Understanding Our Natural World

Field Nats News No. 300

Newsletter of the Field Naturalists Club of Victoria Inc.
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Governor of Victoria

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

September 2019

Annual Biodiversity Symposium 2019

'Environmental Restoration or Green Deserts and Ecological Traps"

Venue: RSL Hall, 2 Diggers Way Blackburn
Sat 12th & Sun 13th October 9 am - 4.30pm

The FNCV presents a two-day program covering aspects of the regeneration and rehabilitation of damaged ecosystems. Human activity is rapidly increasing the number and size of damaged areas. This two-day symposium will include 11 presentations on various aspects of regeneration and a guided excursion of Westgate Park on the Sunday afternoon.

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

Speakers Include:
- Dr Sapphire McMullan Fisher
- Prof Ian Rutherford
- John Harris
- Damien Cook
- Geordie Scott-Walker
- Dr. Geoff Carr
- Dr Graeme Lorimer
- Dr. Luke Barrett
- Darcy Duggan
- Dr David Cheal
- David Sparks

Topics include:
- Mallee Habitat Restoration
- Reviving Degraded Wetlands
- Waterways and streams
- Saltmarshes
- Westgate Park Project
- Ecological Traps
- Grassland Rehabilitation
- The Role of Fungi in Revegetation
- Weed Management
- The nature of offsets
- **And more**

For more information and to register, contact:
Max Campbell 0409 143 538
FNCV Office 03 9877 9860; admin@fncv.org.au
www.fncv.org.au

A damaged ecosystem

The deadline for FNN 301 will be **10 am on Tuesday September 3rd.** FNN will go to the printers on the 10th with collation on Tuesday 17th September

Contents

From the President

The October Biodiversity Symposium, *Environmental Restoration or Green Deserts and Ecological Traps* will embrace some of the issues associated with rehabilitation and revegetation of damaged ecosystems and other sites. Eleven speakers will be presenting on grasslands, wetlands, the role of fungi, ecological traps, weed management, rehabilitated industrial sites, streams, saltmarshes, Mallee Habitat Restoration, offsets and more. Regeneration projects, including the challenges, successes, failures, processes and best practice will be discussed along with current research that may lead to a better understanding of the causes of failures and how success should be monitored and measured.

Max Campbell

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.

September

Monday 2nd – Fungi Group Meeting: Speaker: Beau Picking. Beau is a Mycologist/ Systematist who completed his Masters in 2017. His topic is ***Looking at multilocus molecular species delimination in a native section of Cortinarius***
Contact: Carol Page 9857 6388; cpage356@gmail.com

Tuesday 3rd - Fauna Survey Group Meeting: ***From toads to quolls, and back again***
Speaker: Dr Ben Phillips, Associate Professor, School of BioSciences, University of Melbourne.
Contact: Su Dempsey 0437 172 333

Sunday 8th – Juniors' Group Excursion: ***Night prowl at Blackburn Lake***
Leader: Ian Moodie, Environment & Education Team Leader at Whitehorse Council Contact: Zoe Burton/ Esther Schouten juniors@fncv.org.au

Diary date:
FNCV biodiversity symposium **Saturday 12th to Sunday 13th October**.

Monday 9th – Marine Research Group Meeting: to be advised.
Contact: Leon Altoff 9530 4180 AH; 0428 669 773

Tuesday 17th—Collate FNN 301 10 am in the hall. All welcome. Contact: Joan Broadberry 9846 1218

Wednesday 18th - Terrestrial Invertebrates Group Meeting: The role of small flies in orchid pollination in Victoria.
Speaker: Rudie Kuiter. Contact: Max Campbell 0409 143 538; 9544 0181; mcam7307@bigpond.net.au

Thursday 19th – Botany Group Meeting: ***Native Plants as Weeds.*** Speaker: Geoff Carr,
Botanist, ecological consultant. Contact: Ken Griffiths botany@fncv.org.au

Monday 23rd FNCV Council meeting, 7.30 sharp. Please send apologies or agenda items to Wendy Gare at the FNCV office. admin@fncv.org.au

Tuesday 24th – Day Group Meeting: ***Walking the Larapinta trail.*** This is an extended walking track, total length 223 kilometres. The eastern end is at Alice Springs and the western end at Mount Sonder**.**
Speaker: Dr. Gary Presland. ***Meet at 10.30 am for coffee and a chat,. Speaker at 11 am. All welcome.***
Contact: Joan Broadberry 9846 1218

Wednesday 25th – Geology Group Meeting: ***Vertebrate Palaeontology of Australian early tetrapods from the Devonian to the Cretaceous.*** Speaker: Retired Assoc. Professor Anne Warren, currently Emeritus Scholar, Vertebrate Palaeontology, La Trobe University. Contact: Ruth Hoskin 9878 5911; 0425 729 424; rrhoskin@gmail.com

Friday 27th – Juniors' Group - No Meeting: ***Grand Final holiday***

Saturday 28th – **Working bee.** Meet at 10.00 am for tidying and cleaning up the garden and inside the hall. Please BYO tools etc. Contact the office.

