



NEWSLETTER: JUNE 2023

SEANA Autumn Camp 2023 Pt Campbell 28 April – 1 May

Seven Club members attended the camp hosted by the Timboon FNC, based in Pt Campbell. Evening events were held at the local Lifesaving Club, while all of the field excursions concentrated on the coast between Loch Ard Gorge and Peterborough. The weather was perfect throughout, despite the dire forecast, with showers occurring at night but the days fine and sunny.

The weekend began with a Friday night speaker on the recovery of the giant kelp *Macrocystis*, which suffered a serious decline but is now recovering—in fact could be seen in the water just outside, and was seen later washed up in Loch Ard Gorge. The reasons for its decline are not fully understood, as similar kelp species did not suffer the same fate. It is surmised that this species might be more susceptible to fluctuations in water temperature.

Other speakers covered the topics of megafauna—the west coast has a number of significant fossil sites—on Saturday night, while the Sunday night after-dinner speaker was a leading exponent of the raising of River Blackfish.

Having researched the geology and botany with Costermans and VandenBerg's *Stories Beneath Our Feet* and Graham Patterson's *Coastal Guide to Nature and History 3: Western Victoria*, we set out on the weekend excursions. All of the excursions I attended were around Pt Campbell and to the east as far as Loch Ard Gorge, so I can't report on the excursions held towards Peterborough to the west.

First was a walk along the coastal heath, starting a couple of kilometres to the west and walking back to Pt Campbell. The group quickly separated into the 'general interest' faction and the hard-core plant nerds. This latter minority, armed with Kevin Sparrow's *Plants of the Great South West*, were soon left far behind and never saw the rest of the group again until we were back in Pt Campbell.

Many of the plants were familiar from observations on the Peninsula, although the growth forms on the high windswept cliffs were considerably more stunted—

including Messmate *Eucalyptus obliqua* and Coast Banksia *Banksia integrifolia*. We passed through some lovely groves of Drooping She-oak *Allocasuarina verticillata*, and patches dominated by Prickly Tea-tree (*Leptospermum scoparium* or *L. continentale*? Opinions differ). Apparently there has been a difference of opinion also on whether Coast Wattle *Acacia sophorae* ssp *sophorae* is an

environmental weed in this area—it seems that the verdict is leaning more to the affirmative.

Some of the undershrubs noted ranged from the common and familiar, such as Common Correa *Correa reflexa* var *reflexa* (cream-flowered),

White Correa *C. alba*, Cushion Bush *Leucophyta brownii*, Daisy-bushes *Olearia axillaris* and *O. ramulosa*, and Sea Box *Alyxia buxifolia*, to some less common on the Peninsula. These included Coast Bitter-bush *Adriana quadripartita* and Pale Turpentine *Beyeria leschenaultii*. Then there were unfamiliar species including Coast Bush-pea *Pultenaea canaliculata*, Slender Velvet-bush *Lasiopetalum baueri* and the endemic Pt Campbell Guinea-flower *Hibbertia truncata*.

Three species of grass-tree could be seen almost side by side: *Xanthorrhoea australis*, *X. caespitosa* and *X. minor*—each clearly distinguishable by its leaf cross-section.

Ground covers included Sea Celery *Apium prostratum*, Angled Lobelia *Lobelia anceps*, Common Raspwort *Gonocarpus tetragynous*, and Bower Spinach *Tetragonia implexicoma*. The foregoing gives only a sketch outline of the variety of plants along this walk. Harder to describe is the spectacular scenery to be seen whenever we looked up from the plants—in this case a picture really is worth a thousand words. Our local guide pointed out a rock ledge where Black-faced Cormorants were roosting, and a few Gannets could be seen out to sea, but birds were few.

The walk finished with a descent overlooking the town, to the bridge crossing Campbells Creek.



My second excursion followed a track through the heathland east of the town, to the north of the Great Ocean Road. The vegetation was similar here, but taller, but there were more birds, including Yellow-tailed Black-cockatoos, Grey Fantails, and honeyeaters including White-eared and New Holland. We were lucky enough to get a glimpse of a small flock of Southern Emu-wrens, thanks to our guides. The bird of the camp was Rufous Bristlebird: they were reputedly so common one could not fail to see one. I didn't see one! Others did (or said they did).



Bird sightings over the weekend included about 40 species, including Red-browed Finches and Superb Fairy-wrens seen from the balcony of the holiday park cabin where we stayed, and a number of waterbirds on Campbell Creek beside the cabin: Coots, Moorhens, Shelducks, Masked Lapwing, Little Pied Cormorant, Great Egret, and a group comprising a dozen White-faced Herons and one White-necked Heron. Little Corellas, Welcome Swallows, and Red and Little Wattlebirds were abundant. There were also a great many House Sparrows and Starlings. We were amazed at the number of rabbits in the streets of the town, who took little notice of people walking by.

