

NOVEMBER MEETING – All About Moths

With Cathy Powers

Moths are often thought to be annoying, boring brown things, but nothing could be further from the truth. They can be incredibly colourful and vary in size from a couple of millimetres to a whopping 27cm in the case of the Hercules Moth from northern Australia.



The 'Old Lady' moth - *Dasytopia selenophora*

Moths and butterflies belong to the order Lepidoptera and the lines between the two groups are somewhat blurred. Butterflies all have 'clubbed' antennae whereas moths generally have feather-like or hair-like antennae, although the Castiiniidae – a group of colourful, day-flying moths – also have clubbed antennae. Butterflies are exclusively day flying, whereas moths are mostly night-flying, but can be both. Moth caterpillars often spin cocoons or bury themselves underground to pupate, butterflies never do. Butterflies sit with wings together and above or spread to the side, moths generally wrap their wings about the body or hold them flat but not spread (except for many Geometrids who hold their wings like butterflies). Richard South, who wrote the definitive guide *'Moths of the British Isles'* in 1908 put it best. "All those lepidoptera which are not butterflies are moths". ☺

In Australia there are about 10,000 named species of moths, with about twice that many collected and awaiting description. There are probably as many again that have not yet been discovered, and a night at a moth trap may well reveal a host of 'new' species.

The antennae of moths are wonderful structures, and can be useful in differentiating between males and females. The antennae of the females are always filiform (hair-like) while those of the males are quite complex and feathered. Females attract males by means of pheromones and the complex 'feathers' on the male antennae are receptors to aid the males to find a mate.



Feathered antennae of a male moth

Female moths lay eggs – some are deposited on a food plant, some a 'broadcast' while the moth flies through the night. Tiny caterpillars hatch from the eggs and go through five or more moults, called instars. Each instar may be just a larger version of the one before, or may change the appearance of the caterpillar dramatically.



Caterpillar of the Emperor Gum Moth

When it is ready to pupate, the caterpillar spins a cocoon, either on the food plant or buried in the ground

President: Bruce McGinness – brucesm@gmail.com

Treasurer: Frank Scheelings – ftscheelings@gmail.com

Australian Plants Society, Geelong: P.O.Box 2012, Geelong . 3220

Secretary: Phil Royce: phil.i.royce@gmail.com

Editor: Ade Foster – adefoster@internode.on.net

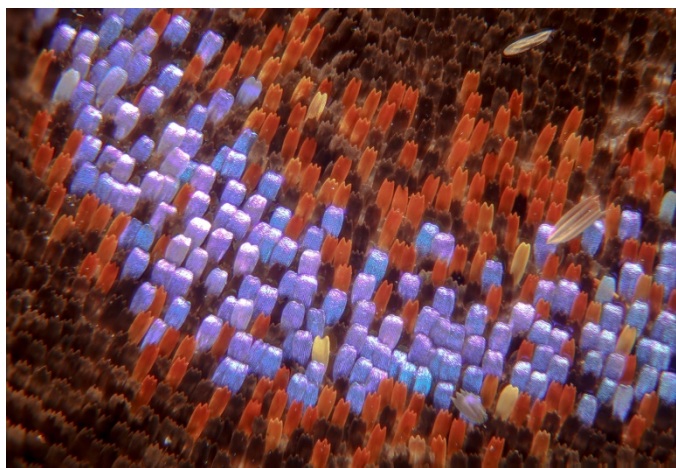
Website: www.apsgeelong.org

beneath it. Here it changes to a pupa, and, depending on species and time of year, it may be a couple of weeks or a couple of months before the adult emerges to begin the cycle again.

In some species of moths the females are wingless and remain in or on the cocoon after emerging from the pupal case. The males are attracted to them by pheromones.

Adult moths differ greatly in their choice of foods. Many are nectar feeders and are important pollinators of many native plants. Some are attracted to rotten fruit, or fungi, and some, like the Swift moths or Ghost moths (Family *Hepialidae*) have no moth parts at all and are basically bags of fat and reproductive organs.

The name 'Lepidoptera' is derived from the Greek, *Lepis*, *Lepid* – a scale, and *Pteron* – a wing, and describes the scales which cover the wings of moths and butterflies. If you have ever handled a moth you've probably noticed the 'dust' that remains on your hand when the moth is released. These are the tiny scales, which overlap like shingles on a roof providing a waterproof covering and giving rise to the beautiful colours and patterns of the wings.