Sunday 29th to Saturday 5th October - Fauna Survey Group Survey - ***Annuello Nature Conservation Reserve and Moss Tank Flora and Fauna Reserve.*** Prior registration essential**.** Contact: Andrej Hohmann 0410 934 779
(Note: The October FSG meeting will be moved from 1st October to Tuesday 8th October)

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

Members' news, photos & observations

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

Welcome

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

Kerryn Dempsey, Melvin Xu, Marielle Babineau, Troy Williams and Bruce Edley

A look back at Field Naturalist News

Field Naturalist News, No. 300 is a milestone edition, making it an appropriate time to take a look back at the history of the FNCV's monthly newsletter.

Early days:
Until 1990 all of the club's meetings, excursion notices and reports were published in *The Victorian Naturalist*, (six issues per year). At that time the FNCV met at the Herbarium in the Botanic Gardens. There were obvious difficulties in communicating the program in this way. The first separate club newsletter containing a calendar of activities running from December 1990 to June 1991 was published in November 1990. Its four A4 sheets were edited by the late Dr. Noel Schleiger and typed and laid out by the late Dorothy Mahler. Collating, addressing and posting the newsletter was a big task with the work performed in the evenings at their home. Noel and Dorothy were soon joined by a number of volunteers.

The production of FNN was greatly assisted by the FNCV's move to its current premises. Issue 24 was a turning point. The newsletter was given a name, *Field Nats News* (FNN*)*, was produced monthly using the desktop publishing program *Publishe*r and laid out in roughly the same format as today. A collation team met in the hall each month. Over about a decade, a number of people contributed to FNN's editing and production, meeting in the Blackburn office at night. In January 2003 (FNN 117*)* Noel Schleiger and Joan Broadberry became joint-editors, no longer working in the evening but during the day, with the assistance of the Office Administrator and others.

At the very beginning, articles were handwritten and had to be typed and printed. Diagrams maps and photocopied illustrations were glued on to the master sheets and then delivered by hand to the printer. Rapid advances in technology drove change. More and more reports were delivered on disk. Eventually disks became redundant and articles were sent by email with the master file being emailed to the printers as a PDF. In November 2004, FNN was first available in colour in a web-based form, however, members still received it as a paper document.

More recent changes:
Nine years ago in FNN 200, I wrote a detailed account of FNN's birth and development entitled *Twenty years and two hundred issues of FNN*. It is time to bring the story up to date. Sally Bewsher joined the editorial team in 2011. Sadly, due to ill health, Noel stepped down from an editorial role in 2012. Perhaps the biggest change is that over 80% of members now receive their newsletter in colour by email. This has meant a huge saving on the cost of printing and postage. Collation is a far easier task and now takes place in the morning. Columns are no longer used in the layout and FNN carries many more images. From 1997 the Marine Research Group prepared its own page for each FNN. This was discontinued in March 2017. Extracts from short reports prepared by various SIGs for the FNCV council minutes have been included since October 2012, (FNN 224). The current newsletter (as well as issues back to FNN 205), is available on the FNCV website. The yearly FNN index continues to be prepared by Pat Grey but from this year will be emailed as a separate document. The printed and digital versions of FNN were identical up until FNN 295. Two versions are now being produced, the advantage being that the digital version is no longer restricted to 12 pages.

One thing however, remains forever unchanged—the continuing contributions from hard-working FNCV members, without which there would be no FNN

Joan Broadberry

Leap into Nature Stewards program offerings this Spring in the City of Melbourne and City of Melton areas! Come and discover more about your local environment, where you can get active for nature through volunteering, and meet like minded people along the way!

Applications open from the 12th to the 30th August, with programs running October 3rd to December 14th!