My excursions on the Sunday were all around Loch Ard Gorge, mostly scenic and geological, of which I am not qualified to speak, but there were some botanical finds: another *Lasiopetalum*, Drooping Velvet-bush *L. schulzenii*, and a number of groundcovers such as Coast Bonefruit *Threlkeldia diffusa*, Coast Daisy *Brachyscombe parvula*, and Silky *Wilsonia humilis* growing on the high cliffs; daisies including Small Swamp-daisy *Allittia uliginosa*, Dune Thistle *Actites megalocarpus*, and Coast Everlasting *Ozothamnus turbinatus*.

The geology is much better explained in the two references mentioned earlier than I could do. High, almost white, cliffs of Port Campbell Limestone rise 20-50 metres above the sea. This formation was laid down under the sea between 16 and 8 million years ago (Miocene epoch) and is composed of different layers, not only of limestone but also layers of silt and clay, which erode at different rates, leading to some interesting patterns with a harder layer projecting from the cliff as the layers above and below eroded more quickly. Differences in the rate of landward retreat, leading to the development of bays and promontories, and ultimately stacks such as the Twelve Apostles, result from jointing planes within the formation that are transverse to the coast, allowing ingress by the waves.

Having read the relevant sections of the above references, it was interesting to observe some of the features mentioned in them, such as the formation of sea-caves, followed by a blowhole when the roof opens, then a sinkhole when the whole roof collapses, and finally the linking of two sinkholes leaving the cliff in between as a stack. We could see the beginning of the process in the stack called the Bakers Oven, where an opening has been eroded right through; as the opening enlarges it will probably come to be called another London Bridge, then the bridge will collapse leaving two stacks—a process that can be seen in various stages along the coast.



Loch Ard Gorge. Photos: Lee Denis

For most of us though, this coast holds mainly scenic values, as well as the epic story of survival after the wreck of the Loch Ard. These days tourists can get in and out of the Gorge via a flight of stairs; standing on the beach below and looking up at the high cliffs all around, it is amazing how the hero of the story, Tom Pearce, was able to climb out and find help for the only other survivor Eva Carmichael. The story is retold in Graham Patterson's book.

Congratulations to the Timboon FNC for staging a very successful camp. The Spring camp this year will be held from 20-23 October in Yarram, hosted by the Sale & District FNC and Latrobe Valley FNC—**Lee Denis**

Postscript

Following conversations with other camp goers, I, with my travelling companions Judy and Ann, decided to make a detour on the way home to Lake Elingamite, on the way to Cobden. Here the chief attraction was a small flock of Magpie-geese (we counted 12 on the lake margin); on the

lake were Black Ducks, Musk and Freckled Ducks, Chestnut Teal, Hoary-headed Grebes, and Black Swans, while on the margins were large numbers of Little Pied Cormorants, also Little Black Cormorants and White-faced Heron.

**Gunbarrel Highway- 1500km Drive Through The Deserts Of WA
Geoff Lay, March 8, 2023**

Geoff Lay is a retired mathematician and keen amateur botanist, and also treasurer of SEANA. He and his wife Jannie were able to travel on a Coates Wildlife tour in May 2021, between lockdowns. Their timing was good, as apart from evading lockdowns, their trip followed heavy rains in 2017, 2019 and 2021, so the desert was very green and lush. The downside was that the flies were so prolific during daylight hours that they could not be escaped and drove everyone crazy.

Reserve, where the mulga and other acacias all had minni ritchi bark (reddish-brown bark that continuously peels in small curly flakes). A plant of note was *Leptosema* – the upside down pea plant, which has flowers on the ground and foliage above. They saw many species of *Ptilotus* (Mulla mulla) about 50 species altogether.

The Gunbarrel Highway is one of the Len Beadell highways, constructed for the Woomera rocket launches in the 1950s. The purpose was to build a meteorological station to predict wind for the future atomic tests, plus surveys. In spite of the name, the road is not dead straight. Len Beadell’s team graded 6000km of road, and each road was graded 5 times, making 30,000km of tough grading altogether. It is a highway in name only, and is more of a rough bush track.

Some trees of note were the Desert Oak *Allocasuarina decaisneana*, *Eucalyptus gamophylla* and *E. gongylocarpa*, and *Corymbia opaca*, the Desert Bloodwood.

Their tour group was small- 2 vehicles with driver/guide each, and 6 passengers including the Lays. One of the first stops was at Mangkili Claypan Nature Reserve, where Geoff counted 80 plants in flower, including sundews and succulents. Another stop was the Gibson Desert Nature

There were plenty of feral camels, but no kangaroos or emus, and only a dead Monitor lizard. Later on they saw a Fat-tailed Dunnart. In the Central Australian Ranges they camped at Bungibillie Gorge, where Chiming Wedgebill, Red-backed Kingfisher and Budgerigars were seen at the pool, only the second water site on the 15 day tour. Notable plants there were *Grevillea wickhami* ssp *hispidula*, *Hakea lorea*, everlasting daisies, saltbushes and *Nicotinia rosulata*, which the Aboriginals used as chewing tobacco. Geoff is a keen fungi person, and was pleased to see plenty of *Podaxis pistillaris* – desert shaggy mane, a puffball.

