

Latrobe Valley Naturalist

July - Aug 2017

Issue No. 591

Office bearers

President: David Stickney Secretary: Wendy Savage Treasurer: David Mules Publicity Officer: Alix Williams Magazine editor: Tamara Leitch Conservation Coordinator: Jackie Tims Archivist: Marja Bouman Webmaster: John Sunderland

Contact

The Secretary Latrobe Valley Field Naturalists Club Inc. P.O. Box 1205 Morwell VIC 3840 info@fieldnats.org 0428 422 461

Website

lvfieldnats.org

General meetings

Held at 7:30 pm on the fourth Friday of each month at the Newborough Uniting Church, Old Sale Road Newborough VIC 3825



This male Eastern Spinebill was photographed by David Stickney at Nyerimilang Heritage Park during the Club's 2017 Summer Camp.

Upcoming events

July general meeting: Friday 28 July – Winter Members' Night Excursion: Saturday 29 July - Moe-Yallourn Rail Trail. Meet 10am Moe Botanic Gardens off Dinwoodie Drive. Botany Group: Saturday 5 August - Holey Plains SP. Carpool 9.30am at Amigo Mexican Restaurant carpark in Traralgon. <u>Bird Group</u>: Tuesday 8 August – Bunyip SP. Meet by 9.30am in the Service Centre carpark on the westbound side of the highway at Longwarry. Bird Group: Thursday 17 August – EA Wetland survey. Meet by 9.30am at the Morwell Bridge Gate. Please confirm attendance with Alix beforehand. August general meeting: Friday 25 August New Holland Mouse at Wilsons Promontory - Phoebe Burns Excursion: Saturday 26 August – Meet 10am Providence Ponds carpark, 18km E of Stratford on RHS, or 9.15am at Amigo Mexican Restaurant in T'gon to carpool. Botany Group: Saturday 2 Sept – Wonthaggi Heathlands with Terri Allen. Bird Group: Tuesday 5 Sept – Australian Paper Mill. Plan to arrive before 9.15am and park in 1st part of carpark, towards the back. Short induction will follow, then carpooling to "birding" entry. There will be no option to leave early.

SEANA Autumn Camp 2017

It is a pleasure to report, in my role as Working Party convenor, that the SEANA Autumn 2017 Camp held over the extended weekend of Friday 17th - Monday 20th March was a great success. Hosted jointly by the Sale & District FNC and our club, 121 naturalists registered, making it one of the largest SEANA gatherings in recent years. They were drawn from 15 member clubs from as far away as Portland, Donald and Albury-Wodonga. The camp base was The Laurels function centre at Sale Racecourse, which proved to be an excellent, attractive venue with plenty of space for dinners, socialising, evening talks and displays.



Naturalists at the Laurels Function Centre (Photo: Phil Rayment)

Evening talks

Sale club member and talented nature photographer Ron Greer gave a presentation 'Birds of the local area' on Friday evening. His first set of photos was taken as recently as five days earlier, in Holey Plains State Park, and included a Collared Sparrow-hawk whose arrival disturbed the fun of various honeyeaters, Eastern Yellow Robins and Spotted Pardalotes. Superb photos in various wetland locations around Sale followed. Ron enlivened his talk with some great anecdotes, including an unusual encounter between a Freckled Duck and a Eurasian Coot on Lake Guyatt back in 2012. The coot waddled past the duck, which appeared to take offence! Whatever the duck said, the coot didn't take kindly and turned to the approaching duck. Ron's brilliant photo sequence suggested that the coot won the ensuing altercation!

Our speaker on Saturday evening was Dr Kate Charlton-Robb, from Museum Victoria, on the subject of the Burrunan Dolphin, only recently classified as a distinct bottlenose dolphin species. Kate was the lead author of the scientific paper published in 2011 which formalised its naming as *Tursiops australis* and provided its description. She explained that its delineation as a new species was based on consideration of its skull size, external characteristics and DNA. *T. australis* has been sighted off Victoria, Tasmania and South Australia, with only approximately 60 counted in the Gippsland Lakes area. Its long-term survival is thus of great concern.

Sunday night's speaker, Don Love, also gave a talk 'Citizen science at Beware Reef' with a focus on the Gippsland region. This reef, a Marine Sanctuary, lies 5 km to the south-east of Cape Conran and encompasses a series of underwater granite pinnacles, with a small section at its northern extremity rising above sea level. Don is an experienced diver who, as a member of Friends of Beware Reef, has been studying and photographing its marine life for many years. To date approximately 100 fish species, 4 marine mammals, 40 sponges and more than 180 other invertebrates have been listed for the sanctuary. Don's well-illustrated presentation vividly conveyed the challenges of scientific survey work in such underwater environments.

Displays

A very popular display was the set of the 34 awarded exhibits from our recent nature photography competition, open to members of the two host clubs. On Friday evening, the two medallions for "Best in Show" and "People's Choice" were presented: the former medallion went to Ron Greer for his photo of a male White-fronted Chat and the latter to David Stickney for his 'charismatic megafauna' shot of a yawning Koala. Ken Harris had prepared a Power Point show of the 96 leading images, but including at least one photo from each entrant, and this was screened as a loop on Sunday evening before and during dinner.

