

Understanding Our Natural World Est 1880

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

Field Nats News No.267

Newsletter of the Field Naturalists Club of Victoria Inc.

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September 2016

From the President

On Saturday 30-08-2016, Gary Presland and I met with Margaret Bennett and Gary Barker from the King Island Field Naturalists Club. Margaret is the current President and is very interested in celebrating the 130th anniversary of the FNCV field trip to King Island on November 18th 1887. There was a 100th anniversary excursion in 1987 which some of you may remember. There is a proposal to organise yet another excursion to coincide with the 130th anniversary in November 2017 which is also the 55th anniversary of the King Island club and the members are keen to have us come down for a visit.

In Margaret's words: "November is a good time of the year to visit the island. Some of the concepts discussed include visiting the locations of 1887 such as the main camp at Yellow Rock, flora and fauna site visits, as well as presentations. To cater for the diversity of interests one idea is to have parallel tours so people can maximise their interest areas. We would welcome feedback as to the interests of possible attendees so we can cater accordingly. I also understand that there was interest from Tasmanian Clubs in 1987 and may follow up with them again.

As you are aware Gary Barker and I have been visiting the areas where the 1887 photographs were taken and taking current photographs. To give you an idea of the change I have attached a photo of the FNCV's base camp at Yellow Rock and a recent photo of the same site. You are most welcome to publish this photograph in your newsletter. We suggest a good sized tour group to be about ten to twelve people, but would do our best to accommodate more members if necessary. However, priority may have to be given to those people who register early. We have not contacted accommodation providers on the island or airlines as this can be done closer to the time. As a way ahead I'd be grateful for advice from the FNCV on whether there is interest in this possible activity."

Please contact Wendy in the Office if you are interested in being part of an excursion to King Island in November 2017. I believe it would be a very enjoyable excursion.

Maxwell Campbell

IMPORTANT – Early due date

As the editor will be away, the due date for copy for FNN 268 will be a week early, on Tuesday 30th August. FNN will be completed and sent to the printer on Tuesday 6th September. Collation will be as normal on Sept 20th.

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Left: A lovely reminder of one of the FNCV's milestone events.

The double celebration of the 20th anniversary of the official opening of our Club premises in Blackburn and the launch of Gary Presland's history of the FNCV took place on Friday the 8th of July.

(L to R) John Harris, Dr. Gary Presland, Helen Harris OAM and Associate Professor Don Garden OAM, were photographed holding copies of *Understanding our natural world*. The Field Naturalists Club of Victoria 1880-2015.

Photo: Barbara Burns



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 5th Fungi Group. Meeting: Members' night. Contact: Virgil Hubregtse 9560 7775

Tuesday 6th Fauna Survey Group. Meeting: *Interactions between dingoes and feral cats in northern Australia*. Speaker: Dr Leila Brook, Zoologist, Ecology Australia. Contact: John Harris 0409 090 955; wildlifeexperiences@gmail.com

Sunday 11th Juniors' Group. Excursion: *Werribee Gorge Walk.* Meet at 10.30 am in the lower carpark. Contact: Claire Ferguson 8060 2474; toclairef@gmail.com

Monday 12th Marine Research Group. Meeting:

For details contact Leon Altoff 9530 4180 AH; 0428 669 773

Thursday 15th Botany Group. Meeting: Myrtle wilt in Victorian cool temperate rainforests.

Speaker: David Cameron. Contact: Sue Bendel 0427 055 071

Tuesday 20th Collate FNN. Starting about 10.00 am. All welcome.

Contact: FNCV office 9877 9860 or admin@fncv.org.au

Wednesday 21st Terrestrial Invertebrates Group. Meeting:

For details contact Max Campbell 0409 143 538; 9544 0181 AH; mcam7307@bigpond.com

Saturday 24th to Friday 30th - Fauna Survey Group. Survey and training camp with Peter Homan and John Harris. *Annuello Flora and Fauna Reserve in the Mallee*. Prior registration essential. <u>Available to FNCV members only and numbers limited</u>. Contact: John Harris 0409 090 955; wildlifeexperiences@gmail.com

Monday 26th FNCV Council Meeting - 7.30 pm sharp. Agenda items and apologies to Wendy, 9877 9860 or admin@fncv.org.au

Tuesday 27th Day Group. Workshop: *All about Microscopy*. Speaker: Max Campbell. Meet at 10.30 for coffee and a chat. Speaker at 11 am.

Contact: Max Campbell 0409 143 538; 9544 0181 AH; mcam7307@bigpond.com

Wednesday 28th Geology Group Meeting. *Paintbrushes, Geo picks, Pixels and Acid - an illustrator's journey into deep time.* Speaker: Peter Trusler, renowned artist and illustrator, currently pursuing a PhD at Monash University. Contact: Ruth Robertson 9386 5521

Friday 30th Juniors' Group. No meeting due to AFL grand final public holiday.