It was a once in a lifetime experience.—**Judy Smart**

In the Mud of the Western Port Bay

Our Cannons Creek excursion in December was one of several we embarked upon in the past year in Western Port Bay (We also visited Reef Island, Stony Point, North Western Port NC Reserve and Warneet). There I collected excellent material for quite a large catalogue of photographs of the “treasures” found in the mud.

In the northern reaches, several creeks drain into the bay and flow through extensive mangroves, mudflats and sand banks before being channelled either side of French Island and into the open water around Phillip Island.

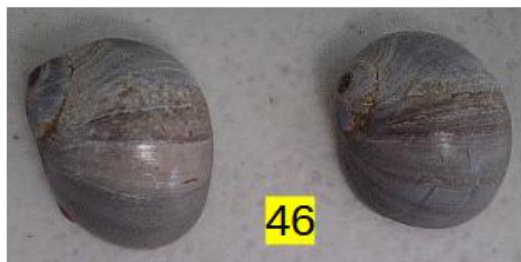
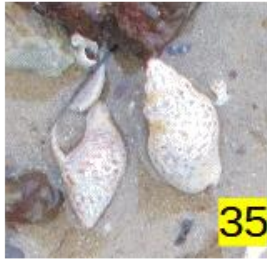
Western Port Bay is a tidal bay opening into Bass Strait. Together with its islands (French Island, Phillip Island, Quail Island, Churchill Island and Reef Island) it is listed under the Ramsar Convention as a wetland of international significance.

Western Port habitat types include underwater seagrass beds, intertidal rock platforms, sandy beaches, intertidal mudflats, tidal channels, salt-marshes and mangroves. These habitat types attract a diverse range of colonial ascidians (sea squirts), sponges and corals. Mudflats and mangrove swamps around the northern end of the bay support a large number of invertebrates that are an important food source for migratory birds and warders.

Formed by a major river drainage system, it was inundated by the rising sea in the Holocene period (last 12,000 years); the Western Port sunk-land now forms an extensive tidal bay, a third of which is exposed as mudflats at low tide. It is interesting to note that the bay is criss-crossed by several seismically active fault lines and often experiences minor earthquakes.

In the following pages I present photographs of “mud creatures” of this unique world – mostly from the northern part of the Bay. They are referred to by both their scientific and common names. The families are also included.—**Velimir Dragic**





ANNELIDA

- 1 *Aphrodita* Bristleworms (F) Aphroditidae
- 2 Scaleworms (F) Polynoidae

ARTHROPODA

- 3 *Cyclograpsus granulosus* Purple Mottled Shore Crab (F) Varunidae
- 4 *Heloeciis cordiformis* Semaphore Crab (F) Heloeciidae
- 5 *Megabalanus coccopom* Titan Acorn Barnacle (F) Balanidae

BRACHIOPODA

- 6 *Magellania flavescens* Lamp shell (F) Terebratulidae

BRYOZOA

- 7 Bryozoa (Phylum)
- 8 *Celleporaria cristata* Lace Coral (F) Lepraliellidae
- 9 *Triphyllozoon moniliferum*, Cheilostomatid Bryozoans (F) Phidoloporidae

ECHINODERMATA

- 10 *Amblypneustes ovum* Sea Urchin (F) Temnopleuridae
- 11 *Goniocidaris tubaria* Stumpy Pencil Urchin (F) Cidaridae

BIVALVIA

- 12 *Anadara trapezia* Sydney Cockle (F) Arcidae
- 13 *Barbatia pistachia* Banded Ark (F) Arcidae
- 14 Bittersweet Clams (F) Glycymerididae
- 15 *Plebidonax deltoids* Pipi (F) Donacidae
- 16 Latern Clams (F) Laternulidae
- 17 Hatchet Shells (F) Lucinidae
- 18 *Mytilus* Black Mussels (F) Mytilidae
- 19 *Xenostrobus* True Mussels (F) Mytilidae
- 20 *Noetia ponderosa* Ponderous Ark (F) Noetiidae
- 21 *Magellana gigas* Pacific Oyster (F) Ostreidae
- 22 *Ostrea angasi* Southern Flat Oyster (F) Ostreidae
- 23 *Pseudarcopagia* Surf Clams (F) Tellinidae
- 24 *Callista* Venus Clams (F) Veneridae
- 25 *Irus crenatus* Boring Venus Shell (F) Veneridae
- 26 *Katelysia rhytiphora* Ridged Venus (F) Veneridae