We thank Sally Court for displaying a large set of 3D natural world images created by her father Ron Court and Arthur Ewen, both late members of the LVFNC.

A range of books and brochures on display included the attractive booklet 'Birds of the Sale Common Wetlands' authored by Sale club members Ron Greer and Rosalind Steel and launched on Friday evening. It has been published with financial contributions from SEANA, FNCV and Gippsland Water.

Excursions

A highly diverse range of 22 excursions had been programmed from Friday afternoon (at Dutson Downs environmental farm) through to Monday morning (at Maffra, the Knob Reserve in Stratford, and at the Heyfield Wetlands), concluding with lunch together at Heyfield.

A camp highlight was a guided cruise on the Gippsland Lakes on Sunday as part of a bus-based excursion which also visited a Grevillea Garden at Nicholson. In cruising between Lakes Entrance and Metung via Reeve Channel, we were rewarded with close-range sightings of bottlenose dolphins and seals near the Entrance and with a diversity of birdlife.



Peach Flat Community Wetland (Photo: Phil Rayment)

Other sites visited across Saturday and Sunday included a number of wetlands and reserves in and around Sale, and to the north the Avon Mt Hedrick Wilderness Area, the Mitchell River NP, Licola and the Wellington River valley, and Peach Flat Community Wetland near Briagolong. Holey Plains SP was visited, being the site of some rare and interesting plants, as were saltmarsh areas on the shores of Lake Reeve near Golden Beach.

Mothing evenings

Ken Harris conducted moth surveys each evening and welcomed those interested to join him following the evening talks. The sites included Sale Common on Friday night, the Herb Guyatt Reserve on Saturday and Holey Plains State Park on Sunday, the latter being particularly rewarding for Ken with the sighting of a lacewing of special interest. In concluding this report, my grateful thanks go to the members of the organising Working Party (five from each club) who worked well as a team, to all the excursion leaders and facilitators, and to all the other helpers whose efforts made for a successful event.

Phil Rayment

Report on Bird Challenge Count 2016

The Bird Challenge Count was held over Friday 2nd, Saturday 3rd and Sunday 4th December, 2016.

Forty-five participants, in six groups, covered 13 sites in the Latrobe Valley region. Results from each group were collated and sent to Birdlife Australia. The 2016 total was 109 species and 3,597 birds.

Most of the Latrobe area now has Bird Challenge Count records from 1998 to 2016. In the early years, about 10 people in two groups somehow covered about eight sites in ONE hectic day! It is much better now as we have more people involved and can take our time to enjoy the birds that we see.

Prior to the 2016 count, it had been a wet spring so there was plenty of water around. There were not the usual concentrations of large numbers of waterbirds. Fewer ducks (eg. 0 Pink-eared Ducks), grebes and Sharp-tailed Sandpipers, with the exception of an increase in Chestnut Teal. Reductions in ibis, small raptors, and Little Ravens also occurred, but there were increases in Laughing Kookaburras, most honeyeaters and thornbills.

Thanks to all the leaders, data recorders and participants. People had an interesting and enjoyable time. Hopefully you have already put the dates of *December 1- 3, 2017* in your diary and can join in for some of that time. In early October the planning starts and we will be asking for participants.

Alix Williams

CLUB SUMMER CAMP 2017 – Part 2

Lonely Bay – Saturday afternoon

After waiting for cars to gather at the junction of Princes Highway and Burnt Bridge Road, the convoy headed towards Blackfellow Arm Track, passing tall stands of *Eucalyptus tricarpa* with the occasional understorey Prickly Geebung *Persoonia juniperina* with its striking yellow tubular flowers, and finally stopping at the picnic ground at the northern end of Lonely Bay. The group divided into two, some members choosing to explore the Fern Loop walk, others walking along the track to the creek, which did in fact join up with the Fern Loop.

The walk to the creek delighted us with various examples of twiners and climbers, so I will concentrate on those. Once home, I did find some of the plants difficult to identify, as they looked very similar. Three plants found along the track, scrambling in profusion up trees and over bushes, had similar leaves in opposite pairs along the stem with a single midrib vein, only varying in length and slightly in shape...Bearded Tylophora *Tylophora barbata*, Milk vine *Marsdenia rostrata* and Sweet Morinda *Morinda jasminoides* or *Gynochthodes jasminoides*. Bearded Tylophora belongs to the hoya family and apparently has the same beautiful, scented flowers, but we weren't fortunate enough to



Milk Vine (Photo: Baiba Stevens)

see any. Its leaves are glabrous, as are the others, but the edges of the leaves are not wavy. Milk Vine and Sweet Morinda both have very similar leaves, being darker green above and a lighter green below, with wavy edges. Looking more closely, the Milk Vine leaves are slightly recurved and end in an abrupt point. They can also be nearly twice as long, up to 15 cm, compared to the leaves of Sweet Morinda, which only reach up to 9 cm. Unfortunately, using this characteristic has its flaws as everyone knows, as the leaves on the same

plant can vary greatly!! Sweet Morinda leaves have an interesting structure that I had not met before. At the forks of the leaf veins are structures called domatia, which in this plant take the form of little hooded pits or foveolae and can be seen on both surfaces of the leaf. I can't be certain that I saw both the Milk Vine and the Sweet Morinda. All three of these plants are confined to the east of the Gippsland Lakes, though Milk Vine can also be found in the Tarra Valley.

