



Understanding Our Natural World
Est. 1880

Field Nats News No.253

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

Newsletter email: fnews@fncv.org.au

(Office email: admin@fncv.org.au)

Editor: Joan Broadberry 03 9846 1218

Founding editor: Dr Noel Schleiger

Reg. No. A0033611X

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

June 2015

From the President

Fellow Naturalists, welcome to the June edition of FNN. As a consequence of the Annual General Meeting, I suddenly find myself writing for the front page for the first time; as President of FNCV. Gary Presland's excellent presentation at the AGM, about the history of the FNCV included reference to early excursions to areas of Melbourne's suburbs and their wonderful flora and fauna. I couldn't help reminiscing about my own experiences as a young naturalist.

Being an active naturalist for most of my life, I have always been an avid student of and observer of biodiversity. I have, throughout that time, noticed firsthand the reduction or complete disappearance of species from places where they were, until recently, quite abundant. As a child I saw large numbers of Growling Grass Frogs, large black and green carab beetles, song birds, reptiles, small mammals and native flowers in the outer suburbs of Melbourne. There were even Eastern Quolls in Studley Park. As part of our nature study classes at primary school, we collected and kept Emperor Gum Moth caterpillars to rear and study. Many schools did this to allow the

students to observe the metamorphosis into adult moths. As a "nature monitor" I was charged with the responsibility of collecting eucalyptus leaves for their food each day. The caterpillars could be found on eucalypts, peppercorns and liquid amber trees throughout suburbia. Unfortunately, they are not so common anymore, like many other once common organisms. In a similar fashion, we all collected frogs' eggs and tadpoles to follow their development and ultimate metamorphosis into small frogs. The whole class would regularly check on their progress. There was always great excitement and delight when they grew legs and walked onto the banks of the little ponds we made for them. The nature study excursions in the fields and woodlands around Heidelberg and Rosanna were always interesting. Parrots, birds of prey, water birds and songbirds were complimented by the Chocolate Lilies, Early Nancy, Eggs and Bacon flowers, *Hardenbergia*, orchids, sundews and colourful fungi. Our teachers always asked us to smell the Chocolate Lilies and, of course, we were always amazed. Many of the flowers could still be seen in those days in the school grounds in suburbia and along railways and creeks.

Urbanisation has dramatically increased the size of Melbourne and its suburbs from well past Werribee in the west, to beyond Pakenham in the east and Whittlesea in the north. A check with Google Earth confirms this fact very effectively. The Port Phillip Coast is pretty much fully urbanised. These days I can seldom recognise the wonderful places I visited in my youth. The urban blocks are now much smaller and shrinking rapidly along with their gardens. Concrete, asphalt and

The deadline for the July issue of Field Nats News will be **10 am on Tuesday 2nd June**. FNN will go to the printers on Tuesday 9th with collation on the 16th June.

the ever increasing plastic turf do little to support biodiversity. The increased use of herbicides and pesticides has doubtless contributed to the reduction of invertebrate populations and their predators in suburbia. The arrival of aggressive, invasive species such as Argentine Ants, European Wasps, Portuguese Millipedes and numerous weeds have also had a significant impact. Combined with drastic decrease in vegetation cover, all of these changes have affected biodiversity overall.

(Continued on page 5)



Photo of Max at the recent AGM by Joan Broadberry

Index	Page
From the President	1,5
Calendar of Events	2
Members' news, photos & observations.	3,4
Thanks to John Harris	5
Fungi Group Report: <i>Foray to Cambarville</i>	6, 12
Extracts from SIG reports to Council	7
Introducing the 2015/16 FNCV Council	8
Day Group Report: <i>Nature Close Up</i> .	9, 10
Environment Fund	10
From the Bookshop	11



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

Monday 1st - Fungi Group Meeting: *Describing new species of Cortinarius. My work on a key, Morphology and DNA.* Speaker: Reannon Smith who was a successful candidate for the Jim Willis Studentship and has been working with Tom May at the RBG Herbarium. Contact: Virgil Hubregtse 9560 7775

Tuesday 2nd - Fauna Survey Group Meeting: *Camera surveys in Papua-New Guinea.* Speaker: Dr Euan Ritchie, Deakin University. Contact: Robin Drury 0417 195 148; robindrury6@gmail.com

Friday 6th—Monday 8th – Fauna Survey Group Excursion: *Arboreal mammal survey in the Warby Ranges, North-eastern Victoria.* Contact: Robin Drury 0417 195 148; robindrury6@gmail.com

Sunday 7th – Juniors’ Group Excursion: *Kinglake* with Ranger Tony Fitzgerald. Contact: Claire Ferguson 8060 2474; toclairf@gmail.com

Sunday 7th – Fungi Group Foray: *The Ada Tree, Yarra State Forest.* If travelling east from Yarra Junction, the turnoff to The Ada Tree is Big Creek Road, unsealed, 6 km on the left after the Powelltown General Store. Travel 11 km to a divergence with Smyth Creek Road at Starlings Gap - veer right and stay on Big Creek Road. The Ada Tree car park is a further 12.3 km and signed. Meet there at 10.30 am (Mel Ed 37, Map X912 U3 or Vic Roads Ed 8, Page 80 F6) Contact: Virgil Hubregtse 9560 7775

Monday 8th - Marine Research Group. No Meeting: *Queen’s Birthday*

Sunday 14th – Fungi Group Foray: *Bunyip State Park, Gembrook.* Meet at 10.30 am at the Mortimer Picnic Ground, off the Gembrook-Tonimbuk Road (MEL Edition 37 Map14 R12). Contact: Virgil Hubregtse 9560 7775

Sunday 14th – FNCV Members Working Bee: *Pruning & cleaning the windows.* Meet 10 am at the FNCV hall. Bring tools! All welcome. Contact: Barbara Burns 9846 2608

Tuesday 16th—Collate FNN. Starting about 10.00 am. All welcome. Contact Joan Broadberry 9846 1218

Wednesday 17th - Microscopy Group Meeting: Speaker: Andrew Christie - Lecturer, Aquaculture Program, Melbourne Polytechnic. (Formally NMIT). "Aquaculture and Marine Pest Research : Microscopic Perspectives - Fish diseases, Marine Pests, Temnocephala." Contact: Philippa Burgess 0409 866 389

Thursday 18th – Botany Group: No Meeting.