- 27 *Ruditapes philippinarum* Japanese Littleneck (F) Veneridae
- GASTROPODA
- 28 *Penion mandarinus* True Whelks (F) Austrosiphonidae
 - 29 *Batillaria australis* Australian Mud Whelk (F) Batillariidae
 - 30 *Pyrazus ebeninus* Hercules Club Mud Whelk (F) Batillariidae
 - 31 *Zeacumantus diemenensis* Mud-creeper Snails (F) Batillariidae
 - 32 *Cacozeliana granarium* Cerith Snail (F) Cerithiidae
 - 33 *Bulla quoyii* Brown Bubble Shell (F) Bullidae
 - 34 *Cominella eburnean* (F) Cominellidae
 - 35 *Cominella lineolata* Lineated Cominella (F) Cominellidae
 - 36 *Conus anemone* Anemone Cone (F) Conidae
 - 37 *Cabestana tabulata* Shouldered Triton Snail (F) Cymatiidae
 - 38 *Cymatiella* Cymatid Triton (F) Cymatiidae
 - 39 *Ophicardelus ornatus* Hollow-shelled Snails (F) Ellobiidae
 - 40 *Australaria australasia* Austral Horse Conch (F) Fasciolaridae
 - 41 *Scutus antipodes* Elephant Snail (F) Fissurellidae
 - 42 *Bembicium auratum* Gold-mouthed Conniwink (F) Littorinidae
 - 43 *Patelloida alticostata* Tall-ribbed Limpet (F) Lottiidae
 - 44 *Nassarius pyrrhus* Red-banded Dogwhelk (F) Nassariidae
 - 45 *Tritia burchardi* Burchard's Dogwhelk (F) Nassariidae
 - 46 *Conuber sordidum* Sordid Moon Snail (F) Naticidae
 - 47 *Nerita* (F) Neritidae
 - 48 *Phallomedusa solida* Amphibolid Snails (F) Phallomedusidae
 - 49 *Scutellastra peronii* Scaly Limpet (F) Patellidae
 - 50 *Phasianella australis* Painted-lady Pheasant Shell (F) Phasianellidae
 - 51 *Phasianella ventricose* Common Pheasant (F) Phasianellidae
 - 52 *Siphonaria diemenensis* False Limpets and eggs (F) Siphonariidae
 - 53 *Austrocochlea constricta* Southern Ribbed Top Snail (F) Trochidae
 - 54 *Bellastraea aurea* Golden Small Star (F) Turbinidae
 - 55 Porifera, Sponges (Phylum)

Coastal Guide to Nature & History- 3 – Western Victoria Graham Patterson, March 12th 2023

Graham had the idea many decades ago, while holidaying at Anglesea, of walking the length of the Victorian coast. Along the way the idea expanded to writing a series of guide books to sections of the coast. The first of these guides, *Coastal Guide to nature and history: Port Phillip Bay* was published in 2013, and the second, on Mornington Peninsula's ocean shore, Western Port, Phillip Island and French Island, was published in 2014. These fascinating little books cover geology, natural history, human history, and interesting features along the way, and are very popular with our members. We consult with his guides when visiting a coastal site.

In 2022 Graham published the third in the series, on the 420km of shoreline from Point Lonsdale to the South Australian border. There are 3 major coastal walks in Western Victoria: the Surf Coast Walk from Point Impossible to Fairhaven, the Great South West Walk and the Great Ocean Walk, around the Otways. Large sections of the coast are protected in National Parks.

Graham started with the oldest rocks—Cretaceous, 100 million years old, known as the Eumeralla Formation, made up of sandstones and mudstones, formed when Australia

was separating from Antarctica. These rocks formed the Otways, from Aireys Inlet to Princetown. Dinosaur Cove, near Johanna, was discovered in 1980, excavated over the next decade, and work finished there in 1993. A number of significant fossils were found there. There was also a dinosaur footprint found near Skenes Creek, which was chipped out and is now in the care of Museum Victoria.

The Great Ocean Rd along the Surf Coast is unstable and prone to landslips, and in places has massive bolts holding the rock face in place. Demons Bluff near Anglesea is so unstable the track had to be moved away from the cliff edge. The Port Campbell Limestone (8-16 million years old), is prone to sinkholes such as the Blowhole. The most recent geological formation is Barwon Heads—the basalt at the base of the bluff is 1-2 million years old, originating from volcanic activity at Mt Duneed.

The Bridgewater Caves, near Portland, had an archeological survey done, which found evidence of Aboriginal use and charcoal dated to more than 12,000 years ago, and remains of land mammals such as kangaroos and wombats. There were few traces of marine foods, as the coast was much further away then than it is now.

Estuaries along the coast open and close at intervals, and Graham was able to finish his walk to the West at Glenelg River near the South Australian border, by walking across, as it was closed at the time. However Rutledges Cutting, near Warrnambool, opened suddenly while Graham was crossing.

Blue Whales feed on the krill and other food brought up by the Bonney Upwelling, off the continental shelf at Discovery Bay. In 1992 a Blue Whale washed up dead near

Lorne. Museums Victoria shifted the whale carcass to the Western Treatment Plant to clean it, and the skeleton is now on display at the Melbourne Museum.