The Wombat Berry *Eustrephus latifolius* and Scrambling Lily *Geitonoplesium cymosum* also have similar characteristics, but belong to different families. Both have leaves of similar length (~ 10cm) that are parallel-veined and not opposite along the stem, the alternate leaves producing an interesting zig zag pattern in the stems. One way of differentiating the two climbers is in the venation of their leaves. The

parallel veins of The Wombat Berry are equally distinct, whereas the Scrambling Lily has a very distinct midvein, that is raised on the upper surface. Perhaps the easiest way of distinguishing the two climbers is to look at their fruit, if there are any at the time!! Wombat Berry has an orange fruit, the Scrambling Lily having black fruit. Both these lilies are only found east of the Mitchell River and I only spotted the Scrambling Lily in the morning, along the Cliff Top Walk at the Nyerimilang Homestead.



Wombat Berry (Photo: Baiba Stevens)

Dodder laurels were also twining through low-growing bushes. Some thought they were *Cassytha pubescens,* others *Cassytha glabella*. No fruit could be found, so it was a bit difficult to identify. I think they were *Cassytha glabella*, as the stems only reached a short way up other plants, whereas *Cassytha pubescens* tends to be slightly more robust, with hairier stems. Twining Glycine *Glycine clandestina* and Southern Tick-trefoil *Desmodium gunnii* were also seen hiding in the undergrowth.

Baiba Stevens

Colquhoun Regional Park – Sunday morning

Our route followed Uncles Road from Forestech through a relatively dry forest, across the Lakes Colquhoun Road, and continued on the Old Colquhoun Road, meeting the Princes Highway near Nowa Nowa. White Stringybark and Silvertop Ash dominated much of the drier area along the roadside. We explored a number of points of interest, most of them a short distance off the main road and often in wetter gullies where we found a rich variety of vegetation and habitat for birds.

Our notes outlined the history related the construction of a tramway in the early 1900s, and in use until the mid-1930s, to move granite from the Mississippi Creek Quarry to Lakes Entrance. The granite was used to replace the original timber pylons that created the permanent entrance to the Gippsland Lakes. At the Log Crossing picnic area, we met many of the plants we would see again later in the morning. Sheltered by tall eucalypts, a rich variety of grasses, sedges, ferns, herbs, shrubs and creepers were easily accessible along the sides of the loop track. These attracted the interest of some members, while others ventured further in search of birds. The ferns included Tree-ferns, Sickle Ferns and the delicate fronds of Maidenhair and Necklace Ferns. A careful search revealed tiny blooms of mauve Twining Glycine and Slender Mint and the dainty blue flowers of Forest Hound's-tongue.



Shrubby Platysace (Photo: Margaret Rowe)

Bright yellow flowers of Fireweed Groundsel welcomed us to the car park of the Historic Granite Quarry. Along the track were shrubs of River Lomatia, some with green fruits, and a few tiny



Hairy Fan-flower (Photo: Margaret Rowe)

flowers of Tick-trefoil. Established eucalypts on the quarry floor spoke of the 80 years or so since workers toiled to remove large chunks of the high quality pink granite. A sample of the beautiful polished stone had been placed there for us to admire.

At Costicks Weir, the view from the steps was very inviting: ferns, such as Scrambling Coral-fern, and a mist of fine-leaved shrubs overhung the rock face, creek and pool. Kanooka *Tristaniopsis laurina*, with its stunning golden flowers, stood beside the pool. During our ascent

we recognised several young shrubs of Rusty Pomaderris and at the car park found small shrubs of Platysace displaying their umbels of white flowers.

We lunched beside the feet of the impressive old Stony Creek Trestle Bridge, which crossed an extensive wetland area. Swamp Paperbark *Gahnia clarkei*, Fishbone Fern and the striking Leafy Flat-sedge *Carex lucidus* could be seen without leaving the picnic area. A brief rain shower temporarily threw doubt on our plans for the afternoon.

Along the roadsides at the upper level of the bridge, the much drier habitat supported an amazingly wide range of plants, mostly of species not seen during the morning.



Lunch at the bridge (Photo: Baiba Stevens)

These included Hairy Fan-flower, Spiny Bossiaea, Cranberry Heath, Paroo Lily, Narrow-leaf Geebung, *Acacia genistifolia* and Pomax. What a treat as our final stop before travelling to Nowa Nowa!

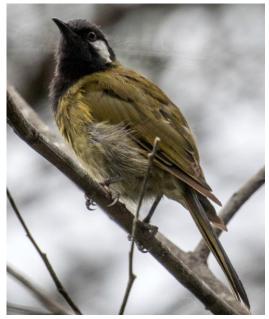
Margaret Rowe

A plant list for the camp is available in Appendix I of the electronic version of this Naturalist.