Sunday 21st – Fungi Group Foray: *Wanderslore Sanctuary.* Meet at 10.30 am at 2180 Warburton Highway, Launching Place (Mel Ed 37 Map 287 J6) Park down below, near the Rail Trail Contact: Virgil Hubregtse 9560 7775

Monday 22nd— FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Wendy, 98779860 or admin@fncv.org.au

Tuesday 23rd – Day Group Meeting: *Members’ Morning* A variety of fascinating presentations from within the group. Contact. Meet at 10.30 am for coffee and a chat. Meeting commences at 11 am. Contact Joan Broadberry 9846 1218 or joan.broadberry@gmail.com

Wednesday 24th – Geology Group Meeting: *Western Port Landforms.* Speaker: Graham Patterson, Author of *Guide to Western Port Bay, Phillip Island and French Island.* Contact: Ruth Hoskin 9878 5911; rroskin@gmail.com

Friday 26th – Juniors’ Group Meeting: *Local Flora and Fauna* Speaker: Ian Moodie from Whitehorse Council. Contact: Claire Ferguson 8060 2474; toclairf@gmail.com

Saturday 27th – Geology Group Excursion: *Western Port Excursion.* Graham Patterson will lead a day exploration of the geology of Western Port leaving from Warneet at 10.30 am. He plans to finish the excursion around 3.30 pm at Flinders. Car pooling will be arranged and further details will be forwarded. Cost: \$3 for members and \$8 for non-members. Enrolments and further details from Graham Patterson 9432 0263 or grahampatterson@bigpond.com

Sunday 28th – Fungi Group Foray: *Woodlands Historic Park, Greenvale.* Entrance off Somerton Rd, meet at 10.30 am in the first car park. Don’t be late as we go through a locked gate (Mel Ed 37 Map 178 C6) WHP 101. Contact: Virgil Hubregtse 9560 7775

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, \$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 in the month.

Welcome
Welcome

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

John Gardiner, Antoni Bedon, Frank Bedon, Sam Green, Matt Green, Emily Green, Will Green, Delphine Vincent, Rosemary Livingstone, Alice Walker, Geordie Scott-Walker, Amy Tipton, Phoebe Burns, Steffan Howe, Elias Howe, Sarah Patterson.

Apology and special welcome to David Hales who joined us in February, but was somehow not listed.

FOSSILS

While looking for fossils along the base of the cliffs near Fishermans Steps, Jan Juc, I noticed this fossil worm tube on a lump of rock. It was only on closer examination that I realised the rock was a whale vertebra heavily encrusted with sediment and fossil marine organisms. Back home I cleaned up the fossil whale bone but left the worm tube that had first drawn my attention. Both whale vertebra and serpulid worm tube date from the Late Oligocene epoch, about 24 million years ago.

Rob Hamson



FNCV Club Jackets - sale

A number of these lovely jackets (*photo right*) are hanging in the hall and are available to try on. They are smart and warm and very appropriate for the next few months of colder weather. Their price has been reduced from \$45 to only \$35.

Jackets can be purchased at meetings through your SIG representative or contact the office.

A photo from my property

This photo symbolizes that we all should get a second chance ... This morning there was a flock of ~100 cockies on my adjoining paddock, about 2/3 Long-billed Corellas and 1/3 Sulphur-crested, with two Galahs – a lovely way to start the day.

The tree is a River Red Gum (*Eucalyptus camaldulensis*) (below) that's been pushed over by long-distant floods, but regrew from prone position. You can see from the boulders in the creek (Back Creek, Redesdale, central Victoria) that it's basalt country; so fertile, but shallow, loams over the bedrock. The adjoining slopes were open woodland to grassland, so the photo bespeaks of occasional heavy downpours (at a decadal or lower frequency) that soon run off and hurtle down the drainage lines.

David Cheal, Redesdale



Thanks to the editorial and layout team who put together FNN 253

Joan Broadberry
Wendy Gare
Sally Bewsher

Thanks to the team who assisted in readying FNN 252 for postage 21/4/15

Sheina Nicholls
Hazel Brentnall
Edward Brentnall
Andy Brentnall
Bruce Fuhrer
Irene Fuhrer
Barbara Burns
Joan Broadberry
Neil McLachlan
Margaret Brewster

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

VALE JOHN SPENCER

The Club recently learned of the death of one of its long-time members, John Spencer, who died on 25th December 2014. John joined the FNCV in June 1990. He mainly attended Geology meetings. Some readers may know of his connection with the CSIRAC computer, now at Museum Victoria. John graduated from the University of Melbourne in 1949 with a BSc majoring in chemistry. He became a scientist with CSIRO and was using CSIRAC in his research on measuring solar radiation from 1959 till 1964. He retired from CSIRO in 1994, but assisted with the setting up of the computer in 2000 at Museum Victoria, where he featured on a video explaining its operation. John remembered the Club in his will, leaving us two microscopes and his geology books and magazines.