To find out more and to apply: https://outdoorsvictoria.org.au/nature-stewards/

NATURESTEWARDS
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Fungi Group

Meeting:1st July 2019 ***Sharing knowledge through images***

Bruce enthralled a large audience with his beautiful photos of a wide variety of fungi, many of which were new to us. He started with a number of *Cortinarius* species that came in different shades of purple (e.g. Fig. 1). Several of these were found at Warrandyte, principally Jumping Creek Reserve (an area that had once been cleared for gold mining, and subsequently became covered in Burgan *Kunzea ericoides* and mosses). There were also numerous photos from Cobboboonee National Park, near Portland. It was interesting to see the different ways a familiar fungus such as *Cortinarius archeri* can appear, with tones of reddish purple, bluish purple and brownish purple.

Fig. 1. A mauve *Cortinarius* sp. Photo Bruce Fuhrer

Some other highlights included: apparently the only Australian record of *Calathella digitiformis*, a tiny white fungus growing in profusion on wet fern fronds; *Dacryobolus sudans*, a hard waxy toothed fungus; *Postia stellifera*, a stipitate terrestrial polypore that is heavy like wet plaster, grows in Malaysia and is extremely rare in Australia; an undescribed *Leucopaxillus* that lives with native pines *Callitris* spp.; a dark pink, glutinous *Hygrocybe*; a group of all-pink *Mycena roseoflava*; and a huge *Entoloma* with a bluish grey cap 120 mm across, growing with tea tree *Leptospermum* sp. (Fig. 2). Then came a host of coral fungi in every imaginable size, colour and texture, from delicate white *Ramariopsis* clubs to a tough, stalactite-like *Deflexula fascicularis*. Some of the most memorable were the blue form of the usually brown *Ramaria zippelii* (Fig. 3); an unidentified bright orange *Ramaria* sp. (Fig. 4); an example of the rare *Scytinopogon* genus; the lichenised *Multiclavula mucida*; and *Tremellodendropsis tuberosa*, which looks like a coral but is actually a multi-branched jelly fungus.

Fig. 2. Huge *Entoloma* sp. Photo Bruce Fuhrer

Bruce concluded with photos of about 20 tropical fungi, including numerous boletes; an orange *Cantharellus* that is funnel-shaped at first, then proliferates into several lobes as it matures; *Cymatoderma dendriticum*; a yellow *Entoloma* that has cubic spores; a brilliant orange *Hygrocybe*; a yellow *Craterellus*; *Lentinus sajor-caju*, with a funnel-shaped cap that holds water, where tadpoles and mosquito larvae can live; vivid magenta 'parasols' of *Marasmius haematocephalus*; spectacular dark red *Phillipsia subpurpurea* with concave disc-shaped fruit-bodies up to 70 mm across; and the yellow-capped, tall *Protoxerula flavo-olivacea*, which is similar in stature to the more familiar *Oudemansiella gigaspora* but much more colourful.

Fig. 3. Young *Ramaria zippelii* (unusual blue form). Photo Bruce Fuhrer.

Fig. 4. Unidentified *Ramaria* sp. Photo Bruce Fuhrer

Many thanks to Bruce for a particularly interesting evening, and for assistance with preparing this report. It was a pleasure to see so many beautiful photos of species from the seemingly infinite variety of fungi.

Virgil Hubregtse

Extracts from SIG reports given at FNCV Council Meetings

Botany Group: Meeting, 31st March, *Forest Succession in East Gippsland*.

Speaker: David Cameron, of the Arthur Rylah Institute. 21 people attended. Below are a few excerpts from the presentation.

- Forest succession is the ecological study of the sequence of plants which follow a major disturbance. Whether the original forest returns, and when, are of concern.
- A graphic image of a clear-felled and burnt forest coupe illustrated the requirement for new growth to come from seed., *Eucalyptus delegatensis* or Alpine Ash being an example. This contrasts with an unlogged forest, where a range of growth stages is present. After fire, epicormic growth can sometimes result in leaves sprouting from the trunk. The same image showed a sphagnum moss bog. This endangered community had survived here, so its peat soil below was not ignited.
- David presented some shocking projections for the following forest species in the Victorian Central Highlands in response to climate change, (from Nitschke & Hickey, 2007) They are: Black Wattle, Silver Wattle, Blackwood, Sassafras, Mountain Ash and Alpine Ash. While the contraction of suitable regeneration regions was first projected as gradual, after a tipping point is reached, it is projected that by 2085 there will be catastrophic reductions.
- In East Gippsland some key species are: Errinundra Shining Gum *(E. denticulata*), Mountain Grey-gum (*E. cypellocarpa),* Snow Gum (*E. pauciflora*), White Box (*E. albens*), Lilly Pilly (*Syzygium smithii*), Blue Oliveberry (*Elaeocarpus reticulatus*), Gippsland Waratah (*Telopea oreades*).
- Some issues are: obligate seed regeneration, lignotuber or epicormic sprouting, possible refugia sites, logging and other management practices.
- The notable Jones Creek warm temperate rainforest (80 Ha, near Genoa) was devastated by a hot fire in 1983, caused by lightning. Whether complete recovery would ever occur was unknown in 1985. (VicFlora). David showed mature Lilly Pilly killed by fire. Kangaroo Apple (*Solanum aviculare*) and Forest Vine Weed moved in opportunistically, completely smothering the forest floor.
- In rainforest, an under-storey fire can be tolerated, but not a canopy fire. An interval of less than 50 years between fires will likely increase the proportion of sclerophyll species, already present after previous fires, until eucalypts dominate.
- Devastation from Sambar deer was shown. No understorey remains as the deer eat shoots and rub the bark. The rainforest species Yellow-wood (*Acronychia oblongifolia)* is a victim.