Nowa Nowa – Sunday afternoon

After enjoying our lunch watching heaps of butterflies and leaf-curling spiders, we continued on to the boardwalk at Nowa Nowa, where Boggy Creek widens into one of the arms of Lake Tyers. There is a warm thermal spring that bubbles into the lake behind the Mingling Waters accommodation and camping ground, but we saw very few waterbirds enjoying a spa during our visit.

When we arrived at the Nowa Nowa Wetlands carpark, the advance party were hearing scarlet honeyeaters, but as far as we know, nobody managed to spot one of these tiny birds in the high canopy.



White-eared Honeyeater (Photo: David Stickney)

Easier to see was a White-bellied Sea-eagle, which posed for quite some time on a dead tree branch on the other side of the lake. Other birds seen during the afternoon were Red Wattlebird, Rose Robin, Sacred Kingfisher, Dusky Woodswallow, Leaden Flycatcher, Kookaburra, Yellow Robin and Lewin's, White-naped, White-eared and New Holland Honeyeaters.

Birdwatching seemed to be a bit out of season in early February. Some of us had been lucky earlier to see parent birds feeding young at nests and fledglings in the forest, and others called in at Lake Tyers beach on the way back to see satisfying numbers of shore and sea birds.

The botanists enjoyed easy walking and the view of the mature forest at Nowa Nowa, but found little of particular

interest in the lake shore vegetation. This was mainly mature Swamp Paperbarks with an understorey of *Phragmites*. They also found Sea Celery, New Zealand Spinach *Tetragonia tetragonioides,* Creeping Brookweed, saltbush and *Centella*, which is a little leaf growing on the ground.

Earlier, at the Stony Creek Trestle Bridge, they'd found a bit more to get excited about even though very few plants were in flower. There was an *Opercularia*, as well as Running Postman *Kennedia* sp., Apple-berry *Billardiera* sp., Cassinias, *Hardenbergia*, and something that looked like Yellow Rush-lily *Tricoryne* sp. except with white flowers.

A group of plant taxonomists were later occupied well into the night with identifying their finds, while the birdwatchers partied on, oblivious.

Jay Duncan and Joelle Champert

A bird list for the 4th and 5th of February is available in Appendix II of the electronic version of this Naturalist.

Mitchell River Silt Jetties – Monday morning

On our last day, we stopped at the Mitchell River Silt Jetties. The wind and rain did not deter a number of our members from visiting this fascinating geographic structure.

The Silt Jetties are a classic example of a finger delta. They extend 7 km into Lake King and, according to my research, are the second longest silt jetties in the world (one reference places them as the longest since the destruction of the silt jetties on the Mississippi River in the Gulf of Mexico by Hurricane Katrina in 2005). They are so special, they are listed on the Register of the National Estate.

They are a recent formation in geological time – 6,000 to 10,000 years – and are formed from the silt carried down by the Mitchell River, particularly during floods, when the sediment deposition occurs faster than the tidal currents can remove it. Vegetation such as reeds protect them from wind and wave action.

Much of the Silt Jetties are privately owned, so the southern jetty has several houses, but there are some patches of native vegetation. It was a surprise to see a population of Eastern Grey Kangaroos in one of them.

The birdlife consisted of waterbirds such as Black Swans and Eurasian Coots in Lake King. Those of our group that remained were treated to a majestic, low fly-by of a White-breasted Sea-eagle. The bird still had a patchy, buff-white head and body so it would have been a second or third year immature.

There were a number of Crested Terns and Silver Gulls, and both Little Pied and Little Black Cormorants, roosting on the tip of the northern jetty, which appeared to be more heavily vegetated. The birds were active and we spent much of our time observing the terns and cormorants diving for fish. The terns would plunge-dive from a fair height and the cormorants would surface-dive.

It was a fitting end to a very successful camp and our thanks go to Phil and Wendy for introducing us to this remarkable landscape.

David Stickney

Penguins at Sea

An oceanographer at Phillip Island Nature Parks, Andre Chiaradia has been studying aspects of the ecology of the Little Penguin for 22 years. He spoke about some of his findings at our February meeting.

Penguins spend 80% of their time at sea, coming ashore to breed and moult. They evolved from terrestrial birds, slowly making the transition to feeding at sea. Among the mammals that have moved into the sea, seals are similar as they also feed at sea but breed ashore while dolphins are able to breed at sea.

Worldwide, penguins are facing serious problems due to biodiversity loss, oil spills, penguin bycatch, overfishing and global warming. Of the 17 species, most are declining, some are stable, and a couple living in Antarctica – Gentoo and Adélie Penguins – are increasing.



Little Penguin on Phillip Island (Photo: David Stickney)

Effects of global warming on penguins have been detected. Globally, most of the excess heat is trapped in the ocean. Ocean currents move around the planet creating 'hot spots' where the temperature has already risen by over 2 degrees. This affects the penguins by affecting their prey. Studies of the South African penguins showed that as coastal waters warmed, prey have moved further from the coast and penguins have to travel further, and for longer, to find food. Chicks, waiting in burrows for parents to return with food, die of starvation. The population of South African penguins has declined by 90%. Steps are now underway to raise deserted chicks.