FORKED ROUGH TREE FERN

I recently came across this forked Rough Tree Fern (*Cyathea australis*) (photo right) growing in the Mt Dandenong Arboretum (Melway 52, G12). It is about 5 m high with the fork at about 3 m. I don't recall having ever seen a forked specimen of this species before. This 16 ha arboretum, part of the Dandenong Ranges National Park, was established in 1928 and was designed to feature exotic conifers and deciduous trees. The collection includes eight trees that are listed on the National Trust's significant tree register. The pictured tree fern is probably a 'blow-in' from the surrounding native forest, but perhaps should be also on the 'register'!

Peter Fagg, Blackburn



Photo: Eleanor Dilley

CRESTED PIGEON

Whistling wingbeats
flash of iridescence
smoky crest held high
summer grass ripe with seed

you celebrate your territory
with soft murmurings
strut and spread your wings
and sink into a dust bath

an unseen predator
crouching on all fours
also has an eye for beauty
you rise in time on rainbow wings

my heart sings at your escape
and from the safety of a bough
you preen, confident, unperturbed
crest held high and golden eye.

Cecily Falkingham, 2015



**Apology from the editor to Cecily for an error that occurred last month in her report on the Crossback Stingaree*

If you find injured wildlife:
Wildlife Victoria
1300 094 535
Help for Wildlife
0417 380 687
Will connect you to your nearest
suitable wildlife shelter

**PUT THESE NUMBERS IN
YOUR PHONE NOW.**

GET CLOSER TO NATURE

EXCLUSIVELY for FNCV members' and their friends and family. Use code:

FNCV6581

shop at www.opticscentral.com.au or call 1300 884 763

Valid Until 11:59pm, 31/05/2015

* Not applicable to Celestron's range of SkyProdigy, AVX, SGT, CGEM and CGE Pro telescopes
** Some items may not be in-stock and have a short lead time before despatch.

(Continued from page 1)

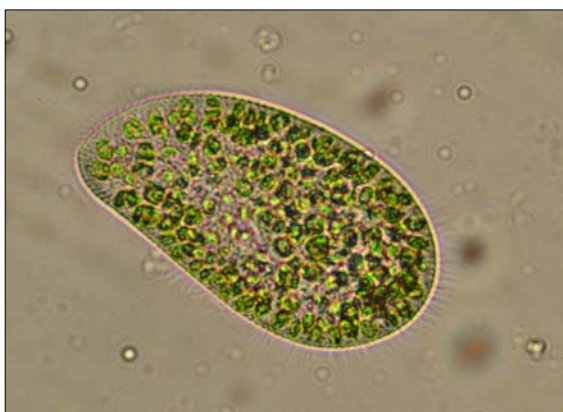
It is still possible however to be pleasantly surprised by the appearance of something quite unexpected in your garden. This week I turned over a small piece of bark from a eucalypt to reveal a couple of tiny pseudoscorpions (see photo below), quietly sitting there. As it

The pseudoscorpion, 3mm in length.



turns out there is a small colony in residence. These small, secretive, cryptozoic organisms are rarely seen in suburbia. I frequently investigate soil and water samples from pot plants, small containers and gutters. Microscopic examination reveals many unusual organisms. It would be a lifetime's work to begin to describe the biodiversity of these micro-habitats. One of the most extraordinary organisms is the *Paramecium bursaria* group of ciliate protozoans which incorporate symbiotic algae, zoochlorellae, within their single cell. (Photo below) At first glance they appear like chloroplasts circulating around the cell like green blood corpuscles. In nature, nothing is as simple as it first appears to be, which is why its study is so compelling and why it is so poten-

Paramecium bursaria



tially dangerous to interfere with. Politicians at all levels use the term biodiversity quite freely without actually understanding what it really means. It extends well beyond a few mammals, birds and trees. It is the total of all species, their interactions, habitat, ecology and biology; all of which has evolved over a very long period of time as a balanced,

inter dependent system. It cannot simply be restored or recreated at a whim once it is gone. Its full complexity is unknowable and is therefore virtually irreparable. A plantation of trees is not a forest.

Many of the problems and issues we face could be assisted by public education; something that the FNCV is well positioned to address in a continuing role. We already do this via Symposia, community activity, meetings and our SIGs. The next Biodiversity Symposium is on 12th and 13th of September and will comprise 16 presentations covering various aspects of the "Impacts on Biodiversity During the Anthropocene". I hope to see you there.

Max Campbell



Thanks to John Harris, FNCV president for the last six years.

John has recently stepped down from a very successful presidency and it is appropriate that FNN pays tribute to his outstanding leadership of the Club over the last six years.

As John himself wrote in FNN 252, there has not been another FNCV president who has stayed in the job for that length of time. In his presidents' column, John has constantly thanked individuals with whom he has worked. It is now time for us to thank him.

John has the rare and outstanding quality of enthusiasm. This is infectious and energises everyone around him. John has an unquenchable, positive, 'can-do' attitude. He has been pivotal in making the FNCV environmentally friendly through the solar power and rainwater tank projects.

As well as his role as President, John has continued on the Fauna Survey Group (FSG) committee, has given many presentations and led camps and activities for both the FSG and Juniors' Group.

John met and married Kathy Himbeck during his presidency and has set up his own business, *Wildlife Experiences*. He is a frenetically busy person, but thrives on doing the work he loves: work that makes the world a better place.

We are very fortunate that John will continue on Council as part of the FNCV leadership team.

The accompanying photo shows John about to cut up a pavlova, which with a small gift (and roses for Kathy), was presented to him at the April Council Meeting. I am not sure if it was the supper or the thought of this being the last Council Meeting he would chair, but John could not stop smiling that evening.