Scales on a moth's wing x 300.

Moths are attracted to lights at night and so can be easily observed and photographed. They seem to be more attracted to light approaching the ultra-violet end of the spectrum, but why this is so is open to debate. A white sheet hung vertically with a light source close to it will attract hundreds and sometimes thousands of moths, particularly on dark, warm, humid, still nights. Using this method, Cathy has photographed over 600 species on her property in the Brisbane ranges, and is contributing photos and observations to the book series 'The Moths of Victoria'.

OUR NEXT MEETING

20th November

The speaker at our next meeting is our own Tony Cavanagh, who will talk to us about *Dryandras*. Tony and colleague Margaret Pieroni wrote 'The *Dryandras*',

the definitive work on the genus. Expect a very interesting talk with some of Tony's fabulous photography.

UPCOMING MEETINGS

2nd December Xmas break-up. Matt and Pam Baars' house at 8 Rotella Avenue, Corio. Lunch at 12.00 noon, BYO everything.

19th February, 2019 - Members' night. We have decided to have a 'proper' meeting in February and to kick the year off we are inviting all our members to tell us what has been happening in their gardens or in the bush over summer, or what they've seen on their holidays that would be of interest to the club. Perhaps a report on the High Country trip may be in order?

March 2019 - Maria Hitchcock OAM will speak to us about *Correas*. Maria is the author of "*Correas – Australian Plants for Waterwise Gardens*" and "*Wattle – Australia's National Emblem*". She has the Registered National Collection of about 200 *Correa* varieties in her garden in Armidale, NSW. Don't miss this fascinating talk.

April 2019 – Dr. Dean Nicolle is an Australian botanist, arborist and ecologist. He is widely recognised as the leading authority on the genus *Eucalyptus*. He has written five books on Eucalypts, including Field Guides to the Eucalypts of South Australia, Victoria and Tasmania. He founded the Currency Creek Arboretum in South Australia where over 900 Eucalypt taxa are grown. Dean has a PhD in mallees.

ON THE TABLE

with Frank Scheelings

This is the time of year for the *Chamelaucium*s, and we had a good variety of species, colours and forms on display. 'Purple Pride' is a favourite for good reason. It will grow to about 2m x 2m and at this time of year is a riot of purple flowers.



Chamelaucium uncinatum – Seton's Form

Seton's Form, from Frank's garden is a very large white and pale pink flowered form of *C. uncinatum*. It is a spectacular, long flowering plant with large flowers, 30mm across, with deep, reddish centres. A small flowered form is 'Sweet Rosie'. The flowers are deep crimson with white/pink outer edges. Sweet 16 is another small flowered form with white flowers aging to deep pink. All the Chamelauciums make great cut flowers and last for many weeks in the vase.

Verticordia grandis is a spectacular small plant with vivid red 'feather flowers' for most of the year. It is found in the sandplain country from north of Perth to about Geraldton in WA. *V. chrysantha* is a small shrub bearing masses of very bright yellow flowers in spring and summer. 'Paddy's Purple' is a popular plant, an intergeneric hybrid of a *Verticordia* and a *Chamelaucium*. It takes the form of a number of long, upright stems with masses of mauve/pink flowers at the ends.



Paddy's Pink

There were a number of *Melaleucas*, *Callistemons* and *Kunzeas* on the table this month (I've lumped them together coz I can't tell them apart 😊) Five were plants that Roger brought along. See our Plant of the Month for more on these. *Melaleuca citrina* is an attractive small tree with terminal yellow flowers. It also has red forms and many refer to it as *Callistemon citrinus*. (See what I mean?) *Melaleuca phoenecia* (*Callistemon phoenicius*) – the Scarlet Bottlebrush is a spectacular small tree bearing large bright red flowers. The variety 'King's Park Special' is a common tree on nature strips and medians around Geelong. Settlement Road between Torquay Rd and High St., Belmont is particularly good at the moment.