Andre showed a map of Australia and New Zealand indicating the amount of increase in surface water temperature over the last 30 years. He superimposed circles showing colonies of Little Penguins. After contacting people working with these colonies, he found that in places where the temperature increases are largest, foraging success is decreasing and populations of Little Penguins are decreasing. In places where temperature has not yet increased, such as in Bass Strait, colonies are doing well at present. This is not what Andre had initially expected.

Penguins are stimulated to prepare to breed when they sense that the temperature of the ocean is on the increase. This can be in August or as late as November. The best years for 'breeding success' occur when, by the time eggs are laid and hatched, the increasing temperature of the ocean has resulted in a peak of marine productivity. This provides a boost in the food supply.

Penguins are not alone in the ocean; they are part of a complex ecosystem. If we are to protect them, we need to understand their way of life and also the complex system in which they live. What do penguins eat and what competition is there for the food? At what time of year are particular areas of the ocean important for penguins?

Andre outlined a number of methods used to gather data. Most of the 6000 penguins in the Penguin Parade are micro-chipped. They are weighed each time they walk to and from the ocean across the 'PenguinLink'. DNA analysis of their scats indicates the proportions of different prey they have eaten. Some penguins carry loggers ('penguin Fitbits') that record activity at sea such as the number of dives and distance travelled. While at sea, penguins spend 50% of their time underwater, chasing mobile prey such as small fish. A penguin makes over 2000 two-minute dives per day, to a depth of 70 metres. It seems that they travel in groups and communicate with each other. They expend a lot of energy in hunting, and dives are not always successful. A penguin foraging for chicks travels about 30 km in a straight line each day. When taking the distance of the dives into account, they travel up to 300 km in a day. They bring about 200 grams of food per day to the chicks. Penguins eat squid, krill, sea horses, sardines, young barracouta and jellyfish. There is competition for these resources. In Bass Strait, penguins are top predators, but a very small player in the ecosystem. To save the penguins, we must save the fish. Bass Strait supports fishing, fish farms, oil and gas developments, etc. In order to protect the penguins and the resources they need for survival, we need really strong arguments based on knowledge. We need to map which areas are hotspots for penguins when feeding. We need to know at which times of year these areas are most important. We need to understand the system well enough to be able to make predictions.

For example, if we cut the population of sardines and anchovies by half, what effect would it have on penguins? We need a model that can predict this. We will then be in a position to negotiate for their protection. The Penguin Parade is an important tourist attraction that brings \$200m to Victoria each year.

Andre's responses to questions...

Predators: In Bass Strait, nothing in the ocean eats the Little Penguin. Leopard Seals, are known to eat Little Penguins, but they are rarely in the Phillip Island area. Long-nosed Fur Seals would also be a threat if they moved into Bass Strait. On Phillip Island, ravens have recently learned to work in pairs to steal penguin eggs. One goes to the front of the nest so that the penguins go to the front to protect the nest. Meanwhile the second raven digs into the back of the nest and steals the eggs. Studies are underway seeking the best way to prevent this.

Catastrophic moulting: After the chicks leave, the adults replace all their feathers at once. They stay ashore for 17 days while this process is completed during February or March.

Margaret Rowe

REPORT ON BUSINESS MEETING 19.06.2017

Finance

Cash Management Trading Account: \$5,431.31 Term Deposit: \$16,847.05

Business Arising, Correspondence & General Business

- Club spring camp at Chiltern 29 Sept 2 Oct: A reminder that participants must book their own accommodation.
- SEANA Spring camp at the Little Desert will be held 13-15 October 2017
- ANN Get-together 2018 will be held Sat 29 Sept Mon 8 Oct 2018 at Halls Gap in the Grampians. Expressions of interest are invited by 31 July 2017.
- Ken Harris was interviewed about local wildlife by ABC Gippsland radio 100.7 FM, broadcast between 6.30-7.00 am each morning from Monday 19 June to Friday 23 June 2017.
- 'Nature of Latrobe' booklet: awaiting counts from people with booklets in their possession to learn how many copies remain.
- Dave Stickney will follow up on Sean Smith's offer of assisting with the digitisation of plant lists from Bon and Ollie Thompson and the LVFNC.
- Ideas are sought from club members regarding conservation projects that we should support using some of our funds.

Conservation matters

- Tyers Rd tree removal: VicRoads advised they have pegged out areas from which vegetation will be removed. Irene advised that she has been doing field surveys of the pegged area and found it contains 10 large (>1m diameter) and 10 juvenile Strzelecki Gum, plus about 80 other trees of various species such as wattles.
- Mt Worth State Park: The value of the property will be determined before a decision is made.
- Cores and Links: Ryan Incoll from DELWP advised that handback will commence in the next few months and that the land will likely be categorised as Special Protection Zone.