Graham has completed his walk along the coast, finishing the last section of 90 Mile Beach in 2018. He is not confident of writing the last book in the series, on the Coast of Eastern Victoria, as it is a big project with much research and writing to be done. We hope he is able to though.—
Judy Smart

Birding Reports

March: Coolart

This has been a regular venue for our Monday birding excursions, and usually yields a good bird count. On this day our total of 34 was a bit disappointing, mainly comprising the most common birds. Birds on the main lagoon made up almost half the total. The water was covered in large patches of duckweed *Lemna dispersa*—it was notable that most of the Wood Ducks were in those patches, and appeared to be feeding on it. Some grey shapes on the far side puzzled us for a while before we realised they were cygnets, almost as large as their parents but still in juvenile plumage.

Bush birds were no more numerous, with the expected honeyeaters, fairy wrens etc; a Shining Bronze-cuckoo was heard. On the beach we located a party of Red-capped Plovers; starting with 5 our count eventually reached 10.

Looking back over our previous lists I found that we more usually visit in Spring. Of ten previous lists, six were in November, one in October and one in August. The bird counts in these cases were up to double the number of this visit; the numbers in previous visits in February and March were even lower than this year. Definitely a venue for Spring.

April: Moorooduc Quarry & Rail

In the first part of this excursion we walked into the quarry, where a young man was flying a drone—not a promising start. However we did see a few bush birds, including honeyeaters, Grey Fantails, Fairy-wrens, Pardalotes, and a Fan-tailed Cuckoo. By far the biggest excitement occurred after the drone had been grounded: a raptor soaring high over the quarry initiated the Goshawk/Sparrowhawk debate when suddenly, with loud cries, two Peregrine Falcons began flashing across the space, giving a demonstration of how fast they can fly. The reason for their appearance was not clear—as I said, the drone was no longer flying, and they did not appear to be reacting to the Goshawk (as we decided it to be).

Later we moved to the bush along the railway line, adjacent to the Moorooduc station, from where the tourist steam train operates. We saw nearly as many birds here, adding only White-plumed Honeyeater and a Willie Wagtail to the above list. We heard another Fan-tailed Cuckoo, but it

remained elusive.

Later we walked along the railway line from Wooralla Drive to Oakbank Road, seeing a few honeyeaters.

May: Seaford Wetland

Bird numbers were down at this venue also, but we were happy to spot a single male Flame Robin—these used to be common on Downs Estate but are now not seen at all in some years. The Red-browed Finches usually seen in the revegetation area on the east side were not present, and it's some time since we saw Yellow-rumped Thornbills here. Two raptors only, a Swamp Harrier and a Whistling Kite, were observed. The weather was not ideal, with sporadic showers throughout the morning, until a real downpour put an end to the proceedings. Final count 34, mostly bush birds.

My observation on the subject of Yellow-rumped Thornbills came to mind when I noticed an article in the June newsletter from Peninsula Birdlife. Larry Wakefield wrote

*Last month, I was asked: "Where are good localities on the Peninsula to view a Yellow-rumped Thornbill?" It got me thinking, when did I last see a Yellow-rumped Thornbill around here? Not for quite a while, in fact. The last sighting on a monthly outing was in 2019 at Sages Cottage farm, and before then, Tyabb Bushland Reserve in 2017. Prior to that, there was a dearth of registered sightings until before 2010 when we would generally get to view one at a number of localities. Sightings are becoming few and far between, but does this mean the local population is collapsing and is fated to disappear altogether?**

This prompted me to look back over our own records for Seaford Wetland, dating back to 2010. Keeping in mind that these are for just one morning in the year, Yellow-rumped were seen most years until the last record in 2017. (Note though that Graeme Rigg recorded them at Jam Jerrup in April, as reported below.)—**Lee Denis**

** Yellow-rumped Thornbill on the Mornington Peninsula... becoming scarce?—Larry Wakefield, Mornington Peninsula Birdlife Volume 12 Number 2 June 2023*

Galls on a Drooping Mistletoe

Our birding visit to Coolart in March resulted in us wondering what was causing the many galls developed in a Drooping Mistletoe (*Amyema pendula*) found growing in a Black Sheoak (*Allocasuarina littoralis*).

On the day of the visit, we opened one of the galls to find a small larva. This didn't look like a moth larva, but I'll never know as I couldn't raise it to an adult. However, a different looking caterpillar was found outside a gall (likely emerged from a hole in the gall) and this pupated and emerged as a tiny grey moth, which is yet to be identified.

Hopefully, the wonderful iNaturalist community will advance our understanding of what was happening in those galls.

There are many causes of galls and sometimes secondary infections confuse the understanding of what the origin of the gall was. —Rog Standen



Gall on mistletoe, and the larva inside. Photos by Rog Standen

Jam Jerrup – Lang Lang Foreshore Caravan Park 23rd to 25th April 2023

Had the opportunity to get away for three days to the Lang Lang Foreshore Caravan Park, Jetty Lane Jam Jerrup. Two kilometres south of the South Gippsland turn off, located on the eastern side of Western Port. The weather was perfect Spring weather, cool and foggy in the morning clearing to blue skies and calm waters during the day.

