



NEWSLETTER: SEPTEMBER 2019

Upper Sweetwater Creek Working Bee 2nd June

Every winter we have a working bee in a different Frankston reserve. This year it was Upper Sweetwater Creek (USWC), the area between Lawson Avenue, Overport Rd and Frankston Nature Conservation Reserve (Frankston Reservoir). Action Sweetwater Creek group look after the beach end of Sweetwater Creek. In between these two reserves the creek edge is privately owned, by adjoining residents, with no public access. USWC is 5.3 hectares, Lower Sweetwater Creek 13 hectares.

Our leader was Malcolm Elsworth, long standing member of Friends of Upper Sweetwater (FOUS). Malcolm along with David Chynoweth formed the group more than 25 years ago to protect the natural reserves of South Frankston which didn't have Friends Groups, but now focus on Upper Sweetwater Creek.

This land was originally owned by the RSL, who planned to subdivide the area into 2/3 acre lots. MEAFEC, led by Grace Fraser, Anne Read, Malcolm and others ran a strong campaign to save the land for its natural values, and through VCAT the Dept of Conservation and Environment opposed the development specifically where the Caladenia Circuit development is now, as it was a rare 'Raised Wet Heathland' and of Regional Significance. Yes, DCE lost, and ironically the following month 'Raised Wet Heathland' on the Mornington Peninsula became State Significant.



VCAT allowed the RSL higher density development to go ahead and accepted the compromise proposed by lawyers for the RSL that 50% of the land be transferred to FCC, as the Reserve we now know as Upper Sweetwater. Many of the plants were dug up prior to development and transferred to the Cranbourne Botanic Gardens.

Upper Sweetwater Creek is a beautiful remnant of heathy woodland and riparian creek vegetation, such as once covered South Frankston. When the Friends group took over the land it was a thicket of sallow wattle and boneseed, but you would never know that now. Due to the vigilance of the Friends there is a canopy of Narrow-leaf Peppermint and Coastal Manna Gums, and hiding in the bracken is a great collection of heathland plants – we saw two kinds of Hibbertia, Monotoca, Aotus and other peas, Wedding Bush, Prickly Ti-tree and a multitude of wattles including Sweet Wattle (*Acacia suaveolens*) in flower.

Philip Yule, FCC Natural Reserves Ranger, showed us an impressive collection of winter orchids – masses of *Acianthus pusillus* (Mosquito Orchid), some *Pterostylis nutans* (Nodding Greenhood), a few *P. concinna* and *P. melagramma*, (Trim and Tall Greenhoods). There were sun orchid leaves to show us what is to come. We decided that we must to go back in Spring to see the floral show.

Not many birds were seen – bell miners, rainbow lorikeets, grey fantail, grey butcher bird.

FCC manages the woodland vegetation, and Melbourne Water the creek side vegetation, a complicated arrangement which is working here anyway.



The Friends Group are low on numbers and would really appreciate some new help. They meet the first Sunday of the month, 10 – 12, and their next working bee is October 6. Malcolm's phone number is 0412 923 636.

Thanks to Malcolm for supplying the history of the Reserve, and leading us on the day. — **Judy Smart**

Down's Estate: Past, Present and Future

Maureen Griffin and John McKenzie

12th June

Downs Estate, comprising an area of 50 acres (approx 20 hectares), is located towards the northern end of Seaford Wetland, along Wells Road, and until recently was used for cattle grazing. It was the farm of saddler Harry Down, and is now owned by Frankston City Council. Our club regularly visits for birding outings, and in the past it was a reliable location for seeing Flame Robins in the autumn/winter months.

Maureen began by presenting a short history of the site. Following the death of Harry Down the land was purchased by the City of Frankston. This included preservation of existing buildings and some farm infrastructure. The site is now managed jointly by Council and a group called the Down's Estate Community Project, which is working to set up a community-based public space, including a community garden, walking trails, and educational facilities covering the history (including indigenous use) and ecology of the site.