Contact: Claire Ferguson 8060 2474; toclairef@gmail.com



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

Members' news, photos & observations

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



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

Rowan Williams, Fiona Williams, Alice McDougall, Felicity Smith, Maureen Muhlhauser, Mark Hall, Sue Fisher, Kim Wright, Matthew Clancy, Jake McKenzie, Floris Sharpe, Megan Sharpe, Ben Sharpe, Claudia Filipic and Sara Petrov

FUNGI



The stage is set for the emergence of a miracle

water oozes, trickles, gushes a cornucopia of colour

> soil soaked, enriched re-activates its treasures

> > thrusting from earth's dark recesses

heaving its way upwards to salvation

lighting our way to the joys of Autumn

and the fungi season.



Cecily Falkingham 2014

Vale—Enid May McCarthy

We are sad to announce the death of long-term FNCV member Enid Mc Carthy. Enid joined the Club in November 1962.

She was a valued member and customarily made a donation to the Club when she renewed her annual subscription.

Our deepest condolences.

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.

Experimenting with the layout of FNN

Thank you to the many FNN readers who have changed from receiving a paper FNN to downloading it online. We now have the great majority of newsletters distributed in this way. Be assured, for those who choose to receive FNN by mail, we will continue to provide this service.

It was pointed out to me that a three column layout is not always easy to read on a screen, thus I am experimenting with an 'e-friendly' version. I tried to eliminate all columns, but was not happy with the result. Two columns seems to work best. Any positive feedback welcome.

The Editor

Thanks to the editorial and layout team who put together FNN 267

Joan Broadberry Wendy Gare Sally Bewsher



Geology Group

Meeting 27th July
Professor Peter Betts presented a talk

"How do we know about the Earth"

The following is a brief summary which he very kindly provided for FNN.

Pete is a tectonicist at Monash University and has expertise in interpreting geophysical data. Pete provided an overview about the key observations that led to the formulation of plate tectonic theory from a historic perspective. He highlighted the importance of "continental drift" and Alfred Wegener's speculations about the supercontinent Pangea. Pete showed that paleomagnetism, which is when rocks preserve an ancient record of the Earth's magnetic field, demonstrates that Wegener was indeed correct with his continental drift hypothesis. He then went on to discuss the significance of post WW2 efforts to map "ocean floor bathymetry", with the discovery of great underwater mountains called Mid Ocean Ridges. These are the locations where flips in the magnetic poles of the Earth and proved that new ocean crust was being created at Mid Ocean Ridges. The last piece of the "Plate tectonics" jigsaw was highlighted by the mapping of the "Benioff Zone" using deep earthquakes, which showed the geometry of rigid ocean crust descending back into the Earth's mantle. These regions are known as subduction zones and are part of mantle convection.

During his presentation, Pete highlighted that our understanding of the Earth is biased by our understanding of the present day structure of the planet, which can be imaged using vast amounts of geophysical data. This is only a tiny part of the geological record of the Earth. Pete then demonstrated an example of a numerical model of the geology that underlies our feet here in Melbourne. The model showed the collision of a small continental fragment with to the edge of Gondwana during the Silurian geological era. See Explanatory Figure 1 (Right)

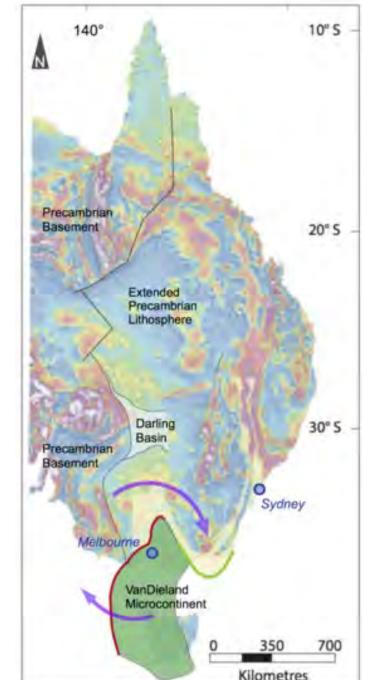
The geology of VanDieland is exposed in western Tasmania, but extends as far north as the Victorian NSW border and as far south as the Southern Tasman Rise. The collision modified the Gondwana margin and contorted the geology of the Tas-

manides, by making continental scale bends in the Earth's crust. The model was created using Underworld software developed at Monash University and University of Melbourne.

Explanatory Figure 1

We interpret the complicated geology of South Eastern Australia as having been formed by the collision of an exotic terrane (VanDieland) in the Silurian period over 400 million years ago. We see evidence for a swirling pattern in the geological fabric of Australia which supports this idea. Mountain building at the front of the collision (red) and crustal thinning and stretching along the side and behind the terrane (green) are consistent with our model.

