

# Latrobe Valley Naturalist

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## VALE BON THOMPSON

To the great sadness of many past and present club members, Bon Thompson passed away during the night of 11 June, at the age of 92 years. Bon, a treasured Life Member along with her husband Ollie was greatly esteemed for her dedication to conservation of our natural environment and for her place at the heart of our club's life over many years.

Our thoughts are very much with Ollie and Max and Sue at this time.

## MARINE RESEARCH - FROM MALLACOOTA TO PORTLAND

### Talk by Margaret Rowe 22.2.2013

The Marine Research Group has excursions on 12 days per year, coinciding with exceptionally low tides. On each excursion, after about four hours' searching the intertidal area, the group uses a checklist of about 350 species of invertebrates to record the species seen and give an indication of their numbers. Species recognised but not on the checklist are also noted. Members tend to specialise in certain invertebrate groups and are aware of which species are of interest to staff or volunteers at the Museum of Victoria. Under permit, specimens are occasionally taken for photography and further study. Photos taken over the past five years on excursions to nine localities along the Victorian coast with the Marine Research Group of the Field Naturalists Club of Victoria were screened.

Rock platforms, such as those at Bastion Point, the Bunurong Marine and Coastal Park, Phillip Island, Shoreham, Flinders, Warrnambool, and Portland are favourite places for rockpooling. They provide suitable habitats for an amazing diversity of invertebrates. Many of the common species are found on most of the rock platforms across Victoria while other species are seen only occasionally and some are restricted in their range. Animals living on the upper surface of rocks which are exposed to the air as the tide recedes have adaptations that enable them to withstand the extremes of a wide range of temperatures, while avoiding desiccation. For example, the tube worms, *Galealaria caespitosa*, are protected in their

calcareous tubes, each tube with an operculum that shuts out the air. Clustering to form thick encrustations of thousands of tubes would offer added protection. The Red Waratah Anemone, *Actinia tenebrosa*, retracts its tentacles when exposed to the air.

The more protected habitats provided underneath rocks, in crevices, in gutters or pools, and among algae or seagrasses supports a more varied assemblage of creatures. Generally, the more protected the habitat and the shorter the time of exposure as the tide recedes, the greater the variety of invertebrates living there. There were photos of several species each of encrusting sponges, sea anemones, flatworms, annelid worms, chitons, nudibranchs, a range of other gastropods, bivalves, barnacles, tiny crustaceans, crabs, sea stars, brittle stars, sea cucumbers, sea urchins, and tunicates.

Extensive sandy or muddy flats, such as those of Corner Inlet, support a different assemblage of creatures, such as the Sand Crabs, Wavy Volutes, Soldier Crabs and Pebble Crabs while others, such as Sentinel Crabs and Semaphore Crabs shelter higher on the beach around mangroves or among patches of seagrass. The relatively sheltered muddy intertidal areas at San Remo and Stony Point support a surprising range of often brightly coloured sponges, nudibranchs, sea stars, tunicates, and barnacles.

During the meeting a question arose about the respiratory organs of sea cucumbers. Most of these cucumber-shaped invertebrates have a ring of retractable tentacles around the mouth and these are used in feeding. The digestive tract ends at the cloaca, an open sack at the rear of the animal. The animal pumps water in and out of the cloaca, passing it into several branching 'respiratory trees' which extend internally along the body. These facilitate exchange of oxygen and carbon dioxide between the animals' tissues and the water. Thus, as mentioned during our meeting, in lay person's language, sea cucumbers "breathe through their backside".

Margaret Rowe

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## EXCURSION TO ELLEN LYNDON PARK AND FLATROCKS

Excursion led by Margaret Rowe, Saturday 23.2.2013

The huge old oaks beside the playground at Ellen Lyndon Park provided welcome shade for a relaxed picnic lunch. Coral Hughes and Graeme Rowe, members of the Australian Plants Society South Gippsland Group, related aspects of the history of the extensive planting of Australian natives that the group now helps to maintain. Ellen Lyndon, a keen naturalist and founding member of LVFNC, after convincing the Shire to purchase the land, planted the park to showcase Australian native plants. She worked with the Shire for over 30 years to maintain and improve the park. The group wandered through the park admiring the established trees, including Cherry Ballart, Lightwood, Lemon-scented Gum, and Cypress-pine, many shrubs, and the recent plantings of daisies and Eremophilas.

On the way to Inverloch, those who took the opportunity to call at Maher's Landing were rewarded with views of waders and waterbirds. Others chose to browse in the Bunurong Environment Centre until we reassembled to travel to Flatrocks.



