

Latrobe Valley Naturalist

PRESIDENT'S REPORT

Your committee has recently discussed our model rules so it is an appropriate time for us to review and reflect on some of our objectives. The Latrobe Valley Field Naturalists Club is a regional club whose primary objective is:

- To study and enjoy and conserve nature
- To encourage an interest in the various aspects of natural history

We seek to achieve this by bringing together people with an interest in natural history, to generate knowledge of our regional environment and facilitate its use for the conservation of our regional biodiversity.

Our Club has a good standing in our local community and that's reflected in our membership. It continues to grow and we now have over 90 members. The most encouraging sign is that our membership retention rate is very high.

We owe a great debt to our committee. We have a very stable, experienced and enthusiastic committee and this provides us with a solid base to move forward. Raising awareness about conserving our regional environment in the face of numerous threats has got to be our priority. We are lobbying decision makers to address some of our local issues and our thanks to Jackie Tims for taking on the challenging role of conservation coordinator.

We continue to produce a quality magazine each month to disseminate information about our Club's activities. This year we have experienced a significant increase in the cost of printing and unfortunately that had to be reflected in our membership subscriptions. We also have changed our printer and we will monitor the magazine to ensure that the quality of printing and photography is maintained. Gill Bremner has been the editor of our magazine since 1993 and is one of our longest serving committee members. Gill is a quiet achiever and we should recognise her achievement for reaching a 20 year milestone. I hope she continues for many more years.

I would also thank our treasurer - David Mules for keeping our books balanced during a period of significant cost increases

this year. We would also like to thank John Sunderland for his work on setting up and maintaining our web page in his new role as webmaster. I encourage all members and the public to view the webpage for up to date information on the Club's activities.

We continue to monitor our attendance records and although our attendance has declined this year to an average of 23 at our general meetings it is still a respectable number. Our excursion attendances were also lower but we did not manage to record numbers at all our excursions. I noted that we appear to follow a pattern with our more popular speakers. Last year I reported that one of our member's presentations proved to be the most popular with 35 attending the talk on Madagascar in April 2011. This year our most well attended meeting was in April 2012 when Phil Rayment gave a talk on Kangaroo Island, followed by the talk by Ken Harris on the Grand Strzelecki Track. Not far behind was Margaret Rowe's talk on Marine Research which was followed by a very popular related excursion to Flat Rocks at Inverloch.

The general meetings covered a good cross section of natural history topics with more emphasis on birds this year. We had a very informative talk on bird photography by Chris Tzaros, a talk by Susan Taylor on the waders at Corner Inlet, and Rolf Willig on his owl monitoring program provided regional focus. Our other interesting talks were Simone Louwhoff on lichens followed by a microscopy workshop, and Jean-Mark Porigneaux on tolerable fire intervals.

The club has had to respond to the changes in Victoria's Associations Incorporation Reform Act 2012 and we may have to adjust some of our processes. The changes require us to re-name the Public Officer as Secretary so Wendy will now be taking on that role. Other changes affect our procedures at AGMs and the number of officer positions. The Club is seeking clarification of the new 'Model Rules for Incorporated Clubs' and then members will have an opportunity to vote on their acceptance.

I would like to thank the Club for electing me as your president for a further term. My policy is to continue with our interesting and

knowledgeable speakers because the quality of our speakers is fundamental to the success of our Club's meetings. I would also like the committee to consider how the Club can attract new members and particularly younger members. I believe we should take into account the emergence of new social media in addressing this goal. I will also continue to monitor new technologies to see how they may enhance our meetings, excursions and camp experiences.

David Stickney

GEOLOGY OF THE MORNINGTON PENINSULA

A talk by Leon Costermans

Leon Costermans gave an absorbing, magnificently illustrated talk on the geological evolution of the Mornington Peninsula during the Autumn 2013 SEANA camp. His starting points were that huge geological diversity is found in Victoria (even though just 3% of Australia's land area) and that the Mornington Peninsula encapsulates in a far smaller area much of that diversity.