Image credit: Louis Moresi, Peter Betts and Ross Cayley using data available from Geoscience Australia at the Geophysical Archive Data Delivery System, http://www.geoscience.gov.au/gadds



Professor Peter Betts Associate Dean Graduate Research - Faculty of Science School of Earth, Atmosphere, and Environment Monash University

This newsletter is printed on recycled paper.

Extracts from SIG reports given at the last FNCV Council Meeting

Botany Group:

We had a brilliant, educational, interactive workshop on macro photography at our July meeting. Wendy Clark, from Empathy Photography and teacher from Mastering Your Camera, took questions on our problems with macro photography. Once a list of problems were taken from the participants, Wendy introduced us to white balance to control exposure and contrast. Surprisingly this can even be adjusted on a camera phone. Wendy explained focus and depth of field by discussing the interaction between F stops, shutter speed and ISO. Wendy also showed us how to adjust light using bat lights and shades (which can be as simple as a plastic bag or white umbrella). Tripods, lenses and other camera accessories were also discussed. Then we practised taking photos of orchids and other flowers with Wendy providing individual instruction.

Thanks to Wendy for a most informative session enjoyed by 28 participants.

Fauna Survey Group:

The meeting on the 5th July was attended by about 20 members. The scheduled speaker wasn't able to attend so we were lucky to have Peter Homan step in. Peter first presented some wild life camera videos, including some rare species, such as the Broad-tooth Rat and Long-nosed Potoroo. The main presentation was a study Peter made at Moysten West, 'Survival and recolonization following wildfire at Moyston West'.

On Sat. 23rd we had our annual equipment stocktake and maintenance day.

Surveys: On the Sat 9th July we continued the survey 'Parks Vic-FNCV Eastern Fauna Focus Survey', this time to check tiles and tin shelters in the metropolitan south-eastern parks for reptiles.

On 24th July the cameras in Deep Lead Flora and Fauna Reserve were retrieved

Juniors' Group:

On Sunday 10th July, 11 of our Junior members joined the FNCV Fungi Group for their seasonal weekly foray at Wanderslore Sanctuary in Launching Place, Yarra Valley. With cool but calm conditions we got to view a wide variety of fungi including many boletes and corals – there were many red and yellow corals scattered throughout the woodland forest. To my delight, we found a few tiny Bird's nest fungi (that Bruce Fuhrer had told me we might find there) and I got to see them in real life for the first time. Thank you Fungi Group members for your patience and sharing your knowledge with us!

Geology Report

At our meeting on Wednesday 27th July Prof Peter Betts, a geophysicist from Monash University, spoke on the topic *Plate Tectonics*; we have come a long way but have a long way to go.



Peter began by giving an overview of the development of the concept of Plate tectonics from the early theories of Alfred Wegener. Wegener did not have a mechanism to explain the movement of continents across the earth's surface. Discoveries since the end of the Second World War have built up a picture of how plate tectonics function. These discoveries include: the discovery of mid-oceanic spreading ridges and convergence zones where less dense crust is dragged under more buoyant crust producing subduction zones; the youthful age of the world's oceans, less than 210my; palaeomagnetism; improving techniques in dating; as well as gravity; magnetic and seismic imaging etc.

Note: A more detailed report supplied by the speaker appears on page 4.

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

If you find injured wildlife: Wildlife Victoria

1300 094 535

Help for Wildlife

0417 380 687

Will connect you to your nearest suitable wildlife shelter

PUT THESE NUMBERS IN YOUR PHONE NOW.



Day Group

The Day Group's July presentation was given by its convener, Joan Broadberry. Some endemic birds and Wildlife of New Zealand - an introduction.

The endemic or special birds of New Zealand are those which breed only within its borders, although they may spend part of their lives elsewhere.

New Zealand was once a land of birds, but the arrival of humans brought hunting, the clearing of habitat and the introduction of predators and competing species, resulting in the extinction of an estimated 40% of endemics. Many now only survive in predator-controlled eco-sanctuaries such as Mt. Bruce or Zealandia, both located in the far south of the North Island or on predator-free islands such as Kapiti, Motuara (in the Marlborough Sounds) or Ulva, part

New Zealand

Robin

of Stewart Island.

Some of the endemic birds I have observed in four trips across the Tasman are: Bellbird, Stitchbird, Tomtit, Rifleman, Brown Creeper, Whitehead, Kea, Yellow-crowned Parakeet, Takahe, Blue Duck and Brown Teal. Few endemics are common, with the Tui, Grey Warbler and Paradise Shell Duck being exceptions. However, with the help of books such as, Birds of New Zealand, Localitv Guide by Stuart Chambers, it is possible to find many rare species in the wild. As they

evolved without predators, birds, such as the New Zealand Robin (above) and Weka readily approach people and can be a delight to encounter.