False Limpet *Siphonaria diemenensis*

As we stepped onto the rock platform, we were surrounded by molluscs that are equipped to withstand heat, cold, rain and desiccation as they are exposed to the air for several hours in each tide cycle. The False Limpet, *Siphonaria diemenensis*, the Ribbed Top-shell, *Austrocochlea concamerata*, the Periwinkle, *Bembicium nanum*, and the less

common *Siphonaria zelandica*, a False Limpet which is found only on expanses of horizontal rock near high tide level. Black lichen occupied high spots on the exposed rocks.

As we made our way out over the rock platform, through shallow pools and across sheets of the brown alga, Neptune's Necklace, our attention was caught by masses of tubes of the worm *Galeolaria caespitosa*, scattered individuals of the Variegated Limpet, *Cellana tramoserica*, and small clusters of the Black Crow, *Nerita atramentosa*. In shallow gutters, the small green sea star, *Parvulastra exigua*, was scattered over the pebbles and tentacles of the brown sea anemone, *Aulactis veratra* fringed shallow pools.



Pink Sea Anemone *Isanemonia australis*

As the tide fell to its lowest ebb for the day, we searched the gutters and the more protected habitats which are available to us for brief periods in each tide cycle. Members of the group explored enthusiastically, including searching under rocks and amongst the seaweeds in ankle-deep water. The range of animals seen included: two species of flatworm, the beautiful pink sea anemone *Isanemonia australis*, brown sea centipedes, the Purple-mottled Shore Crab and the Eleven-armed Sea star. Molluscs were well-represented with five species of chiton, large and small individuals of the spectacular Elephant Snail with its sturdy black body and white 'duckbill' shell, Warreners, Anemone Cone shells, Dog Whelks, Lineated Cominellas, and Wine-mouthed Lepsiellas with their claret-coloured 'mouths'.

A tiny (10 mm) green sea slug, *Elysia coodgeensis*, was sieved from seaweed. Further investigations on the internet revealed that this sea slug feeds on seaweeds, taking intact chloroplasts from the cells of its food plant and storing them in its own body, giving it the green colour. It appears that the sea slug reaps the advantages of good camouflage and the ability to supplement its food supply with the sugars produced by photosynthesis in the chloroplasts.

Margaret Rowe

## WETLANDS AT DUTSON DOWNS

The botany group travelled to Dutson Downs on Saturday April 6 to record plants in a couple of wetland areas. Gippsland Water staff Ryan Snell and Kassie Dear met us in Rosedale and led us to the Dutson Downs Farm Office to sign in and put on fluoro tops, to make us conspicuous to duck and deer shooters. Here an adult and two young Sea Eagles were seen flying over the nearby water.

Our first wetland at Eagle Pines was, as the name suggests, near a plantation of *Pinus radiata*. Here was a large low-lying area with a small water body, which would probably be a large water body after more rain. Cattle had previously grazed in the area but are now excluded, but pasture grass and weeds remained. The ground was thickly covered with tussock grass and sword grass (mainly *Lepidosperma longitudinale*) with little gaps where small plants could be found, such as *Centella cordifolia*, *Astroloma humifusum* and *Kennedia prostrata*. Coastal and salt tolerant plants were also found, such as *Myoporum insulare*, *Rhagodia candolleana*, *Einadia nutans* and *Selliera radicans*. This wetland was about 5 or 6 km inland from Delray beach. Here we were shown the Dwarf Kerrawang *Rulingia prostrata*, discovered in Dutson Downs in 2007 and listed as endangered under the Victorian Flora & Fauna Guarantee Act (VFFGA).

The most exciting find wasn't a plant, but a frog. I spotted what I thought was a green leaf near the top of a patch of reeds, and leaning over to look closer I was surprised to see a lovely bright green frog. Several others

saw it too as it moved down the reeds and some saw some gold on the body. It was most probably the Green and Golden Bell Frog *Litoria aurea*, which was only found in Dutson Downs in 2011 and is listed as vulnerable under the Environment Protection and Biodiversity Conservation Act.

We drove through an area with many attractive grass trees and banksias to our second wetland located in a block of remnant vegetation known as Delray Bush. There were fewer species recorded here, and there was a thick covering of young burgan plants. The Trailing Hop-bush *Dodonaea procumbens*, only discovered at Dutson Downs in 2009, was pointed out to us by Ryan, who had studied these plants for his thesis for his honours year at Melbourne Uni. The LVFNC was involved in one of the original surveys to find the extent of its distribution. It is listed as threatened under VFFGA and is an attractive little plant with small hastate leaves. There were quite a few plants growing in small gaps amongst the burgan and sword grass. Despite the dry soil a couple of patches of Parson's bands *Eriochilus cucullatus* were flowering bravely.

The number of species recorded in both areas was relatively low due to the recent dry summer and if we were to visit in Spring I'm sure there'd be all sorts of plants popping up. Thanks to Ryan and Kassie for giving up their Saturday to allow us access to this interesting area.