John followed with an outline of the vegetation history of the area. He began by showing a watercolour painting from the NGA collection entitled *Lagoon in the Carrum Carrum Swamp - Evening* by James Curtis, painted around 1872. Seaford Wetland (and Down's Estate) was a part of the extensive Carrum-Carrum Swamp which stretched before European settlement from Mordialloc to Frankston. Most of it has been drained since, firstly for agriculture which in turn was displaced by housing.

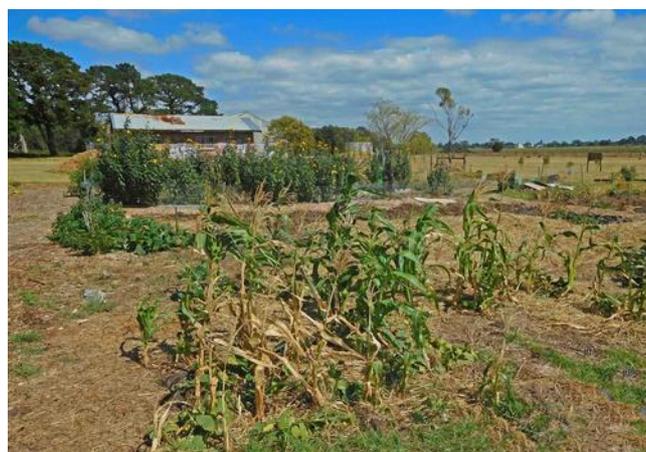
The scene depicts a sheet of open water surrounded by mature River Red Gums with little understory. A flock of birds is flying low over the water in the left foreground, whilst in the background two figures are beside a fire. There are signs of fire on the tree trunks, while the right foreground is dominated by a large dead Red Gum, with numerous hollows providing habitat for arboreal mammals and birds. An idyllic scene.

Painted so soon after white settlement, this scene probably depicts the environment that met the first white settlers. The exact location in the extensive wetland is not known, but the Seaford swamp would have been similar to the depiction in the painting. The viewing of this painting led to a general discussion about the concept of 'returning to the natural state'. More interest has been developing recently about the management of Australian landscapes — mainly by the use of fire — by the original inhabitants. Bruce Pascoe's book *Dark Emu* has extended the discussion to a recognition of aboriginal land management by means of active farming methods, rather than simple hunter-gathering. A consequence of this re-think is that we really have no idea of the 'natural state' because the landscape has been managed by humans for tens of thousands of years. We may have ideas of the state we think a landscape should be managed in, but they are opinions rather than based on knowledge. In any case, 'natural' landscapes are never

static.

Seaford swamp was initially preserved as a flood retarding basin; only in fairly recent times was its conservation value recognised. In 2001 it was declared a Ramsar site, conserving habitat for migratory water birds. John showed a number of photos — taken by our member Heather Ducat — to illustrate the changes that have been brought about by extensive plantings. Some of the old River Red Gums remain, and have been supplemented by understory plantings to provide habitat, especially for birds.

A month after the presentation by Maureen and John the Club paid a visit at one of the working bees. Unfortunately the bitterly cold wind and lashing rain limited our activities to a quick inspection of the Community Garden, including their 'garlic project', followed by morning tea around the fire-drum.



The Community Garden. All Photos by Heather Ducat

The Down's Estate Community Project has a facebook page as well as a website. Working bees are held every Saturday at the Community Garden — all welcome. They are at the Seaford Community Committee's stall at the Seaford Farmers' Market on the third Sunday of every month from 8am - 1pm. — **Lee Denis**



Some before-and-after views, Downs Estate. All Photos by Heather Ducat

Solving One Old Mystery Velimir Dragic

Three years ago a friend of mine showed me some old photos he took of a strange marine creature he saw. He asked me if I knew what it was. The only additional piece of information he could provide was that the photos were taken somewhere in Western Port Bay and that the size of the creature was approximately 3 cm. (We deduced this by comparing it with the size of the hand which was holding it in another photo.)