Perhaps only 80 of the critically endangered Black Stilt remain, but they are breeding at the Twizel wetlands just south of Mt. Cook. As with many threatened birds, great efforts are being made by New Zealand to conserve them.

New Zealand has one endemic gull, the Black-billed Gull. It feeds over pastureland and breeds in the wide, braided South Island river beds. Similar, but smaller than the abundant Red-billed Gull (the Australian Silver Gull) it has a fine, black beak with no black under its wings. There is also only one endemic pigeon, and one



endemic raptor. The New Zealand Pigeon's size (below) gives it great presence as does its beautiful iridescent green

and pink plumage and conspicuous white apron. The New Zealand Falcon is scarce, but announces itself with a loud 'kekeke' call.

I enjoyed some great birding experiences in February this year during a two week guided wildlife trip of the southern South Island. Katiki Point also known as Moeraki Lighthouse, a peninsula on the east coast, is home to a great variety of birds, many nesting as well as New Zealand Fur Seals. Species include Little Blue Penguin (Fairy Penguin) White-fronted Tern, Black-backed Gull (Kelp Gull) and the endemics; Variable Oyster Catcher, Spotted Shag and Yellow-eyed Penguin. The Yelloweyed Penguin (above) is large, second in size only to Emperor and King Penguins and has been placed in a

genus of its own. It is also possible to observe these rare penguins at Roaring Bay, south of Dunedin. Unfortunately without greater protection their mainland colonies may not survive.

Taiaroa Head at the tip of the Otago Peninsula is a world famous reserve, home to over 200 endemic breeding Northern Royal Albatrosses and many other species. It offers a variety of guided tours and is an absolute must for any naturalist to visit. A lesser known jutting headland further south, is Nugget Point, where a Fiordland Crested Penguin was spotted on one of the rocky



islets off the tip. These breed on New Zealand's west coast, but from December some disperse more widely. The Caitlin Forest Park region is another beautiful and rewarding area to visit for native forests, walks, waterfalls and birdlife.

Stewart Island offers some of New Zealand's best birding. After a rough crossing from Bluff to Oban, the good weather returned and a fantastic morning was spent cruising its coastal waters. At times up to 60 albatross and mollymawks followed the boat. The most common was the White-capped or Shy Mollymawk. Very similar, but with a grey head and neck, was Salvin's Mollymawk. Easier to identify, with its vivid black and yellow beak was Buller's Mollymawk. Much bigger was the majestic endemic Southern Royal Albatross, (below). Brown Skuas, endemic Stewart Island and Spotted Shags and flocks of Sooty Shearwaters, feeding in company with White-fronted Terns were also present.

The Kiwi is THE iconic New Zealand endemic. Seven species have now been identified. I have seen the smallest and rarest, the Little Spotted Kiwi, on



Kapiti Island. After a boat trip and guided night walk on Stewart Island, we had great views of two Southern Brown Kiwis feeding on a beach.

Another highlight was a day spent on predator-cleared Ulva Island, a short ferry ride from Oban. Many endemics such as New Zealand Robins, Saddlebacks, Wekas, Kakas and Redcapped Parakeets were easily seen. I also enjoyed a first sighting of a flock of rare Yellowheads.

My visits to New Zealand haven't been all about birds. Wonderful incidental sightings of marine mammals include the endemic Hector's Dolphin in the Marlborough Sounds, readily identified by its rounded dorsal fin (below) and Hookers Sea-lions resting along a stretch of beach at Cannibal Bay.

Joan Broadberry





Marine Research Group News

Summary of MRG presentation Monday 11 April, 2016 by Andre Chiaradia on the topic "Penguins at sea"

This talk was on the little penguin *Eudyptula minor*, focusing on the populations at Phillip Island and also at St. Kilda, Port Phillip Bay. Little penguins spend 80% of their time at sea.



They are deep divers, spending 50% of this time underwater., with their food consisting of small pelagic fish. They use a small area on land for breeding. The talk looked at environmental variables affecting their food

supply, foraging behaviours and breeding. These variables included water temperature, salinity, currents, turbidity, the presence of phytoplankton as an indicator of marine productivity, and human impacts (such as fishing, coastal development and shipping).

Platon Vafiadis

Many thanks to those who helped collate and label FNN 266

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



Fungi Group

FUNGI GROUP MEETING 4th July 2016

Surveys for the threatened fungus: Tea Tree Fingers *Hypocreopsis amplectens*. A presentation by Dr Sapphire McMullan-Fisher

Dr Sapphire McMullan-Fisher, ecologist and Fungimap Coordinator, spoke about the rare Tea-tree Fingers, *Hypocre*-

opsis amplectens, which is the only macrofungus listed under the Victorian Flora and Fauna Guarantee Act 1988. The fungus is currently listed as 'vulnerable', but actually it may be critically endangered, since it seems to have disappeared from two of the three sites where it was found in the early 2000s. Much more knowledge about its life cycle and ecology is needed.