Prostantheras – the Mint Bushes – are a varied group, many having stunning floral displays. The foliage is strongly aromatic, and even brushing past a shrub releases a heavy minty (some say medicinal) scent. *P. ovalifolia* is a large shrub with soft dark green leaves and great numbers of purple flowers. It will grow to over 3m and needs to be controlled with some judicious use of the secateurs. *P. serpyllifolia* is a small shrub <1m

with pinkish flowers resembling *eremphila* blooms. *P. magnifica* is an upright shrub with bunches of large terminal flowers, pink or mauve with deep red/purple calyxes. It is another which benefits from the secateurs.



A large *P. ovalifolia* from Leach's garden at Inverleigh

Among the other plants on a loaded table was *Pimelea spectabilis*, a small shrub with rounded flower clusters which are pink in the centre, fading to white as they open fully. *Hypocalimna angustifolium* is a small shrub with tiny, pink and white flowers. Though hardy to frost, it prefers to be in a sheltered position away from damaging winds. Matt Leach brought along a waratah from his dad's garden at Inverleigh. 'Shady Lady' is a cross between *Telopea speciosissima* and *T. oreades*, and Matt's plant has issued a challenge to those grown by Roger Wileman, the hitherto unchallenged king of the Waratahs.



The Challenger – Waratah "Shady Lady"

PLANT OF THE MONTH - *Melaleuca scabra*

By Roger Wileman

The chosen plant for this month was a small melaleuca brought along by Roger Wileman. The species is uncertain, but Roger believes it to be Melaleuca scabra, or a close relative. Melaleuca scabra occurs in coastal areas of Western Australia between Hopetoun and Israelite Bay in the Esperance Plains.



Melaleuca scabra

Roger writes ...

On one of my trips to W.A a few years ago, I was taken by the number of *Melaleuca* species that were out in flower, with many different flower colours and various plant sizes from very small to quite large. Many of the smaller melaleucas are very desirable garden plants, with spectacular flowering displays in mid spring to early summer.



***Melaleuca ciliosa* – Eneabba, WA**

The original plants in our garden were grown from seed, the seed from all melaleucas is very small and fine, especially the smaller growing species, seedlings are minute and a lot of care is needed when transplanting from the seed tray to the first small pot. Most melaleucas will flower about three to four years after the seed is planted. Once a plant is established in the garden it will strike fairly easily from cuttings and flower the following year.



***Melaleuca sustena* – Gordon's Inlet, WA**

I have found that with regular pruning even from an early age it will give the plant a better shape and improve the flowering, which usually occurs on the outer tips of the branches. I usually give our plants a light prune after flowering. I have included photos of four species that have flowered for the first time this year.



***Melaleuca spathulata* – Bremmer Bay, WA**

SCHEELINGS' AND FOSTER'S GARDEN VISITS

October 13th was one out of the box, 24 degrees, clear skies and a gentle breeze to keep things cool. It was the perfect day for the garden visits that we had planned, and members certainly enjoyed the sunshine.

The visits started with Frank and Tina's garden overlooking the Barwon River in Highton. About fifteen members gathered for a wander in this most interesting garden. The large block is gently sloping at the front and quite steep at the back and features many mature plants with a fair sprinkling of younger and new plants, too.



The garden began in around 1990 with Frank carting uncountable wheel-barrow loads of gravel each night after work and scouring the newspapers on weekends for second hand sleepers. The garden has been landscaped with the sleepers and rocks to create levels with meandering pathways.



Frank interest in native gardening was awakened by a patient who brought him interesting plants. Creating the garden was, to a great extent, a family effort and Tina still boasts of her prowess as a sleeper mover. Franks has used plants which have interested him and his garden is an eclectic collection.



***Verticordia ovalifolia* in Frank's front garden**

The group then moved to Ade and Penny's house in suburban Belmont. A flat block of about 700 m², it started out, as many in the area did, with a lot of lawn and not much else. Ade began planting natives around the perimeter, and found that grevilleas did particularly well. Around 2005, at the height of the drought, the

lawn made way for garden beds which required no mowing and less water.



Ade decided to make it a 'grevillea only' garden in the rear, with the front a mix of grevilleas and exotics. At one time there were 121 grevillea plants on the block. Over the intervening years some grevilleas have succumbed to lack of water (or lack of care) and have been replaced with other natives, but grevilleas remain the focus of the garden.