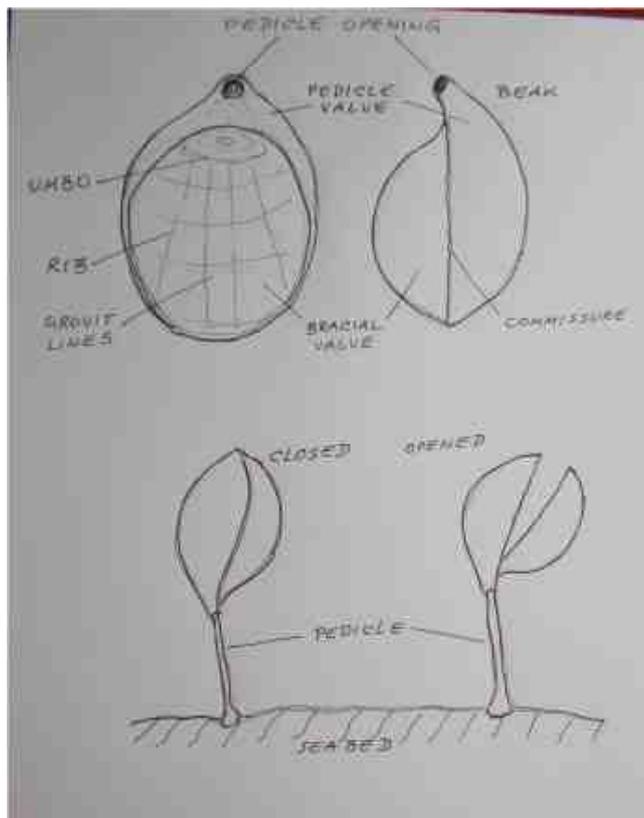
My modest knowledge of marine biology prevented me from providing the answer. I consulted several naturalists and we speculated that it might be a type of mollusc: a slug, a snail, or a bivalve or maybe even some kind of plant - an algae seed or perhaps a strange egg. There were many things we didn't know – whether it was soft or hard, for example – and we could only speculate whether the bit that was coming out of the shell was some kind of digestive organ or just a piece of rubbish.

Time passed and my friend passed away but the mystery remained until our last outing to French Island in May of this year. Amongst the heap of pebbles, broken shells, seaweed and sand on the promontory of Tortoise Head, I happened to spot a small, unusual object covered in mud. I picked it up and washed it, and immediately recognised the shape I had committed to memory three years earlier. Enthusiastically I said to Lee that this is the creature from the photo. Now that we had it in our hands – complete, with both valves of different sizes intact - we could see that it was a brachiopod. A mystery no longer.

Brachiopods are a phylum of small marine shellfish, sometimes called lampshells, because of their similarity to traditional gas lamps. While not common today, they were very common in Palaeozoic times.



Although they resemble bivalves, their internal organisation is quite different. Their mostly calcium carbonate shells or 'valves' have upper and lower surfaces, unlike the left and right arrangement in bivalve molluscs. Brachiopod valves are hinged at the rear end. The front can be opened for feeding or closed for protection. In a typical brachiopod a stalk-like pedicle goes from an opening in one of the valves (the pedicle valve). It attaches the animal to the seabed.



Lamp shell, French Island, May 2019
 Clade: Lophorata
 Phylum: Brachiopoda
 Class: Rhynchonellata
 Order: Terebratulida
 Family: Cancellothyrididae
 Genus/Species: *Terebratulina retusa*

Brachiopods have a very long history of life on Earth (at least 550 million years). They first appear as fossils in rocks of earliest Cambrian age, and their descendants still survive – albeit relatively rarely. Their numbers were much reduced by the two main extinctions events. [Late Devonian, 375 MYA and Permian, 251 MYA]. There are about 100 to 350 living species today; the fossil species number is about 12,000. The various species have many similarities, and they are an excellent example of living fossils. . — **Velimir Dragic**

July Meeting – AGM and Open Night – 2019

This is for all you chickens who were too afraid to come to our July meeting. You missed out on some great photos and stories. The AGM part of the evening was over with quickly, with no coercion or violence to recruit committee members. Welcome too to Eleanor Masterton, who has volunteered to join our committee, which is great.