What is known so far

Hypocreopsis species are fungicolous (i.e. live on other fungi). The host mycelium is likely to be a species of Hymenochaete, a wood-rotting fungus. Hypocreopsis amplectens fruits on only some of the available woody substrates, such as stags and branches 1-5 cm diameter and more than one metre long. It prefers wood that is dead and not yet lying on the ground, but historically it was also found on timber lying on the ground. These substrate requirements mean that care needs to be taken not to trample likely habitat, and particularly to avoid knocking dead wood down to the ground.

In Victoria, Hypocreopsis amplectens is found in closed can-

opy 'Old growth' Tea-tree tickets. The *Hy-menochaete* species is rarely recorded but seems to have a substrate preference for Prickly Tea-tree *Leptospermum continentale*, and maybe 'Manuka' *Leptospermum scoparium*, Scented Paper Bark *Melaleuca squarrosa*, and Silver Banksia *Banksia marginata*.

Little is known about the life cycle, particularly whether there is a mycelium stage, and whether the fungus is self fertilising or needs to outcross. Fruit bodies seem to persist for several seasons, but we don't know how long they are fertile and shedding spores nor how long the spores remain viable. It is assumed that the fruit-bodies are producing spores when the ostioles (pores through which the spores are ejected) look fresh.

Threats

Fire is a threat and likely to become more of a problem with altered climate and increasing

probability of fire. There is also the possibility that the Teatree thickets can become too old to provide suitable habitat for these fungi. We don't know what the optimal habitat is.

Action plan

Sapphire gave details about a proposed action plan to locate and save the fungus. With Victorian Government Threatened Species Protection Initiative Community Volunteer Action Grants, it is hoped that it will be possible to develop community surveys to help locate this species. It will be necessary to send records, along with images of the fungus and its habitat, to Fungimap, but **important not to collect the fungus** because at this stage we do not know enough about the biology to know if collecting is detrimental to populations.



Hypocreopsis amplectens Photo: Sapphire McMullan-Fisher

At our August meeting Sapphire will conduct a workshop titled 'How to carry out data-rich surveys for rare fungi like the Tea-tree Fingers (*Hypocreopsis amplectens*).

Jurrie Hubregtse

Hypocreopsis amplectens Photo: Tom May





Fungi Group

WEEKEND FORAY near FORREST, OTWAY FOREST PARK

Len Sprague Reserve, nr West Barwon Reservoir, 20th May 2016

A big thank you to Virgil and Jurrie Hubregtse for organising a very enjoyable weekend, and for finding us a variety of good sites to visit.

Wet Sclerophyll Forest

On the sides of the road leading to the car park were numbers of Cortinarius spp. Many were unknown, but we were able to identify the yellow-brown capped C. abnormis slimy when fresh and the stem has a lot of loose brown fibrils, and the basal mycelium is yellow. This species was present in large numbers at all growth stages from young to disintegrating. The lilac-capped C. alboviolaceous was distinguished by its characteristic water droplets at the top of the lilac stem. Along the roadside, many groups of the well known Green Skinhead C. (Dermoscybe) austrovenetus were identifiable by their green caps and pale vellow stem decorated with horizontal bands of brown fibres. We also found a very large brownish Cortinarius sp. with tinges of purple on the cap and stem. The question was whether it was a dried and mature Cortinarius archeri, or another Cortinarius sp., or perhaps Lepista nuda,. We were so fixated on Cortinarius that I forgot to look at the gills to see what colour the spores were (brown = Cortinarius; pinkish = Lepista nuda). However Sue Forster send some images and it showed that it was a Cortinarius sp, the brown spore print was quite clear.

Small orange-caps of Little Pin *Rickenella fibula* were everywhere in the moss. Some had aged or weathered to almost white. On both sides of the road were numerous fruit-bodies of a small coral fungus. The colours varied from pink-fawn to whitish and the branch tips were crested or spiky. These were the Spiky Coral *Clavulina coralloides (cristata)* and the colour variation is normal for this species. A number of small yellowish branched corals proved a puzzle and, as always, immature fruit-bodies are hard to identify. A later find of a larger (to 40 mm tall) specimen had a white stem, yellowish branches and branch tips on the way to fusing



Cordyceps gunii

Photo: De'ana Williams



Pholiota squarrosipes

Photo: De'ana Williams

together with some evidence of viscidity where some litter was stuck on the branches. This was the Pale Cauliflower Coral *Ramaria capitata* var. *capitata*, and the smaller fruit-bodies were indeed immature specimens of this species.