Guest speaker for August Phoebe Burns

Phoebe is an ecologist specialising in native Australian rodents. She completed her Masters degree on the fire ecology of the endangered Smoky Mouse, and will speak about her current PhD study testing the response of New Holland Mouse populations to planned burns at Providence Ponds and the Gippsland Lakes Coastal Park.



Guest speaker for September Linda Rogan

Linda is a member of the Entomological Society of Victoria with a special interest in native bees. She has travelled extensively in Australia, photographing and documenting the life cycles of many species, with a focus on their ecological roles as pollinators and the plants they visit. She has recorded 13 species in her own native garden.



Latrobe Valley Naturalist is the official publication of the Latrobe Valley Field Naturalist Club Inc. The Club subscription includes the "Naturalist".

Brief contributions and short articles on any aspect of natural history are invited from members of all clubs. Articles, including those covering Club speakers and excursions, would typically be around one A4 side in length, should not exceed 1,000 words, and may be edited for reasons of space and clarity. Photos should be sent as an attachment and be a maximum of 1 megabyte in size.

Responsibility for the accuracy of information and opinions expressed in this magazine rests with the author of the article.

Contributions should be addressed to:

Ms Tamara Leitch The Editor LVFNC Inc. PO Box 839 TRARALGON VIC 3844 Phone: 0438 372 186

Email: tleitch@wideband.net.au

Deadline for articles to be considered for inclusion in the next issue (Sept/Oct): 4 Sept 2017

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The Naturalist is generously printed by the office of Russell Northe MLA, Member for Morwell

APPENDICES

APPENDIX I – Plant list for Club Summer Camp at Lakes Entrance, 4-6 February 2017 (M. Rowe)

FERNS

Adiantaceae Adiantaceae Aspleniaceae Blechnaceae Cyatheaceae Dennstaedtiaceae Dicksoniaceae Dicksoniaceae Dicksoniaceae Cyopteridaceae Gleicheniaceae Lindsaeaceae Polypodiaceae Pteridaceae

MONOCOTYLEDONS

Cyperaceae Cyperaceae Cyperaceae Cyperaceae Cyperaceae Cyperaceae Cyperaceae Cyperaceae Cyperaceae Juncaceae Juncaginaceae Liliaceae Liliaceae Liliaceae Liliaceae Liliaceae Liliaceae Orchidaceae Orchidaceae Poaceae Poaceae Poaceae Poaceae Poaceae Poaceae Poaceae Poaceae Poaceae Smilacaceae Smilacaceae

Xanthorrhoeaceae

Adiantum aethiopicum Pellaea falcata Asplenium flabellifolium Blechnum neohollandicum Blechnum nudum Cyathea australis Pteridium esculentum Calochlaena dubia Dicksonia antarctica Polystichum proliferum Gleichenia microphylla Lindsaea linearis Microsorum scandens Pteris tremula Pteris umbrosa

Carex appressa Cyperus lucidus Eleocharis sphacelata Ficinia nodosa Gahnia clarkei Gahnia radula Lepidosperma concavum Lepidosperma elatius Lepidosperma laterale Juncus pallidus Triglochin procerum Burchardia umbellata Dianella caerulea Dianella revoluta Dianella tasmanica Stypandra glauca Tricoryne elatior Dipodium punctatum Thelymitra sp. Austrodanthonia sp. Distichlis distichophylla Echinopogon ovatus Microlaena stipoides Phragmites australis Poa labillardieri Spinifex sericeus Tetrarrhena juncea Themeda triandra Eustrephus latifolius Smilax australis Lomandra longifolia subsp. longifloia

Maidenhair Fern Sickle Fern Necklace Fern Prickly Rasp-fern Fishbone Water-fern Rough Treefern Austral Bracken Common Ground-fern Soft Tree-fern Mother Shield-fern Scrambling Coral-fern Screw Fern Fragrant Fern Tender Brake Jungle Brake

Tall Sedge Leafy Flat-sedge Tall Spike-rush Knobby Club-sedge Tall Saw-sedge Thatch Saw-sedge Hill Saw-sedge Tall Sword-sedge Variable Sword-sedge Pale Rush Water Ribbons Milkmaids Paroo Lily Black-anther Flax-lily Tasman Flax-lily Nodding Blue-lily Yellow Rush Lily Hyacinth Orchid Sun-orchid Wallaby-grass Australian Salt-grass Hedgehog Grass Weeping Grass Common Reed Common Tussock-grass Sand Spinifex Forest Wire-grass Kangaroo Grass Wombat Berry Lawyer Vine

Spiny-headed Mat-rush

Xanthorrhoeaceae

DICOTYLEDONS

Aizoaceae Aizoaceae Apiaceae Apiaceae Apiaceae Apiaceae Apocyanaceae Apocynaceae Asclepediaceae Asclepediaceae Asteraceae Bignoniaceae Boraginaceae Campanulaceae Campanulaceae Caprifoliaceae Caryophyllaceae Caryophyllaceae Casuarinaceae Chenopodiaceae Chenopodiaceae Chenopodiaceae Chenopodiaceae Clusiaceae Convolvulaceae Dilleniaceae Elaeocarpaceae Epacridaceae Epacridaceae