Reference: Forest types and species; https://vicflora.rbg.vic.gov.au/static/bioregions/east-gippsland

Ken Griffiths

Fauna Survey Group: Meeting, Tuesday 2nd July. *A talk on 'Diversity and conservation of Victoria's galaxiid fishes',* was presented by Dr. Tarmo Raadik, senior scientist in Applied Aquatic Research, at the Arthur Rylah Institute. *Galaxidae* is a southern hemisphere family of temperate regions, living in fresh water or estuaries. In Australia they occur in all southern states, just reaching SE Queensland, and occur from sea level to about 2000m. Victoria has 19 species and Australia has 37. Some of the more familiar species are the Common Galaxias found in coastal rivers of WA to NSW and Tasmania. Spotted Galaxias can be found in coastal rivers of Victoria such as the Otways and Wilsons Promontory. The Dwarf Galaxias is able to withstand relatively dry conditions in rivers. The Mountain Galaxias is a diverse species and undergoing revision and description of many new species, caused by isolation of populations in a drying continent. The majority of species are of conservation concern and some have a limited distribution mainly because of the widespread distribution of introduced trout.

Survey: The fieldwork for the survey at Deep Lead was concluded with the retrieval of the remote cameras four weeks after they were set out. A total of seven native and three introduced mammal species were recorded. Many honeyeaters and a few small flocks of Swift Parrots were seen in the flowering Yellow Gum.

Raymond Gibson

Fungi Group: Excursion and meeting attendances:

3rd June Members' night - 8 members and 1 visitor
9th June foray at Neds Gully - 10 members
23rd June foray at Blackwood - 9 members and 2 visitors
1st July Meeting - Bruce Fuhrer - 20 members and 12 visitors
7th July foray at Mt Worth - 16 members and 4 visitors

Virgil Hubregtse

Geology Group: Meeting, 26th June The participants at the last Geology meeting were treated to Maxwell Campbell's photos, videos and descriptions outlining the evolutionary history of the Arthropods from when fossils of hard covered animals were first found in the early Cambrian to the present. We marvelled at the incredible diversity of both extinct and

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extant arthropod species. Some fossil forms, such as Horse Shoe Crabs, share very close similarities with living species. On the other hand, whole assemblages such as the amazing varieties of trilobites with over 20,000 described species are extinct and have no modern representatives. Fossils being excavated from Moroccan sediments show astounding biodiversity of trilobite forms. The large and highly diverse eurypterids also vanished. The Phanerozoic can be rightly termed the "Age of Arthropods".

Max however emphasised that these fossils are really only trace remains of life of the past and direct behavioural, biochemical, colour or genetic information is not available. Some aspects of behaviour, biology and ecology may be inferred from living counterparts where they exist. We know nothing of their microbiomes and other associations. Fossilization, in particular good preservation, is a relatively rare occurrence and not all life forms are preserved at any rate so there are always going to be gaps and we should be aware that there are real limits to interpretation.

Absence of evidence is not evidence of absence. As an example, he stressed that the so-called Cambrian Explosion was not necessarily a dramatically sudden appearance of arthropod without ancestors, but might simply be the result of a gradual evolution over millions of years from the Ediacaran into the Cambrian without good fossils (550 to 490 Ma). It is thought that at this time oxygen levels were higher and the climate was warm and virtually greenhouse supporting a rapid increase in biodiversity. Extraordinary fossilization events gave us the Burgess Shales and the Chengjiang sediments where even relatively soft-bodied organisms were preserved in detail. Hard-bodied arthropods are more likely to leave fossils than soft-bodied ancestors so will bias their representation in the fossil record.

This was a most interesting overview of the early evolution of the Arthropods. We look forward to the second part of this presentation at our November meeting. Many thanks Max.