John Eichler found the uncommon Entoloma rodwayi a beautiful delicate green fungus. It had a pale grass-green cap with a darker green central umbo, and a very grass-green stem with a tuft of white mycelium at the base. The all-white gills had just a tinge of colour from maturing spores. A similar species E. viridomarginatum is easily distinguished because its lamellae have a dark green edge. A couple of *Cordvceps gunnii* (below left) were seen under some Black Wattles Acacia melanoxylon. The fertile black head graded smoothly into the yellow-brown stalk. It was attached to the remains of a moth larva probably an Oxyeanus sp. Another unusual sighting was the slime mould Stemonitis sp. on a small piece of litter. The thin upper portion that is usually brown and quite individualistic, was black and was starting to morph together. S Stephenson and H Stempen (2000) (Myxomycetes A Handbook of Slime Molds) says that S. trechispora is 3-7 mm tall, short stalked and with very dark sporangia. This seems to suggest that might have been the species we saw.

The fern gully had denser vegetation and was moister and produced a different suite of fungi. We found Hygrophoropsis aurantiaca in the ground near a rotting tree trunk. Its colouring – brownish orange to brownish yellow – is very like the more commonly found Austropaxillus infundibuliformis. However, Hygrophoropsis aurantiaca is differentiated in its smaller size (60 mm cap diameter cf 150 mm), inrolled margin and repeatedly-forked gills. It also has a white spore print although we did not see that (A field guide to AustralianFungi by Bruce Fuhrer 2011). A tiny yellow patch of Golden Splash Tooth Phlebia (Mycoacia) subceracea was growing on a small stick, the teeth were only discernable under a 10x hand lens. In the middle of the track were a cluster of the shaggy golden Pholiota squarrosipes (above). Small pieces of debris were stuck on the cap indicating that it was glutinous, and the stems were very shaggy and fibrillose. This species is readily identified by its caespitose growth habit, viscid, brightly coloured cap with veil remnants, and shaggy fibrillose stem. Further down the track, near a large fallen log there was a splendid example of *Marasmius* sp. 'angina' on a small piece of wood. The 'angina' cap (colour purplish-fawn with purplish-blue centre) and the tall thin black rhizomorphs were particularly characteristic.

Lake Elizabeth, 21st May 2016

Wet Sclerophyll Forest

Four species were present through the day in large numbers. Pale lilac caps of Cortinarius alboviolaceus were dotted in groups alongside the walking track. The pale brown gills, the satiny lilac cap and stem helped with identification (water droplets at top of stem). The pale thin clubs of the Fairv Club Macrotyphula juncea were found in profusion on leaves in the litter and once, unusually, growing on a Rough Tree-fern's (Cyathia australis) fallen dead rachis (frond). Fruit-bodies of the branched Mustard-yellow Coral Ramaria flaccida were growing in the litter among shrubs and were the most common coral seen on the day. Single specimens or groups stood out against the dark background. The unfamiliar white simple clubs of Clavaria alboglobospora (right) was a good find near the Lake, and the first viewing for many of our members. Fruit -bodies grow up to 100 mm high and 4 mm thick and the clubs are gregarious to densely caespitose in groups of up to 30 individuals, which arise from individual or common white mycelial patches. They are very brittle. The colour can vary from white to very pale buff and is concolorous with the stem. This will be included in the next revision of the Little Book of Corals

Yellow Earthballs *Scleroderma* spp. were everywhere, and there was discussion about their identification. The spore mass in this genus is contained in an outer skin (peridium) and the thickness of this measured at the equator, is one point of species identification, along with spore size and ornamentation. Colours of the spore mass develop with age and may proceed from white (immature) through purple to purple-brown or grey -black shades (D Arora Mushrooms Demystified; Sims et al A revised key to the genus Scleroderma, Mycotaxon 56, 1995, pp 403-420; R Ramsey. Trial field key to the species of Sclerodermataceae in the Pacific Northwest, 2003). Scleroderma cepa with its mouse-grey spore mass and peridium to 2 mm thick could be identified, but there were also numbers of small fruit-bodies (to 20 mm) which Jurrie Hubregtse said were fully developed at this size, but which we could not identify. This genus has some 25 species world wide and there are at least five reported in Australia: S. albidum, S. bovista, S. cepa, S. paradoxum, and S. verrucosum. Group members also had fun puffing brown spores of the smooth puffball Lycoperdon scabrum. All the scales had fallen off leaving a smooth brownskinned fruit-body.