Best wishes John, in all that you do from FNN and the FNCV family.



Fungi Group

FNCV FUNGI GROUP FORAY 26 April 2015 CAMBARVILLE

Wet Eucalypt forest with Mountain Ash.
& Myrtle Beech Forest

Some 14 people gathered on a cool gloomy day for the first foray of the season. We welcomed new members Annette, Eileen and Nick. Around the picnic ground were a number of *Russula clelandii*, unfortunately in various stages of decay although it was possible to see the purple-red cap colour and the faint pink in the stem below the white gills. We added to the destruction by breaking the stem of one to show the 'snapping' made by the round cellular structure. *Mycena* species were abundant throughout the day, especially *M. austrofilopes*

(small, greyish-pale brown cap with a 'bloom') which appeared in large groups. On fallen eucalypt bark was the minute white/grey *M. minya*, and the white *M. maldea* with its associated white rhizomorphs.

Mycena interrupta was found again on the same log as at the previous foray. The rain had washed out a

lot of the blue colour so that some were almost completely white. Near the *M. interrupta* was a small group of *M. kuurkacea* – the Bleeding *Mycena* - and as they were fresh, the stem, when broken, produced a lot of 'blood'.

Back near the car park on a eucalypt trunk were a couple of Beefsteak Fungus *Fistulina hepatica* which was beautifully red and the cap had characteristic radial wrinkles, but two white/cream spongy brackets were growing below and very similar to the red ones above. Jurrie Hubregtse had a couple of interesting points to make. He said that

sometimes the Beefsteak Fungus can be pale which the lower fruit-bodies were. Jurrie then brought to our attention the fact the lower fertile surface consists of a layer of separate tubes and pointed out what J H Petersen had said in *The Kingdom of Fungi*: '... cyphelloid fungi are small cup-, bell-, tongue-, or tube-shaped *Basidiomycota* that hang from wood or dead herbs. Their fruiting bodies resemble those of the cup fungi (*Ascomycota*) but in contrast to these they must point their opening downward to allow the weakly released basidiospores to fall free. When cyphelloid fungi fruit closely together, they may form meta-fruiting bodies by fusing numerous single fruiting bodies. This is the case with the Beefsteak Fungus where each tube may be perceived as the



Above: *Cortinarius metallicus*, Photo: John Eichler
Right: *Nectria cinnabarina*, Photo: Reiner Richter

remnant of a single but now fused cyphelloid fruiting body.'

Reiner Richter had this to say: 'I saw a strange species that produced thousands of white globules along two separate, recently fallen *Atherosperma moschatum* (Southern Sassafras), covering the entire bark of the trunk and branches. As it matures, it starts to produce tiny red (presumably) spore packets. The fungus ages further, which it had done along the twigs, the gelatinous white material dries away leaving behind

the fairly hard, clustered red beads (I estimate each of which is around 0.5mm in diameter). These may be *Nectria*, as suggested by knowledgeable members of the group, but I was unable to confirm this for myself from what I could find on the internet'. Ed Grey added to this: 'While *Nectria cinnabarina* (photo below), species are commonly found as parasites on other fungi. It is possible that these globules are the anamorph (asexual stage) of *Nectria cinnabarina* and the internet (found under *Tuberclaria sporodochium*, in images for this species) names the anamorph as *Tubercularia sporodochium*. This was a most interesting find as we have not seen anything like this before.'

In the afternoon, the group split – some walking to a patch of *Nothofagus* on Cumberland Creek led by Richard Hartland, and others to the Cora Lyn Falls carpark. At the carpark were two fine examples of White Punk *Laetiporus portentosus*, some three meters up a living eucalypt. Around a small, sapling-sized group of *Nothofagus* were numbers of small fallen branches. Several species were found growing on these, including the black *Daldinia* sp. (probably *D. grandis*), numbers of a black *Biscogniauxia* sp. erupted through the bark in patches to 10 mm across,



two small (to 20 mm) patches of the purple *Hypoxylon* aff *placentiforme* and, to Ed Grey's excitement, his first sighting of *Annulohypoxylon bovei* with its distinct growth habit of discrete groups of individual perithecia. The typical truncated cones and raised ostioles were easily seen with a hand lens.

In the Cumberland Creek area Alannah Matheson pointed out the bracket *Ryvardenia campyla* consisting of tiers of overlapping brackets attached to a com-

(Continued on page 12)

Extracts from SIG reports given at the last FNCV Council Meeting

Botany Group: Noushka Reiter presented on the orchid conservation program at the Royal Botanic Gardens. The RBG has been involved in orchid conservation for 8 years and grows 20 federally listed orchids. Victoria has 400 species of orchids, half of these are threatened at either federal, state or locally. There are action statements for FFG and EPBC listed orchids. ANOS has been involved for 15 years, assisting with monitoring and work at the RBG.

Orchids are difficult to grow as they need mycorrhizal fungi. These fungi are located on different parts of the orchids, depending on species, and need to be isolated and grown in a petri dish with the orchid seed. Most mycorrhizal fungi have not been described yet.

Reintroductions of orchids to the wild have been successfully done, but needs to be in phytophthora free areas as phytophthora affects the vegetation that is required by the pollinators. *Caladenia xanthochila*, Yellow-lip Spider-orchid has been reintroduced into Yellow Gum and Grey Box woodlands since 2007 and there has been pollination and seed set. Other orchid reintroductions have been successful too.

RBGC is currently training up volunteers to work in its nursery, since two truckloads of orchids have been moved from Horsham to RBGC. There are opportunities to help with laboratory work, reintroductions and pollinator baiting.