The caravan park is flanked by Western Port on one side and grazed farm land on the other. It has a series of boat sheds that are used for temporary accommodation and are protected by a Heritage Overlay in the Bass Coast planning scheme. (G. Patterson)

The area hosts some great outside activities such as walking along the beach, bicycle riding or walking the coastal track above the cliff which leads to Stockyard Point, bird watching, mothing, fishing and kayaking of which we participated in all.

Walking along the beach is a low tide activity. There is a sandy beach along the foreshore and mud flats further out as the tide goes out a long way due to the shallowness of this part of Western Port. The walk takes you past Red Bluff, which is referred in books, *Stories Beneath Our Feet* and *Coastal Guide to Nature and History 2* both of which have been presented at the Field Nats meetings by their

authors. You can walk the beach at low tide and come back along the cliff top walk when the tide comes in. The other activity at low tide is to collect a feed of Pacific Oysters that grow on the rock shelves exposed when the tide is out. Closer to Stockyard Point there are stands of Grey Mangrove, *Avicennia marina australasica*, Manawa, with areas of new planting projects.



Red Bluff – Jam Jerrup. Photo: Graeme Rigg

The above photo shows short, cliffed sections where

Pliocene sandstone outcrops. It has reddish sandstone, sandy clays and gravels which are obviously eroding giving sediments that drift seasonally North and South. (Stories beneath our feet, P386. L. Costermans & F. VandenBerg)

One night was quite cool but the second night was mild so I set up the moth sheet to see what was available with the observations listed in the species list at the end. There were a few moths that came into the UV light. The night turned cold after a couple of hours and the numbers of moths didn't increase, so it was packed up.

In the morning there were a couple of moths that presented to have their photo taken. One inside the caravan and the other on a shoe.

The Lang Lang Foreshore Caravan Park is a great base to see the surrounding area or is easily accessible from the Mornington Peninsula for a day trip. There is a public car park and toilet at the end of Jetty Lane with associated picnic table.

38 Species

Grey Mangrove – *Avicennia marina*
 Plantain Moth – *Scopula rubraria*
 Crested Pigeon – *Ocyphaps lophotes*
 Pacific Gull – *Larus pacificus*
 Yellow-rumped Thornbill – *Acanthiza chrysorrhoa*
 Eastern Rosella – *Platycercus eximius*
 Meadow Argus – *Junonia villida*
 Red-spotted Delicate – *Epicyme rubropunctaria*

Athetis tenuis Genus Faveria
Phaeophlebosia furcifera
 Australian White Ibis - *Threskiornis molucca*
 Cape Barren Goose - *Cereopsis novaehollandiae*
 Willie Wagtail - *Rhipidura leucophrys*
 Australian Magpie - *Gymnorhina tibicen*
 Welcome Swallow - *Hirundo neoxena*
 Gorse - *Ulex europaeus*
 European Searocket - *Cakile maritima*
 Genus Orthodera – Mantis
 Bandwing Grasshoppers - Subfamily Oedipodinae
 Silver Gull - *Chroicocephalus novaehollandiae*
 Australian Painted Lady - *Vanessa kershawi*
Culladia cuneiferellus Genus Chlenias
 Genus Phelotis
 Yelloweye Mullet - *Aldrichetta forsteri*
 Grey Saltbush - *Atriplex cinerea*
 Knobby Clubrush - *Ficinia nodosa*
 White-fringed Weevil - *Naupactus leucoloma*
 Genus Acropolitis
 Genus Ectopatria
 Black Field Cricket - *Teleogryllus commodus*
 Macadamia Flower Caterpillar - *Cryptoblabes hemigypsa*
 Toothed Anthelid - *Anthela denticulate*
 Pacific Oyster - *Magallana gigas*
 Pome Looper - *Pasiphilodes testulata*
 Striped Earwig - *Labidura truncata*
 Apple Looper - *Phrissogonus laticostata*

All observations were posted on iNaturalist. —**Graeme Rigg**

Millgrove excursion 2023

Seven of us went to visit Doris Weigert, our much-missed member, at Millgrove near Warburton. Doris shifted there from the Mornington Peninsula 7 years ago, and we miss her a lot, though we sometimes see her at SEANA Camps. Doris has serious health issues now, so we were extra keen to see her. It was well worth the drive to catch up with her, and get a warm welcome.

The back deck at Doris' house looks out to Mt Little Joe, the tree canopy and her bird feeder. The Sulphur-crested Cockatoos and Pied Currawongs weren't put off by our presence, but the Crimson Rosellas and King Parrots kept their distance. Doris told us about the newly completed boardwalk at Millgrove along the Yarra, so we went down there to have a look. The size and stature of the Yarra Valley Eucalypts, mainly Mountain Grey Gums, never fail to impress. It was a bit weedy under the gums, but the *Olearia* was flowering.

I was keen to have a look at the O'Shannassy Aqueduct Trail again. The O'Shannassy Aqueduct was constructed

from 1911 to 1915, an open water race, to bring water from O'Shannassy Reservoir to Silvan Dam. Its working life finished quite some years ago, but the trail is elevated and has beautiful views. The Dee Rd section is mainly pine forest with lots of large tree ferns, so the vegetation is not so interesting. Birds were scarce too.