Reiner Richter pointed out the beautiful small rose-pink My-cena, Mycena roseoflava (photo below), which was growing



Mycena rosoflava

Photo: Reiner Richter

on the bark of a large fallen eucalypt log, although Genevieve Gates and David Ratkowsky (A Field Guide to Tasmanian Fungi. 2014 p 124) note that it is usually found on small branches. This species had a pale pink cap (c 8 mm diameter) and the gills are whitish or pale pink and the small stipe (c 3mm long) is pink or yellow. We had a discussion about the colour of the stem, but more mature fruitbodies on another log showed some yellow. On these



Clavaria Alboglobospora
Photo: Richard Hartland

forays this weekend we have come across a lot of *Hohenbuehelia clelandii* on dead logs, identified by the layer of gluten, between the skin of the brown cap and the gills. This makes the cap look slightly viscid, The spoon-shaped fruit-body and the whitish decurrent gills, and the type of attachment (not a stem) inserted into the wood identifies this as *H. clelandii*. Genevieve Gates and David Ratkowsky (*A Field Guide to Tasmanian Fungi* 2014p 86) mention that it has a distinct odour of flour, but we only smelt a slight mustiness.

Marasmius species were also present in large numbers. The 'true' *M. crinisequi* with the 'pimple in a dimple' on the cap was found together with what might be described as *M.* sp. 'horse-hair stem'. The latter had the typical thin, tough black stem, wide-spaced pale gills and small brown convex cap with a 'dimple but no pimple'. The typical scooped out pale fawn caps of *M. alveolaris* were an aid the their identification and the smelly *Marasmiellus affixus* was found on a small twig. A number of small white, shell-shaped Marasmius sp. were growing on lots of pieces of stick. They were small and the gills had hardly formed, but one image by De'ana Wil-

liams showed that a black stem was developing, thus this was a very young *Marasmiellus candidus*. Small clubshaped fruit-bodies to 5 mm tall were interesting in that they were coated with white powdery material which puffed off when knocked. These were most likely young *Xylaria hypoxylon* at the conidial stage before developing the black fertile stage.

There were two rather quirky finds. Virgil Hubregtse pointed out the mass of Australian Honey Fungus *Armillaria luteobubalina* growing up the stem of a dead Treefern and near the lake also massing up a Tree-fern stem were the simplex form of the Pagoda Fungus *Podoserpula pusio*. Usually they form tiers of smooth, kidney-shaped

caps around a common stem – the complex form which we also saw – but the simple form consists of only one cap on a stem.

Richard Hartland pointed out a number of *Entoloma* spp. Around the Lake Richard saw the brown *Entoloma readiae*, 'brown eye', so called because the pale brown cap has a dark depressed centre. The slender stem is pale brown and the gills are pink when young becoming a pale brownish pink at maturity. *Entoloma brevispermum* is a large Entoloma; this one was a really large specimen with a cap diameter of 65 mm (15 mm bigger than the description in Genevieve Gates and David Rat-

kowsky p 67). The pale brown cap is undulating and wavy at the margin and the long, slender stem was 100 mm long.

In the ground in one of the more disturbed areas going across the Lake was a Common Rosegill Volvopluteus gloiocephalus(Volvariella speciosa) which likes to grow in disturbed or cultivated areas. It has a large, smooth, conical to flat cap which varies from white to brown-grey and is very slimy when fresh. The pale stem has no ring, but enclosing the base is a characteristic sac-like volva, and the white gills turn pink-brown with mature spores. On an odd bit of dung, Reiner Richter found Coprinopsis nivea. Its main characteristics are that it is snow-white in colour due to its white mealy coating and is small in size. It appears principally on herbivore dung, but in this case it was impossible to decide which sort of dung. We also saw one Descolea recedens, but could hardly believe what it was, the cap was so big, 70 mm diameter, but yellow scales remained on the margin of the cap and on the stem was pleated ring.

Redwood (Sequoia sempervirens) Plantation, 22 May 2016

Wet Sclerophyll Forest

This area was planted in 1938. The tallest tree in the world is a Redwood *Sequoia sempervirens*, named the Hyperion Tree. Scott Fergusson mentioned that although shallow rooted, the roots of all neighbouring Redwoods intertwined to strengthen their hold on the soil.

It was very quiet under these large trees with few fungi to be seen at first. Then we came across hosts of the Yellow Club *Clavulinopsis amoena* (to 75 mm tall) (Photo RP1 Ed Grey) in the pine litter. These bright yellow simple clubs were growing in an unusual habitat – conifer litter – whereas we normally find them in native forests. However, overseas literature does mention coniferous forests as habitat for this cosmopolitan species. This was a first sighting in this habitat for our group. Just into the Redwoods was a group of two Saucer Earthstars *Geastrum tri plex*. These were almost perfectly formed with six rays, a



Leptoa lubrica

Photo: Reiner Richter

fawn spore sac and a roughly torn mouth.

