



North-Eastern Tasmanian Field Naturalists Club Inc.

The North Eastern Naturalist

Newsletter of the NE Tasmanian Field Naturalists Club
Number 205: June 2019

President: Ann Scott, Phone: 0400 037 492; email: 16erinastreet@gmail.com

Vice President: Pam Bretz, Phone: 0439 547 529; email: pambretz@gmail.com

Secretary and Public Officer: Louise Brooker, Phone: 0417 149 244; email: brooker@vision.net.au

Treasurer: Sue Wilson, Phone: 0448 435 012; email: sue.wilson@utas.edu.au

Committee: Mike Douglas, Jay Wilson, Lloyd Reeves

Newsletter Editor: Chris Forbes-Ewan, Phone: 0448 987 632; email: forbes-ewan@tassie.net.au

Web page manager: Penny Reeves, email: pennyreeves@iinet.net.au

Web page: <http://www.netasfieldnats.com.au/>

MISSION STATEMENT: It is the mission of this club to encourage the study, appreciation and preservation of our natural and cultural environment, the animals, plants, geology and landforms, including those of the coastal and marine areas in the North East region of Tasmania.

From the President: On 11, 12 and 13 October our club will host members of other Field Nats Clubs for the Biennial Field Nats Federation Weekend Get-together.

There will be a BYO barbeque on the evening of Friday 11 October and another on the evening of Saturday 12 October. Our club will provide meat, and we ask members to bring a salad or a dessert.

Mike Douglas will lead one of the Saturday walks, and other activities are being arranged.

We would like those who can offer accommodation for Friday and Saturday night to

let Lou Brooker know. As this will take some arranging, please contact Lou ASAP. Lou will send a reminder about this later on as well.

Penny is making progress with the job of constructing a new website for our club. She has requested that members who have good quality photos (i.e. in focus and of interest) to submit them for placing on the web page.

Have a look at the new web page, especially the photo gallery: www.netasfieldnats.com.au

I think it looks amazing.

Thank you Penny.

Photos of Northern Tasmanian wildlife



Grey goshawk (*Accipiter novaehollandiae*) – Mehrdad Abbasian



Native bread (*Laccocephalum mylittae*) – Ross Coad



Tiger snake (*Notechis scutatus*) – Susan McClenaghan

Program for June-December 2019

NB Please read the notices at the bottom of this program about the cancellation process and the policy on images of participants in NE Field Nats activities

JUNE 8th: Walk part of the North East Rail Trail

Meet at 10.00 am on Tonganah Road, about 500 metres from the junction with Tasman Highway, where car pooling will take place. The walk will begin at the top of Rocky Gully at the old Kamona Siding. It is on even ground and slightly down-hill, and can be exited after 6 km or 12 km. It is a lovely walk through wet sclerophyll forest with ferny understory and interesting hand-constructed cuttings.

JULY 13th: Short films on natural themes, and members' pictures on the theme 'Where Am I?'

Bridport Hall; Bring own lunch; tea and coffee provided.

AUGUST 10th: AGM

20 Edward Street, Bridport

Guest Speaker: Steve Cronin

SEPTEMBER 14th: Cape Portland – its natural features

Stay over in stone cottage if interested

OCTOBER 11th, 12th and 13th: Federation of Field Nats Weekend Get-together

Members to host visitors from other clubs for walks and activities

NOVEMBER 9th: Waratahs at Blue Tier

DECEMBER 14th: Musselroe Bay [to be confirmed]

Images of Participants at Field Nats Activities

Participants in outings need to be aware that filming may occur, and that films and photos may be placed on-line, in the NEFN newsletter and/or in the NE Advertiser.

PLEASE INFORM THE LEADER IF YOU DO NOT WISH TO BE PHOTOGRAPHED OR FILMED

Film-makers also have a responsibility to notify activity co-ordinators of their intentions, then films will be reviewed and approved by the Executive before being made public.