Beginning in the Cambrian, 500 million years ago (MYA), Leon explained that what was to become eastern Australia was on the edge of Gondwana and under the sea. Some of the volcanic eruptions on the sea floor reached sea level, forming islands. Material also accrued from sediments washing into the sea off Gondwana. The south coast of Phillip Island displays some volcanic material dating from that time; there is a 450 million year gap between two different surface rock bodies in close proximity.

Moving ahead into the Ordovician, around 460 MYA, we have the sedimentary rock which underlies much of eastern Australia. Devilbend Quarry reveals such rock in highly discrete layers. Leon explained that the well defined bands result from avalanche-type flows of material; such layers are known as *turbidites*. All life at that time was in the sea – essentially invertebrates feeding on algae, including graptolites found as fossils in Palaeozoic rocks.

Around 370 MYA, the intrusion of magma through the earth's crust produced granites

as they solidified. On the Mornington Peninsula, Arthurs Seat, Mount Martha and Mount Eliza are three granite outcrops resulting from the erosion of the surrounding material.

During the period from 130-60 MYA, in the Cretaceous, Australia became a separate continent, but not yet including southern Victoria – the Otways, Mornington Peninsula, South Gippsland etc. Volcanic sediment was being carried to sea by enormous flooding rivers. This process, along with squeezing action, formed the Otways and other hills of southern Victoria.



A 'Cannonball' at Flinders

Later again, lava oozing from fissures flowed down rivers, leading to marked changes in surface geology between adjoining areas – for example, Phillip Island is substantially on basalt and neighbouring French Island is sedimentary. A similar sudden change is found along a line through the Mornington Peninsula starting just to the west of Flinders. The coast off Flinders, which we were to visit with Peninsula FNC member Heather Ducat on the following day of the camp, displays basalt in various forms such as platforms, platform intrusions and boulders, some of which have been worn down into "cannonballs" or are found atop agglomerates of cemented volcanic ash.



Basalt rocks atop agglomerate - Julie Parker in background

Leon's account concluded in the relatively recent epoch of 23-3 MYA which saw sea incursions from south of Victoria and flooding rivers further craft the landscape. Faulting produced the Mornington Peninsula uplift, resulting in something like the region we know today.

Philip Rayment

WHO GIVES A HOOT

At the March 2013 meeting, Rolf Willig gave an interesting and informative talk on his and Shane Atkins' study on South Gippsland owl species. We had heard the exploits over a number of years of three of our members who have participated in the study and ventured out, come rain or moonshine, in the depths of night when the rest of us were safely tucked up in bed.

The study has been carried out over 8 years. The Powerful Owl, *Ninox strenua*, is found in drier forests and feeds mainly on arboreal prey (Ringtail Possums, Greater Gliders and larger birds), breeds in winter and is distinguished by chevrons on its chest and its size -50-60cm. Their call is a double hoot, in males 'down' then 'up' and females the reverse. The Southern Boobook, *N. novaeseelandiae* is widespread and common, feeds on invertebrates, small birds and mammals and breeds in spring. Its size (30-35 cm and the smallest of the Australian owls) is its distinguishing feature. Its call is a sharp double bark. The endangered Masked Owls (*Tyto novaehollandiae*) were heard at two sites. The species size is 33-50cm long and it inhabits open forest and woodland. It feeds on small to medium mammals including rabbits and breeds

autumn to spring. Its brown colouring is its distinguishing feature and its call is a loud scream something like the Sooty Owl. The Sooty Owl (*T. tenebricosa*), size 33-45 cm, is reported to live in the wet forests of the Central Highlands and East Gippsland. Its prey is small terrestrial and arboreal mammals. Breeding appears to be opportunistic. Rolf postulated that its diet is possibly changing and that it is being 'pushed out' of its breeding range by Powerful Owls. There were no responses to calls at any site despite recordings being played in known Sooty Owl habitats. The other two Victorian owls, the Barking Owl (*N. connivens*) is found mostly north of the Great Dividing Range, takes arboreal and terrestrial prey and breeds mid winter to September-October. It has large eyes and a sharp double bark and was not recorded in the study. The Barn Owl (*T. javarica* - *T. alba* in all my (old) books) did not feature in the study. Masked Owls are distinguished from Barn Owls in that they have more heavily feathered legs. All the Tyco species have the heart shaped facial marking.