A field trip to a Trust for Nature property in Three Bridges was held in April. We visited the rainforest gully near the creek where plants such as *Dicksonia antarctica*, soft Tree Fern and *Nothofagus cunninghamii*, Myrtle Beech, were seen. An enjoyable morning was spent by all.

Fauna Survey Group: At our April meeting Dan Harley spoke on zoos conservation. Our Easter field trip was to Wilson's Prom. The April Eastern Fauna Focus reptile survey also took place, with a range of species identified.

Geology Group: Dr Peter Jackson talked in detail about the geology of the Flinders Ranges at the Geology meeting on 22nd April. These Ranges were formed in the Neoproterozoic era - very early in the Earth's geology and provided the earliest fossil evidence of life in the Ediacara Hills. The geology was extremely complex, varied, and well documented. I was interested to see it included ejecta from the Acraman meteorite which fell about 590 million years ago around 300 kms from the Flinders Ranges. A most interesting and well presented talk which was well attended, with a larger than usual number of visitors present.

Juniors' Group: Genoa River Easter Camp 2015

We had 45 people attend our Juniors' family Easter camp at Alastair Traill's beautiful property near Genoa in Wangarabell, East Gippsland. Our campsite was a short walk from the Genoa River and set amongst natural bushland with many birds, reptiles and other creatures.

On Saturday morning we headed to Mallacoota, with a stop off at Genoa Falls and Double Creek Arm before lunch and a walk at Betka Beach. We explored Secret Beach where we found many crabs, a dead shark, magnificent rocks and a secret cave. We then had free time around Mallacoota before heading back to camp. After campfire, we observed the total lunar eclipse with the bonus of having John's telescope to view it by.

Sunday morning started with our annual Bilby Hunt, before spending time exploring the camp property / river and playing on Andrey's rope swing and tightrope. After lunch we headed towards Coopracambra National Park to Max James' property where we had a guided tour to learn about the many species of plants and trees in the region and saw many birds also. We then grabbed our swimming gear and headed to what had been promised to us to be the "best swimming hole in Victoria!" It was definitely up there as the best I have seen and, with the glorious weather we had had all weekend, it was a great way to finish our touring part of the weekend.

On Sunday night we were entertained by a variety of acts from the children and adults at our camp fire concert and many Easter egg prizes were consumed. A big thanks to Alastair Traill for preparing his property for us to stay on and being such a welcoming and accommodating host. We all have lots of great memories of our time there.

At our meeting on Friday 24th April we had a great talk from Sally Bewsher about her trip to Svalbard with great photos of the local flora and fauna. Full report in next The Junior Naturalist.

Marine Research Group: Our field work season came to an end in March with four days of activity around Port Campbell. The weather did not help us with large swells, rain and cold weather keeping us from reaching as much of the intertidal area as normal. The scenery of this rugged coast made up for the weather and the climbing up and down cliffs to access the reefs.

(Continued on page 8)

(Continued from page 7)

Our new electronic data collection, along with e-mailing our observations out each evening, worked well and was appreciated by the local Parks and Fisheries offices.

Our April meeting was a field trip roundup, where we looked at the animals we found and the places we visited. Joan Broadberry showed images of the group at work in the field and in the lab, while John Eichler and Leon Altoff showed images of the different animals found during the excursions.

Microscopy Group: Wednesday 15th April Mr Mark O'Loughlin, Senior Honorary Research Associate for Museum Victoria spoke to us on : "Sea Stars and Sea Cucumbers and their reproduction Enhancement Strategies"

Due to their size and the precarious life they live, these animals have had to evolve various specialised methods of reproduction to ensure maximum numbers and highest possible survival rates for their offspring.

Some of the strategies include:

- Close and touching, which groups together a lot of sea stars to concentrate sperm release from top or underneath gonopores. These sea stars at all other times always maintain distance from each other.
- *Smilasterias* sea stars brood gastrically until maturity as brood protection.
- *Coscinasterias* and *Alostichaster* reproduce by splitting in two and can regrow lost arms. Their internal structure multiplies and rearranges prior to this division, so each half is a fully functioning sea star.
- *Parvulastra vivipara*, a threatened species from SE Tasmania, is a rare hermaphrodite that has internal fertilization and embryo protection and the juveniles are born live.
- Tiny sea cucumbers engage in brood protection of the embryos in external 'pockets' around the 'neck'.

This was, of course accompanied by fabulous photographs and narrative.
Try searching *Peter Mark O'Loughlin Research Gate*.



Photo. M. Campbell

INTRODUCING FNCV COUNCIL MEMBERS 2015/16

President: Maxwell Campbell
Vice President: to be decided
Secretary/Public Officer: Barbara Burns
Treasurer: Barbara Burns
Correspondence Secretary: Andrew Brentnall
Councillors: Sally Bewsher, Joan Broadberry, Su Dempsey, John Harris.

SIG Representatives:

Botany: Sue Bendel
Day Group: Joan Broadberry
Fauna Survey: Vacant
Fungi: Vacant
Geology: Ruth Hoskin
Juniors: Claire Ferguson
Marine Research: Audrey Falconer, & Leon Altoff
Microscopy: Philippa Burgess
Terrestrial Invertebrates: Maxwell Campbell

Standing: from left to right: Max Campbell, Sally Bewsher, Audrey Falconer, Leon Altoff, Claire Ferguson, Su Dempsey, Andrew Brentnall, Sue Bendell, Philippa Burgess. **Seated:** Barbara Burns, John Harris, Joan Broadberry

A farewell supper was held after the final Council meeting of John Harris' presidency, when the above photo of the 2014/5 Council was taken. Missing are Ian Kitchen, Ray Power and Ruth Hoskin. Thanks to everyone for your work over the last 12 months.