After a kilometre we came to the Dee Slip Bridge, a trestle bridge built in two sections, one supporting the aqueduct, the other the trail, in 1947, after the aqueduct slipped. The bridge was restored in 2008, but collapsed again in 2021. It is all fenced off now, but you are able to walk down steps to the base of the bridge and admire the many logs supporting the bridge, and continue along the trail. By now the threatened rain was looking a lot closer, so we turned back, and we made it back to the cars just as it started raining.

Bird list from our 3 stops- Pied Currawong, Sulphur-crested Cockatoo, Brown Thornbill, Grey Fantail, Crimson Rosella, King Parrot, Magpie, Little Wattlebird.—**Judy Smart**

How many scorpions do we miss?

On a recent night at Woods Reserve, James, Graeme and I were monitoring what came to a light sheet, but also searching the tracks and trees for other lifeforms, like the fantastic little sugar gliders.

While discussing the relative lack of spiders, James, a self-proclaimed nature nerd much like myself, noticed a scorpion on the track between us. This was a Forest scorpion (*Cercophonius squama*). We discussed the fluorescent nature of these arachnids under a black or ultra violet (UV) light, so he went and got a portable UV light he had and we watched in awe as the scorpion glowed brightly with an eery blue-green aura. This posed a challenge for my limited photography skills to capture an image of it due to the low light level (using a flash of course swamps the fluorescence), but I sort of got there in the end.

It seems that the scorpions produce something that is contained in the cuticle of their exoskeleton that can absorb UV light and then emit it in a different wavelength which can be seen at night as a blue-green light which is what we see.

Why scorpions have this strange (to me) phenomenon is unclear, but the most likely theory is that because the whole animal can detect UV (which the sun directly produces and which then less-so, is reflected by the moon) it acts as an ‘eye’ detecting which parts of the creature are under shade and so are hidden away from predators.

What was also fascinating that night was that between where we found the first scorpion and the light sheet, James saw two more under the UV light. How many of these amazing little creatures are we missing when out in the bush at night?—**Rog Standen**



Forest scorpion (*Cercophonius squama*), left under white light of a torch or flash, and right under UV light.. Photos: Rog Standen

Flinders Island John Roth 10th May 2023

John is a member of the Peninsula Bushwalking Group, and has previously presented talks on diving on the Mornington Peninsula, and on a visit to Lord Howe Island, in 2013 and 2015. John and his wife flew to Flinders Island out of Essendon Airport, about a one hour flight to the airport at Whitemark on the island, where they hired a car.

Accommodation options include a cabin park, hotel and apartments, as well as camping. One location is the Patriarch Wildlife Sanctuary, on the east coast, where there is an A-frame building you can stay in without charge—facilities are very basic; the Sanctuary is run by a trust and maintained by volunteers.

Flinders Island is the largest island in the Furneaux Group, 60-70 km from north to south and around 1300 square kilometres in area. It was a high point on the land bridge between Wilsons Promontory, which it closely resembles in its geology, and northern Tasmania. It is included in the State of Tasmania, and has a population of about 1000.



John’s main interest was in bushwalking, and walks that they undertook included the summit of Mt Strzelecki, and the Mt Killekrankie loop track, as well as some beach walks.

Mt Strzelecki is the centrepiece of the Strzelecki National Park at the south end of the island; a trail of about 5-6 km takes you to the summit at 750 metres (about the height of Mt Dandenong) through more or less alpine country, affording views to the Tasmanian mainland.

Mt Killekrankie is towards the north end of the island; it reminded John of the Grampians. Elevation 326 metres.

There are long stretches of deserted beaches; with their granite tors they are reminiscent of the Prom, including the prominent orange lichen *Xanthoria elegans*.

Fauna: Bennetts and Red-necked Wallabies were common; Pademelons are also present, but John didn’t observe any. There are three subspecies of the Common Wombat, including one endemic to the Island. Echidnas and possums were seen, as well as Cape Fur Seals. Birds include Cape Barren Geese, Short-tailed Shearwaters (which are still harvested to some extent), Forty-spotted Pardalotes, Hooded Plovers and Flame Robins. There is a Ramsar site at Logan Lagoon, of about 30 square kilometres.

There is also a wild population of turkeys—considered ‘tickable’ by twitchers.



Castle Rock walk (west coast). Photos: John Roth

Plants included *Zeiria* (stinkwood), White *Kunzea*, some *Acacias*, and Streaked Rock-orchid *Dockrilla striolata* (aka

Dendrobium striolatum).

Human history begins with aboriginal occupation when the island was connected to Victoria and Tasmania during the last ice age. This population is believed to have died out about 4,500 years ago, after the rise in sea level isolated them. Sealers began operating in the area in the very early days of European settlement; in 1834 a settlement of the remaining Tasmanian aboriginals was established, lasting until 1847, in one of the more shameful episodes of colonial history. After years of neglect, some archeological work has been done on the site, with the chapel being rebuilt. John recommended the account written by Jack Serong, called *The Settlement*.

