Field Nats News No.231

Newsletter of the Field Naturalists Club of Victoria Inc.
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June 2013

From the President

DUE DATE FOR FNN 232—10 am Tuesday June 4th

Hello members and welcome to the June edition of the FNN. It seems that winter is well and truly on its way, with record low overnight temperatures in May. That said, it cannot be all bad, as our Blunt Greenhoods *Pterostylis curta* have just started to break through the ground. Hopefully, if we can keep the snails off them this year, we should have a nice flowering of greenhoods over the next couple of months.

Annual General Meeting
Sunday May 5th saw our AGM take place with all of the usual procedures that go with such an event. Some highlights of the afternoon were the annual Environment Fund grants, the Financial report and our guest speaker Professor David McInnes, CEO of the Earthwatch Institute.

As usual, reports from the recipients of the 2012 Environment Fund grants were tabled and although the Fund is only small, the reports showed the value of the Fund in assisting people with research or education. This year's recipients were on hand to collect their grants; they were Friends of Leadbeaters Possum, FNCV Botany Group (*Prasophyllum frenchii* project), Dr Patrick-Jean Guay (Satellite tracking of Grey Teal) and Lucy Johanson (native bees in the Vic Alps).

There was some good news in the Financial Report as the club operated at a much smaller loss, less than $2000, as compared to more than $17 000 in 2011. Cost savings are largely due to efficiencies made, such as members receiving the FNN electronically and donations. Thanks go to Barbara Burns and Hali for their diligent work in this area.

Professor David McInnes spoke to us about "Citizen Science" and the Earthwatch Institute. It was interesting to hear how EI incorporated individual and organisational volunteers into their many research projects

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FNCV PHOTOGRAPHY COMPETITION

This competition is open to all interested, non-professional, nature photographers.

Two categories: **Nature up-close-and-personal**
Nature from a distance

Great Prizes:
- ***Open:*** First prize $100; Second prize $50
- ***Junior:*** First Prize $25; Second Prize $10
- ***People's Choice***: Prize $50 (x 4)

Entries Open - **Monday 8th April**
Entries Close - **4 pm Mon. 3rd June, 2013.**

Prizes will be awarded at 2 pm on Sunday 14th July at the photographic exhibition

Costs per entry:
Open: Non-Members $7.50; Members $5
Junior: (14 Yrs and under on 8th April)
Non-Members $5; Members $2.50

Terms and conditions & entry forms are available from the FNCV website www.fncv.org.au or at the FNCV office 1 Gardenia Street, Blackburn, or phone 9877 9860. A maximum of four entries can be submitted by each entrant (two per category).

An exhibition of the best photographs will be held on Friday 12th 8.00 pm to 10.00 pm, Saturday 13th 9.00 am – 3.00pm and Sunday 14th July 1.00 pm – 4.00 pm at the FNCV hall, 1 Gardenia

CALENDAR OF EVENTS

All meetings are held at the FNCV Hall, 1 Gardenia St. Blackburn at 8 pm., unless otherwise indicated. On days of extreme weather conditions, excursions may be cancelled. Please check with leader.

June

Sunday 2nd – Fungi Group. ***Fungal Foray –*** 10.30 am, Greens Bush - Baldry Crossing Mornington Peninsula (MEL Edition 37. 254 G6). Contact: Virgil Hubregtse 9560 7775.

Monday 3rd – Fungi Group. Meeting – ***Storm clouds gathering over our forests and rural landscapes, a report card for the Victorian flora.*** Speaker: David Cameron. Senior Botanist with the newly-created Victorian Department of Environment and Primary Industries (DEPI). Contact: Virgil Hubregtse 9560 7775

Tuesday 4th - Fauna Survey Group. Meeting - ***Box-Ironbark Experimental Mosaic Burning Project.*** Speaker: Greg Holland, Research Fellow, School of Life and Environmental Sciences, Deakin Uni. Contact: Ray Gibson.

Saturday 8th – Monday 10th Fauna Survey Group. Survey - Rushworth Forest**.** Maintenance and checking of nestboxes and survey for potential reptile sites. Contact: Ray Gibson 0417 861 651

Sunday 9th – Fungi Group. ***Fungal Foray –*** 10.30 am, Bunyip State Park, Gembrook, Mortimer Picnic Ground, off the Gembrook – Tonimbuk Road (MEL Edition 37 Page 14 R12). Contact: Virgil Hubregtse 9560 7775

Monday 10th – Marine Research Group. No meeting due to public holiday.

Sunday 16th – Fungi Group. ***Fungal Foray*** **-** 10.30 am, Woodlands Historic Park (MEL edition 37 178 C6) WHP 101. Entrance off Somerton Rd. Meet first car park. Contact: Virgil Hubregtse 9560 7775

Tuesday 18th —Collate FNN 221. Starting about 10 am. All welcome. Contact Joan Broadberry 9846 1218

Wednesday 19th – Microscopy Group. Meeting – Speaker: Phillip Littlejohn, ***Friend or Foe? Microlife that inhabit the aquarium. Is there need for Concern?*** Many different genera of microlife can be found within an aquarium, often causing concern to the owners. Whether pathogenic or not, microscopic identification will aid in the correct diagnosis. Microlife abundance and species diversity can also be used as indicators of water quality. Contact: Philippa Burgess 9598 3231 AH.

Wednesday 19h—Grey-headed Flying Fox Survey. Meet at Yarra Bend Golf Course carpark, Mel 2D G7 at 5.15 pm. More information from Rod Van Der Ree (rvdr@unimelb.edu.au), Jo Ainley (j.ainley@unimelb.edu.au) or Ian Kitchen (iankitchen@optusnet.com.au)

Thursday 20th – Botany Group. Meeting - ***Pulse grazing of goats as weed management.*** Speaker: Colin Arnold. Contact: Sue Bendel 0427 055 071

Sunday 23rd – Fungi & Juniors' Group. ***Fungal Foray*** **-** 10.30am, Mt Macedon Ranges National Park **– Sanitorium Lake.** Meet at Sanitorium Lake Picnic Ground (Melway Ed 37 Map X909 G/H 10 more detail in VICROADS Ed 8 Map 60 B 7/8). Drive north uphill on Mt Macedon Road C322 through the town; near top of hill do not turn left on C328 to Camels Hump and Memorial Cross; about 100 m further on C322 turn right on to Barringo Road (first section may be called Lions Head Rd). Picnic Ground is about 1.5 km along Barringo Rd. Contact: Virgil Hubregtse 9560 7775

Monday 24th - FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Hali, 98779860 or admin@fncv.org.au

Tuesday 25th – Day Group. Meeting – ***Antarctica 2011: sustainability, climate and life at Mawson Station***. Speaker: David Morrison (Bureau of Meteorology). Meet at 10.30 am for coffee and a chat, speaker 11 am. Contact Gary Presland 9890 9288

Wednesday 26th – Geology Group. Meeting - Magmatic and phreatomagmatic eruption styles of Mt. Gambier volcanic complex. Speaker: Dr. Jozua van Otterloo, School of Geosciences, Monash University. Contact: Ruth Hoskin 9878 5911

Friday 28th – Juniors' Group. Meeting – ***Snorkelling at Lady Musgrave Island, Queensland.*** Speaker: Trevor Turner. Contact: Claire Ferguson 8060 2474: toclairef@gmail.com

Sunday 30th – Fungi Group. ***Fungal Foray*** **-**10.30 am. Anglesea district. Meet at Anglesea Post Office (Melway Ed 37 Map 514 F6) at 10.30 am. Contact: Virgil Hubregtse 9560 7775

The policy of the FNCV is that non-members pay $5 per excursion and $2 per meeting, to cover insurance costs. Junior non-member families, $2 per excursion only.