Congratulations to those who will make up the 2015/16 FNCV Council. As most people are serving consecutive terms, the above photo serves two purposes, as a farewell and an introduction. Ruth Hoskin, who was on holiday in Tasmania, is missing.

The minutes of the FNCV AGM will be published in FNN 254.



Day Group

NATURE CLOSE UP

Speaker: Bruce Fuhrer

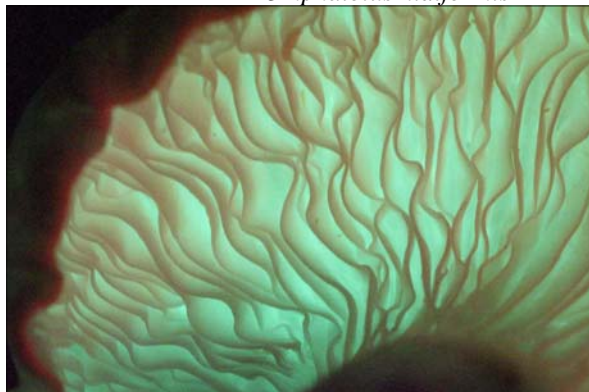
The April Day Group meeting was privileged to welcome Bruce Fuhrer as their speaker. Bruce is well known to us all. He joined the FNCV in the 1960's and was made a life member in 2005. His first book, *A field*



Guide to the Common Genera of Gilled Fungi in Australia, was published in 1978. Since then Bruce has written, (sometimes in collaboration) and illustrated with his magnificent photographs, books on many aspects of natural history. Four species of fungi and two species of liverworts are named for him. He has received numerous awards, including an Honorary Master of Science from Monash University in 1988, The Australian Natural History Medalion in 1989 and an Order of Australia in 2011.

Bruce's choice of topic, *Nature Close Up* was a great fit for the Day Group's generalist natural history focus. He selected about 80 images from his collection and spoke briefly and eloquently about each. Bruce's knowledge of nature is prodigious. We, the audience admired Bruce's stunning photography and at the same time, were gently educated on many fascinating aspects of the natural world. The theme of fungi reoccurred throughout his talk. However, carefully selected groups of images covering

Omphalotus nidiformis



mosses, liverworts, lichen, galls, slime moulds, insects and wildflowers were interwoven between fungi photos. Each image came with its own story, related in Bruce's uniquely entertaining style.

In this report I will attempt only to record a small part of Bruce's presentation. Firstly, he shared with us that the Luminous Fungus, *Omphalotus nidiformis* was the first fungus ever to catch his interest. He was staying in a shack in the forest, and on a night stroll, happened upon a glowing clump. Exciting thoughts of goblins and gnomes came into his mind. The next day he returned to the clump and found an unspectacular, white fungi. He picked a stalk and that night, in the darkness of the shack, its luminous properties were revealed. A beautiful macro, time exposure of *Omphalotus nidiformis*' gills accompanied the tale. (photo below, left)

An image that created great interest in the audience was that of *Podaxis berringamensis*. (photo above, right) This fungus grows only on termite mounds in the tropics, for example at Mareeba or on the Atherton Tableland. It reaches an astonishing one foot to 18 inches in height. As it matures its fawn cap splits and falls off, exposing the darker spore mass underneath.

Asterella drummondii (photo right) is a striking liverwort. Its frilled, strap-like bodies are trimmed with black. The green sporophyte is an attractive gas-lamp shape, edged with white. A

macro photo revealed extraordinary detail, including breathing holes or stoma. *Asterella* smells like stale sardines. Bruce quipped that a common name for it might be 'Fishsmella'.



Podaxis berringamensis

A masterly macro image that particularly stayed with me was that of the fine stinging points of the Nettle, *Urtica stings*. (photo right) These needle-sharp, pouched points are of course capable of piercing human skin.



Sphaerobolus stel-latus, a fungus photographed at Warrand-



tye, (photo above) has an unusual method of scattering its spores. It fires or projects them to a distance of up to seven metres, in other words 7000 times its own diameter, by means of suddenly turning its bladder-like membrane inside out.

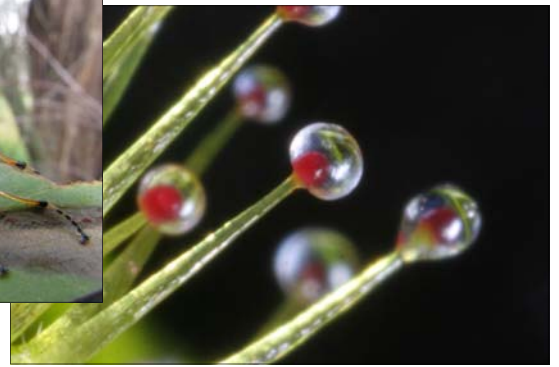
The insect world was represented by the Mountain Sawfly, photographed guarding its eggs. Female sawflies possess a rear appendage with which they cut a slit in a leaf into which they then deposit eggs. This species also attends its larvae. (photo page 10)

Bruce's last group of images were of
(Continued on page 10)

(Continued from page 9)

Drosera peltata. A macro-image of its sticky tip was a particularly beautiful study of nature, (photo far right).

Bruce's talk attracted an audience of 44 people, a record for a Day Group meeting. We were very glad to welcome back Margaret Corrick and also our many visitors. On behalf of everyone, I would once again like to thank Bruce for sharing his work with us. It was a very special treat.



Joan Broadberry

Have you thought of contributing to the FNCV ENVIRONMENT FUND?