Both gardens use propagating sand as the surface of the garden beds, a suggestion which Frank made when Ade started laying out his plan. The white gravel has several purposes – it reflects sunlight to keep the soil cooler, it is permeable to allow water through to the roots, it is a fine medium for many of the WA sand-loving plants, it is easy to weed, and it makes a nice back-drop for the plants.



2017 SOUTH AUSTRALIA TRIP Part II

By Matt Leach

In Part I of Matt and Nicole's trip they had just visited the Arid Lands Botanic Gardens. Read on

We packed up from Port Augusta and headed to Marion Bay, on the Yorke Peninsula. After we checked in and set up, we took a look at one of the beaches that was recommended to us by the owners of the park. The beach had great coloured rocks and a nice collection of native flowers. The next day we tripped around Innes National Park. We walked around Stenhouse Bay Jetty, where there were quite a few shipwrecks. The shipwreck Ethel was visible on the beach, as was an old train, which used to carry gypsum from the local mines to Stenhouse Bay Jetty.



The wreck of 'Ethel'

We drove around to Gym Beach and walked the long hike to Browns Beach. We were attacked by thirsty bees whilst we were having lunch on the beach, so we headed back to Gym Beach to collect the Landy. We checked out Cape Spencer Lighthouse on our way back to the campsite, but didn't stay too long as we were exhausted after the Browns Beach hike. There were so many different plants and flowers, as well as bird and animal life.



Westringia eremicola

After Marion Bay we drove through Adelaide to reach Second Valley on the Fleurieu Peninsula. Second Valley is on the way to Cape Jervis, which is the port where the ferry to Kangaroo Island leaves from. We chose Second Valley because it was a little protected from the southerly winds that were blowing a gale at times and it was close to Deep Creek Conservation Reserve. We explored the Second Valley causeway and jetty, which used to have a tram that carried goods out to the old jetty off the island. The next morning we were woken by a murder of incredibly loud crows because the campsite was a little like an amphitheatre and amplified their calls. Once we finally got the courage to get up out of our warm bed, we travelled over to Deep Creek Conservation Reserve.



Dilwinnia sericea

We took a look around Stringybark and Trig Campgrounds before stumbling across the small Raywood Nursery. The Wrens were so tame that the nursery owner was hand-feeding them cheese. We continued to drive and trek around the reserve, jumping out to discover the myriad of native plants and flowers. We drove down to Cape Jervis at the end of the day, just to check it out. The next day was rainy, not a day for tramping around. Wineries are lost on us, we don't drink wine (just Muscat), but nurseries are great. After a little research, we were happy to find that there were a handful of wineries that made their own fortified wines, as well as a couple of 'native' nurseries, so off we went. After calling by the disappointing 'native' nurseries (which were either closed, not native or no longer in business) visiting the half a dozen wineries we wanted to go to (and coming home with some 'samples', which were taking up precious plant room in the Landy) we took a drive. We ended up at the Christmas Hill Forestry Reserve, which had some areas of native bushland. We trekked around, finding a few orchids and flowers. On our way back to the campsite, we found ourselves at Ingalalla Falls, where you could get right up close to the waterfall.



Ingallalla Falls

After leaving Second Valley we relied on Google Maps to get us to the Princes Hwy, but it insisted on trying to take us through farmland. We eventually got to the freeway and to Murray Bridge. We stopped for a break at the State Flora Nursery, moving bottles around to fit the plants in. We stopped at Naracoorte for the night, where Nicole wanted to see the caves. We checked in and got there in time for the Fossil Cave tour. It was an intimate tour of us and another couple and the tour guide showed us areas that they don't take the larger tour groups. The guide was chatting with us whilst we waited for the other couple to arrive, when I found an orchid in the area that he didn't know was there. He mentioned that they were considering doing a flora count of the types of plants in the caves areas. We lived it up on our final night, staying in a warm cabin and eating out.