Members' news, photos & observations

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

Welcome

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

Amber Johnson, Prue Hasler, Frank Hasler, Maxim King, Anastasia King, Peter King, Oksana King, Phillip Smith, Rose Major, Florence Major-Smith, John Wainer, Ty Matthews.

FNCV Garden

Next working bee: Thurs. 30th May

Thanks to : Sally Bewsher, Heather Eadon, Brendan Murphy, June Anton, Amber Johnson, Barbara Burns, Su & Peter Demsey, Ray Gibson (photo below) for their hard work on 4th May.

The garden is a work in progress and the next working bee is scheduled for Thursday 30th May 2013, 12.30 - 2.00 pm. Hope to see you there!

15/4/13

This photo of a Marbled Gecko was taken in our Oakleigh garden this week. We had also a Praying Mantis (brown) but it was camera shy.

Ken & Michele Hancock

Dear friends,

I am about to undertake my first foray into crowd funding and am very excited. Our project, a partnership between Deakin University and the Tenkile Conservation Alliance, will seek to undertake the first comprehensive camera trapping study of mammals in the Torricelli Mountain ranges of PNG.

More detailed information is available at our site www.pozible.com/tenkile , which has just gone live this morning! We also have a Facebook page https://www.facebook.com/groups/383489768430633/ , and yes, shamelessly we are on Twitter too: @EuanRitchie1 @Tenkile #Tenkile

Crowd funding relies on weight of numbers (donations but also word of mouth/promotion), hence the name. Please consider visiting our site and donating (only if you wish), but just as importantly, spreading the word among your networks.

Many thanks **Dr. Euan G. Ritchie, Lecturer in Ecology, School of Life and Environmental Sciences**

Field Naturalists' Club of Victoria

Presents

Bats - Our Nocturnal Neighbors

24/25th August 2013

With presentations by

Some of our leading researchers.

Venue: FNCV Hall.

1 Gardenia StBlackburn.3130

For registration details or a copy of the program please contact the FNCV office

(03) 9877 9860

www.fncv.org.au

Volunteer needed for a Communications Role within the FNCV

The Club receives a great deal of information about events and activities of an environmental or conservation nature through our relationships with a range of organizations.

We would really love to publicize many of these activities so that FNCV members could have the opportunity of supporting them. This could be done in several ways, including through the website, email or monthly newsletter.

We are looking for someone whose role it would be to regularly collate and summarize what is happening and then pass it on to other members who would update the website or include items in the newsletter.

Important features of this role would be keeping up-to-date and working with others. Some computer skills would be required such as internet and email. If you could do this or would like to talk about what is involved, please contact Hali Ferguson in the FNCV office.

(Continued from page 1)
through Australia and the world. As naturalists we all partake in "Citizen Science" every time we go on an excursion, as the information we collect is added to the volume of scientific knowledge that already exists (and in many cases, doesn't exist beforehand). Thank you David for your informative talk. It is a reflection of your talent to be able to deliver the presentation having only been in the CEO's position for 36 days.

I would like to thank those members who have been re-elected and would like to welcome Su Dempsey and Max Campbell to the Council.

Vale Dr Noel Schleiger
It was very sad news when the FNCV was notified that Noel had passed away on the 24th of April. He had been a stalwart of the Club since joining in 1984. We owe a lot to Noel and Dorothy Mahler, his partner, for their hard work and dedication over many years. In fact, this FNN is their joint legacy as they were the founding editors 231 editions ago.

It was my honour to present part of the eulogy at Noel's funeral on behalf of the FNCV, and all the other naturalist clubs and associations that he was a part of. I am thankful that the Club recognised both Noel and Dorothy last September with Honorary Life Membership.

Solar Panels
We have been talking about them for many months now and eagerly awaiting our first 'bill' since their installation. Well it came in, with a credit of just over $500 dollars for the first three and a bit months of operation. That credit alone covered the shortfall between what had been donated by the members and Councillors of Whitehorse City Council. We have received the credit and it has been banked with excitement J. The panels have produced almost 6000kW hours since they were installed.

John Harris

Vale—Dr. Noel Schleiger 3.10.1926—14.4.2013

That Man Is a Success

That man is a success
who has lived well,
laughed often and loved much;
who has gained the respect
of intelligent men
and the love of children;
who has filled his niche
and accomplished his task;
who leaves the world better
than he found it;
who has never lacked appreciation
of earth's beauty
or failed to express it;
who looked for the best in others
and gave the best he had.

Dr. Noel Schleiger was elected to FNCV on 29 November 1984 and went on to hold the following positions within the Club:

- Council member, 1990 – 2012.
- Vice President, 1998 – 2003, 2009 – 2012.
- Day Group Secretary, 1996 – 1997.
- Editor & founder of Field Nats News, January 1991 – 2012;
- Programme Secretary, 1990 – 1991.
- Activities Coordinator, 1991 – 1998.
- Australian Natural History Medallion Committee
- Environment Fund Committee, 2003 – 2012.
- FNCV representative on the SEANA Committee 1995 – 2012.

Noel was made an Honorary life member of the FNCV in September 2012.

In addition, Noel contributed 19 articles (contributions, reports & book reviews) to *The Victorian Naturalist* between 1990 and 2007.

In 1995 he published, *Roadside geology: a drive of discovery, a trip through time, an explanation of landscape and underlying geological structure: Melbourne to Ballarat* (Melbourne: FNCV/Geological Society of Australia (Victorian Dvn))

TRIBUTE TO DR NOEL SCHLEIGER

During the period 1999 to 2009 when I was Secretary of the Geology S.I.G. Noel was a great support and contributor to the activities of the Group. Of course his involvement in the Group started long before those dates and continued afterwards. During the ten-year period I worked with him, he gave three talks, led four excursions and wrote up eight geology reports for the FNN.

From 2005 he was the Geology S.I.G. representative on the Council, which was a welcome relief for me as the council meetings were almost always on the Tuesday before the geology meeting on the Wednesday. Noel was a person one could rely on; if he was in Melbourne he would be at both meetings, reporting to the Group on Council matters on the Wednesday.