Ruth Hoskin & Max Campbell

Juniors' Group: June Meeting.

We had a fantastic night with Wendy Clark. First she talked to us about some common problems when taking a photo. For example, she helped us find the right focus and to use aperture and shutter speed in different lighting conditions and for different situations such as landscape or close up photography. Wendy brought different objects to be photographed which helped us to put in practice what she explained to us about wildlife photography. She also briefly talked about various computer programs such as gimp which are free and almost exactly like photoshop. Wendy helped us to find camera settings for the shutter speed and iso in our mobile phones. If our object looked too dark or too light, she explained where to find and how to change, the shutter speed to correct the lighting. It was great to see all the questions the children had for her. It was a wonderful introduction indeed.

Practical photography excursion to Badger Weir, June:

We had a very cold day to start with, so Wendy led a run around the area to warm up. She also explained to us that phone's batteries can stop working due to cold weather. So we kept our phones close to our body to keep them warm. We found lots of interesting fungi to photograph. Moreover the bridge and the creek gave us the perfect opportunity to practice taking photos with different shutter speeds and light. Thomas Hosken was very lucky to spot a Superb Lyrebird and capture this encounter with a video, which he shared with all of us. Wendy also gave us tips that we can use to stabilize our hands, so they do not shake when taking photos. I am sure those not afraid of the cold weather, who took part in the excursion were happy with their new skills in wildlife photography.

Patricia Amaya & Chaquen

Microscopy Group: Meeting, Wednesday 19th June.

Using our large collection of microscopes, we enjoyed an evening examining and discussing many live, dried and prepared specimens. The enthusiastic group of six members were enthralled by these specimens and their own findings brought in for much closer inspection and help in identification. Screened throughout the evening were some of Max Campbell's fabulous videos of live freshwater invertebrates.

Philippa Burgess

Terrestrial Invertebrates Group: Meeting Wednesday 17th July members' night

We were able to view and discuss everyone's latest photos and observations.

FNCV Facebook followers: 13,896

Fauna Survey Group

Survey at Deep Lead NCR (near Stawell) June 2019

This survey at Deep Lead Nature Conservation Reserve in June 2019 was the latest in a series in the parks and reserves in and around the Grampians. The first was in 2014. The focus of these surveys is threatened arboreal mammals, particularly the Squirrel Glider and Brush-tailed Phascogale and woodland birds

Sixteen members and visitors journeyed out west and took part in the survey. We stayed in the Grampians Gate Caravan Park to the south of the Stawell township.

It was our third survey at Deep Lead in this time period. Although the FSG had not recorded either the squirrel glider or phascogale in this reserve, Victorian Biodiversity Atlas (VBA) records indicate the detection of the former in the area in 2004. The FSG detected one by camera some 5km away in Lonsdale NCR in 2015. The closest phascogale recorded in the VBA was our own at Lonsdale NCR in 2014. The majority of recordings are further east in the Ararat Hills.

During this survey we deployed 33 cameras at 21 sites. Each site had a camera deployed in a tree and 12 sites, which were surveyed last time, also had one on the ground. The cameras were deployed for nearly four weeks.

We also carried out daytime bird surveys and spotlighting at night on seven transects, six were 500m long and one was 1 km long. The survey recorded two species of frog, 50 species of bird and 11 species of mammal. Of note was the recording of 50 Swift Parrots, usually in flocks of 6-8. This species is endangered and listed under the *Flora and fauna Guarantee Act, 1988* (FFG). The flowering Yellow Gum seemed the primary attraction.

Other listed species were Brown Treecreeper and Brown Toadlet. A further five species of bird (Black-chinned Honeyeater, Brown-headed Honeyeater, Fuscous Honeyeater, Jacky Winter and Yellow-tufted Honeyeater) are listed as members of the Victorian Temperate Woodland Bird Community. This community is listed as threatened under the Act.

Neither Squirrel Glider nor Brush-tailed Phascogale were detected. Four introduced species European Hare, European Rabbit, House Mouse and Red Fox were detected. The fox and rabbit are FFG-listed as potentially threatening processes.

In perhaps an unusual recording for us, one of our cameras managed to detect some 147 images/videos of the train that passes between Stawell and beyond, not a threatened species as far as we know.

Robin Drury

Musk Lorikeets

Long-billed Corellas

Above: Australian Owlet-nightjar
Left: In the background, train near Stawell.