Xanthorrhoea minor

Carpobrotus rossii Tetragonia tetragonioides Apium prostratum Centella cordifolia Hydrocotyle hirta Platysace lanceolata Alvxia buxifolia Parsonsia brownii Marsdenia rostrata Tylophora barbata Bedfordia arborescens Brachyscome multifida Xerochrysum bracteatum Cassinia aculeata Cassinia longifolia Euchiton gymnocephalus **Euchiton sphaericus** Helichrysum leucopsideum Hypochaeris radicata* Lagenophora gracilis Lagenophora stipitata Olearia argophylla Olearia lirata Olearia viscosa Ozothamnus adnatus Ozothamnus argophyllus Ozothamnus ferrugineus Pseudognaphalium luteoalbum* Senecio glomeratus Senecio linearifolius Senecio minimus Senecio tenuiflorus Sigesbeckia orientalis Pandorea pandorana Austrocynoglossum latifolium Lobelia anceps Wahlenbergia gracilis Sambucus gaudichaudiana Stellaria flaccida Stellaria pungens Allocasuarina littoralis Chenopodium album* Einadia hastata Einadia nutans Rhagodia candolleana Hypericum gramineum Dichondra repens Hibbertia aspera Elaeocarpus reticulatus Acrotriche serrulata Astroloma humifusum

Small Grass-tree

Karkalla New Zealand Spinach Sea Celery Centella Hairy Pennywort Shrubby Platysace Sea Box Twining Silk-pod Common Milk-vine Bearded Tylophora Blanket-leaf Cut-leaf Daisy Golden Everlasting Common Cassinia Shiny Cassinia Creeping Cudweed Annual Cudweed Satin Everlasting Cat's-ear Slender Lagenifera Common Lagenifera Musk Daisy-bush Snow Daisy-bush Viscid Daisy-bush Everlasting Spicy Everlasting Tree Everlasting Jersey Cudweed Annual Fireweed Fireweed Shrubby Fireweed Narrow Groundsel Indian Weed Wonga Wine Forest Hound's-tongue Angled Lobelia Sprawling Bluebell White Elder-berry Forest Starwort Prickly Starwort Black She-oak Fat Hen Saloop Saltbush Nodding Saltbush Seaberry Saltbush Little St. John's Wort Kidney-weed Rough Guinea-flower Blueberry Ash Honey Pots **Cranberry Heath**

Epacridaceae Epacridaceae Euphorbiaceae Euphorbiaceae Euphorbiaceae Euphorbiaceae Euphorbiaceae Fabaceae Gentianaceae Geraniaceae Goodeniaceae Goodeniaceae Goodeniaceae Haloragaceae Haloragaceae Lamiaceae Lamiaceae Lamiaceae Lamiaceae Lauraceae Lauraceae Loranthaceae Malvaceae Malvaceae Myoporaceae Myrsinaceae Myrtaceae Myrtaceae Myrtaceae Myrtaceae Myrtaceae Myrtaceae **Myrtaceae** Myrtaceae **Myrtaceae**

Epacris impressa Leucopogon parviflorus Amperea xiphoclada Beyeria lasiocarpa Phyllanthus gunnii Phyllanthus hirtellus Poranthera microphylla Acacia caerulescens Acacia dealbata Acacia genistifolia Acacia implexa Acacia longifolia Acacia longifolia var. sophorae Acacia mearnsii Acacia melanoxylon Acacia suaveolens Acacia terminalis Acacia verniciflua Aotus ericoides Bossiaea obcordata Desmodium gunnii Dillwynia glaberrima Glycine clandestina Hardenbergia violacea Indigofera australis Kennedia prostrata Pultenaea scabra Centaurium erythraea* Geranium sp. Goodenia humilis Goodenia ovata Scaevola ramosissima Gonocarpus teucrioides Myriophyllum simulans Mentha diemenica Plectranthus parviflorus Prostanthera rotundifolia Prunella vulgaris* Cassytha glabella Cassytha pubescens Amyema pendula Gynatrix pulchella Howittia trilocularis Myoporum insulare Myrsine howittiana Acmena smithii Eucalyptus baueriana Eucalyptus cypellocarpa Eucalyptus globoidea Eucalyptus globulus Eucalyptus melliodora Eucalyptus obligua Eucalyptus ovata Eucalyptus polyanthemos

Common Heath Coast Beard-heath Broom spurge Wallaby-bush Shrubby Spurge Thyme Spurge Small Poranthera **Buchan Blue Wattle** Silver Wattle Spreading Wattle Lightwood Sallow Wattle Coast Wattle Black Wattle Blackwood Sweet Wattle Sunshine Wattle Varnish Wattle Common Aotus Spiny Bossiaea Southern Tick-trefoil Smooth Parrot-pea **Twining Glycine** Purple Coral-pea Austral Indigo **Running Postman** Rough Bush-pea **Common Centaury** Geranium Swamp Goodenia Hop Goodenia Hairy Fan-flower Germander Raspwort Amphibious Water-milfoil Slender Mint Cockspur Flower Round-leaf Mintbush Self-heal Slender Dodder-laurel **Downy Dodder-laurel Drooping Mistletoe** Hemp-bush Blue Howittia **Common Boobialla** Muttonwood Lilly-pilly Green Box Mountain Grey-gum White Stringybark Blue Gum Yellow Box Messmate Swamp Gum Red Box

