

Castlemaine Naturalist

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Monthly newsletter of the
Castlemaine Field Naturalists Club Inc.



Eltham Copper butterfly - photo by Joy Weatherill

Geological fun with Julian Hollis Lynne Kelly

On Saturday 9 April a large group of field naturalists enjoyed an excursion to the Coliban Reservoir, part of a trio of linked water storages with the Lauriston and Malmesbury Reservoirs. The excursion was a follow-up to geologist Julian Hollis's hugely popular talk for the club in February.

This photographic essay represents just some highlights. In three hours, we learned so much and had so many fascinating objects shown to us, that no report could do it justice.



A geological site as rich as we have on our doorstep at Coliban, we were reliably told, would be hugely valued in other parts of the world. But our geological heritage is totally neglected by government, industry and most of the Australian population. We were able to appreciate it thanks to Julian's enthusiasm and expertise.



Julian showed us many examples of tachylite, a natural black glass stone that was used by indigenous people to make a variety of tools. I was surprised to learn that Aboriginal artefacts made from local tachylite have been found well into NSW. The trade routes were extensive and this stone greatly valued.



On the outside of the tachylite, the rock is 'devitrified', that is the clay has been washed out leaving many indentations.



We were all fascinated by the variety and forms of tachylite as shown in this sample held by Peter Turner.

We spent quite a bit of time enjoying the lovely patterns in the sandstone that dates from the Ordovician around 430 million years ago. We were advised not to waste our time looking for fossils. There are none here. They are found in slate and much more recent.



There were stunning examples of liesegang bands in the sandstone and wonderful examples of the layers within the rock.



There were plenty of examples of quartz veins forming a reef through the Ordovician sandstone.



Once exposed by erosion, the quartz vein starts breaking up. This doesn't happen quickly; this is geology after all.



Plate movement crushed and folded these sediments from east to west, so the concertinas tend to be aligned north-south, as was the example we saw.



One of the most beautiful sights was of natural ochres found in Ordovician rocks. These are formed from iron oxide, also known as limonite.



People were constantly collecting rocks that attracted their attention, and the tireless Julian enthusiastically explained what they were. Jim Taylor found a glacial erratic quartzite, or chert. The explanation revealed that a 'glacial erratic' means that the stone was carried here by ancient glaciers.



Among many of the lovely textures and colours we admired during the day was this beautiful granite with pinkish felspar crystals



We crossed over to other side of the reservoir in the hope of finding some Aboriginal artefacts. A disappointed geologist tried to be pleased that the water levels were higher than during the drought. It meant that we couldn't get to the submerged geology he was keen to show us. Somewhere under the water, he assured us, there are lots of aboriginal artefacts formed from the tachylite glass.



I found it astounding when Julian held up a fairly ordinary rock and made it extraordinary by explaining how this sandstone glacial erratic showed scrape lines from being dragged over hard rock, probably from as far away as the Antarctic.



Towards the end of the day, Julian delighted us with a demonstration with the tachylite which had been of so much interest at the very start. A gentle tap of his hammer and a sliver of the black stone sheared away. Soon he had fine samples of extremely sharp flakes. We were offered samples to keep as superb souvenirs.

A wonderful time was had by all those who attended due entirely to the inspiring enthusiasm of our leader, Julian Hollis.

Thank you for the excursion, Julian. And thank you for checking and correcting this report!

Bird and Plant Quiz

The correct answer to the bird quiz last month was the **Brown Treecreeper**. It is a bird which is pale brown, with noticeable streaks on the lower breast and underside. It is one of a family of six treecreepers that can be found in Australia. The only other which can be found in our area is the White-throated Treecreeper, which is a black and white bird with similar streaks on the underside. In Sutton Grange we have the White-throated Treecreeper, which have been resident for many years; however we have seen no Browns.

The Red-browed Treecreeper is similar to the White-throated, with a distinct red brow. It is found in south eastern Australia, but not reaching Castlemaine. The White-browed treecreeper is more a bird of the inland and difficult to differentiate



from the Brown. The Rufous Treecreeper is a resident of the south west and easily picked by its rufous colouration. Finally, the Black-tailed Treecreeper is a resident of the north and is dark and the largest treecreeper. - N. H.

The bird for this month is from a photograph taken in the Botanical Gardens, and the plant photo on the right is supplied by Geraldine Harris.