Day Group

Garden Arthropods

Speaker: Max Campbell

The Day Group, being a generalist naturalist group, is very fortunate in the variety of its presentations. This was never more evident than in the July meeting, when Max Campbell spoke on *Garden Arthropods*. We were treated to a fabulous overview of a miriad of creatures inhabiting the mini-world that surrounds us.

In his opening remarks, Max reminded us of some fundamentals. Arthropods are life's great success story, making up approximately three quarters of all species. From the Cambrian to the present might easily be termed 'the Age of Arthropods'. There are no 'stand-alone' species, nature is always about symbiosis. Invertebrates are the basis of the food chain. Many factors such as: high-density housing, concrete, plastic grass, overuse of fertilizers, weedicides, insecticides, exotic vegetation and pests, drought and a learned fear of insects, have led to lower numbers of invertebrates (and vertebrates) in the environment.

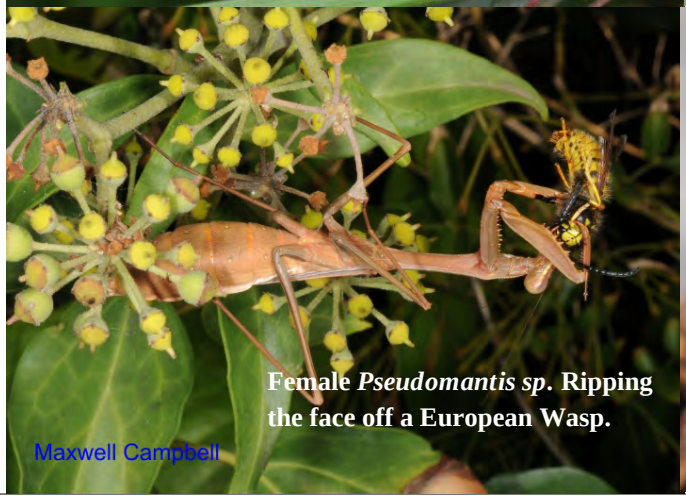
The remainder of the presentation gave us a brief glimpse of a large number of groups of arthropods often found in backyards. These included: Hemiptera (Bugs), Coleoptera (Beetles), Mantodea (mantids), Diptera (flies), Orthoptera (grasshoppers and crickets), Lepidoptera (moths and butterflies), Arachnids (spiders, mites, scorpions), bees, antlions, weevils, aphids, ants, wasps, and more. The detail of Max's observations is something to marvel at, as is the quality of the photos and videos which he (and others) have recorded. Many images shown were taken under a microscope. In addition, through Max's lively commentary, we learned some interesting things about the world of arthropods, for example that 75-85% of pollination is probably done by flies (Diptera).

As always when summarising a presentation, I am unable to do justice to the speaker. Videos of seldom witnessed invertebrate behaviour were especially memorable. Two highlights being: the live birth of aphids and a ladybird (*Coccinella tranversalis*) eating, really better described as 'hoovering up' aphids. (*Still image, right)*

One way to convey something of the essence of this talk is through reproducing a few more of the images shown at the meeting. **All the images shown were taken by Max Campbell.**

***Gynoplistia bella.* A crane fly at rest on a leaf.**

A rapacious Cabbage Looper Caterpilar *Trichoplusia ni* eating a geranium. (Introduced)



Female *Pseudomantis sp*. Ripping the face off a European Wasp.

Maxwell Campbell

A full size *Latrodectus hasseltii* hiding under a log.

Cont. next page

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A Metallic Shield Bug *Scutiphora pedicellate*

A wood or forest scorpion, *Cercophonius squama* with parasitic mites.

Max's presentation covered a huge range of species. 'Speed dating with Arthropods' is one way of describing it. As a follow up, I would recommend that those who wish to learn more attend the meetings and excursions of the Terrestrial Invertebrates Group (TIG). All FNCV members and visitors are welcome. An email sent to club members on 21/6/19 gave details of forthcoming TIG activities.

In addition, there is a wealth of publications available. The club library, or the catalogue of books available for purchase on the website, many of which can be examined in the bookcases in the hall, are good starting points. (Discount rates to members.)

On behalf of the Day Group I would like to record our thanks to Max. I have received some enthusiastic feedback, including from visitors, on how much *Garden Arthropods* was enjoyed and appreciated**.**

Joan Broadberry

Vale Lilian Kirk

The club notes the passing of one of its Long-term members, Mrs Lilian B Kirk, in July. Lilian joined the FNCV on 9th December 1968, and was presented with Long-term membership at the 2010 AGM.

Growing up in an isolated community in south-western New South Wales, Lilian's childhood interest was in bird life. At the suggestion of one of her teachers she joined the Gould League. It was following her marriage to a farmer in the Donald area, and starting work as librarian at Donald High School that she discovered *The Victorian Naturalist* and soon became a member of the FNCV.