Then it was over to Members' photos.

Roger Standen showed photos of insects from my garden - Yellow Spotted Epicoma caterpillars defoliated my Thryptomene over summer. Roger has previously had these in his own garden, eating Callistemons, and he hoped that mine would be a different species. After they reached the moth stage he was disappointed to find that they were the same as his. He tried to rear them himself to moths, but the first lot were parasitized by Brachinid wasp, and the second batch by Tachinid flies. Unfortunately for me nothing parasitized them at my place, and even over winter they are still defoliating the Thryp. My tomatoes were unwilling hosts to Green Vegetable Bugs, and Roger showed us the five stages, all quite different looking to each other.

Lee showed us photos from this year's excursions – Tortoise Head, French Island. It was agreed that we need to go back there soon to see the rest. Woodlands Historic Park, Greenvale, with choughs among the ancient river red gums, and great views over the airport and to the City, multitudes of kangaroos, and not an EB bandicoot to be seen. And rock pooling at Mushroom Reef, Flinders.

I showed some of vegetation at Kaiser Stuhl Park, Barossa Valley. I was struck there by the local grass tree – *Xanthorrhoea semi-plana*, which has flattened leaves. The Eucalypts and other plants were the same as many on the Peninsula, with the grass trees being the main difference. My other photos were of Halletts Cove South Australia, on the coast south of Adelaide, which is of great geological interest, with a glacial scratch. — **Judy Smart**

Studio Park and Langwarrin FFR 17th August

Studio Park is a small bushland reserve in Langwarrin, comprising 8 hectares bounded by houses on two sides, a sand quarry to the north, and the McLelland Gallery to the west. Once part of an orchard, all this land was bought by artist Harry McLelland in the 1920s. In the 1960s it was split in two, one half to become the McLelland Gallery and the other Studio Park, which is now managed by the City of Frankston.

It is sandy heathland, with some low-lying areas with a watercourse flowing through. Over 100 indigenous plant species have been recorded, together with 40 species of birds (this information from the City of Frankston booklet *Natural Reserves Within Frankston City* — latest issue 2017).

There is no provision for car parking, and only one way in or out — the first thing we noticed was the impressive new gate, which has been installed since our last visit five years ago.

There is a network of paths through open *Eucalyptus viminalis* woodland on the hilltops, down to wetter lower areas mainly vegetated with *Melaleuca squarrosa* and *M. ericifolia*. It was also noticeable that there were very few weedy species — the odd Pittosporum and Sallow Wattle, and some weedy grasses — incredible considering that the vegetation of the adjoining McLelland Gallery seems to consist almost entirely of weeds!



Drosera macrantha. All photos by Lee Denis

Species we noted in flower included many Climbing Sundews (*Drosera macrantha*), a few Scented Sundews (*D. aberrans*), *Leucopogon virgatus*, *Correa reflexa* (both green

and red/green flowered forms), Common Heath (*Epacris impressa*) — white-flowered form. The only pea flower noted was Showy Bossiaea (*Bossiaea cinerea*). At the same time of year in 2014 we also saw *Pultenaea gunnii* in flower, and the Wedding Bush (*Ricinocarpus pinifolius*) was in flower then but not yet this year.

Orchids in flower were Nodding, Tall and Trim Greenhoods (*Pterostylis nutans*, *P. melagramma* and *P. concinna*) and Mosquito Orchid (*Acianthus pusilla*).

Twenty-four bird species were observed, including Swamp Harrier and Wedge-tailed Eagle overhead. As they were on our last visit, Common Bronzings were prominent; other birds sighted or heard included Spotted Pardalote, Yellow-tailed Black-cockatoo, Black-faced Cuckoo-shrike, Pied Currawong and Eastern Yellow Robin. With 40 species of birds said to have been recorded in the reserve, our total of 24 seemed pretty good. (Adding species we recorded in 2014 but not this time brings the total to 32).

