

THE LAUNCESTON NATURALIST

Issued to members of the Launceston Field Naturalists Club as a contribution to club activities.



The aim of the Launceston Field Naturalists Club is to encourage the study of all aspects of natural history and to support the conservation of our natural heritage

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August/September 2012

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Committee	:	E Montgomery, J Handler, P Wright, M Clarke, P Warren, P Ralph

Meetings 1st Tuesday of month, Feb-Dec at Scotch-Oakburn College, Penquite Rd Newstead

PROGRAM

OCTOBER

- Tuesday 2** **AGM Dinner Meeting - Sandors on the Park**
 6.30pm for 7.00 pm
- Friday 12 -** **Federation Weekend hosted by North Eastern**
Sunday 14 **Field Naturalists Club (see details this newsletter)**
- Saturday 13 -** **Australian Naturalists Network**
Sunday 21 **get-together in Canberra**
- Sunday 28** **Skemp Day - Water Monitoring**

NOVEMBER

- Tuesday 6** **General Meeting - Guest Speaker Simon Cameron -**
 “Kingston” Land Covenant
- Saturday 10** **Field Trip - Visit Kingston property near Nile**
- Saturday 24** **Skemp Day - Spring Clean**

DECEMBER

- Tuesday 4** **General Meeting - Members' night - Photographic**
 competition and *“The Year That Was”*
- Sunday 9** **Christmas at Skemps**

<http://www.lfnc.org.au/meetings.htm>

COMMITTEE/GENERAL MEETING

Puggle

August - Prue Wright asked what was the first aid treatment for a Redback Spider (*Latrodectus hasselti*) bite? Tom Trelloggen answered 'ice' which was the closest answer to 'cold compress'. The patient should also be kept calm and under observation; take to hospital if they have any adverse reaction.

September - Tom Trelloggen asked members to name the largest gastropod in Tasmania. John Elliott was the closest when he suggested a conch. The correct answer was the *Livonia mammilla* (or false baler) as seen in the book *Shells of Australia* by Simon Grove.

Sightings

August - While checking for a suitable venue for a field trip, Peter Ralph, Peter Warren and Prue Wright saw 2000 plus Eurasian Coots (*Fulica atra*) and 1 White-bellied Sea-Eagle (*Haliaeetus leucogaster*) at Four Springs. Prue also saw Australian Magpies (*Gymnorhina tibicen*) building a nest at Gravelly Beach, Shirley Anthony saw 5 Black Cockatoos (*Calyptorhynchus funereus*) at Kings Meadows, Tom Trelloggen saw Green Rosellas (*Platycercus caledonicus*) at South Launceston, Daphne and Peter Longman have seen White-faced Herons (*Egretta novaehollandiae*) making nests at Dilston, and Alison Green reported very vocal Crescent Honeyeaters (*Phylidonyris pyrrhoptera*) at Windmill Hill.

September - Peter Warren saw 100s of white cockatoos at Cora Lynn, Daphne Longman saw her first Maroonhood (*Pterostylis pedunculata*) of the season and two black ducks nesting near her home, Alison Green saw a White-bellied Sea-eagle (*Haliaeetus leucogaster*) over Launceston, Peter Longman saw two sea-eagles low over his house at Dilston while other birds harried them and Tom Trelloggen saw one sea-eagle at Marion's Vineyard. Peter Longman had also seen his first Welcome Swallow (*Hirundo neoxena*) and a Striated Pardalote (*Pardalotus striatus*) for the season. A black duck was seen flying above Skemps by Tom Trelloggen and he reported Eastern Spinebills (*Acanthorhynchus tenuirostris*) in his backyard. Diane Pegler saw a Yellow-tailed Black-cockatoo (*Calyptorhynchus funereus*) near her home.

Library Report

Tina McGlynn reported that the posters on mosses and liverworts, and books *Living in a Gall* and *A Field Guide to the Mosses and Allied Plants of Southern Australia* purchased for the Club's library had been received.

General

Exhibitions - Members were advised that the Australian tour of images from the prestigious Wildlife Photographer of the Year competition, together with images from the ANZANG Nature Photography annual competition will be on exhibit at the Queen Victoria Museum and Art Gallery, Inveresk site, from 15 September to 4 November. Entry to these exhibitions is free.

Redback Spiders - As a follow-up to last months 'Puggle', Alison Green gave further information on the treatment for a Red Back Spider bite, including that symptoms may not show up until sometime after the bite and that you should always seek treatment.

Threatened Species Day - Tom Treloggen advised members that Tasmania Zoo were offering \$10 admissions on 8 and 9 September.

Calendars 2013 - There were enough good images to print two calendars. Members were given a sneak preview at the September meeting.