Cancellation of Field Nats Activities

If there is unpredictable and severe weather, or for any other reason, it may occasionally be necessary to cancel with short notice. Here is the process for cancellation: an outing will be cancelled if the leader considers that the conditions are not safe. If an activity is cancelled, a global email will be sent by 0700 (i.e. 7.00 am) on the day of the outing. If members are uncertain, it is their responsibility to contact Ann, Lou, or the leader (whose phone number will be in the Calendar notification of the activity). Note that phone reception is not always available, so you may have to try alternative numbers.

MARCH 2019: MUTUAL TO MOORINA

Article by Lloyd Reeves; photos by Penny Reeves

The March activity was a gentle 5-km walk along the banks of the beautiful Ringarooma River, from The Mutual to the cemetery at Moorina. Led by Lloyd Reeves, 18 members and guests attended this activity.

A LITTLE HISTORY

George Renison Bell discovered tin in the North-East in 1874, and by 1876 three of the Krushka brothers were working the tin-rich Brothers' Home mine. Brothers' Home was the name of the original settlement that built up around the mine; it was renamed Derby in 1887.

Tin was discovered at the Mutual Hill and worked by the Briseis Co. on Mutual Hill and adjacent river flats between 1912 and 1918. Hydraulic sluicing removed the over-burden of basalt rocks to reveal lower tertiary sediments of ancient river beds in which the tin (cassiterite) was found. Such deposits exist from Branhholm to Ringarooma Bay.



On the bank of the tranquil Ringarooma River

Originally known as Krushka's Bridge, Moorina was later named after Truganini's sister. Truganini was one of the last surviving Tasmanian Aboriginals. She died in 1876.

Moorina was a major commercial centre for the area, more important than Derby, and a transport centre for goods coming to and going from Weldborough, Goulds Country and Boobyalla Port. There was a large population of Chinese workers, and the cemetery has one surviving Chinese grave and a conical-shaped oven for burning ritual offerings to the ancestors.

THE WALK

We enjoyed fine views up and down the river from the path above. We lunched at a very accessible stony beach and spent a pleasant half hour fossicking for unusual stones, especially the circular 'concretions' which, when broken, display a powdery brightly-coloured interior.

There is a lot of re-growth on the river flats due to disturbance from the mining, so we saw lots of wattles (*Acacia deabata*), dogwoods (*Pomaderris apetala*) and native daisies, including the forest daisy (*Olearia lirata*) and the musk daisy (*Olearia argophylla*).

Flat, open areas were sometimes choked by a creeping vine (*Muehlenbeckia gunnii*) and bracken (*Pteridium esculentum*).



Concretions – showing the bright-orange powdery interior

At the beginning of the walk it was sad to see the plight of the white gums (*Eucalyptus viminalis*), which are dying, their wonderful tall trunks turning deep-orange as the trees die of 'ginger tree syndrome'. To date there is no known cause or cure for this die-back.

We passed some fine stands of myrtle (*Nothofagus cunninghamii*), blackwoods (*Acacia melanoxylon*), man ferns (*Dicksonia antarctica*), mother shield ferns (*Polystichum proliferum*) and kangaroo ferns (*Microsorium pustulatum*).

A highlight was the abundance of the native edible fruiting plants—the native currant (*Coprosma quadrifida*), native raspberry (*Rubus parvifolius*), native cherry (*Exocarpos cupressiformis*), and purple appleberry (*Billardiera longiflora*). The native cherry is parasitic on the roots of other plants and almost impossible to transplant or grow from seed.



Native raspberry – *Rubus parvifolius*

Allocasuarina verticillata) and native cherry on one side, and on the other an impressive stand of stringybark (*Eucalyptus obliqua*). Interestingly, the stringybark was the first eucalypt to be identified and classified. It was collected on Bruny Island on Captain Cook's third voyage in 1777.

Our birdwatchers identified the yellow-throated honey eater (*Lichenostomus flavicollis*), the golden whistler (*Pachycephala pectoralis*) with its loud clear whistle ending in a whip crack, the grey shrike thrush (*Colluricincla harmonica*) and the grey fantail (*Rhipidura fuliginosa*).

Towards the end of the excursion we walked down to a clearing complete with a shelter and a sink for cleaning trout. Some of us remember the large sofa that used to be there. It must have returned to the earth.