Myrtaceae Myrtaceae Myrtaceae Myrtaceae **Mvrtaceae** Myrtaceae Myrtaceae Myrtaceae Oleaceae Onagraceae Onagraceae Oxalidaceae Pittosporaceae Pittosporaceae Pittosporaceae Plantaginaceae Polygonaceae Polygonaceae Primulaceae Proteaceae Proteaceae Proteaceae Proteaceae Proteaceae Proteaceae Ranunculaceae Ranunculaceae Rhamnaceae Rhamnaceae Rosaceae Rosaceae Rosaceae Rubiaceae Rubiaceae Rubiaceae Rubiaceae Rubiaceae Rubiaceae Rubiaceae Rutaceae Rutaceae Rutaceae Rutaceae Santalaceae Sapindaceae Scrophulariaceae Scrophulariaceae Scrophulariaceae Solanaceae Solanaceae Sterculiaceae Sterculiaceae

Eucalyptus sieberi Eucalyptus tricarpa Eucalyptus viminalis subsp. viminalis Kunzea ericoides subsp. agg. Leptospermum laevigatum Melaleuca ericifolia Melaleuca squarrosa Tristaniopsis laurina Notelaea venosum Epilobium billardierianum Ludwigia peploides Oxalis exilis **Billardiera scandens** Bursaria spinosa Pittosporum undulatum var. emmettii Plantago debilis Persicaria decipiens Rumex sp* Samolus repens Banksia integrifolia Banksia marginata Banksia serrata Hakea decurrens subsp. physocarpa Lomatia myricoides Persoonia linearis Clematis aristata Clematis glycinoides Pomaderris aspera Pomaderris ferruginea Acaena novae-zelandiae Rubus parvifolius Rubus sp* Coprosma quadrifida Galium sp. Gynochthodes jasminoides Opercularia aspera Opercularia hispida Opercularia varia Pomax umbellata Correa alba Correa reflexa Crowea exalata Zieria smithii Exocarpos cupressiformis Dodonaea triquetra Mazus pumilo Veronica calycina Veronica plebeia Solanum aviculare Solanum prinophyllum Brachychiton populneus Lasiopetalum macrophyllum

Ironbark Manna Gum Burgan Coast Tea-tree Swamp Paperbark Scented Paperbark Kanooka Large Mock-olive Robust Willow-herb Water Primrose Shady Wood-sorrel **Climbing Apple-berry** Sweet Bursaria Sweet Pittosporum X Banyalla Shade Plantain Slender Knotweed Dock **Creeping Brookweed** Coast Banksia Silver Banksia Saw Banksia

Silver-top

Silky Hakea **River Lomatia** Narrow-leaf Geebung Australian Clematis Forest Clematis Hazel Pomaderris **Rusty Pomaderris Bidgee-widgee Burr** Small-leaf Bramble Blackberry Prickly Currant-bush **Bedstraw** Jasmine Morinda **Coarse Stinkweed** Hairy Stinkweed Variable Stinkweed Pomax White Correa Common Correa Small Crowea Sandfly Zieria Cherry Ballart Large-leaf Hop-bush Swamp Mazus Hairy Speedwell Eastern Speedwell Kangaroo Apple Forest Nightshade Kurrajong Shrubby Velvet-bush

Thymeliaceae Thymeliaceae Urticaceae Violaceae Violaceae Violaceae Pimelea axiflora Pimelea humilis Urtica incisa Melicytus dentatus Viola hederacea Viola sieberiana Bootlace Bush Common Rice-flower Scrub Nettle Tree Violet Ivy-leaf Violet Tiny Violet

*Introduced species

APPENDIX II – Bird list for Club Summer Camp at Lakes Entrance, 4th - 5th February 2017 (D. Mules)

Australian King-parrot Australian Pelican Azure Kingfisher Bell Miner Black-faced Monarch Brown Gerygone Brown Thornbill Chestnut Teal Common Blackbird Crimson Rosella Dusky Woodswallow Eastern Spinebill Eastern Yellow Robin Eurasian Coot Fan-tailed Cuckoo Galah Golden Whistler Great Cormorant Grey Butcherbird Grey Fantail House Sparrow Laughing Kookaburra Leaden Flycatcher Little Black Cormorant Little Corella Little Pied Cormorant Little Wattlebird Magpie-lark Masked Lapwing New Holland Honeyeater Pacific Black Duck Pacific Gull Rainbow Lorikeet Red Wattlebird Rose Robin Rufous Fantail Sacred Kingfisher Shining Bronze-cuckoo Silver Gull

Striated Thornbill Sulphur-crested Cockatoo Superb Fairy-wren Swamp Harrier Varied Sittella Welcome Swallow White-bellied Sea-eagle White-browed Scrubwren White-faced Heron Yellow-faced Honyeater Yellow-tufted Honeyeater