This month the newsletter will be mailed out as usual to all members. We are still assessing the e-copy list; if you are willing to receive your e-copy by email, instead of the printed copy, contact Geraldine or the Secretary with your email address so we can include you on the list.

Overdue subs; if your newsletter envelope has '2/16' highlighted on it this time, you will no longer receive the newsletter until current.

Please note also the deadline for articles for June is May 28

- Ed

ODE TO SUMMER

Joy Weatherill

An inspired speaker at our November meeting - Julie Whitfield - who talked about the Eltham Copper butterfly, rekindled my childhood interest in butterflies; so, the morning after the meeting, I decided to test out her theory that butterflies "hill-top".

I went to the Botanical Gardens in Castlemaine and looked for a hilly patch to climb, and there they were. On this particular morning, a lot of Painted Lady butterflies on the Sweet Bursaria. No sign of Eltham Copper at this time.

Later that day, it was our field trip, and the Swallowtail butterflies were also high up - near the rotunda at Kalimna, the Eltham Copper butterflies a little lower. Julie gave another inspired talk and ran around with a butterfly net.

A photo does let you observe greater detail at your leisure, e.g. When you look at the antennae of the Eltham Copper butterfly I photographed, [cover photo] you can see that they have fine stripes all the way up to the clubbed ends.

I presume the Greenish Grass Dart butterfly family had been in the garden at Point Lonsdale for some time (years?), but it was only when I lay down on the grass - tired from gardening – and viewed things on a different level, that I noticed them flitting around. With wings closed, they only measure half a centimetre across. The only way to get a detailed photo was to take it with the camera on macro and the lens held a couple of centimetres from the specimen. I spent two hours dragging myself around on my stomach (and hoped the neighbours weren't watching). When I looked at the detail - what a cheeky, exquisite little thing.

Some people say that I must have a good camera; but it is not very special. The key word in getting good photos of birds, butterflies etc. is "patience".



Green-grass Dart; *Ocybadistes walkeri*
Point Lonsdale



Painted Lady; *Vanessa kershawi*
Castlemaine Botanical gardens



Orchard Swallowtail; *Papilio aegaeus*
Kalimna Park Castlemaine



Red-spotted Jezebel; *Delias aganippe*
Point Lonsdale

Plants in flower on Mt. Alexander in February noted by Richard Piesse

Yellow Rush Lily -	<i>Tricoryne elatior</i>
Rock Isotome -	<i>Isotoma axillaris</i>
Annual Bluebell -	<i>Wahlenbergia gracilentia</i>
Tall Bluebell -	<i>Wahlenbergia stricta</i>
Magenta Storksbill -	<i>Pelargonium rodneyanum</i>
Manna Gum -	<i>Eucalyptus viminalis</i>
Grassland Wood-sorrel -	<i>Oxalis perennans</i>
Small St Johns Wort -	<i>Hypericum gramineum</i>
St Johns Wort -	<i>Hypericum perforatum</i>

Richard also reported several sightings of **Lyrebirds** in Sherbrooke Forest in March and April.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

Castlemaine Field Naturalists

Coming events

Fri May 13 meeting: speaker CAROL HALL: New England and beyond -
an ice age legacy

Sat May 14 field trip: Swift Parrot Survey **NB** 9 am start

Sun May 15 FOBIF Walk, Cobblers Gully, herons Reef
(9.30 at 30 Templeton St)

Fri June 10 meeting: PAUL BATES, DELWP - Controlled Burns

Sat June 11 field trip: Firth Park (fungi) – to be confirmed

VISITORS ARE WELCOME AT CLUB ACTIVITIES

General meetings - (second Friday of each month, except January) are held in the Uniting Church (UCA) Hall (enter from Lyttleton St.) at 7.30 pm.

Field Trips - (Saturday following the general meeting) leave from the car park opposite Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise. BYO morning and/or afternoon tea. Outdoor excursions are likely to be cancelled in extreme weather conditions. There are NO excursions on total fire ban days.

Business meetings - third Thursday of each month, except December, at George Broadways; 24a Greenhill Ave., at 6.00 pm. Members are invited to attend.

Club website (Web master: Chris Timewell) - <http://castlemainefnc.wordpress.com/>

Subscriptions for 2016

Ordinary membership: Single \$30, Family \$40

Pensioner or student: Single \$25, Family \$30

Subscription includes postage of the monthly newsletter, Castlemaine Naturalist

2016 Committee

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