Calendars are now available for purchase for \$5.00 each. See Karen Manning who will have copies at meetings, field trips and Skemp Days. If you would like to collect a calendar at a time other than above, please contact Karen on 6344 2277 to make arrangements.

December General Meeting

The Committee would like this to be a memorable end of year meeting. The following sets out how the evening will proceed. We would like as many members as possible to be involved by submitting images for both of these activities.

- Short meeting
- Members to judge and vote on the entries submitted for the Photographic Competition (please see conditions of entry below),
- Enjoy a Christmas supper (could members bring food to share please),
- Prizes to be awarded for Competition
- Slideshow called '*The Year That Was*' will run during the evening featuring images from Club activities during 2012 (more details below)

Photographic Competition. The competition will be held after the general meeting in December. Due to time limitations to erect the display of entries and judge them, there will be a limit of three entries per member. Members at the meeting will judge and vote on the entries; prizes will be awarded for 1st, 2nd and 3rd places.

Conditions of entry

- **Print size:** from 6" x 8" (15 cm x 20 cm) up to 8" x 10" (20 cm x 25 cm).
- **Print medium:** colour or monochrome (black and white)
- Must be simply mounted on cardboard at least.
- **Prints topics:** Subjects are to be related to Tasmanian flora and fauna, forests and Tasmanian landscapes and should have a title eg. Where it is or what it is. Prints of cultivars are not acceptable.
- Entries to have been taken since January 2011.
- The competition is open to members only and prints should be brought in on the night.

'The Year That Was'. Members are asked to submit images from 2012 Club activities for a slideshow to be shown at the December meeting. Images should be submitted on either CD or USB to Prue Wright prior to 31 October. Prue can be contacted by email redgum101@gmail.com

SKEMPS - Sunday 29 July - Guest Speaker Lyn Cave - *Mosses and Liverworts*

Prue Wright introduced Lyn who started her talk by telling us that she worked at the Tasmanian Herbarium, part of the Tasmanian Museum and Art Gallery, and mentioned our former patron Winifred Curtis who was a mainstay of the collection for many years. To the amusement of those present she claimed a tenuous link with the Field Nats because she sits in Winifred's office and although not doing the same work she appreciates how the office is set out.

Lyn explained that the herbarium is the state repository of its botanical collection and is part of a worldwide network of herbaria. The collection still uses the original method of pressed and dried plants on cards and includes items from Captain Cook's voyages. The herbarium has the most comprehensive collection of Tasmanian native plants and specialists and other groups access the herbarium to study specimens and John and Marion Simmons have been there to study the acacia.

The herbarium includes 155,000 specimens of flowering plants and approximately 100,000 other specimens, with the counting and cataloguing yet to be completed. The bryophyte collection has around 34,500 specimens and Lyn knows these numbers because she is the registration officer, helping to check that new specimens are preserved properly, processed, data based, stored in the appropriate location and managed.

Lyn has a side interest in mosses which is what she was here to talk about and these are covered by the subject of bryology which includes liverworts and hornworts as well as mosses. Mosses and liverworts have a bad reputation being seen as something to be removed from gardens, paths and lawns yet Lyn showed their beauty. While the presentation was referring particularly to Tasmanian mosses, once you know a few mosses you will find the same ones in the cooler southern parts of the Australian mainland and also New Zealand. As well these ancient plants are very similar to species found in South America and the southern hemisphere generally. Bryophytes are mostly land plants with a few that can live partly submerged in fresh water and no true marine mosses, although there are a few which can live on rocks near the sea side. Mosses are between one and 10 centimetres high although there is one Tasmanian species which grows to 30 cm and this genus occurs in other parts of the world. This is extraordinary because mosses lack the strengthening tissue and the water conducting systems of woody plants so that normally if they get too big they flop over and would not be able to draw water.

The Tasmanian rainforest is the place to find these plants and Lyn had an example where in a 20 by 20 metre plot there were between 40 and 100 species of bryophyte while in the same plot there were only between 10 and 35 trees and shrubs. As field naturalists we might quickly identify the trees and shrubs while it will take much longer to identify the bryophytes. Only about 5% of our rainforests mosses are endemic to Tasmania with the rest shared with the rest of Australia and New Zealand.

A slide showed an area in the central highlands where mosses grow in places which get very dry. What was a pool in winter was dry in summer and the black around the edge and the green in other parts were mosses. Unlike flowering plants if mosses get completely dry they simply shut down and stop photosynthesizing and wait until the conditions are damp enough again and start photosynthesizing in a very short time. If you don't water your pot plants for weeks on end they will be dead but the mosses will survive.

Another slide showed a moss similar to one in the grassed area of Skemps but growing on bare rock which can get very hot in summer and they can survive by folding up their

leaves and shutting down till conditions improve. The next slide showed the sort of damp forest as found on the forest track that morning at Skemps with bryophytes on the ground and the lower parts of trees where it is humid enough. The next slide was a geological chart and the earliest known bryophytes were fossils of liverwort spores from the time of the Skemps graptolites around 400 million year ago. Bryophytes predate flowering plants with the first known mosses being fossils from the carboniferous period.