Needless to say, both Noel's talks and the excursions were excellently planned and prepared, informative and very enjoyable. His academic background gave him a deep and wide-ranging knowledge of geology. His observations and explanations were often enlivened with his own brand of geological humour, his puns - for instance "Take it for granite!" (take it for granted).

Rob Hamson

Geology Group

STOP PRESS
GEOLOGY MEETING
May 29th

The Geology group will meet on Wednesday May 29th, (not 22nd as listed earlier).

Speaker: John Bosworth, Museum Victoria. **Topic**: ***Kilauea, Hawaii***.

Contact Ruth Hoskin, 9878 5911

"Could we find signs of life in minerals on Mars"

Dr. Sasha Wilson,
School of Geosciences,
Monash University
27 February 2013

Sasha, a geochemist specialising in the study of the chemical composition of the crystalline parts of planetary bodies, opened her talk by posing the question **"**What is a mineral?" and then provided us with a definition from Nesse (2000) "a mineral is a naturally occurring crystalline solid with a definite, but not necessarily fixed chemical composition".

Then came a demonstration of the making of a synthetic mineral, nesquehonite ($MgCO_3 \bullet 3H_2O$) in a test tube, showing how two solutions found on the Earth's surface, when mixed together could produce a synthetic mineral!

Sasha, in her role as a geochemist, studies how minerals are produced and destroyed by interactions between the geosphere, hydrosphere, atmosphere and biosphere especially at the planetary surface. Minerals can provide a long lasting record of the environmental history of a planet.

In order to look for life forms on other planets we can study how life forms and minerals react on Earth. Life on Earth uses elements such as Ca, Mg, C, P and Si to make minerals for shells, bones and teeth. Life forms, such as algae, trilobites, brittlestars and many other animals, form the mineral calcite, while others, including humans, make bones and teeth predominantly of apatite. Sasha showed examples of such organisms' utilisation of minerals.

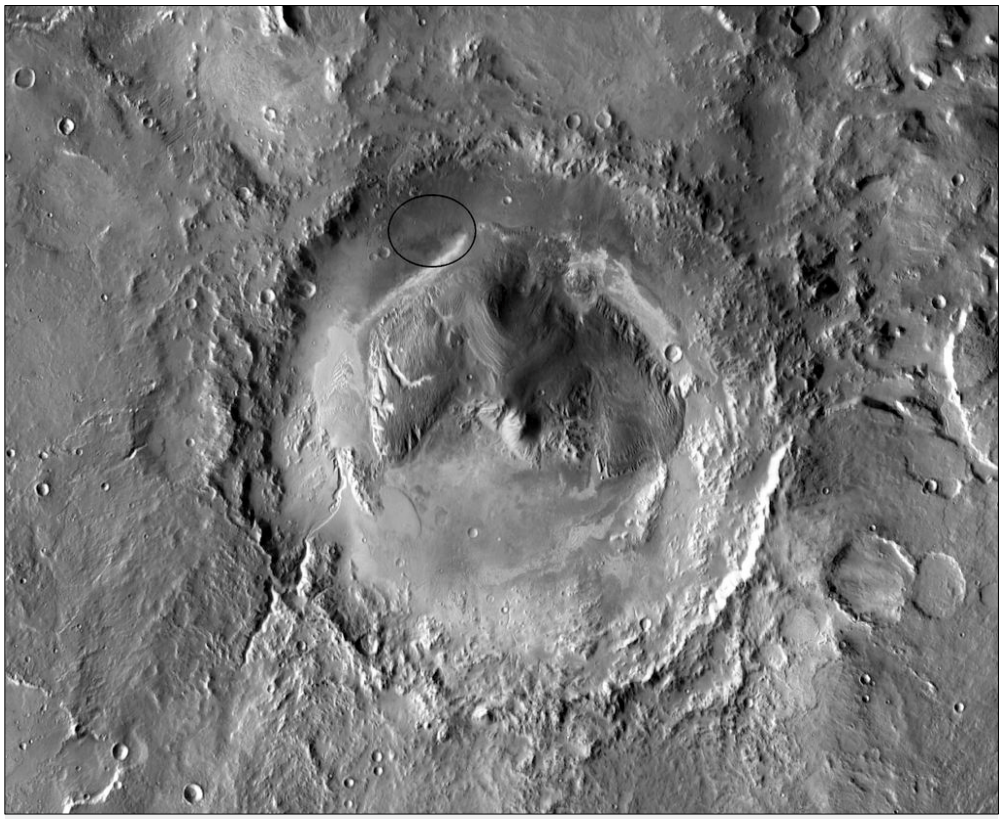
It is thought that life on Earth may have begun using inorganic minerals to provide templates for pre-biotic organic chemistry and to catalyse the production of organic molecules. Such inorganic minerals include smectite clays (hydrated phyllosilicates) and these clays are thought to be common on Mars. Smectite clays can also store nutrients and organic molecules which can be used as food sources for micro-organisms.

Sulphate minerals such as epsomite ($MgSO_4 \bullet 7H_2O$) contain valuable Ca, Mg and are thought to be common on Mars; and on Earth these elements are used by animals for shells, cell function and skeletons. These minerals can trap and preserve living cells or fossils of shells. Micro-organisms on Mars (if they ever existed) could thus have similar relationships with minerals to what we see on Earth.

Studies of the Martian surface suggest that water once flowed on the planet and water is conducive to the development of life. If life once existed on Mars, a good place to look for fossil traces will be in water-borne deposits such as are thought to occur near Gale Crater, the place where the Mars Science Lab landed in 2011. The site also is thought to contain clays and sulphates which may preserve signs of past life.

Our thanks to Sasha for providing us with such an entertaining talk and bringing us up to speed on the search for life through the minerals on Mars.

Roger Needham



Gale Crater on Mars [NASA image]

Field site for the exploratory rover Curiosity, part of the Mars Science Lab which landed on Mars in 2011 (site shown by black oval ellipse in photo) and which found evidence for mineral deposition and erosion by water in a wetter era; minerals that are connected to biological processes on Earth; and a sedimentary record of admixed smectite clays (swelling hydrated phyllosilicates) and sulphates (probably Mg- and Ca-sulphates).

Thanks to those who helped collate and label FNN 230—

Back row, from left- **Sally Bewsher, Edward Brentnall, Ray Power, Andy Brentnall-** *left of table–* **Bob Rowlands, Margaret Brewster, -***right of table, from back* **Hazel Brentnall, Margaret Corrick, Keith Marshall, Sheina Nichols.**

Photographer—**Joan Broadberry.**

This newsletter is printed on recycled paper.

EXTRACTS FROM THE MINUTES OF THE FNCV AGM—held on 5th May 2013

A complete record of the AGM minutes and a copy of the Annual Report 2012 is available from the office.

Welcome—John Harris welcomed 23 members and 3 Visitors.