Wendy Savage

## BIRD EXCURSION TARRA BULGA NP

On 7 May a fine mild day with early sunshine saw 14 Field Naturalists meet at the Tarra Bulga NP Visitors Centre, where we were greeted by a very friendly Crimson Rosella. Satin Bower Birds were spotted in the surrounding trees imitating many different bird calls.

Setting off after a cuppa, along the Fern Gully Nature Walk, Scrub Wrens and Pilot Birds were heard calling and came out briefly out onto the path for good sightings. Also spotted was a Yellow Robin, Brown Thornbills and a loudly calling Whip Bird.

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The Lyrebirds were elusive, though they gave quite a repertoire of calls. Yellow Tailed Black Cockatoos were seen in the tree tops and a Tree Creeper heard. After crossing the swing bridge we took the highroad and briefly joined the Grand Strzelecki Track back to the car park. Lunch was enjoyed in the picnic shelter and a short walk to the falls concluded the outing.

Meryl Cracknell

## REPORT ON BUSINESS MEETING HELD 20.5.2013

### General Meetings & Excursions

**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.

**Friday 26 July:** Winter Members' Night. Presentations from members.

**Saturday 27 July:** Moe Town Reserves – Ollerton Ave and Edward Hunter. Meet 10am Matlock St off Ollerton Ave.

**Botany Group:** Saturday 6 July - 10am Mosses at Bruce & Estelle Adams' residence 7 Lorikeet Place, Traralgon ☎ 5174 2753

**Bird Group:** Tuesday 2 July – T'gon Rly Res Cons Reserve. Meet by 9.30 at the carpark, Hickox St. Contact: Alix Williams ☎ 5127 3393, [alixw@spin.net.au](mailto:alixw@spin.net.au)

**Finance** – Balances: Cash Mgt Trading A/c \$2017.86. Term Deposit \$13,629.02.

### Business Arising, Correspondence & General Business

Motion-sensitive camera – David Stickney has specifications for a number of different types, and we need to decide exactly what we need. Committee and John Poppins will be sent information to make a decision at a later date.

Spring Camp Fri 13-Mon 16 September at Rowsley – Camp booking has been completed with deposit paid.

Changes to Incorporation and rules for club – Secretary has sent the annual statement. Motion: That the club resolves to operate under the new model rules as contained in the Associations Incorporation Act 2012 with the committee consisting of the four

specified positions and five ordinary members elected under Rule 53. Our financial year will be from the first day of March to the last day of February, and our statement of purpose shall remain the same as that originally adopted. A Williams/P Rayment. Passed unanimously. This will be placed in the Naturalist as notification for putting the motion at a special general meeting on August 23, 2013.

ANH Medallion nomination for Ken Harris has been sent.

Secretary away for June and July meetings – as we have no Assistant Secretary, Alix will stand in for this period.

Naturalist from 2009-2012 have been bound.

Plant survey at Morwell River Falls – Catheryn Thompson has made a request to have the plant list added to. Botany Group can do this November 2. David Stickney will let them know.

Morwell River NEIP will be reconvened and Kevin Roberts will be contacting David Stickney as our rep.

Waterbug Workshop to be held 10-12 July at Zoological Laboratories Monash, cost \$484. David Stickney has details.

Bird identification guide for Latrobe Valley request from Kevin Roberts – will discuss at a later meeting.

SEANA camp hosted by LVFNC – suggestion that we offer to host camp in 2016 or 2017 (previous camps 1994, 2001, 2010) together with Sale FNC based in East Gippsland such as Sale or Bairnsdale. Phil will raise matter with John Steel, President Sale FNC.

### Conservation Matters

Nothing to report.

## 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. Camping is possible. Evening meals will be arranged for Saturday and Sunday nights at \$12 per head. Full details later.

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**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.

## **NOTICE OF MOTION AT SPECIAL GENERAL MEETING 23.8.2013**

The August GM will be suspended briefly in order to put the following motion at a special general meeting:

That the club resolves to operate under the new model rules as contained in the Associations Incorporation Act 2012.

That the committee will consist of the four specified positions – a President, a Vice-President, a Secretary, and a Treasurer – and five ordinary members elected annually.

Our financial year will be from the first day of March to the last day of February.

Our statement of purposes shall remain the same as that originally adopted.

Statement of Purposes:

1. To study, enjoy and conserve nature.
2. To encourage an interest in the various aspects of natural history.
3. To hold regular meetings and arrange for suitable speakers.
4. To organize excursions or field days at times to be determined by the Executive Committee.

## **LYREBIRD WALK – MIRBOO NORTH**

On Saturday 25 May seventeen Field Naturalists met at the picnic area and set off along the Little Morwell River Walk. Some of the few birds sighted were: Crimson Rosellas, Olive Whistlers, Grey Fantail and a Tree Creeper. Those interested in fungi were kept busy with a wide variety of colourful fungi to photograph. Other points of interest were the Wild Raspberry, a wattle growing out from the trunk of a tree fern and some different reeds Jack had spotted.