There are 2,680 species of flowering plants in Tasmania including introduced flora, we have 15 conifers and native pines, 110 species of ferns, an unknown number of lichens, probably about 1,000 species, and it is thought there are 640 species of bryophytes. Around 14% of the Tasmanian flora species are bryophytes and half of these are mosses.

There followed an explanation of the various stages in the life cycle and reproduction of bryophytes and like land plants generally there are two generations of growth. They start as a spore which grows into a protonema with little buds on it which grow into the leafy structures we are looking for when collecting mosses. In the first stage the gametophyte generation has only one set of chromosomes, unlike most plants which have two, and on the top of this leafy structure are the male and female gametangia. As well as needing moisture to live the mosses need moisture to reproduce. The sporophyte at the top of the plant produces the spores while the leafy structure below does the photosynthesis to feed the plant and the spores fall or are blown away to start the next generation when the conditions, especially the moisture, are just right.

The next slides showed various aspects of the mosses she had studied, including ones found at Skemps, and the unusual shapes of these plants. The talk then concentrated on pictures and descriptions of the reproductive parts of the plants, including electron micrograph of spores, and the differences between the mosses, liverworts and the hornworts. As well as sexual reproduction the mosses and liverworts can reproduce asexually, effectively cloning themselves. This is a huge advantage as the conditions do not have to be ideal and the plants can save energy by not going through the entire reproductive cycle.

Further slides showed the nerve down the leaf of a moss which is presumably for strength and is a feature not found on liverworts. Electron micrographs showed in close up bumps on the leaf called perpilli and these are thought to assist with water retention and perpilli on the nerve of the leaf could be very ornate as seen in one slide. Lyn then showed slides and gave information on different species of mosses highlighting various differences including cells as seen under the microscope, perpilli, sporophytes, spores, leaf shape and other features as well. Included here was a presentation on liverworts, again with slides and information on different features, which Lyn had stated earlier were not her area of interest or expertise. We also learnt that although what we see hanging from trees is usually a liverwort one species of moss is often seen drooping from trees and it is called *Weymouthia* named after W Weymouth a Tasmanian plant collector from the 1800s.

There was a short presentation on dung mosses which include two Tasmanian endemics, *Tayloria gunnii* and *Tayloria tasmanica*, and a third shared with other states and countries *Tayloria octoblepharum*. To the amusement of those present Lyn described how these mosses have yellow sticky spores which stink to attract insects to

help disperse the spores and also that colleagues are studying the smell.

We learnt that there were introduced species of mosses which were being spread throughout Tasmania by humans as well as native animals as it only takes a small piece on a shoe or animal foot to move it elsewhere. Using a similar method for those who wanted a moss garden dried mosses could be placed in a coffee grinder and spread around the garden and would soon grow.

After this very interesting talk, members enthusiastically embraced Lyn's suggestion to look at what we had 'out there' and she told us that this was best done with a hand lens to appreciate the details of the plants.

During question time we learnt that mosses are colonisers. She gave as an example the burnt patch on the grass at Skemps now covered in moss, as well she told us of a logging coup in the south studied by colleagues. The coup was studied before the logging and the bryophytes present listed. It was again studied a year or so after the logging and burning and new species had arrived and this was probably by airborne spores. Her answer to a question as to whether mosses were edible she said they contain chemicals to make them less attractive to grazing insects, they probably were harmless and that she did not know any recipes. At the end of question time the members expressed their enthusiasm to study what had been collected earlier.

Noel Manning

GENERAL MEETING - Tuesday 7 August - Calendar Selection

At this meeting members voted for images for inclusion in the 2013 calendar. Judith Handlinger displayed the images and captions submitted by members, using a power point presentation. The images had been sorted into groups and after running through all the images, Judith then showed individual sections, for example fungi and insects, and members cast their vote for each section.

Each member had six votes for each section; 3 points for GOLD, 2 points for SILVER and 1 point for BRONZE, or were able to vote 2 points each on 3 images that they liked because a favourite couldn't be decided. This proved a great way of voting for similar images but in many cases it was still very hard to make that final decision.

Many thanks to Judith for her hard work putting the presentation together and taking home the score sheets to count up the votes at the end of the evening.

FIELD TRIP - Saturday 11 August - Paper Beach and Supply River area

A group of four travelled from Inveresk to Paper Beach in glorious sunshine where we were met by another 8 members. From there we walked along the water's edge around to the spit, noting the flora and birdlife along the way with Prue Wright telling us some of the interesting history of this area. After some observation we walked back along the road to where our cars were parked and had our lunch.