Environment Fund Recipients and Report

2012 Recipients:

FNCV Fauna Survey Group bought cameras which have been deployed in many locations throughout Victoria. This has resulted in many excellent videos and photos, including 35 species recorded. These include birds, bats, insects and mammals.

Mange Management used their computer mainly for education purposes, speaking to many groups. They continue to treat mange in wombats throughout Victoria.

Maryborough FNC has been using their new projector to show members some of their archival and historical data that they are slowly digitising.

John Patykowski hired a portable photosynthesis system to further his research into the extremely rare *Pomanderis vaccinifolia*. He will be speaking at the October Botany Group meeting**.**

2013 Recipients:

FNCV Botany Group – Conservation of the Maroon Leek-orchid.
Friends of Leadbeater's Possum Inc. - an ipad and a Garmin GPSMAP for recording field data.
Patrick-Jean Guay – 2.5 months of satellite tracking of 4 Grey Teals as part of an ongoing study project
Lucy Johanson – Research on native bees in alpine regions and the production of a field guide.

The following members were declared elected to Council

FNCV *2013 Council:*

President:	John Harris
Vice Presidents:	Jurrie Hubregtse
	Vacant
Secretary:	Andrew Brentnall
Treasurer:	Barbara Burns
Asst Treasurer:	Julie Rewell
Councillors:	Su Dempsey
	Sally Bewsher

SIG Representatives:

Botany:	Sue Bendel
Day Group:	June Anton
Fauna Survey:	Robin Drury
Fungi:	Virgil Hubregtse
Geology:	Ruth Hoskin
Juniors:	Claire Ferguson
Marine Research:	Joan Broadberry
Microscopy:	Ray Power
Terrestrial Invertebrates:	Max Campbell

Photo: J. Broadberry

Presentation by Prof. David McInnes, CEO of Earthwatch. *Photo- right*

David spoke about Earthwatch's program of "Citizen Science". This program engages people, worldwide, in scientific research and education to promote the understanding and action necessary for a sustainable environment.

Earthwatch originated in the USA and is now worldwide. This not-for-profit organisation brings together organisations with funding agencies and the scientific community to further scientific knowledge across a range of areas.

Earthwatch works in partnership to support independent scientific research. It engages people in "hands-on" research and promotes science-based conservation.

Fungi Group

FUNGAL FORAY TO GEMBROOK
21 April 2013

Shrubby Foothill Forest
Two post fire areas;
1 year after the fire.

For our first foray of the season we visited post fire sites. A smallish group of people gathered at the meeting area before driving down to White's Corner to again foray, a year after the fires. Here, despite early concerns that we would find few fungi, we were surprised by the variety and number of species which careful searching found. The ground cover vegetation was starting to recover and litter from the trees was beginning to cover the ground. Seedlings of Hairpin Banksia (*Banksia spinulosa*), Bushy Needlewood (*Hakea decurrens*), Dusty Miller(*Spyridium parvifolium*) and Hop Goodenia (*Goodenia ovata*) were up to 15 cm tall. Sedges were more advanced, and Wire Grass was becoming prominent, but walking through the area was still generally easy.

La Fungi forayers Photo: Bob Rowlands

Mesophyllia glauca Photo: John Eichler

One of the most prominent large fungi was ***Phylloporus rhodoxanthus*** with its brown-orange cap and distinct decurrent yellow gills. All stages of fruit-bodies were seen and one of the largest cap sizes was 150 mm diameter. Three species of *Amanita* were spread through the area - the white buff one had prominent warts and ring, another was white with a ring and both had only ridges to mark the volva, and the third had a yellow cap with flat cottony fibrils.

A large number of groups of red-brown Laccaria species were distributed through the area in the clear burnt charcoal sections. These included *Laccaria* species B**,** identified by the clusters of cells at the top of the stem. A different *Laccaria* with frilly cap and pale floppy gills was probably L. species E (or C).

A single specimen of the tiny, brick-red headed *Cordyceps menesteridis* with the parasitised beetle larva attached, was found lying above the ground, obviously kicked up by some foraging animal. This *Cordyceps* was also found here last year. The more open ground surface contributed to our finding this tiny fungus. It may well be that this *Cordyceps* is not uncommon but that its small size, usually to 15 mm above the ground, means it is lost in the litter.

Some other interesting finds were a single, small *Leucoagaricus ooliekirrus* – an all-white species with a prominent ring on stem (cap turning buff in the centre), a pale white, tinged pale coral – *Ramaria capitata,* one example of *Russula clelandii* a reddish-purple cap with white gills and a pink flush on the white stem and the truffle ***Mesophellia glauca*** with a coating of earth and small stones covering the grey-brown skin enclosing the white spore mass within.

Phylloporus rhodoxanthus Photo: Paul George

After lunch, we drove to the Hansen Creek Track site where few fungi were found even with careful searching (9 compared to 12 last year). Here it was noticeable that a Coral Fern (*Gleichenia* sp) was regenerating strongly, although again, the ground was generally sparsely vegetated. However, it was interesting to find several species on the damp underside of fallen Hairpin Banksia *B. spinulosa* cones. On one were numerous white *Lachnum virgineum*, tiny hairy stalked discs which were scattered over the cone surface and a tiny long stemmed polypore with huge pores visible to the naked eye, possibly a *Porodisculus* sp. On another cone were groups of tiny, flattened, grey, sessile discs – *Mollisia* aff. *cinerea*. Several specimens of ***Fistulinella mollis*** Marshmallow Bolete were found growing in litter and amongst fallen wood. This was an unexpected find as this species is not associated with fire or its aftermath.

Ed Grey

Thanks to John Eichler, Paul George, Richard Hartland, Carol Page and Bob Rowlands for their numerous photos that will be added to the Rangers' report.

FNCV FUNGI GROUP FORAY
Sunday 28th April 2013

The Beeches, Lady Talbot Drive, Yarra Ranges National Park, Marysville

Myrtle Beech, Temperate Rainforest

It is four years after the 2009 bush fire and the burnt debris on the ground is becoming covered with new forest litter and ground covers. Most of the fungi were again found growing on wood. On a very warm and dry day mild, sunny morning our group started this foray on the Myrtle Loop. One of the first finds were groups of *Mycena cystidiosa* with their tall, stately stems and masses of the associated criniform stipes. Several members went down to the Whitehouse Creek in search of the rare Two-toned Pin *Chlorovibrissea bicolor* which had been found in this area on a previous foray. It was successfully found again, growing on a fallen log in running water – its described habitat. This tiny fungus with a yellowish, round head on a slender, dark stem only grows to 20mm high and is very hard to see. In the same area were the thin spikes of *Xylaria hypoxylon* on fallen wood and our favourite *Mycena*, the blue *Mycena interrupta*.