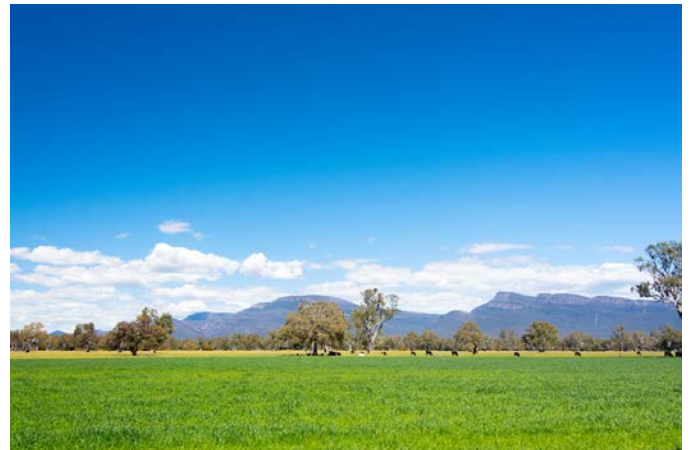


Fossil Bed at Naracoorte Caves

The next day we headed home, we didn't realise how well-maintained the roads were in South Australia until we crossed the border back into Victoria. We stopped for lunch at Killarney Beach, just out of Warrnambool, where I spotted a couple of Lewins Rails in the fresh water. Whilst we were in the area we thought that we

could stop into Codrington Nursery to pick up a couple more plants.

POMONAL WILDFLOWER SHOW - 6th and 7th October



A few members made the trip to Pomonal for the annual Wildflower Show, and it was certainly worth the drive. The new Pomonal Hall is a treat and the grounds, with their lovely gardens, were full of stalls selling plants, jams and preserves, arts and crafts and all manner of unnecessary but delightful trinkets.

Inside the hall the display was simply breath-taking. The number and variety of flowers on show was staggering, and again I wonder just what it is that makes the plants flower so much bigger and brighter at the Grampians. It seemed to me that there was a greater percentage of Grevilleas on show this year, and for me, a lover of all things Grevillea, it was a mouth-watering display.



Roger and Tina discuss the finer points

The plants are all clearly named and members of the local APS group were on hand to answer questions and offer suggestions. This is a must visit show and I would urge all members to make the trip and enjoy the wonderful scenery and flowers of the area.

While the surrounding bush was a little disappointing in terms of plants in flower some diligent searching by Frank, Ade and Penny managed to uncover a few lovely terrestrial orchids – fifteen species in all.

A GARDEN IN WALLINGTON.

A random conversation with a lady at a nursery, and a follow-up phone call by Bruce McGinness found ten members enjoying an amazing garden in Wallington. We were invited by Suzanne and Geordie to visit their five acre property 'Remedy Farm' for a BBQ lunch and a wander. Those who did not take up the invitation missed a cracker.

The property was a horse paddock when the girls acquired it in 2008, and the first thing they did was to plant indigenous eucalypts, acacias and casuarinas on the boundaries. Then, a small section at a time, the sprayed, mulched, imported soils and planted over the entire five acres. Paths meander through the property and there is a surprise around every corner.



I hope I am not doing the ladies a disservice when I say there appears to be no overall plan for the landscaping – they have used plants they liked, or that were available at the time – but the overall result is a delight. You can't see the house once you are 30 metres into the garden, and each area seems to have its own 'personality'.



Bruce and the monster *Grevillea magnifica*

Highlights for me included a wonderful frog pond, a 40 metre hedge of *Kunzea baxterii*, a spectacular *Hyocalimna angustifolium* and the biggest *Grevillea magnifica* I have ever seen.



Carmel and *Kunzea baxterii* hedge

There is an invitation to return again, perhaps a little earlier in the year next time, and I'm sure all those present this time will be there again.

PROPOSED ALPINE TRIP

Bruce McGinness

We are offering members a trip to the Victorian High Country next year. Please note the change of dates. **February 1 – February 4, 2019.** This will be at Falls Creek, where many of the walks are flat and easy to negotiate. We will be staying at Chorki, a self-catering lodge in the Falls Creek village, an easy walk to the village centre.

A bus will be available for those who wish to travel that way. We are looking at either a 20 or 25 seat bus to allow sufficient room for travellers and their belongings to travel in comfort. At this stage the bus will leave on Friday 1st February from a central location, and return on Monday February 4th, leaving Falls Creek in the early afternoon and arriving in the late evening.

Frank Scheelings, who has an extensive knowledge of the area, will be there to guide us and show us some of the amazing plants of the high country.

<http://chorkiskiclub.com.au/accommodation/>

NEXT ISSUE:

- A report on a visit to Doug McKenzie's garden in Ocean Grove
- Phil continues his battle with weeds

And all the usual goodies