To begin the afternoon activities we walked from Paper Beach along the Supply River Track which contained much of the same flora and fauna as our morning ramble but also different species just to keep us on our toes and quite a discussion ensued with identification of some species of plants. Prue again filled us in with the history of this

track which she helped to build.

From here we moved on to the Supply River Bridge and Falls which is a fascinating place with its flour mill ruins and it has been nicely revegetated and interpretation signs depicting the history of the site are really informative. Prue had also supplied us with information from a comprehensive report done some time ago. It is some years since I had been to this area and I was very favourably impressed with its development.

After all this hard work we retired to the café at Gravelly Beach for a well earned afternoon tea. Good company, good food, good weather and an interesting day out what more do you need?

Lynne Mockridge

The following flora and fauna were seen during this field trip: -

Egretta novaehollandiae, White-faced Herons on Gravelly Beach Road and *Chenonetta jubata*, Australian Wood Ducks on Paper Beach Road

Paper Beach to Swan Point Road :- *Acacia dealbata*, Silver Wattle; *Acacia longifolia* subsp *sophorae*, Coast Wattle; *Acacia melanoxylon*, Blackwood; *Acacia terminalis*, Sunshine Wattle; *Acacia verticillata*, Prickly Moses; *Allocasuarina littoralis*, Black Sheoak; *Bursaria spinosa*, Prickly Box; *Comesperma volubile*, Blue Lovecreeper; *Dianella revoluta*, Spreading Flaxlily; *Dodonaea viscosa*, Broadleaf Hopbush; *Epacris impressa*, Common Heath; *Eucalyptus* sp., Gum; *Exocarpos* sp., Native Cherry with fruit; *Geranium solanderi*, Native Geranium; *Gonocarpus* sp., Raspwort; *Leptomeria drupacea*, Currantbush; *Limonium* sp., Sea-lavender; *Lomandra longifolia*, Sagg; *Melaleuca ericifolia*, Coast Paperbark; *Pelargonium australe*, Southern Storksbill; *Poa labillardierei* sp., Tussockgrass; *Pomaderris apetala* subsp *maritima*, Coast Dogwood; *Pteridium esculentum*, Bracken; *Pterostylis nutans*, Nodding Greenhood; *Pultenaea daphnoides*, Heartleaf Bushpea; *Tetragonia* sp., Spinach; Orange bracket fungi

Acanathiza pusilla, Brown Thornbill; *Acanthorhynchus tenuirostris*, Eastern Spinebill; *Anas castanea*, Chestnut Teal (1 pair); *Anthochaera paradoxa*, Yellow Wattlebird; *Cygnus atratus*, Black Swan; *Gymnorhina tibicen*, Australian Magpie; *Haematopus longirostris*, Pied Oystercatcher; *Larus novaehollandiae*, Silver Gull; *Larus pacificus*, Pacific Gull; *Pelecanus conspicillatus*, Australian Pelican; *Phalacrocorax melanoleucos*, Pied Cormorant; *Phalacrocorax sulcirostris*, Little Black Cormorant; *Vanellus miles*, Masked Lapwing; *Thylogale billardieri*, Pademelon.

Supply River Track from Paper Beach:- *Allocasuarina littoralis*, Black Sheoak; *Astroloma humifusum*, Native cranberry; *Banksia marginata*, Silver Banksia; *Comesperma volubile*, Blue Lovecreeper; *Dodonaea viscosa*, Broadleaf Hopbush; *Epacris impressa*, Common Heath; *Exocarpos* sp., Native Cherry; *Goodenia ovata*, Hop Native-primrose; *Juncus* sp., Rush; *Lepidosperma* sp., Sedge; *Lomandra longifolia*, Sagg; *Melaleuca ericifolia*, Coast Paperbark; *Persoonia juniperina*, Geebung; *Phragmites australis*, Southern Reed; *Poa labillardierei* sp., Tussockgrass; *Pomaderris elliptica* sp., Yellow Dogwood; *Pomaderris pilifera*, Hairy Dogwood; *Pteridium esculentum*, Bracken; *Pultenaea daphnoides*, Heartleaf Bushpea; Brown fungus
Cygnus atratus, Black Swan; *Lichenostomus flavicollis*, Yellow-throated Honey-

eater; *Pachycephala pectoralis*, male and female Golden Whistler; *Rhipidura fuliginosa*, Grey fantail; *Thylogale billardieri*, Pademelon.

Supply River Bridge to the Race:- *Acacia mearnsii*, Black Wattle; *Acaena novae-zelandiae*, Common Buzzy; *Astroloma humifusum*, Native Cranberry; *Beyeria viscosa*, Pinkwood; *Coprosma quadrifida*, Native Currant; *Lepidosperma* sp., Sedge; *Micrantheum hexandrum*, River Tridentbush; *Pomaderris* sp., Dogwood; *Poa labillardierei*, Tussockgrass; *Viola* sp., Violet.