The monitoring project started in 2006 by investigating potential sites away from harvesting of forests as 500 Ha is the required hunting area for a pair of Powerful Owls. Initially the study used one play back of the owls call per night in any one locality and recorded any responses. It was found two years into the study that by using two sequences of playback doubled the number of responses. Checks and balance were applied to the monitoring process - permits were needed, consistent methodology (originally developed by Ed McNab of ARI) was used, to minimise the impact on birds. The breeding season was not used and frequency and timing of monitoring limited. Occupational health and safety guidelines for staff applied. Monitoring sessions started with 5 -10minutes of silent listening at dusk, about 25 minutes using playback calls followed by 40 minutes of spotlighting. During the study time, the 2009 fires affected a number of the monitored sites.

Project Results:

In 2006-7, Powerful Owls were recorded in 26 core sites. Each seasons 1 visit recorded a 40% response. In 2008, two visits recorded a

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60% response. After the 2009 fires there was 40% and 2010 – 20% and 2011-20%. At Wilsons Promontory the Owls remained in this area, possibly because of the mosaic pattern of burning allowing birds to move to unburnt parts. However smoke and noise (from bulldozers) could also have affected. For Boobook Owls there was a slight decline (not statistically significant) in responses in 2009. Arboreal mammals did not vary much between 2008 and 2011. In the Latrobe Valley, Powerful Owls have declined but appear to be coming back in 2012. Boobook Owls showed an initial drop but then climb in number.

There has been a limited analysis on the 2009 fires. Before 2009, sites occupied by Powerful Owls have shown direct or indirect effects of burning in reduced numbers. Boobook Owl numbers have returned to previous levels. Confirmation is required but it seems that Masked Owl numbers are increasing.

Thanks to Rolf for a stimulating talk, complete with beautiful pictures, given he was asked to speak at the last moment.

Jackie Tims

REPORT ON BUSINESS MEETING HELD 22.4.2013

General Meetings & Excursions

Friday 24 May: Ecological restoration in Kruger NP – Deb Archer

Saturday 25 May: Excursion to Lyrebird Walk, Mirboo North. Meet there at 10am.

Friday 28 June: Parks of West Gippsland – Andy Gillham

Saturday 29 June: Mt Worth SP. Meet 10am Moonlight Creek Picnic Ground. Carpool **BY 9.15 SHARP** Trafalgar Railway Station. (Note: 9.15 is when we leave)

Botany Group: Saturday 1 June. Sedges and Rushes – looking at families and genera, 10am at Jack and Marja's, 189 Briggs Rd, Nilma North. Contact: Wendy Savage ☎ 5634 2246

Bird Group: Tuesday 4 June – Wirilda. Meet by 9.30 at the carpark. Contact: Alix Williams ☎ 5127 3393, alixw@spin.net.au

Finance – Balances: Cash Mgt Trading A/c \$2849.64. Term Deposit \$13,629.02. Term

deposit has been reinvested for 6 months @ 4.1%.

Business Arising, Correspondence & General Business

Sales of 'Nature of Latrobe' – payment made for 5 from Tourist Information Centre at Traralgon.

Motion-sensitive camera – if the club purchased one it could be hired by members to monitor their wildlife. David Stickney will enquire about prices.

Spring Camp Fri 13-Mon 16 September – have booked Lady Northcote Camp, Rowsley for 3 nights. (18km from Bacchus Marsh). Angliss Lodge has 12 bedrooms with 2 bunks to sleep up to 4. Cost \$43/night/pp with minimum of 15 people. Bring all bedding and pillows. Lodge has 2 bathrooms, kitchen and eating/sitting area. Can use nearby hall. Will arrange for evening meals on Sat and Sun at \$12/person. \$650 deposit required. Members can camp by building if needed.