It was great to see the regrowth along the track since the fires 4 years ago and the new seats in place along the way.

We then drove to Old Darlimurla Road where Grace showed us the last of the season’s Parsons Band Orchids.

The very enjoyable excursion finished with lunch in the sunshine and an opportunity for the botanists to identify specimens.

Meryl Cracknell

## **PRE & POST FIRE MONITORING AT WILSONS PROMONTORY**

Mary Ellis, a long time supporter of the Prom, spoke of the repercussions of the 2005 fire which burnt from Tidal River to the lighthouse. Out of a July 2005 meeting, she organised a group of naturalist friends who volunteered in September to learn how to do the vital attributes of monitoring vegetation. This early work has been overlooked since. In February 2006 a project was commenced by a Canadian, Frank Burrows who designed the methods. He was the first of many rangers who have assisted in the project. The current and longest serving ranger, Dan Jones has seen the 2009 fires and the March flood of 2011.

The Monitoring Objectives were:

1. To develop a long term vegetation monitoring protocol.
2. To track post fire vegetation trends.
3. To assess vegetation condition in Coastal Grassy Woodlands (CGW) specifically Coast Dune Scrub Mosaic (CDSM) and Coast Banksia Woodland (CBW) Ecological Vegetation Classes (EVCs).
4. To establish a monitoring protocol for an Adaptive Experimental Management (AEM) approach of these poor condition EVCs.

The questions to be asked:

1. What is the vegetation species composition, abundance and condition and how does it change over time?
2. What introduced species are present and do they have an impact on the EVC condition?
3. What rare species are present?
4. How does fire severity influence vegetation?

5. What active management techniques (burning, slashing, grazing control) best restore or maintain the Coastal Grassy Woodland conditions?

## The Monitoring Design

**Representation** – plots stratified by EVC, fire intensity and topography.  
**Randomization** – plots placed randomly within 2 EVCs and 4 fire severity strata.  
**Replication** – 5 replicates within each strata.

The initial 35 quadrats were recorded in years 1, 2 and 4. This year, 7 years after the beginning, we are revisiting these quadrats, possibly for the last time. There were other limited studies in the intervening years including preparation for controlled burns which proved very timely for the fire of 2009.

**Vegetation Plot Design** The plots (quadrats) are 20x20m, with 5 1x1m quadrats in the centre and corners. Care is taken not to trample any plants within the quadrats, especially the small quadrats. If identification is needed, specimens for identification purposes are picked from outside the large quadrat.

**Ground Cover Data** In the small quadrats, all vegetation less than 1m in height are recorded. Species name, number of individuals, cover abundance and reproductive class for grasses, sedges, rushes and herbs are recorded. Any plants that have the potential to grow to more than 1m or are woody need to have their heights measured and recorded.

**Cover abundance** The Braun-Blanquet scale was used. On advice from ARI, this was changed to percent cover and now, again on their advice, the Domin scale is being used.

**Reproductive Class** is a new measurement and is a bit subjective, but will provide invaluable information. For example Coast Tea-tree started flowering in the fourth year and this presents a management problem. Determining juvenile from mature with these seedlings is easy because of buds and seed capsules. Post mature plants usually look senescent, drying off, brown. Some plants flowered in the first year after the fire, e.g. *Hakea decurrens*.

**Other species** For a complete record of the species within the 20x20m quadrat, any additional species not found in the small quadrats were added to the total list. Usually between 2 and 6 other species were added. ARI have now asked for percentage cover and reproductive class for these species as well.

**Mid-storey and Canopy** have now been combined in one data card and simplified so that individual trees are not tagged and recorded and the whole quadrat is assessed for each species, similar to the small quadrats. Mid storey begins at a height of 1m. Also recorded are: number of individuals (live only); species name; diameter breast height **cm**; height **m** minimum, maximum and typical required; cover abundance including age; class that is either juvenile, mature, postmature, dead; and crown condition BB code of % dead crown – note that this is a measure of **dead** crown.

This data card has been modified and is much easier to use. When ARI looked at the original data they thought data of the midstory or crown had not been collected. The reason was that after the fire there was no mid storey or canopy. This is a classic example of the value of field work – we in the field knew what we were doing, they in the lab didn't.

**Photographs** Every small quadrat was photographed and one taken from the SW corner of each 20x20m quadrat. These are fixed photo points, another method of recording changes in the vegetation.

**Results** ARI have finally produced a report on the analysis of the results from the 35 quadrats surveyed in years 1, 2 and 4.

Jackie Tims *To be continued next issue.*

## PLEASE NOTE

**August and September speakers have been swapped**

**2013-14 Subscriptions are now overdue**