Calyptorhynchus funereus, Black cockatoo; *Petroica phoenicea*, Flame Robin; *Phylidonyris pyrrhoptera*, Crescent Honeyeater.

SCIENCE WEEK

The Club was invited to participate in Science Week activities held at the Inveresk site of the Queen Victoria Museum on Friday 17 and Saturday 18 August, by the Natural Sciences Curator David Maynard. Our involvement was in the 'Be a Scientist' section where presenters were to show how science can be used in recreational and leisure activities.

On Friday students from local schools attended and on Saturday family groups. Members manning our display discussed with participants the many ways science plays a part in club activities. The digital microscope was set up with a laptop which enabled small groups to view the samples of insects, leaves, mosses and liverworts that were collected for the event.

On display also were charts that are used to assist in the identification of waterbugs, flora and fauna books and fresh examples of native plants.

On Saturday the displays were opened to the general public. During the day the five members attending went on one of the arranged tours of the Fauna of Tasmania section where discussion centred on how items were presented, the lighting used depending on whether the material is likely to deteriorate and the need for a constant temperature and humidity. We then visited the Conservation and Natural Sciences laboratories where staff discussed preservation of donated items, the preparation of articles for displays and saw examples of how animals can be preserved and stored.

Members enjoyed the days interacting with the school children and families and the other participants. Thank you to members who gave their time willingly over these days.

Karen Manning

SKEMPS DAY - Sunday 26 August

Driving out to Skemps this morning was nicer than usual as there was little carnage from road kill compared to recent trips. It was sunny but there was a crispness in the air and nearby the top of Mt Barrow was covered with snow.

Following coffee and a chat, eight members and a guest walked along Skemp Creek checking the progress of plants that had been put in 12 months ago. We then crossed the creek and entered the East Track. This track is mostly open forest with tall trees and only small patches of understorey. It was a very pleasant walk with the bright green mossy carpets covering fallen logs and rocks, and white flowers from a *Atherosperma moschatum*,

Sassafras, were sprinkled on the ground. A few species of fungus were seen but not in any great numbers.

Exiting out of the trees we walked back up to Skemp Road past the area of the first small plantation that members experimented with on the property in 1976. This is just below the Scotch Oakburn adopt-a-patch. The trees in the Scotch Oakburn area have really taken off since the tree guards were removed. We chatted while we walked back to the Centre soaking up the sun.

Following lunch the weather was still perfect so we walked the Zig-Zag Track, then followed on to the lava flow on the fence line of the property near the Bedfordia Track. The edge of the lava flow was a real picture as it was covered in mosses and lichens. During our return to the Centre we noted many of the *Tasmannia lanceolata* (Mountain Pepper) were in bud.

Tidying up we all headed for our homes after an enjoyable day. Karen Manning

GENERAL MEETING - Tuesday 4 September - Guest Speaker Ralph Bottrill - *Minerals*

Peter Ralph introduced Ralph Bottrell as an employee of Mineral Resources Tasmania and as a provider of information to amateur mineralogists and those who did lapidary. He also stated that Ralph had a world class mineral collection and was a co-writer of '*A Catalogue of the Minerals of Tasmania*' which the club had recently purchased. Computer problems gave us a greater understanding of his passion for minerals as Ralph told us of his childhood interest in nature getting out in the bush looking at the plants, including orchids. While his dad could name plants and animals he could not name or explain the existence of minerals, especially crystals, and this started his lifelong interest in minerals.

He went on to explain that geology was not just about digging things up, we would not have TVs, cars and computers without minerals, it was more about understanding the rock we live on. He likened the world to an apple and our understanding of it has not even scraped into the skin.

When our equipment was finally up and running he spoke of the perceived history of Tasmania. If you are white you talk about 200 years of history, if you are aboriginal you can go back 50,000 years but if you are a geologist this is nothing because Tasmania has been here in one form or another for 7 or 8 hundred million years. His talk would look at the major geological events of Tasmania and the gemstones that formed in these times.

His talk started with how Tasmanian geology equates to other parts of Australia. Rocks in northwest Tasmania can be directly correlated to those in the Adelaide Hills, those around Rosebery with those in western Victoria and the granites of the north east are similar to what is found in central and eastern Victoria. The sandstone of the Tasmanian basin is very similar to the sandstone of the Sydney basin and all this makes for a microcosm of Australian geology here in Tasmania and according to Ralph is 'very, very complex and lots of fun to unravel'.

Ralph talked of the geology of Tasmania from the oldest and that the pre Cambrian geology of the Savage River contains magnetite and serpentine and amused members by using a walking stick to point to the a for mentioned geological differences on a slide.

In the Cambrian geology we find serpentine and gold as well as the rare stichtite which is often polished into spheres.