We also spotted a Swamp Wallaby — as advertised in the brochure. For those with a more specialised interest, I was fascinated to find, on some Wallaby pellets, a tiny ascomycete which I identified as *Cheilymenia coprinaria*. Our general impression was that this was a small pocket of quality bushland, little used (judging by the slightly overgrown state of the paths) but well maintained.



Cheilymenia coprinaria

After lunch we dropped in to the Langwarrin Flora & Fauna Reserve, where we found 8 species of orchid, including 3 species of Helmet Orchid (*Corybas diemenicus*, *C. unguiculatis* and *C. incurvus*), 4 species of Greenhood (*Pterostylis nutans*, *P. melagramma*, *P. concinna* and *P. pedunculata*), and Mosquito Orchid *Acianthus pusillus*.

Also seen: Golden Whistlers and a Jacky Lizard. — **Lee Denis**

Urban Powerful Owl Study

Nick Bradsworth

14th August

How do Powerful Owls persist in public places? They are an apex predator, traditionally confined to old growth forest, but being seen around the urban fringe. Nick started GPS tracking Powerful Owls for his Masters degree, and has continued his surveys for his PhD. As part of his study he monitors sightings lodged by the general public, which are very often Tawny Frogmouths (34-53 cm high) or Boobooks (35cm), as compared with Powerful Owls at 65cm.

To survive they need prey – up to 300 possums per annum, (or equivalent size wildlife); roost sites which are structurally diverse ie include canopy; and a large nest hollow for breeding in winter. They have a lifespan of 30 – 40 years. They are listed by FFG as Threatened, as their habitat is being lost to urbanization and development, and lack of hollows impedes their breeding.

They have been much studied, but Nick wanted to find out how they move through the landscape, how much space they need, and what habitat they use. To find this out he catches Powerful Owls, attaches a GPS tracker, and follows their movements from the data it records – this requires catching the bird again. The tracker is attached to tail feathers, so that if the bird is not recaptured, the tracker will moult off eventually.

So far he has tracked 17 Powerful Owls – 6 male, 11 female. Each one involved 10 challenging steps to catching and tracking – firstly, finding the bird by looking for signs such as whitewash and pellets, then setting up the net at dusk, calling the bird in, quickly collapsing net and attaching tracker, monitoring health of bird, and releasing, all without injuring bird or handler. The GPS tracker has a 1 – 3 month lifespan, and during its life he is able to track the birds' movements, whether hunting for prey, foraging or transitory. They mostly follow riparian areas and treed creek lines.

How far do they travel? On average, the males covered 4.8 km per night, and the females 4.3 km. One, which was

caught at Langwarrin FFR, mostly travelled around Frankston and Langwarrin, but flew to Dandenong and back one night. Another, caught at Warringine, covered large areas of Western Port, and by great luck its GPS tracker fell off in a driveway and was retrieved by Nick.

Most of the birds studied have been in the Yarra Valley and Mullum Mullum Creek area, where the birds have close home ranges – 11 territories so far. By doing this study they are finding more records than previously available through Birdata and other sources.



Powerful Owls at Langwarrin FFR. Photo by Lee Denis

How much space do they need? In forested areas they need 1466 – 2053 hectares, but in urban areas only 638 hectares.

Where to now? Nick is continuing to deploy GPS trackers, investigate roosts, and study juvenile dispersal through tracking the juveniles or by population genetics. We can help by looking out for roosts, and lodging sightings with Birdata and powerfulowl@mornpen.vic.gov.au.

For more information go to Global Ecology and Conservation – www.elsevier.com/locate/gecco ‘Joining the Dots: How Does an Apex Predator move through an urbanizing landscape?’— **Judy Smart**

Darwin June 28th to July 7th

Graeme Rigg

I had the opportunity to visit Darwin recently to attend a wedding and as a consolation was able to spend 9 days in the warmth. The overnight temperatures dropped to 17 degrees and the daytime temperatures reached 32 degrees with a low humidity due to it being the dry season, very enjoyable considering a couple of days before we left the morning temperature in Somerville was 2 degrees.