The Polish explorer, Paul Edmund Strzelecki visited Flinders Island and climbed the highest peak, now named for him, in 1842.

John’s talk and accompanying photographs left many in the audience contemplating a visit.—**Lee Denis (thanks Eleanor for the notes)**

A Walk on the Shore Platform around Settlement Point, Corinella May 2023

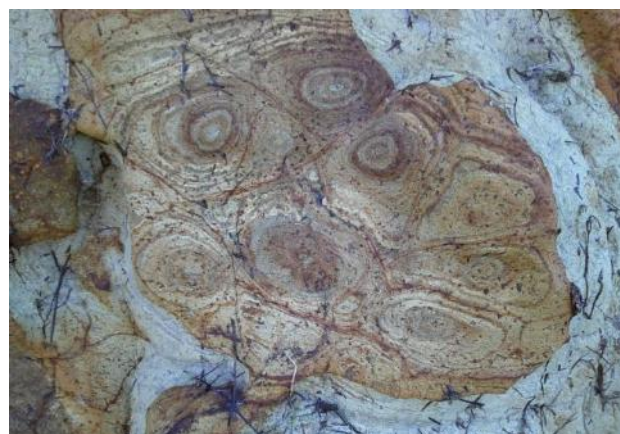
About 2.6 million years ago, during the Pleistocene epoch, a period which included the Ice Age, the sea levels were over 100m lower than they are today. However, the changes in climate at the beginning of the Holocene period (11-12,000 years ago) and warmer weather caused the gradual retreat of the glaciers. Water filled both bays around Mornington Peninsula, which was itself created by the accumulation of molten rocks at the time of Gondwana. Sea level varied due to the melting of ice sheets and seismic processes.

Lee and I separated from the group which Heather was leading along the path towards the top of the cliff. We managed to step down onto the platform and circled around Settlement Point. We walked from the Beach Street steps on the southern side to the boat ramp on the north side of the Point.

Basalt cliffs on the southern side can decompose almost entirely to basaltic clay. They are still among the highest on the mainland coast of Western Port. These cliffs consist of the basalts and tuffs of the ‘Older Volcanics’. Ages of different eruptions can be dated according to the structure of the rocks



Coastal cliffs and shore platform at Corinella, visible during the low tide, exposes the basalts and tuffs of the Older Volcanics. The extent of weathering is such that rocks can be almost entirely decomposed into basaltic clay. The cliffs on the southern side of Settlement Point can reach up to 15 m in height.



Photos: Velimir Dragic

‘Liesegang rings’ are formed in basalt during the geological process of cooling and contracting of lava. These dark red banded ornaments and rings composed of iron oxide are a frequent occurrence in rocks and are the result of the

It was in order to explore these geological attractions that

chemical reactions that occur during the weathering

Red sediments (iron-rich tuff and volcanic ash) and black basalt cobbles dated from the Eocene epoch (40-50 million years ago). Black basalt cobbles on the beach are formed as the softer material around them erodes away. We can still see cobbles embedded in the volcanic material which has not yet eroded completely

Later on, we joined the group which was led by William, and ventured across to Tenby Point where we could see the coarse and heavily ferruginised rock on the shore platform. The disintegration of these rocks is revealed in the coarse and heavily ferruginised gravels that form a veneer on the shore platform near the contact line between the Baxter formation and Older Volcanics at Tenby Point. We saw the erstwhile beach formed above the present-day sea level at the foot of the bluff. Partly eroded sediments include deposits of gravel, sand, clay and shells.

In addition I'll give a list of molluscs spotted on our platform walk:

Bivalves:

- Sydney Cockle (*Anadara trapezia*)
- Banded Ark (*Barbatia pistachia*)
- Southern Brooch Shell (*Neotrigonia margaritacea*)
- Pacific Oyster (*Magellana gigas*)
- Southern Flat Oyster (*Ostrea angasi*)
- Venus Clams (*Callista*)
- Ridged Venus (*Katelysia rhytiphora*)
- Boring Venus Shell (*Irus crenatus*)
- Smoke Cockle (*Eumarcia fumigata*)
- Japanese Littleneck (*Ruditapes philippinarum*) [Fisherman use as a bait]

Gastropoda:

- Gold-mouthed Conniwink (*Bembicium auratum*)
- Fronted Murex (*Chicoreus denudatus*)
- Lineated Cominella (*Cominella lineolata*)
- Leaden Sand Snail (*Conuber sordidum*)
- Anemone Cone (*Conus anemone*)
- Nerita (Looks like *Nerita melanotragus*)
- Staircase Abalone (*Haliotis scalaris*)
- Southern Ribbed Top Snail (*Austrocochlea constricta*)

—Velimir Dragic

Peninsula Field Naturalists Club Inc

Meetings are held on the second Wednesday of each month with a field trip the following Saturday. Further information and current Programme of Activities can be found at our website.

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Annual Subs due July

Adult	\$30
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Newsletter edited by Lee Denis

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