The Devonian period saw mountains forming down the east coast of Australia, including Tasmania and with the granites came the topaz. The topaz know as Killie-

crankie diamond was one of the first mineral exports from Australia and there was some controversy when it was realised that these were not really diamonds.

While the late Carboniferous period was tropical in the northern hemisphere Tasmania was near the south pole and most mountains were eroded away by glaciers. The Jurassic saw the Gondwanaland (the earth's super continent) breaking up and the forming of the dolerite mountains in a tropical Tasmania. The erosion on the mountains produced much sand and ultimately the sandstone of both Sydney and Tasmania. At this time we get the well known minerals of Lune River, including petrified wood and ferns as well as agates, quartz crystals and opal.

From the Cretaceous to the Tertiary the breaking up of Gondwanaland continues with Antarctica heading south and Tasmania separating from the rest of Australia. Australia is heading north at around 2cm per year and 'attacking' Indonesia causing the earthquakes and tsunamis. In the Tertiary, Tasmania has spectacular volcanic activity and is tropical and we see sapphires and zircons brought up with basalts. Although the production quality is low, the Tasmanian sapphires are a beautiful blue and according to Ralph they are better than those of Queensland and New South Wales. Also yellows, greens and pinks are to be found in Tasmanian sapphires. Associated with sapphires you often get zircon and black spinel, also known as black jack. There is also chrysoberyl which has varieties cat's eye and alexandrite. Cat's eye is polished chrysoberyl and alexandrite changes colour from green to purple in different light. Orthoclase is a colourless, gemmy feldspar also associated with the sapphires and can be quite valuable.

Ralph explained that petrified wood formed when trees and ferns were buried by mud or lava and then the organic matter was replaced one cell at a time by minerals as mineral rich water seeped into where the tree was.

Crocoite is the mineral emblem of Tasmania. The rare and beautiful red crystals highlight the beauty and rarity of all things Tasmanian as well as highlighting the economic importance of the mining industry. Another slide featured crocoite and pyromorphite in the same rock which he called broccoli and carrot which was obvious from the slide.

Crocoite, pyromorphite and xerophyte are formed by the unusual combination of chromium and lead as found on the west coast.

Ralph explained the formation of turquoise in air bubble hollows in the solidifying lava. Mineral rich water seeps into the cavity and slowly builds the turquoise from the walls of the hollow.

The petrified ferns from Lune River are well known. Although the area is now dry open forest it was once a rain forest with huge ferns and these forests were buried by volcanic ash and the vegetation became minerals as water seeped into the ground. Academics working with mines department staff use these fossilised ferns and wood to better understand what was happening here 100 million years ago.

One slide had the fossicking areas of Tasmania and the next the list of places and what you could find as follows; **Lune River** - fern, wood, agate. **Coal Hill** - wood, agate.

Tunnel Marsh - agate. **Colebrook Hill** - axinite. **Lord Brassey Mine** - Ni mins. **Magnet Mine** - Pb-Zn-Ag mins, **Penguin** - jasper. **Killiecrankie Bay** - topaz. **Weymouth** - jasper. **Gladstone** - quartz, **Weld River** - sapphire. Ralph told us that there was a fossicking tradition going back to the earliest settlers and that it was a great family activity. Some of the sites may be lost to the forest agreement.

During the lengthy question time he told us of a two day walk to the Jane River where gold might be found then then informed us that he could not encourage anyone to go there as it was in a national park. Peter Warren gave the thanks and asked the members to show their appreciation.

Noel Manning

FIELD TRIP - Sunday 16 September - Waterhouse

Twelve members with two visitors headed to Waterhouse to meet with our guide Mike Douglas at Homestead Road. Once we had all arrived Mike provided us with two A4 sized maps of the area in waterproof covers and indicated where we would be looking today. We headed to Hardwicks Hill, parked and walked up the road to the Telstra tower to get a good view of the area. On the roadside were Silver Banksia, Drooping Sheoak, Dogwoods and Coast Wattles to name a few. On the water side of the hill we could see from Ninth Island (NW of Bridport), the coast from South Croppies Point to the eastern end of Ringarooma Bay. As your eyes swept east you could see Waterhouse Island then Mt Strzelecki on Flinders Island and Cape Barren Island hazy but visible in the distance. In the foreground were large sand hills of exposed sand while another older sand hill formed a ridge covered in vegetation.

Mike told us the history of the area and that it only became the Waterhouse Conservation Area in 2003. We then went to the other side of the hill where Mike pointed out the Ramsar Wetland site and Blackmans Lagoon both within the Conservation area and said they were worth a visit. In the distance were mountains shrouded in mist including the Mt Cameron ranges to the east and Mt Stronach at Scottsdale to the west and many in between.