Being the dry season everything looked like it needed a good drink and that was both close into Darwin and further out into the rural areas. One day we travelled out to

Litchfield National Park and spent the whole day touring. Whilst touring we noticed a lot of the area had been burnt, or was smouldering and in several locations we came across active fire. There were no people in attendance however there were plenty of Black Kites present and remembering an article I read about Black Kites starting fires to flush out prey, I wondered whether this was the case. Black Kites were noticeable nearly everywhere we ventured.

The waterfalls in Litchfield NP still had water flowing over them and the swimming holes were occupied by plenty of

tourists. The majority of the tourists were in a hurry to get from the carpark to the swimming holes without much concern for the environment they were travelling through. We ambled along the paths looking and listening and were rewarded numerous times with the sightings of both flora and fauna that we hadn't seen before. One being the Spotted Tree Monitor.



Spotted Tree Monitor. All photos by Graeme Rigg

The flora in Darwin also was completely different to that we encounter in Victoria with it being sparse and very hardy to cope with the climate in the drier rural settings, but there are areas where Tropical Monsoon Forest exists with a completely different assemblage of vegetation. Driving along the roads from Litchfield NP we noticed that there were plenty of flowering plants one being Fern-leaved Grevillea (*Grevillea peridifolia*) and the Kapok Bush

(*Cochlospermum fraseri*). The Kapok Bush while flowering (photo) had lost all its leaves and had developed fruit. The flowers and fruit were on the end of the naked branches.

Fauna was also abundant in all the parks, reserves, beaches and National Parks that we visited. I photographed as much as I could — as we were travelling light I hadn't packed binoculars so relied on the zoom of my camera to help identify bird life. It worked very well with some new birds ticked off my list. One being the Australasian Figbird.



Figbird

In all we saw 50 species of birds, 3 species of lizard, one turtle and a large number of moths and butterflies all too quick for me to get images for ID purposes, together with a large variety of fish that came to the jetties and boardwalks when people were feeding them bread.

I can say that we enjoyed Darwin both for the weather and the natural environment. — **Graeme Rigg**

Birding at Bulldog Creek Road 1st July

We had not visited Bulldog Creek Road, in Merricks North, for a couple of years. One of our semi-regular locations, this site usually yields a reasonable bird list, even in winter. This time a cold blustery wind kept most of the birds indoors, although our first sightings were of a mixed flock of 20 or 30 White-naped and Yellow-faced Honeyeaters in the treetops near the top of the hill — the windiest spot.



Grey Butcher-bird. Photo by Lee Denis

Comparison with past lists showed that we saw the most often seen birds over the last eight years — such as Sulphur-crested Cockatoo, Eastern and Crimson Rosellas, Brown Thornbill, Noisy Miner, Yellow-faced Honeyeater, Eastern Yellow Robin, Grey Shrike-thrush, Grey Fantail, Grey Butcherbird, Magpie and Little Raven — birds recorded in every list for the site.

Less common were White-throated Treecreeper and Varied Sitella — both sighted once previously. We could not add any new records.

As usual, side interests included flowers, orchids and fungi. Nodding Greenhoods were in flower, a Tall Greenhood was sighted, while leaves of *Acianthus* species (Mosquito orchids, possibly Mayflies), Tongue orchids (*Corunastylis*) and Sun orchids (*Thelymitra*) were observed.

The Common Heath (pink form) was in flower, whilst several wattles were in bud. Some rather unusual fungi in paddocks beside the road were most likely *Phlebopus marginatus*, the largest being about half a metre across.