Aurantiporuspulcherrimus
Photo: De'ana Williams

Under one of the picnic tables were two young stages of the Orange Peel Fungus *Aleuria aurantia*. Although this is a distinctive species, our group rarely sees it on forays. We then noticed a bright-red bracket high on the trunk of a Myrtle Beech, *Nothofagus cunninghamii*. This proved to be the Strawberry Bracket Fungus ***Aurantiporus pulcherrimus*** which is strongly associated with *Nothofagus*. Telephoto lenses were needed here! Further along the track were two specimens of the beautiful, purple *Cortinarius violaceous* with purple cap, gills and stem. Brown spores had started to colour the stem. The cap was covered with soil, but no-one thought to check for patches which would have indicated *C.* sp. 'toolangi' that Paul saw in the afternoon on the Meeting of the Waters track.

Over Whitehouse Creek, was a display of the Peppery Coral Fungus *Artomyces austropiperatus* (formerly *Clavicorona piperata*) with its distinctive crenulate ends to branch tips, which then form new branches as the fungus grows. It is one of two species that grows on wood. No-one tried the peppery taste test to determine whether it was *A. piperatus* or *A. colensoi* (a much smaller, finer species)! The colours varied from greyish-purple to milk-coffee. This species does seem to vary in colour - Mark and De'ana recently found a white specimen at Mt. Worth like the one illustrated by Fuhrer 307.

Agrocybe parasitica Photo: Paul George

We were puzzled by numerous examples of largish (to 7 mm diameter) sessile yellow discs growing on mossy, rotting wood. While the substrate pointed to *Bisporella citrina*, the size is way out of the range for this species (diameter to 3 mm) and colour (denser yellow). Thus it is likely that our specimens were *Discinella terrestris* which, while usually found on the ground, is found on wood at the base of mossy tree trunks (Fuhrer 488).

A further puzzle was the find of numerous small, greenish discs growing on rotting wood alongside yellow *Bisporella citrina*. These discs were smooth, with no surface hairs, diameter to 3 mm and sessile (resting stalkless on the substrate and easily removed with a needle). These characteristics do not match – *Chlorociboria* sp.(stalked), *Cudoniella* sp.(stalked) or *Mollisia* sp,(on colour and asci size). These discs will be listed as 'unidentified ascomycete discs'.

A profuse display of the yellow, spiky fruit bodies of *Calocera sinensis* group was found on a fallen, cut eucalypt log. It was interesting, when later looking at a photo of these on the cut end of the log, to see the greyish discs of young fruit bodies of *Mollisia* aff *cinerea*. Amazing what you don't see until you look!

After lunch, we crossed the road walked down the Beeches Rainforest track towards the Meeting of the Waters. While fewer fungi were found, of interest was a mass display of the purple-grey, laterally attached *Pleurotus purpureo-olivaceus*. All states were present from the very young, looking like miniature teaspoons, to mature fruit-bodies showing the grey gills and grey-purple cap. John Eichler and Paul George scrambled past a wood blockage and discovered the distinctive ***Agrocybe parasitica.***. It was found growing on a tree trunk (the tree parasitised by it); the cap is brown, and high on the stem is a distinctive membranous ring often covered with chocolate-brown spores.

Throughout the day we saw specimens of the black *Biscogniauxia* species erupting through the bark of small branches and dead standing saplings. Many thanks to all our forayers and here's hoping for more rain soon.

Ed Grey

Extracts from SIG reports given at the last FNCV Council Meeting

Botany Group: Dr Andrea Kodyn spoke about the propagation of native vegetation with tissue culture. There is a need to propagate "keystone species" for revegetation and biodiversity. These "keystone species" are long lived and prevent weed spread. Species include *Ghania radula, Lepidosperma* spp and bracken fern, which set few seeds or spores and are very slow to propagate by division. Therefore tissue culture is used to propagate many plants at once, from seeds spores or prapagules. These plants are grown in a nutrient solution of water, agar, minerals, sugar, vitamins and growth regulators, at high humidity. Once rooted they are transferred to potting media and grown on in a fog house in tubes, for use in revegetation.

There is also a study of growing female buloke from young tip cuttings, by tissue culture, as this is the food source for the endangered south eastern red-tailed black cockatoo.

Fauna Survey Group: Plains wildlife at Terrick Terrick

Dr. Mark Antos from Parks Victoria spoke to us about research on the fauna of the northern plains of the state, particularly around Terrick Terrick National Park. Surveys have been carried out on the numbers and preferred habitat of fauna such as the endangered Plains Wanderer. The evidence suggests that these birds prefer relatively bare ground and all but disappear after rains and subsequent grass growth. The grazing of sheep seems to provide the most manageable solution to this particular problem, as well as some income. This option is not well received by all sectors of the community.

Eastern Melbourne Parks Project: It appears that we will have sufficient grant money to fund the equipment needed for this project. A trial began this month with 10 cameras and 30 hair tubes deployed in the Cardinia region.

Geology Group: Dr Guy Holdgate, Department of Earth Sciences. The University of Melbourne, gave a most interesting talk to the Geology SIG on 27th March. He described the changes in the sea bed of Port Phillip Basin particularly over the past 10,000 years. Using the evidence of seismic surveys, seabed sampling cores and more recently, LIDAR surveys, Port Phillip Bay showed a clear river system meandering through the upper levels of the bay. This river system was blocked near the Heads and a large lake (Lake Phillip) formed until relatively recently when the blockage was broken and the sea flowed into PHB relatively rapidly. This was within memory of the aboriginal tribes of the area. It was a fascinating description of how many sources of evidence could be used to interpret the changes that this very prominent Victorian feature has undergone in recent times.

Juniors' Group: Easter Camp

Our annual Easter camp was held at Kiata campground, Little Desert National Park from Easter Friday to Easter Monday. We had 70 people participate in a full program, including a visit to Glen Lee Flora and Fauna Reserve; Lake Hindmarsh; Wimmera River; Pink Lake; Little Desert Nature Lodge to see their Mallee Fowl project; Clive Crouch's property to see his captive breeding program (including a talk by Fabian who has a PhD in 2 varieties of Sun moths that live only in the land adjacent to Clive's property) and walks in the Little Desert. We were lucky enough to have John Harris and Kathy Himbeck join us and lead various trapping activities which included the use of Elliott traps, pit traps, a cage trap and Harp traps. Over the weekend we caught frogs, skinks, bats, and insects. We had Simon Nash, entomologist, attend camp with his daughter. Simon kindly led a session for us on insect catching and identifying, which involved viewing of insects through microscopes. As usual, our camp had the many ongoing camp competitions, campfire concert and Bilby Hunt ending with our prize giving ceremony.

Marine Research group: Our April meeting featured Leon Altoff talking about a trip to South Australia's Spencer Gulf working with the South Australian Conservation Research Divers looking for marine invertebrates that are endemic to South Australia. We didn't find much for SA only, though a couple of suspected new species may end up on the list. We did however, discover the extended the range of several Victorian species.

