRP \$79.95, Member **\$48**



**Australian Lizards: A Natural History (S. Wilson)** takes the reader on a journey through the remarkable life of lizards. It explores the places in which they live and what they eat, shows how they make use of their senses and how they control their temperatures, how they reproduce and how they defend themselves. (PB, 208 pp., 2012) RRP \$49.95, Member **\$24**

**Mountain Ash: Fire, Logging and the Future of Victoria's Giant Forests (Lindenmayer, Blair, McBurney & Banks)** draws together exciting new findings on the effects of fire and post-fire ecological dynamics following the 2009 wildfires in the Mountain Ash forests of the Central Highlands of Victoria. The book integrates data on forests, carbon, fire dynamics and other factors, building on 6 years of high-quality, multi-faceted research coupled with 25 years of pre-fire insights. With spectacular images of the post-fire environment, this book will be an important reference for scientists and students with interests in biodiversity, forests and fire. (PB, 200 pp., Nov 2015) RRP \$59.95 Members **\$30**





# The Field Naturalists Club of Victoria Inc.

*Understanding Our Natural World*

## Biodiversity Symposium 2018

### "Introducing the FNCV"

**Saturday 25 August, venue FNCV Hall, 1 Gardenia St,  
Blackburn 9.30am—5pm**

**Sunday 26 August, venue Maranoa Gardens, Balwyn 10am—3pm**

The FNCV presents a two day program to showcase our Club and its Special Interest Groups. Find out about our past and present achievements, the people who freely give their natural history knowledge and expertise, and how we are currently contributing to "Citizen Science".

On Saturday at our clubrooms, each of our groups will present fascinating insights into their research and other activities.

**Note:** *MORNING TEA, LUNCH and AFTERNOON TEA included on Saturday.*

There will also be the opportunity to purchase books from the FNCV bookshop on Saturday. As usual, there is a member discount on most books in the bookshop.

On Sunday at the Maranoa Gardens we will have guided walks discussing the flora and fauna of the park, with a picnic lunch (BYO) and sausage sizzle (provided).

**HERE IS YOUR CHANCE TO INTRODUCE YOUR FRIENDS TO OUR FANTASTIC CLUB!**

For more information contact Max Campbell 0409 143 538  
or the FNCV office 9877 9860 Mon & Tues 9.30—4 pm or [admin@fncv.org.au](mailto:admin@fncv.org.au)



Name: \_\_\_\_\_

Organisation: \_\_\_\_\_

Address: \_\_\_\_\_ P'code: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Dietary Requirements: \_\_\_\_\_

**Registration & payment  
by 10/8/2018**

Fee: \$20 Number attending

Includes  
GST

PAYING BY (Please tick) : Cash ☐

Direct Entry ☐

*Direct EFT payment option:*

*Bendigo Bank BSB 633-000 Acc No: 123098725*

*Name: The Field Naturalists Club of Victoria Inc.*

*Please use your name with "Symp" as your reference*

Visa ☐ MasterCard ☐ Cheque ☐

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Cardholder's name: \_\_\_\_\_

Signature \_\_\_\_\_

**TOTAL \$**

Return registration form by **10th August 2018**

to : FNCV Inc., PO Box 13, Blackburn Vic 3130

OR : Email to: [admin@fncv.org.au](mailto:admin@fncv.org.au)

## Library News



### Recent acquisitions:

The following monographs have been catalogued recently and are available for borrowing:

Brooker, M.I. & D.A. Kleinig (2016) *Field guide to eucalypts. Volume 2: South-western and southern Australia* [582.16 BRO]

Cabouret, M. (2014) *The early career of Neville Henry Cayley in Victoria*. [920 CAB];

Clode, D. (2018) *The wasp and the orchid*. [920 CLO]. This is a biography of former FNCV member Edith Coleman and her discovery of how some orchids pollinate;

Chapman, B. (2017) *Shark attack: myths misunderstandings and human fear*. [597.3 CHA];

### Recent periodicals:

*Wildlife Research* 45(1) has an article looking at the causes of the decline of small and medium-sized native mammals in Kakadu NP;

*Australasian Bat Society Newsletter* 49 (Late 2017) reports on many bat-related activities around the country. There is a long list (25 pages) of articles relating to bats published in the second half of 2017;

*Muelleria* v.36 (2017-2018) includes articles on truffle-like fungi renamed in *Russula* and *Oudemansiella*, the botanical and mycological contributions of PJ Murphy and Flora Campbell respectively and the taxonomy of *Viola* species.

The latest periodicals are displayed in a rack in the library; the most recently-acquired books are on a shelf at the end of the Archives compactus. You can borrow any of the items that are on display. Don't forget to fill in the appropriate borrowing book.

### Library collections now on the website

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

Gary Presland Hon. Librarian

**Advertising in the  
Field Nats News**  
**VERY REASONABLE  
RATES**

Contact Wendy in the Field  
Nats Office  
admin@fncv.org.au

**Many thanks to those  
who helped collate and  
label FNN 287**

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