The FNCV Environment Fund provides an avenue for tax-deductible donations so that resources can be directed to **small worthwhile projects to help the environment, which otherwise may not be funded**. Between 2004 t - 2015, the Environment Fund made an amazing **47 grants** of from \$200 to \$1000. Grants go to other Field Naturalists' Clubs, community groups and individuals (often students). Some grants also go to our own Club. The 2014 and 2015 grants are set out below and show how small amounts of money can achieve a lot.

2014 Grants

- FNCV Botany Group. Conservation of the Maroon Leek-orchid. Clyde Grassland. \$752*
- Yarran Dheran Nature Reserve. TV, \$981*
- Nature Watch - VNPA, Motion Sensor Camera, \$800*
- Wildlife Experiences, Investigation into the stygofauna of Port Campbell Limestone, \$945*
- FNCV, Juniors and Terrestrial Invertebrates Groups, microscopes, \$990*
- Dr Graeme Lorimer, Illustrated Identification Key for Vic Stipoid Grasses, \$1000*

2015 Grants

- Andrew Christie, Lecturer Melbourne Polytechnic: Survey of marine pest species, the Giant Fanworm, at the Point Cook Marine Sanctuary. Students from the Polytechnic and Marine Care Point Cook will be involved in the project. \$778. (Right photo of Andrew receiving his cheque at the recent AGM)*
- Darcy Watchorn, Honours student Deakin University: Study of the breeding behaviour of free-ranging koalas in the Otway's. \$500*
- Binginwarri Landcare Group: Ongoing work on a database of indigenous species for several differing geographical areas within the district. \$505*



Donations to the Environment fund were down in 2014, from a normal level of about \$3,500 per year to only \$1500. This seems to be because more FNCV members are paying their subscriptions online and overlooking their customary donation. If you are making a donation at the same time as paying your membership on line, in addition to the direct payment, you need to send an email to Wendy at admin@fncv.org.au to explain the split of your payment between membership and the Environment Fund donation.

To make a donation to the Environment Fund at any other time either:

- mail a cheque to the FNCV, Box 13, Blackburn Post Office, Blackburn 3130 or,
- pay directly into the FNCV bank account. Bendigo Bank, BSB 633-000 A/c Number 123098725 . Please put in your name and use "enviro" as your reference.

When you donate you can be assured that 100% of the money will go to the successful applicants. All administration fees are met by the Field Naturalists Club and all time spent on the fund is voluntary. For a number of years I have acted as secretary and treasurer to the Environment Fund. My involvement has been an eye opener to me in the Fund's effectiveness in channelling relatively small amounts of money towards really worthwhile projects that assist the environment. I have seen that it is not always necessary to spend large amounts of money to make a difference.

If you have any questions

please contact Barbara Burns (Environment Fund Secretary and Treasurer) 0425 842 489 or 9846 2608.

NEWS FROM THE BOOKSHOP (June 2015)

As the weather cools down and the rainfall becomes more frequent, it is the perfect time to go hunting fungi. There are several field guides available on the bookshelf to assist you in the identification of fungi. The two mentioned here are just examples of what is available. *The Biggest Estate on Earth* is a title that I have been interested in a while and I was very glad when a member requested a copy. It is a very interesting read, but I only have limited copies. More can be ordered in. Two new books (*Pigeons & Doves* and *Reintroduction Biology*) are being released soon and if you would like to purchase a copy you will need to submit an order as they will not be available on the shelf. Managing the bookshop is a voluntary role and I greatly appreciate your patience and feedback. If there is a time frame on a book request let me know and I will endeavour to meet your requirements. If you have any questions, would like to order or inquire about a book, please send an email to me:

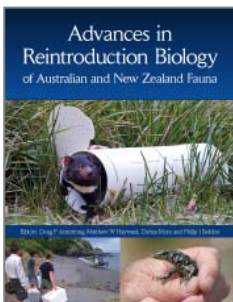
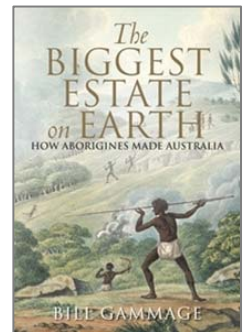
bookshop@fncv.org.au to submit your order or make an enquiry.

Kathy Himbeck



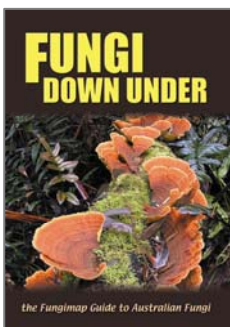
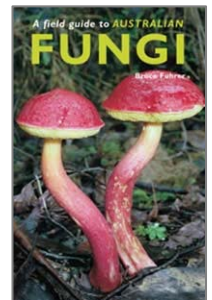
Pigeons and Doves in Australia (Forshaw & Cooper) provides a summary of the current knowledge on this group of birds that are possibly the most successful urban species. The book includes superb artwork of birds in their natural habitats. Detailed information on management practices for all pigeon and dove species is presented providing a valuable reference book (HB, 360 pp., 2015) RRP \$185, Members \$152

The Biggest Estate on Earth: How Aborigines Made Australia (Gammage) is a winner of the 2012 Queensland Literary Award for History. The book explodes the myth that pre-settlement Australia was untamed wilderness revealing the complex, country-wide systems of land management used by Aboriginal people. Bill Gammage sets the record straight on Aboriginal management of fire and how we can and should learn from them. A highly recommended book for most Australians. (PB, 384 pp., 2012) RRP \$39.99, Members \$32.00