Our field work to Phillip Island was successful and we were rained on only 3 out of 4 days, but as usual we didn't notice this much. Our field season is the subject of our May meeting. So if you want to see what you missed out on (apart from the rain) you are welcome to come along.

From the Office…

Photographic Competition:

Entries for the 2013 Photographic competition will close on Monday 3rd June, so get your entries in!

Donations for Hall:

This month we need:
Biscuits (always needed), Longlife milk, Toilet Paper, Gift cards from Coles, Safeway or Officeworks. **Thanks, Hali**

Thanks to the editorial and layout team who put together FNN 231

Joan Broadberry,
Platon Vafiadis
Hali Ferguson
Sally Bewsher

Day Group

The Art of Botanical Illustration—

Fiona McKinnon

Originally from Sydney, Fiona McKinnon started her career as a secondary school art teacher, later going on to freelance illustration and graphic design work. Since 1996 she has taught at the Botanical Art School of Melbourne. Watercolour and graphite are now her preferred media, but she continues to enjoy working with oil paint, pastel and a variety of graphic media. Fiona is inspired by the amazing diversity of the plant world and the incredible individuality of every living thing. She has exhibited at many group exhibitions including The Art of Botanical Illustration, RBG Melbourne 1994–2006 and the Botanical Art School of Melbourne 1996–2004.

Fiona's presentation began by taking the Day Group through many of the stages in the development of botanical art, or botanical illustration as some call it. She started with one of the earliest examples of a work that focused on plants as an important subject in their own right. This was a study of a bramble, *Rubus fruicosus*, (AD 512) with notes in Greek about its medicinal properties. The next image was a stylised representation of Chervil (turnip root) *Chaerophyllum bulbosum*, (1070 –1100) with notes in Latin. Fiona pointed out that true botanical art should enable the subject to be identified by a botanist. The celebrated German artist, Albrecht Dürer, (1471–1528) of the northern European renaissance, endeavoured to draw the world as it really was. He dug up plants and brought them to his studio, so as not to depart from nature. Dürer, gave plants form using shadow and perspective, and was the first painter we know of to use water colour. *Ilustration, right.*

The science of Botany was yet to develop, but curiosity and interest in plants was spurred on by specimens brought back to Europe from voyages of discovery. The Chelsea Gardens in London was established in 1673 and Kew Gardens in 1759. They both became centres of plant propagation and knowledge. Georg Dionysius Ehret 1708–1770) began as an apprentice gardener in Germany, but later moved to England and became one of the most influential European botanical artists of all time. His first illustrations were made in collaboration with Carl Linnaeus. Fiona showed us one of his lifelike, botanically accurate studies, executed in watercolour on velum.

Pierre-Joseph Redoute worked in France, firstly for the court and then for Josehpine and Napoleon Bonaparte. Fiona illustrated his work with a pink Australian Callistermon, grown from seed at Malmaison. Perspective was achieved by leaves from the front of the plant being portrayed as large and dark, with those from the back being smaller and paler. In addition, details of the flower's delicate pistels and stamens, added at the side of the painting, were an advance in botanical art.

Ferdinand Bauer was recruited by Joseph Banks to travel with Matthew Flinders and study plants in situ. His method was to sketch in pencil in the field and record the colours present with a detailed code. As watercolour paintings would be difficult to preserve on board a ship, his final plates were completed in London. His detailed scientific dissections and representation of all the parts of a plant took botanical illustration to a new level. They were also beautiful works of art.

Fiona then moved to the work of some Australian artists. Margaret Flockton was the first and longest-serving botanical illustrator at the Sydney Botanic Gardens, being employed from 1901–1927. She worked first in pencil giving an exact representation of size, leaves, flowers, fruit and seeds even though not all of these can be seen on a plant at the same time. In this way artwork can do what photography cannot.

Elizabeth (Betty) Conabere 1929–2009 and Celia Rosser *OAM* had both studied fashion design before gravitating to botanical art. Betty executed many realistic, lively, brilliant works including *Wildflowers of South-Eastern Australia* (1968*)*. The 384 paintings formed 80 plates in the book. The originals are in the Latrobe Library. Celia Elizabeth Rosser is a renowned Australian botanical artist, best known for having published *The Banksias*, a three-volume series of monographs containing watercolour paintings of every Banksia species. The plates include buds, fruit, flowers and pattern of leaf growth. Her work contains astonishing accuracy and detail and is also of stunning beauty. She now runs her own gallery at Fish Creek.

Fiona completed her talk by introducing us to the work of a number of contemporary artists including Margaret Stones, Anita Barley, Jennifer Phillips, Mali Moir and Kate Nolan. She showed examples of their work and detailed their individual interests and styles.

On behalf of the Day Group I would like to once again thank Fiona for providing us with a wonderfully visual presentation and wealth of stimulating ideas.

Joan Broadberry

Albrecht Dürer, c. 1503

Botany Group

The Royal Botanic Gardens Melbourne: from efficient irrigation to integrated water management.

Speaker Peter Syme

February 2013

Thank you to Peter Symes, curator, environmental horticulture, Royal Botanic Gardens Melbourne (RBGM) for a very educational presentation on the irrigation systems of the RBGM discussing "From efficient irrigation to integrated water management".

There are 7000 taxa held in the collection at the RBGM, with 40% of the trees being native to Australia. In around 1875 to 1876, early water planning included Guilfoyle's Volcano, where water was to be pumped from the Yarra to the volcano at the top of the gardens, and then gravity fed to the remainder of the gardens for irrigation.

During 1994 to 1995 the automatic irrigation efficiency was investigated through research partnerships with the University of Melbourne, and Monash University to measure soil moisture at a landscape level and see if trees were using water at depth. From this study a formula was developed for landscape evapotranspiration estimation.

Evapotranspiration on the indigenously-planted Long Island is about 1mm/day, whereas the rainforest area has about 5mm/day. Consequently these areas are now irrigated to different amounts.
In 1998 it was decided to harvest the rainfall in the landscape, and only irrigate if there was insufficient rain. This was able to be done as there was a 43% increase in flow rate allowing for faster irrigation, so there was no need to water if rain was coming. This gave a 45% less water usage. Another water saving came from changing from cool season grass which use 3-5L/m^2/day to warm season grass which use 2-3L/m^2/day.

Water Sensitive Urban Design is also used to conserve water in the gardens with Long Island being planted with indigenous plants of the Melbourne area from before the gardens were established. This has resulted with an area of vegetation that requires almost no irrigation as it is suited to Melbourne's climate. By adopting current technology the gardens have been able to use about half the water usage of the past with much the same landscape. Integrated water management in the gardens was originally about irrigation only, but now considers the biodiversity of the gardens. For example, blue-green algae (cyanobacteria blooms) are a symptom of nutrient build-up in the lake combined with warm water and a lack of water plants. The ornamental lake was originally a natural lagoon fed by runoff from the surrounding landscape. In 2002, Monash University researched which nutrients were causing the algae blooms, resulting in a wetland planting. Additionally, the Canna Garden has become a rain garden, planted in almost pure sand which filters the nutrient from the runoff and reduces sediment entering the lake.