Changes to Incorporation and rules for club – have sent letter.

ANH Medallion nomination for Ken Harris – application has been completed.

Secretary away for June and July meetings – need to fill position of Assistant Secretary.

Latrobe Region bird lists – look at places to distribute these.

ANN interim steering committee meeting attended by Phil. Decided to set up as a sub-committee of SEANA. Approved a statement of purposes, which is primarily to maintain a register of clubs and organize the bi-annual Get-together. John Gregurke plans to set up a website and prepare a new ANN register. Phil is interim secretary.

Consider meeting at 3pm for winter months.

Conservation Matters

Nothing to report.

GUEST SPEAKER FOR JUNE

Andy Gillham is the Latrobe Ranger in Charge and as such is responsible for the management of 52 parks and reserves spread across the landscape of the greater Latrobe Valley area. These include well known sites such as Baw Baw, Morwell and Tarra Bulga national parks, the historic Walhalla

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township, numerous State and Regional parks and dozens of small bushland and conservation reserves. He has worked in park management for the past 23 years and during this time performed a number of roles relating to land management, including planning, education, compliance, forestry, dog control, land protection and park management (including 17 years working as a park ranger in various locations around the State).

Andy's current role is based in Traralgon where he supervises a team of seven staff responsible for on ground delivery of a range of park management actions. His presentation 'Parks of the Latrobe Region' will focus on the delivery and uniqueness of the parks and reserves in the Latrobe RIC Area, local management issues and the systems and process used by Parks Victoria to achieve management outcomes on the ground.

FOR THE DIARY

Club Spring Camp Friday 13-Monday 16 September at Lady Northcote Camp, Rowsley (18km from Bacchus Marsh). Angliss lodge has 12 bedrooms with 2 bunks to sleep up to 4 people. BYO bedding and pillows. There are 2 bathrooms, kitchen and eating/sitting area, and we can use the nearby hall. Evening meals Sat and Sun nights at \$12 per head. Full details later.

SEANA Spring Camp at Numurkah, hosted by the Broken Creek FNC Inc.

"Riverine Flood Plains, Red Gum Forests, the Mighty Murray River"

Friday 11-Monday 14 October, based in Numurkah, in the Goulburn Valley.

ANN CANBERRA 2012 – FURTHER NOTES

Whenever I had thought of Canberra previously, it had been of big buildings, a lake, bewildering roundabouts, hot air and insults, so there were some surprises awaiting us there. The first came when we studied the detailed maps we were given of the ACT and saw the extent of the National and Conservation Parks which almost surround the city. During our excursions we saw only a very small area of those but we were told we were being given only a taste of the treasures, both natural and cultural, to

be seen in and around Canberra, and we were encouraged to return at a later date to see more.

The Molonglo River was dammed to create Lake Burley-Griffin and another misconception was corrected about its course as it flows in the opposite direction to that I had supposed. Its source is on the western side of the Great Dividing Range in the Tallanganda State Forest, on the other side of the divide from where the Shoalhaven River rises. The Molonglo begins its journey at a height of about 1200 metres, 50km to the south of Canberra, and flows north before turning to the north-west and flowing through the outskirts of Queanbeyan. There it is joined by its major tributary, the Queanbeyan River. It is water from these two rivers that has flooded Queanbeyan in the past. The Molonglo River then continues through Canberra where the Scrivener Dam holds back the waters of the lake. The name is derived from "molongolo", which is from a local aboriginal word meaning "the sound of thunder".