It was Club practice at the time to hold a major excursion, annually in January. Between 1973 and 1995, Lilian was a participant in 13 of these events. These took her to a range of destinations including Tasmania (three times), Broken Hill, King and Flinders Islands in Bass Strait, and Kangaroo Island.

Lilian contributed two articles to *The Victorian Naturalist*. The first, in 1984, was a detailed report, including a bird list, of the Club's excursion to King Island, in January of that year.
The second article was also a report—of the January 1985 FNCV excursion to Cann River.

In 2017, when Lilian downsized and moved away from her long-term home in Donald, she donated many boxes of books and past copies of *Naturalist* to the club. Some of these books are now within the library's holdings. The unbound back issues of *The Victorian Naturalist* will be of use in the impending project to digitise further numbers of the Club's journal.

The Club extends its sympathies to Lilian's family.

Thanks to the editorial and layout team who put together FNN 300

Joan Broadberry
Wendy Gare
Sally Bewsher

Many thanks to those who helped collate and label FNN 299

Andy Brentnall
Edward Brentnall
Hazel Brentnall
Sheina Nicholls

bookshop@fncv.org.au

for any orders or bookshop queries.

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

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

FNCV Environment Fund:
Call for a second round of Grant Applications

In the past two months the FNCV Environment Fund has received two large donations which have boosted the funds available to the extent that, for the first time, we are able to run a second round of grants within a twelve month period.

Applications close at 5 pm on Monday 23rd September 2019

Barbara Burns, Secretary FNCV Environment Fund

The FNCV Environment Fund has the following purposes:

- To support and finance environmental research, in particular research into the biodiversity of Victoria.
- To support and finance dissemination of information on the natural environment by any legitimate means, including public lectures, seminars, field trips, courses and publications.
- To support and finance practical projects aimed at preserving and enhancing the biodiversity of Victoria.

The FNCV Environment Fund is administered by a committee consisting of Malcolm Calder (Chair), Barbara Burns, (Secretary & Treasurer), Bob Rogers, John Harris, Ian Moodie and Cathy Willis.

The Committee calls for applications for the next round of funding from the FNCV Environment Fund. Requests for projects between $200 & $1,000 will be considered.

Applications can be from organisations or individuals, but in the latter case must be supported by an organisation. They could be from established natural history or environmental organisations e.g. (Field Naturalist Clubs, Landcare Groups, Friends Groups etc), educational institutions or government departments. Multiple applications from one research group are not encouraged.

Applications for this round of funding close **Monday 23 September 2019 at 5pm.** All applications will be acknowledged and results of applications communicated by Thurs 10th October 2019. Late applications will not be accepted.

Grant money is required to be spent within 12 months of notification of receiving a grant with a short report on the project supplied to the FNCV within 12 months of the same date. The report can be published by FNCV and successful applicants are encouraged to also communicate the results of their project to the Club via articles, talks or field trips.

Additional information about the Environment Fund is available at **www.fncv.org.au.**

Please include the following information in the application:

- Project title.
- Project description (max 250 words).
- How the project meets the aims of the Fund.
- Budget (include GST on all relevant items). (Also indicate other sources of funding)
- Indicate if the application is from an individual or organisation and give the name of the individual or organisation.
- Applicant name and contact details (including mailing address/phone/fax/email).
- Signature of applicant.
- Endorsement of organisation (signature of responsible person such as President, Secretary, Manager, Head of Department, include name and position held).

Applications should be sent to:
Secretary FNCV Environment Fund
Field Naturalists Club of Victoria
PO Box 13,
Blackburn Vic 3130
or emailed to admin@fncv.org.au

Donations to the FNCV Environment Fund are **tax deductible.** Donations are always welcome. Donation forms can be down-loaded from the website www.fncv.org.au or are available on request from the FNCV Office. Phone 98779860 or email admin@fncv.org.au

Botany Group

Meeting 18th July: In Search of Rare Victorian Plants
Speaker: John Eichler

John Eichler discussed various categories of rarity in the course of listing and describing numerous examples of rare plants. The audience of eighteen was consequently well able to follow and enjoy the illustrated talk.

John at the same time was presenting a personal journey of field research in Victoria. He mentioned he has used information on plant habitats, rainfall etc, as well as records from the Royal Botanic Gardens, the Atlas of Living Australia and La Trobe University, to track down rare plants.

Some of the categories of rarity discussed include:

New rare plant records Examples were provided of eight new rare plants discovered in Victoria during the past five years or so.