Sighting of the day was a White-throated Treecreeper working its way up one side of a tree, while a Varied Sittella worked its way down the other — just as the books say they are supposed to! — **Lee Denis**

Bird List For Bulldog Creek Road 1st July 2019	
Wedge-tailed Eagle	White-naped Honeyeater
Galah	Eastern Yellow Robin

Sulphur-crested Cockatoo	Varied Sittella
Crimson Rosella	Grey Shrike-thrush
Eastern Rosella	Grey Fantail
White-throated Treecreeper	Grey Butcherbird
Brown Thornbill	Australian Magpie
Noisy Miner	Little Raven
Yellow-faced Honeyeater	Welcome Swallow

Patterson River 5th August

After meeting at the Patterson Lakes shopping centre our group walked across to the River and followed the south bank under the freeway, between the Rowing Centre and the Eastern Treatment Plant, and on as far as the bridge over Eumemmering Creek — a total distance of around 5 kilometres.

The weather was fine, overcast at first with a blustery northerly wind; later the clouds cleared from the west, over the Bay, bringing sunshine. This route was familiar to some of the group, but was new to most of us. The birdwatching was exceptional.



*Patterson River above the Water Sports Centre.
Photo by Heather Ducat*

Immediately on reaching the high levee bank, opposite the houses, we could see a Royal Spoonbill; Little Pied Cormorants were busy fishing, and further downstream were a couple of Great Egrets. Towards the Wells Rd bridge there were a few Chestnut Teal and White-faced Heron. Pelicans soared gracefully overhead.

There were very few birds on the Water Sports Centre — some Darters and Coots — but on the other side is the Eastern Treatment Plant. Red-rumped Parrots, several bush birds, and an area of water meadow, with some open water, populated by Black-winged Stilts, Grey and Chestnut Teal, Coots, five or more pairs of Australasian Shovellers, and huge numbers — estimated at more than 50 — of Purple Swamphens gave plenty of sighting opportunities.

We looked for a Whistling Kite nest that Heather had been told about, but didn't spot it. We did spot Red-browed Finches, a flock of Goldfinches, and a Golden-headed Cisticola. A single Pied Currawong called on the wing.

By this time we had passed the starting point of the Rowing Course, (the course runs from east to west, with the finish near the freeway) and immediately there were birds on the River. Pied, Great and Little Black Cormorants, more Teal, and around 50 Pink-eared Ducks.

From there to the Eumemmering Creek bridge there were few bird sightings. A Grey Shrike-thrush calling over towards Dandenong Creek, another Darter and another Great Egret. In the wet ground at the base of the levee bank we could hear Common Froglets.

There was nothing left for it now but to walk the 5 kilometres back. On the return trip the Whistling Kite nest — with two Kites in residence — was spotted. Other raptors sighted during the walk were Swamp Harrier, Black-shouldered Kite and Nankeen Kestrel.



Whistling Kites on nest. Photo by Heather Ducat

With a total count of 47 species we were well satisfied with the day. — **Lee Denis**

Bird List For Patterson River 5th August 2019				
Pacific Black Duck	Great Cormorant	Nankeen Kestrel	Superb Fairy-wren	Little Raven
Australasian Shoveler	Australian Pelican	Purple Swamphen	Brown Thornbill	Red-browed Finch
Grey Teal	White-faced Heron	Eurasian Coot	Red Wattlebird	European Goldfinch
Chestnut Teal	Great Egret	Black-winged Stilt	Noisy Miner	Welcome Swallow
Pink-eared Duck	Australian White Ibis	Masked Lapwing	Grey Shrike-thrush	Golden-headed Cisticola
Australasian Grebe	Straw-necked Ibis	Silver Gull	Magpie-Lark	Common Blackbird
Darter	Royal Spoonbill	Spotted Turtle-Dove	Grey Butcherbird	Common Starling
Little Pied Cormorant	Black-shouldered Kite	Sulphur-crested Cockatoo	Australian Magpie	Common Myna
Pied Cormorant	Whistling Kite	Rainbow Lorikeet	Pied Currawong	
Little Black Cormorant	Swamp Harrier	Red-rumped Parrot		



Contrasting scenes along Patterson River: Whistling Kite - photo by Heather Ducat; Accumulation of plastic waste - photo by Judy Smart

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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