Further in, up the hill, the group was treated to a display of the Toothed Jelly Pseudohydnum gelationosum on several fallen logs. Some of the grey, jelly-like fruit-bodies were huge (over 80 mm across). On another log were Hypholoma fasciculare var. armeniacum which is apricot in colour and the gills bright orange in young fruit-bodies. This is an unusual form the Sulphur Tuft H. fasciculare which has a greasy, yellow cap with a red-brown or orange-brown centre and gills that are greenish yellow. Also on this log were clumps of Hypholoma brunneum with distinctive white scales like 'stitching' on the margin of their brown caps. In the same area Sue Forster found the 'new-to-us' lavender Hygrocybe, H. reesiae with pale to deep lilac-grey cap (to 30 mm diameter), drying white at central umbo and a very pale stem, lilac near the gills, and buff below. The gill form is a characteristic - they are decurrent with some shallow cross gills. These were clearly visible to us (AM Young. (2005) Fungi of Australia: Hygrophoraceae; Genevieve Gates and David Ratkowsky (2014). A Field Guide to Tasmanian Fungi). An exciting new find.

Reiner Richter found the tiny cushion, Hypocrea gelatinosa, growing on a rotten branch. This group showed all stages of development from the pale yellow of young specimens with pale ostioles, to the mature fruit-bodies with dark green protruding perithecia. The green of the perithecia is caused by the green ascospores within. On the ground in a more cleared area were white tongues of the coral fungus Clavulina rugosa. The white to cream fruit-body can grow to 50 mm and may be one of two forms, simple with a number of smooth, unbranched clubs, or tufted with wrinkled contorted branches, and the habitat is under introduced conifers such as the Redwood (J Breitenbach/F Kränzlin. Fungi of Switzerland (1984), vol 2 Non-gilled Fungi). Further reading of some literature, notes that overseas, Clavulina rugosa intergrades (merges) with Clavulina cristata ((D Arora. 1986. Mushrooms Demystified) and that C. rugosa might be considered a form of C. cristata (Cleland 1976 and the web site, Mushroom Expert). Thus, these two Corals appear to be a species complex. Evidence for this is that C. rugosa is occasionally found with

more profuse branching and crested branch tips (web site Mushroom Expert), while *C. cristata* can sometimes be found in a simple club form without crested tips (web site mykoweb). However, this obviously needs more study.

Later we spent some time in the mossy grass area near the carpark Our interest was first aroused by a group of Jellybabies *Leotia lubrica (* photo page 11) (growing under Hazel Pomaderris *Pomaderris aspera*) with their vellow granular stem

and knobbly yellow-green head. Scattered groups of earth-tongues were spread over a wide area. These had black stems and clubshaped black fertile heads. There was discussion about Geoglossum spp. with smooth heads and stem versus Trichoglossim spp. with hairs or bristles on the head and stem. Interestingly, Jurrie Hubregtse's photo of one of these showed that the 'bristles' were caused by infection. Therefore, this species is probably another Geoglossum sp. Jurrie has studied the Geoglossum sp found there and identified them as Glutinoglossum methvenii. "Glutinoglossum is a recently described genus in Geoglossomycetes, characterized by viscid black fruiting bodies ascocarps scattered to gregarious on damp soil or fallen deciduous wood, 3-4.5 cm tall, viscidgelatinous when wet, black; hymenium black, one-fourth to one third the length of the ascocar, although not well differentiated from the stipe, bilaterally compressed, clavate to spathu-

late, 3–5 mm wide; stipe black, terete, viscid, 1–2 mm wide" (Vincent P. Hustad & Andrew N. Miller. Studies in the genus Glutinoglossum. *Mycologia*, 107(3), 2015, pp. 647–657).

Several coral fruit-bodies with yellow-orange simple clubs had flattened, tending to twisted, clubs to 50 mm tall by 4 mm across. The short stems were lemon-yellow with a yellowish mycelial pad attaching them to the substrate. These were Bright Orange-yellow Club *Clavulinopsis depokensis* (*Fungi of Southern Australia* by N Bougher and K Syme 1998), and its lemon-yellow stem is distinct from the more orange club thus distinguishing these from the Flame Fungus *C. sulcata* (*C. miniata*) where there is no colour difference. Fallen branches were substrates for two species. Reiner Richter found the Brown Forest

Cup *Urnula (Plectania) campylospora (*photo below) with its large (to 75 mm across), rubbery, smooth, dark deep goblet-shaped cup and rough dark outer surface. Two fruit bodies of the Peppery Coral *Artomyces austropiperatus* showed the typical upright fawn branches with four turreted tips. This is the larger of two similar-looking corals that grow on wood, the other being *A. colensoi*.



Urnula campylospora

Photo: Photo De'ana Williams

Thanks to all the forayers who, over the three days, found species, particularly John Eichler, Les Hanrahan, Richard Hartland, Virgil Hubregtse and Reiner Richter who helped identify them. Thank you also to the photographers (John Eichler, Ed Grey, Pat Grey, Richard Hartland, Virgil Hubregtse, Reiner Richter and De'ana Williams) who supplied many photos for us to select from for the report. Thanks to Virgil Hubregtse for checking the report, the species list and for her notes and comments.

Pat and Ed Grey

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