Caladenia pumila *Image:* J. Eichler

'Extinct' but subsequently rediscovered. (If not seen for 50 years, a plant is called extinct.). Examples given included *Caladenia pumila* - last seen 1926, *Acrotriche depressa* - last seen late 1800s, *Pterostylis valida* – last seen 1940s, *Calotis pubescens* (Burr Daisy) – last seen 1854, *Leionema microphyllum* (previously known as Phebalium) - last seen the 1960s.

A plant presumed extinct in Victoria is *Atriplex billardierei* (Glistening Saltbush), its last record being in 1958. But the plant is still present in Tasmania and also New Zealand. It grows in sand just above high tide level so may have dispersed across the sea at some time.

Calotis pubescens, Burr Daisy *Image:* J. Eichler

Once widespread or common. Now restricted to NE Victoria is the yellow flowered *Euphrasia scabra* (Rough Eyebright). Why has it become rare? Perhaps due to wetland habitat change. *Nymphoides geminata*, was once widespread in the Murray River catchment, it may have declined due to the presence of Carp. The Purple Donkey Orchid, *Diuris punctata* may have declined from grassland and woodland habitats due to agriculture and/or weeds.

For some plants their natural range only just reaches Victoria. *Boronia filifolia* (also South Australia) grows in the NW of the Little Desert. *Eremophila sturtii* is found only in the far NW Mallee and *Mirbelia rubiifolia*, a pea flower from coastal NSW and Queensland, is found in Victoria only at Mallacoota.

A plant can be rare, but locally common. An example is *Hibbertia truncata* from Port Campbell.

Naturally rare plants include *Borya mirabilis*, found at one site only, in the Grampians and *Pelargonium 'Sp 1'* from Lake Omeo, near Benambra.

A 'cryptic rarity' aptly describes *Thismia rodwayi*, which has no green parts and is often hidden under leaf litter. Mycorrhizal, it lives on decaying plant material with the help of a fungus. The flower is orange and appears translucent.

Found after unusual rainfall events: *Abutilon malvifolium*, at a site at Red Cliffs, near Mildura, appears after heavy rain. In the Wimmera, *Eriocaulon australasicum* is found in ephemeral pools if they persist into summer.

Thismia rodwayi J. Eichler

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Found only after wildfire, on the Nunniong Plateau, in subalpine mallee woodland, *Actinotus forsythii* (a Flannel Flower), germinates and flowers, but it only lasts one season.

Rare plants confined to uncommon habitats include *Pterostylis tenuissma* (a Greenhood) found in alkaline swamps associated with Woolly Tea-tree; *Cheilanthes lasiophylla* (Woolly Cloak-fern) in Mallee rock outcrops; and *Corybas despectans* (an orchid) is confined to alkaline dunes near Portland and Cape Schanck.

New rare plant records sometimes result from the review of specimens: *Brachyscome dichromosmatia* from the far NW was initially misidentified as the widespread *B. lineariloba.* Also *Pterostylis lingua* from the far NW was initially misidentified as *P. xerophila* - both orchids are very rare in Victoria.

John has added four new records for Victoria. *Myoporum brevipes* in the Mallee, *Gleichenia rupestris* in East Gippsland, *Acacia binerva* in the upper Snowy River and *Levenhookia pusilla* in the Little Desert.

John suggests checking your local reserves because they may contain locally rare plants. He and a friend were very pleased to find *Centrolepis polygyna* and *Calandrinia eremaea* on the foreshore reserve at Black Rock recently.

Ken Griffiths

Actinotus forsythia,Flannel Flower J. Eichler

From the Office

Dear Members,
we have purchased some high vis vests complete with the FNCV logo for people to wear when they are representing the Club at festivals and other events. (Modelled by Gary). There are a range of sizes including for juniors. Those in charge of organising promotional events will need to collect and return them to the office.

If anyone is able to donate toilet paper for the hall, we would be grateful. All donations keep costs down.

Wendy Gare
Administration Officer

WANTED TO EXCHANGE OR PURCHASE:

INDIVIDUAL ISSUES AS PUBLISHED OR RUNS OR COMPLETE WORKS IF BOUND TO INCLUDE ALL WRAPPERS AND ANY RELATED EPHEMERA:

The Southern Science Record 1883–1886
The Victorian Naturalist January 1884–December 1893 as well as April & May 1926, September 1927, September 1935, January 1937 and May 1960.

I would be pleased to consider outstanding copies by virtue of condition or association or other issues with a view to further enhancing my sets. Thank you.

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