We then returned to our cars and drove to Herbies Landing for a late lunch. The weather had started to change and there was a very cold breeze, forcing most to layer up. We headed down to the beach area through *Melaleuca ericifolia*, Coast paperbarks, and the *Tetragonia implexicoma*, Bower Spinach, which had climbed up any tree trunk it could find and was draped like a curtain between the trees.

On the beach Mike pointed out the dreaded Sea Spurge which is taking over coastal dunes. He warned us that the spurge oozes a toxic milky sap and that it may irritate the skin and that we should wear gloves if helping to remove it. We walked along the beach a short distance where Mike drew our attention to where a geological fault went through the area. The light coloured granite, including large rounded boulders, gave way to the dark dolerite with angular boulders quite suddenly as we walked west. We continued around the beach further looking at the huge dolerite boulders covered in orange, yellow and white lichens, and the rock pools with seagrasses and Neptune's necklace. There were many crabs under the smaller rocks, but they scuttled away too quick for a good photo opportunity.

Returning to the carpark, Tom Treloggen thanked Mike for the interesting walk and talk which covered geology and flora as well as the history of the area with suggestions for field trips in the future which the maps he gave us covered. Karen Manning

The following flora and fauna were seen during this field trip: -

Hardwicks Hill:- *Acacia dealbata*, Silver Wattle; *Acacia longifolia sophorae*, Coast Wattle; *Acacia suaveolens*, Sweet Wattle; *Acacia verticillata subsp. verticillata*, Prickly Moses; *Acacia verticillata subsp. ovoidea*, Prostrate Prickly Moses; *Allocasuarina monilifera*, Necklace Sheoak; *Astroloma humifusum*, Native Cranberry; *Banksia marginata*, Silver Banksia; *Bossiaea cinerea*, Showy Bossia; *Bursaria spinosa*, Prickly Box; *Centella*, Pennywort; *Clematis microphylla*, Small-leaf Clematis; *Comesperma volubile*, Blue Lovecreeper; *Drosera spatulata*, Rosy Sundew; *Epacris impressa*, Common Heath; *Eucalyptus amygdalina*, Black Peppermint; *Euryomyrtus ramosissima*

subsp. prostrata, Creeping Myrtleheath; *Exocarpus cupressiformis*, Native Cherry; *Hibbertia procumbens*, Spreading Guineaflower; *Hibbertia sericea*, Silky Guineaflower; *Hovea* sp., Purplepea; *Kennedia prostrata*, Running Postman; *Lepidosperma*, Sedge; *Leptospermum* sp., Teatree; *Leucopogon ericoides*, Pink Beardheath; *Leucopogon virgatus* sp., Beardheath; *Lomandra longifolia*, Sagg; *Melaleuca ericifolia*, Coast Paperbark; *Monotoca elliptica*, Tree Broomheath; *Oxalis* sp., Woodsorrel; *Platylobium triangulare*, Arrow Flatpea; *Pomaderris apetala subsp. Maritime*, Coast Dogwood; *Pomaderris oraria*, Bassian dogwood; *Pomaderris paniculosa subsp. Paralia*, Shining Dogwood; *Pultanea daphnoides*, Heartleaf Bushpea; *Pultanea mollis*, Soft Bushpea; *Senecio* sp., Fireweed; *Solanum laciniatum*, Kangaroo Apple; *Stackhousia spathulata*, Coast Candles; *Viola hederacea* sp., Ivyleaf Violet; *Xanthorrhoea australis*, Southern Grasstree; Orange Bracket fungi

Calyptorhynchus funereus, Yellow-tailed Black cockatoo; *Chrysococcyx basalis*, Horsfield's Bronze-cuckoo; *Acanthiza pusilla*, Brown thornbill

Herbies Landing:- *Acacia genistifolia*, Spreading Wattle; *Acacia terminalis*, Sunshine Wattle; *Alyxia buxifolia*, Seabox; *Atriplex cinerea*, Grey Saltbush; *Carpobrotus rossii*, Native Pigface; *Comesperma volubile*, Purple Lovecreeper; *Correa alba*, White Correa; *Dianella revoluta*, Spreading Flaxlily; *Hibbertia riparia*, Erect Guineaflower; *Leucopogon parviflorus*, Coast Beardheath; *Lomandra longifolia*, Sagg; *Melaleuca ericifolia*, Coast Paperbark; *Plantago bellidioides*, Herbfield Plantain; *Rhagodia candolleana*, Coastal Saltbush; *Sarcocornia quinqueflora*, Beaded Glasswort; *Tetragonia implexicoma*, Bower Spinach; *Caloplaca* sp., Lichen

Corvus tasmanicus, Forest Raven with nesting material in beak; *Cyclograpsus granulatus*, Purple Mottled Shore Crab; *Notoplana Australis*, Flatworm; *Spirula*, Ram's Horn shell.