Some fifteen million years ago, the Molonglo meandered across wide plains to reach the area where the city of Queanbeyan now stands, before earth movements forced a block of land to rise creating a geological horst formation, now known as the Cullerain Block, which separated the plains on either side. The river forced its way through the block creating a natural corridor that is now the Molonglo Gorge just a few km east of Queanbeyan. Today that corridor remains relatively unspoiled with natural vegetation and wildlife, but a 3km walking trail through it, revealing the stream, its waterfalls and pools, the natural vegetation and wildlife, has attractive picnic areas at both ends. Downstream from the Scrivener Dam, the river has carved out another gorge and that corridor provides important habitat for some threatened species. A Management Plan prevents development along the gorges. The Molonglo River completes its 115km journey when it flows into the Murrumbidgee River. Being part of the Murrumbidgee Catchment, it is also within the Murray-Darling Basin.

I had never thought there could be any positive outcomes of drought, however, during Dr Gavin Young's address on "Vertebrate fossils, especially fish species, of the Devonian period", he revealed that as the water in the Burrinjuck Reservoir dried up they discovered fossils sitting on its bed, already washed clean and waiting to be collected. Dr Young emphasised the significance of Australia's fossils with its unique species and the further development of the evolutionary time-line, mentioning discoveries near Mimosa Rocks in NSW, those found along the Victorian coast, and especially the footprints of a salamander-type creature discovered on cliffs beside the Genoa River in a remote area of Coopracambra National Park, as those are amongst the oldest ever discovered. Max James spoke of them when club members waded along the Genoa River during our weekend at Wangarabell. Found together amongst the fossils at Gogo in the Kimberley in WA were both vertebrates and invertebrates of a much older time than any found previously elsewhere in the world, showing that these were co-existing far earlier than previously thought. Both Philip and I have searched for Gogo on maps and the internet but have been unable to find any other reference to it. Perhaps its location is not revealed to protect its valuable fossils.

We were told that Parliament House in Canberra is the biggest moth trap in the world. Every night it is floodlit and when the Bogong moths fly south on their migration each year, huge numbers are attracted to the lights and end their journey there. Requests have been made for the lights to be switched off during the few weeks of the moths' migration, but so far this has been refused and the number of moths is decreasing.

During our visit to the National Art Gallery, we were taken behind the scenes to view an impressive collection of work by Fiona Hall. Old bank notes, such as Australian \$1 and \$2 notes, had been joined together to form the background for a drawing of the skeleton of a leaf that is indigenous to the country from where the bank notes came. Australia's was a eucalyptus leaf, that of Canada a maple leaf, and so on. The purpose of the work was to illustrate that the forests of the

world were being destroyed to increase the wealth of the nations. To us it appeared that the greater the wealth of the country, the larger was the piece of art, and consequently the more bank notes used.

To reach Mulligans Flat Nature Reserve, on the northern outskirts of ACT, we had to drive through a new housing development that abuts it. To protect the park from people's pets, it was decided to erect a high fence, but after objections by the developer it was placed some distance in from the road. However, it was those blocks which were most sought after by the buyers and an active friends group now operates amongst residents. They contact the ranger if they see any problems. To protect the Bettongs which have been reintroduced into the park, a cat-proof fence was needed, so small enclosures were tested with people's pet pussies until they were sure the cats couldn't get out. As well, to ensure that the gate is properly closed by park visitors, if it stays open for more than five minutes the Ranger's mobile phone rings and he can activate a camera which shows the gate and what is happening there.

Although Tidbinbilla Nature Reserve had been hit by the 2003 bushfires, it has recovered well. Bird life on and around the several pools was prolific and included Freckled ducks and a pair of Brolgas. In one of the pools a platypus could be briefly seen. Set into the footpaths at intervals were metal sheets with quotations about the environment etched onto them. Amongst them were:

"Ultimately, conservation is about people."
Nelson Mandela

"When we try to pick out anything by itself, we find it hitched to everything else in the Universe." John Muir, Naturalist, conservationist, 1838-1914

"For observing nature, the best pace is a snail's pace." Edwin Way Teale, Naturalist, 1899-1980

"There is sufficiency in the world for man's need, but not for man's greed." Mahatma Gandhi, Political and spiritual leader, 1869-1948

Estelle Adams