This bioremediation treatment has reduced total nitrogens by 49% and total phosphorous by up to 56% which is better than best practice guidelines of 45%. There is interpretive signage in the gardens to explain this. Melbourne Water monitors the nutrients to avoid excess nutrients flowing into the Yarra and Port Phillip Bay. Some of the water from the lake is harvested and recirculated to the rainforest gully, but only about 10% of the lake water can be used as the RBGM is trying to establish the wetlands. The water from the Yarra River cannot be used for irrigation as it is too saline. There are nine floating treatment wetlands, built from recycled plastic bottles, where the plants take up nutrients from the lake. These wetlands have increased biodiversity in the area. In China, Canna Lilies are used to treat sewage outflows, although this is not adequate treatment. The infrastructure to reuse the water from the lake includes filters and UV treatment to kill pathogens. Treated water is stored in tanks which refill as the water is used.

The Gardens is planning for the future as it faces issues such as hotter temperatures and water scarcity. There are increased bio threats due to globalisation, and visitor numbers are expected to increase from 1.6 million now, to 4.5 million in 2070. Green spaces are very important for health and wellbeing, and are a haven for biodiversity. The floating wetlands have increased the number of frog species from one to three and there are additional bird species. There is research conducted in the urban lake system which contains short-fin eels, two species of turtles and birdlife. Macro-invertebrate and macrophyte surveys are conducted in the lakes.
Recent landscape projects have included Guilfoyle's Volcano where water is treated and used to irrigate surrounding plants. These are dominated by cacti, as well as *Acacia stenophylla* and *brachychitons.*

As temperatures increase and rainfall decreases, it is necessary to grow plants which will cope with these hotter conditions. In 2009 there were three days in a row over 40^0C and some New Zealand species were lost. The aim is to target for species requiring 900mm rainfall or less, but many plants in the gardens require more rainfall than this. Even with the rainfall of 2011 and 2012, there is still a water deficit. In the future the gardens may not be able to maintain lush vegetation given climate change, and will have to plant more of a xerophytic landscape. The many rhododendrons were planted in the 1940s and 1950s when there was above average rainfall. The current riparian rainforest is planted in an open area, but would be better planted in a protected area near the fern gully. The Australian Rainforest area requires higher rainfall and may not be able to survive climate change. Many of the Mediterranean species take water from ground water, but these plants may not survive if the ground water is not recharged.

In the future the gardens may have to grow plants from sunny dry warm climates, although some species from higher rainfall areas have survived with less water. Landscape succession to 2070 requires a heritage landscape that will survive climate change.

Sue Bendel

Fauna Survey Group

Surveying at Mt Samaria—*Easter 2013*

At Easter this year the Fauna Survey Group visited Mt Samaria State Park, between Benalla and Mansfield. We camped at the Camphora campsite, which is roughly in the middle of the park.

Although the campsite has a small creek running through it, there was little water and it is highly advisable to bring your own. The site has toilets and large fire places. On both our visits to Mt Samaria we have found it to have few visitors.

Although it was the subject of some logging, it contains wet and dry vegetation and many old growth trees.

We placed 60 Elliott traps and eleven cage traps at three separate sites, one around the camp site and two in the southern section of the park. Two bat traps were used on two separate nights at two different locations. Six cameras were deployed, two on rocky outcrops, two in olearia groves and two in the drier stringybark woodlands. These were retrieved after 21 days. We carried out three spotlighting surveys, two around the camp and one in the stringybark forest. As usual we took note of any incidental observations.

We undertook a walk to Back Creek Falls and enjoyed spectacular views from Rocky Point Lookout.

Our weekend started on a high with a Dingo, just strolling down the road, being spotted. The traps produced a few Agile Antechinus, a Large Forest Bat (*photo bottom right)* and a White-browed Scrubwren.

The cameras produced 18 species, with some others being difficult to identify. The Black Wallaby and Eastern Yellow Robin won the day as the most photographed species. Other native mammals included Brushtail Possum (species unclear), Bush Rat, Eastern Grey Kangaroo, Common Wombat and Echidna. Introduced species were Red Fox, European Rabbit, Sambar Deer and House Cat. Other birds included the Wonga Pigeon.

The most activity was detected in the spotlighting walks. Twenty-eight Greater Gliders were seen, along with six Common Ringtail Possums and one Mountain Brushtail Possum. A Sugar Glider and Powerful Owl were heard along with some Australian Owlet Nightjars and a Southern Boobook.

Robin Drury

Photos: J. Broadberry

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

Fauna monitoring in the parks of eastern metropolitan Melbourne

The FNCV, through the Fauna Survey Group, is working with Parks Victoria to carry out a vertebrate fauna survey in the parks of eastern Melbourne.
We have also invited Melbourne Water (Frogwatch), Birdlife Melbourne and the Friends, Landcare and other environmental groups to participate. We have received favourable responses.

The region currently includes three parkland complexes; Berwick, Dandenong Valley and Sandbelt containing a total of 17 parks and nature conservation reserves. Forty five focus areas have been identified within the parks.

The study will survey for mammals, including bats, birds, reptiles and frogs. This program includes spotlighting, bat trapping, hair funnel placement, remote sensing camera data analysis and bird, frog and reptile surveys. We are inviting all friends and interested volunteers along to learn about what is happening in your area and how you can become involved in as little or as much of the monitoring as you would like.
The project commenced with some spotlighting and bat trapping in the Cardinia region. Seven species of bat were detected. Powerful owls were detected at three of the sites. Fallow deer were also seen.

Members interested in being involved should contact Robin Drury – robin-drury@hotmail.com

Marine Research Group News

Report on the MRG meeting Monday 8 April, 2013:

Preliminary items: John Eichler reported and exhibited a specimen of the soldier crab *Mictyris longicarpus* that he and Val Stajsic collected from Rhyll, Phillip Island during the recent group field work in that region. Edgar (2008) gives the range as across tropical Australia down to Perth on the west coast and Wilson's Promontory on the east coast. The MRG has extended the eastern limit to just west of Wilsons Promontory, having recorded it from Shallow Inlet at Waratah Bay, but this unusual and significant record extends considerably further this eastern limit. This species differs from the closely allied *Mictyris platycheles* in possessing purple colouring of the leg joints and often paler side-bulges on the carapace. *M. platycleles* is also only found along the eastern seaboard, from Moreton Bay, southern Queensland to Port Phillip Bay and also around Tasmania.