Advances in Reintroduction Biology of Australian and New Zealand Fauna (ed. Armstrong, Hayward, Moro & Seddon) is a timely review of our understanding of translocation, ensuring translocation becomes an increasingly effective conservation management strategy in the future. Written by experts, the book includes extensive practical advice and example case studies, identifies emerging themes and suggests future directions. Topics include: prey naivety; disease management; dispersal; genetic diversity; disease management; the contributions of sanctuary networks and zoos; and extensive insights from reintroduction programs. This book is aimed at conservation practitioners and researchers, as well as conservation management agencies and NGOs. (PB, 320pp., 2015) . RRP \$89.95 Members \$74

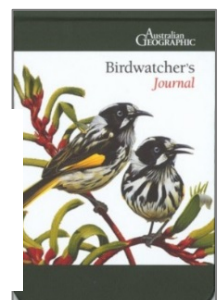
A field guide to *Australian Fungi* (B. Fuhrer) is a definitive guide covering more than 500 fungi species with 548 superb colour photographs. All fungi are photographed in their natural environment with information provided on biology, ecology, classification, distribution, roles of fungi in nature and the spore prints of fungi. This publication will enable people to experience the fantastic world of fungi at a range of levels. (PB, 360 pp., 2010) RRP \$49.95, Members \$39.95.



Fungi Down Under: the Fungimap Guide to Australian Fungi (Fungimap) draws on the work of Fungimap volunteers to describe and illustrate 100 'target' species; species that are easily identifiable in the field. This is a great book for those new to identifying fungi, as each species gets its own page, two or more colour images and a map showing the distribution of the species around Australia, based on Fungimap data. Introductory sections cover the basics of fungal ecology and how to identify fungi. (PB, 146 pp., 2005) RRP \$29.95, Members \$23.95.

Birdwatchers Journal (Australian Geographic) is a practical pocket-sized journal for your bird observations and includes a comprehensive bird list for Australia. This beautifully presented notebook would suit a range of bird enthusiasts from the novice to the experienced observer.

(HB, 2012) RRP \$19.99, Members \$16.00



(Continued from page 6)

mon base. Many of the leaves of fruit-body had rotted, and most of the remaining caps were whitish where the colour had been washed out, but the brown remained in parts on the lower leaves. The pores underneath were pale and broken like jagged teeth. The base had stained blue when Alannah had torn it, thus confirming the species.

We were all excited to see the Steel-blue *Rozites Cortinarius metallicus* (photo p6). Here is what John Eichler had to say: 'I was thrilled to find this species, which has eluded me for many years. I understand it is always associated with Myrtle Beech, and produces fruiting bodies early in the season and is quite rare'. There were several small groups in this area. The species is large and has a very slimy blue-grey cap, with scattered white veil fragments and a large membranous ring on the stem. The *Nothofagus* habitat, larger size, membranous ring and conspicuous white veil fragments on fresh caps, distinguishes it from the Elegant Blue Webcap *Cortinarius rotundisporus* that we saw earlier in the Cumberland Walk in Mountain Ash habitat. Both species had a yellow-brown centre on their blue caps. *Cortinarius metallicus* was formerly called *Rozites metallica* and distinguished from *Cortinarius* at genus level by the presence of a membranous partial veil forming a distinct ring on the stem. However, molecular data link the two groups and *Rozites* is no longer recognised as a genus.

When we came out near the road, we found next to a Victorian Christmas

Bush, *Prostanthera lasianthos*, a deep blue fungus growing in the soil. We spent time looking at it closely and decided that it was an *Entoloma* sp. because of the texture of the cap, and the dimple in the centre. I thought that it was too blue to be the Dark-green Pinkgill *Entolma viridomarginatus*, but Richard mentioned that in this area he had seen them just like this. Looking below the cap, we could see green in the stem and the dark green edge to the gills – an important field characteristic. B Fuhrer number 85 (*A field guide to Australian fungi* 2011) has this to say: 'cap colour is somewhat variable, from yellow-green to brilliant deep blue-green.'

John Eichler had this to say about the green *Hygrocybe* that Reiner had found: 'Reiner took Richard and me to the spot where quite a few specimens at different stages of development were growing. Having seen these, checked Tony Young *Hygrophoracea Fungi of Australia* volume, and reflected on my observations of *H. graminicolor* and *H. stevensoniae* I believe they are *H. graminicolor*. In my experience *H. graminicolor* has a proportionally smaller cap on a relatively tall stipe - the Cambarville specimens had that characteristic. Also, the cap can be brown or green or go brown with age while the cap of *H. stevensoniae* turns pink with age. All the Cambarville specimens were green with two showing hints of brown.'

And finally your homework – what is

this disc on a woody substrate? Disc surface diameter to 4mm, shallow cup, sometimes with indentation in centre, grey drying pale yellow, smooth, margin sometimes inrolled; disc outside yellow rim darkening towards the attachment, velvety; attachment dark and fibrillose; flesh white. (Ed. Please ask Pat and Ed for the photo, it was not included in this report.)

Thanks to all the forayers who found species and helped identify them and thank you to the photographers (John Eichler, Ed Grey, Pat Grey, Richard Hartland, Eileen Laidlaw, Reiner Richter) who supplied photos for the report.

Pat and Ed Grey

Advertising in the Field Nats News

**VERY REASONABLE
RATES**

Contact Wendy in the Field Nats
Office
admin@fncv.org.au
9877 9860
(Mon – Tues 9.30—4)

Field Nats News 253



The Field Naturalists Club of Victoria Inc.
P.O. Box 13
BLACKBURN VIC 3130
Reg.No. A0033611X

**PRINT
POST
100002072**

**POSTAGE
PAID
AUSTRALIA**