SKEMPS DAY - Saturday 22 September

Following the cold and rain of yesterday, this morning was sunny and warm for the drive to Skemps. Targa Hill Road was a picture lined with *Acacia* trees in bloom.

The morning started slowly with only eight people arriving for the day. Two members stayed at the Centre and collected firesticks and set the barbecue, another member arriving a little later, while five members went looking for mosses and liverworts on the Forest Track. They reported seeing species of *Chiloglottis*, Bird Orchids; *Pterostylis*, Greenhoods and *Corybas*, Helmet-orchids during their walk back to the Centre. The weather had changed to being overcast and the temperature had dropped, and dark clouds were threatening rain.

Following a barbecue lunch, Prue set up her laptop with the digital microscope and with help from Jill and Jessica, identified most of the samples collected during the morning walk. They were *Chiloscyphus* sp., (leafy liverwort), *Marchantia* (thallose liverwort) and mosses, *Dicranoloma billiardieri*, *Acrocladium chlamydophyllum*, *Lembophyllum clandestinum* and *Dicranoloma dicarpum*. Pieces of two samples, a liverwort and moss, are being sent to the Herbarium in Hobart for identification. Once identified, the details will be added to the packet containing the remainder of those samples. These will then be placed with the growing collection at Skemps of these interesting plants found at the property.

There were two interesting questions today. The first was Prue trying to remember the

rhyme which reminds people of the sequence for the different levels in the scientific classification of flora and fauna. This led us to the Club Library looking for a book which listed the levels. After an extensive search it was eventually found in an insect book by Tina, the order being Kingdom, Phylum, Class, Order, Family, Genus and Species. The rhyme that Prue was trying to remember was *King Philip Came Over From Germany Sunday*.

The second question was “What is the difference in the male and female flowers of the *Tasmannia lanceolata*, Mountain Pepper?” Samples of the flowers were collected and it was found that the male had lots of stamens and the female had a two lobed ovary.

Although a quiet day, in the company of like-minded people it was an interesting and educational day.

Karen Manning

Federation Get-together 12 - 14 October 2012

The North Eastern Field Naturalists Club will be hosting this get-together. Their club has a great opportunity with Hydro building a wind farm at Cape Portland [the [Musselroe Wind Farm](#)] to be taken onto the property to visit a piece of heathland which was surveyed and later fenced and preserved as a result of early environmental impact studies.

At this stage Lou Brooker (secretary NEFNC) has advised the preliminary plans for this event and they include:

- ◆ Accommodation at Scottsdale High School Mt. Cameron Field Study Centre. There are two bunk rooms sleeping 14 & 16, and there is tent space available for people who would prefer to sleep in the great outdoors. Cost is \$25 per person/ per night.
- ◆ Personnel from the Hydro will talk about environmental studies/impacts/& actions taken as a result of these.

Lou is also hoping for the botanist who was involved in the threatened ephemeral flora search to be present also. Those attending will be taken to the ‘Tree Point Heaths’ by a bus provided by the Hydro.

If you are interested in attending contact Lou via email at brooker@vision.net.au

AUSTRALIAN PLANT SOCIETY MEETINGS

LFNC members are welcome to attend APS meetings held on a Tuesday at Max Fry Hall, Gorge Road Trevallyn at 7.30 pm. The next meeting will be on:

16 October - Mark Wapstra - *Thismia rodwayi*

20 November - Speaker to be advised

A spring Native Plant Sale will be held at Max Fry hall on Saturday 27 October between 10am and 4pm. The plants, propagated by members and grown at the APS nursery are available at very reasonable prices. The full APS program can be viewed at <http://apstasnorth.org/pages/program.html>

Additional Information

Club Outings:

1. All outings depart from Inveresk carpark (near Museum entrance) at 9 am unless otherwise specified. Internet site updated regularly to reflect short notice changes. Saturday all-day parking cost is \$3.00. Sunday parking free.
2. You need to provide your own food and drinks for the outing unless otherwise specified. Morning tea is normally provided by the bus company on bus outings.
3. When travelling by car in convoy, each driver is responsible to ensure that the vehicle behind is in sight immediately after passing each cross road or fork in the road.
4. When car pooling, petrol costs should be shared between all the passengers, including family of the driver, and based on other clubs the Committee suggested \$11 per 100 km. This is a guideline only.

Name Tags: Name tags are to be worn at meetings and on outings.

Tea/Coffee: A levy of 50c is currently charged for supper provided at meetings.

Field Centre: All members have access to the John Skemp Field Centre. Contact our booking manager, John Elliott on 6344 9303 regarding availability and keys.

Field Centre Phone Number - 6399 3361

Postal Address: PO Box 1072 Launceston 7250

Internet site : <http://www.lfnc.org.au>

E.mail : secretary@lfnc.org.au