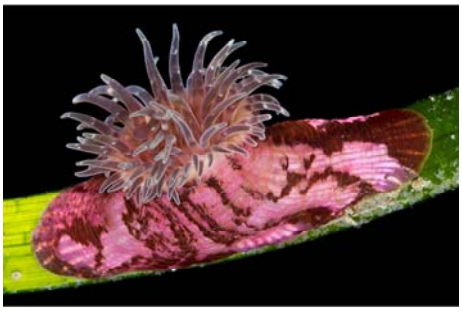
Leon Altoff announced that he and Audrey Falconer have stepped down from the FNCV council as the MRG special interest group representatives, after about 10 years in that position. Joan Broadberry will now take up this role, and will also continue to hold her position as a general councillor. We thank Leon and Audrey for their service, and Joan for continuing our representation on the FNCV council.

Main talk: Leon Altoff, MRG Secretary, spoke on a recent research trip to South Australia in collaboration with S.A.C.Re.D. (the South Australian conservation and research divers).

In recent times Robin Wilson, a polychaete taxonomist and curator of invertebrates at Museum Victoria was approached by Janine Baker, a SACReD diver needing assistance in identification of South Australian nemerteans. Knowing that member Audrey Falconer is developing a keen interest and expertise in this group, she was put in contact with Janine. The end result was that Audrey, Leon and Robert Burn were invited to travel to South Australia in late January for a 4 day research and collecting trip. The SACReD divers were interested in documenting fish and also the invertebrate fauna of their state.

Intertidal and/or subtidal collecting occurred at several sites, mainly from Spencer Gulf and also from the Gulf of St. Vincent. Localities visited included Island Point, south side (26 Jan), Barkers Rock (27 & 29 Jan), Bluff Beach (28 Jan), Port Victoria (25 & 28 Jan), Coobowie (29 Jan), Point Turton (29 Jan), Point Souttar (29 Jan), Port Hughes (29 Jan), and Wallaroo (26 Jan). During this expedition Leon and Audrey met for the first time Bob's long-time acquaintance Dr. Scoresby Shepherd.

Many interesting finds were made. These included a variety of yet-to-be identified anemones, some of these found living on seagrass leaves; delicate polychaete worms of varying shapes and colours; a comb jelly; several flatworms and sea-spiders (pycnogonids); a number of crustaceans including the hermit crab *Pagurixus handrecki*, and a good array of nemerteans (many undescribed) of varying shapes, sizes and colours.



Seagrass blade anemone (subtidal, 2m). Photo: Leon Altoff.

Unidentified nemertean. Estimated length 20-25cm. Photo: Leon Altoff

Many mollusc were recorded, including *Austrocochlea rudis*, *Austrocochlea porcata*, an unidentified marginellid, *Liloa brevis*, *Haminoea maugeansis*, *Elysia coodgeensis*, *Elysia expansa*, *Doriopsilla peculiaris*, *Chromodoris alternata*, impressive *Hypselodoris* cf. *infucata*, *Noumea closeorum*, *Discodoris crawfordi*, *Flabellina poenicea* and *Phyllodesmium macphersonae*.

Noumea closeorum (length not specified; grows to 30 mm). Photo: L. Altoff

Hypselodoris cf. *infucata* (length not specified; grows to 50 mm). Photo: L. Altoff.

New molluscan records for South Australia included the bubble shells *Noalda exigua* and an undescribed *Haminoea* also found in Victoria; a possible new subspecies of *Chelidonura fulvipunctata*; an undescribed *Gastropteron*; an undescribed *Siphopteron*; *Elysia* cf. *furvacauda*; an undescribed *Murphydoris*; *Aegeres exeches*; *Facelina* sp. 2*; *Trinchesia* sp. 5* and *Trinchesia catachroma.* (* as defined in Burn, 2006).

Leon illustrated his interesting talk with many images showing the animals in great detail. The success of the trip has generated a lot of research work and will hopefully lead to more collaboration into the future.

We thank Leon for his very interesting talk and also for making it and its photographic content available to assist in the preparation of this summary.

References and further reading:

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P. Vafiadis

Native vegetation laws

The Environment Defenders Office is a specialised community legal service for litigation and law reform, and the Victorian National Parks Association presented a workshop on the proposed laws which allows clearing of native vegetation on private land.

Soil conservation authority was set up in the 1940s to protect soil due to clearing. Even in the 1970s landholders aimed to clear vegetation as fast as possible for farming.

The Native Vegetation Management Framework policy of 2002 is the current policy and requires net gain if removing vegetation. There is a three step approach: avoid clearing, minimise impact, offset unavoidable impacts. So the law currently requires a permit to clear vegetation, using the three step approach. Offsets should be in same Catchment Management Authority as the clearing. Permits to clear native vegetation are usually obtained through local councils, but could be through the Department of Sustainability and Environment. The law allows clearance of vegetation if the land is less than 0.4ha.

VCAT interprets framework to clear for development and VCAT overrules councils in 70% of cases, often favouring progress. Only 3.5% of permits to be cleared have been refused. Some applications are withdrawn. 81% of permits to clear vegetation have been allowed by VCAT.

Future directions for native vegetation clearing in Victoria are weaker laws. The government is keen to keep new rules quiet.

Priority reform one changes the requirement of net gain to no net loss in the contribution made by native vegetation to Victoria's biodiversity. This only looks at biodiversity value. It doesn't include aesthetics, cultural, soil erosion and salinity, water quality or climatic issues. Priority reform two alters how biodiversity is measured and reduces costs for developers. This reform no longer requires botanists to go out and assess vegetation. It relies on outdated maps instead. These are NaturePrint and are developed on assessment of the fauna species present. The instructions for NaturePrint state that it is not to be used at the fine scale or for statutory planning permits. These maps are used by CMAs on a regional basis. These maps omit lots of native vegetation species due to scale, including vegetation of significance. Priority reform three reduces cost to government by streamlining and mechanising process of monitoring, compliance and enforcement with no funding. Only 10% of application cause most clearing. Only 25-30% of applications are referred to DSE. Priority reform four has NaturePrint being used to measure offsets. This means it will lose local habitat and put offsets far away, eg clearing vegetation in Melbourne's suburbs will allow offsets in East Gippsland, so that local vegetation types will be depleted.

This review to clearing native vegetation laws is simply looking at more of a streamlined process. The review has gaps as we don't have biodiversity policy to sit under. There are also conflicts of interest as DSE is the policy maker, regulator and also runs the Bushbroker program whereby it is regulating how the majority of the offsets market works and handles all of the money associated with the transactions. We currently don't know how much illegal clearing is going on which should be policed. The review should look at why policy isn't working not just alternative policy.

Better mapping exists at many local councils rather than using NaturePrint and revised policy should incorporate local government vegetation maps. The new reforms will make clearing of native vegetation on private land easier. We need stronger rules.

Contact your local councillors and state MPs and ask them to protect the bush and strengthen native vegetation rules.

This is a summary of a recent meeting held at the FNCV but not part of the Club's calendar.

Thanks to Sue Bendel for reporting on some of the ideas presented in this talk, for the information of our readers.

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