From here to the cemetery the walk was a long, gentle incline through regrowth of kunzea (*Kunzea ambigua*), sheoak



Lunch was eaten on a rocky beach beside Ringarooma River

APRIL 2019: VISIT TO THREE GARDENS IN BRIDPORT

Article by Chris Forbes-Ewan and Lou Brooker; photos by Chris (CFE) and Lou (LB)

Our April outing was a visit to three gardens in and around Bridport. A total of 27 members and guests attended, with the first visit being to 'Passing Winds', which is a couple of kilometres from Bridport on Sandy Point Road, and is owned by Willy and Sharon Richards.

The garden is 2.1 hectares in area and consists mainly of natural vegetation, with some planted trees, most of which are native to Tasmania (e.g. a small stand of blackwoods (*Acacia melanoxylon*) and some casuarinas). Willy has also planted some Western Australian flowering gums (*Corymbia ficifolia*) 'to add extra colour'. Finally, he is having some success at propagating local wildflowers such as the Tasmanian Christmas bush (*Bursaria spinosa*).



Native cranberry (*Astroloma humifusum*) in flower – CFE

It was disappointing to see obvious signs of 'ginger tree syndrome' on some of the white gums. This disease is of unknown origin and has no known cure. Although it gives the white gum a very attractive reddish appearance, its presence indicates that the tree will soon die.

We also saw and heard several birds, with an inquisitive kookaburra taking a keen interest in our activities. Willy told us that black cockatoos, wrens, magpies, magpie currawongs and many other species of bird nest and train their young in his garden.

After the tour, Willy and Sharon put on a wonderful morning tea/brunch, featuring home-made pumpkin soup, home-made scones, jam (made from home-grown fruit) and cream.

During our walk through the extensive garden we noted native cranberries (*Astroloma humifusum*), *Xanthorrhoea* (commonly known as grass trees) and two species of eucalypt—white gum (*E. viminalis*) and black peppermint (*E. amydalina*).



White gum (*Eucalyptus viminalis*) at Passing Winds – CFE

The second visit was to a large suburban-style garden in Bridport. For 37 years Mike Douglas has been developing the garden on his property and, with Council approval, on a small area of adjoining Council land. Mike's 0.4 hectare garden contains many local native plants, together with other Tasmanian and mainland natives.

The garden has a variety of (mostly small) eucalypts, including the unusual Grampians gum (*E. alpina*)—which grows more horizontally than vertically—a bloodwood (*genus Corymbia*), and a Western Australian flowering gum (*Corymbia ficifolia*). We also saw soft spear grass, self-sown orchids, lemon-scented tea trees, bulloaks, banksias, grevilleas, paper daisies, and a large shrub with the memorable name 'hairy yellow dogwood'.



Heath banksia (*Banksia ericifolia*) flower – CFE



Woolly grevillea (*Grevillea lanigera*) – CFE

The third garden we visited was that of Lou Brooker, who has 3.5 ha on the edge of Bridport, overlooking Trent Water. Most of the block is marshland, with patches of native vegetation and some healthy groves of swamp paperbark (*Melaleuca ericifolia*).

In the ten years she has been living there, Lou has attempted to plant and manage the garden and surrounds as habitat for wildlife. This has meant planning for a constant food source for as many birds as she can by providing nectar-producing plants for as many months as possible, and also growing plants which will attract insects when birds need more protein in their diet.

Lou provides a constant supply of water in safe places so birds can bathe and drink, but that also allows them to quickly escape if they perceive danger.



A quail caught sun-bathing in Lou's garden – LB

Having observed quail and bandicoots in the garden, Lou has tried to maintain habitat that encourages them to remain in the area. She has done this by allowing an area to be more ‘bushlike’ and less cultivated, with clumps of dense, low-growing shrubs, lomandras and poas allowing for shelter from predators.

Despite this, her biggest problem has been the presence of feral cats, a number of which have been trapped and removed.

Other features of Lou’s block include a dam, a tidal creek and a small area of saltmarsh.

Lou once found a half-eaten eel on a floating nesting box she had installed in the dam. She wondered what would be able to catch and partly eat such a large creature. She had seen cormorants in the dam catching elvers, but this was another dimension—the half-eaten eel was the size of her wrist! Lou wondered if the culprit might have been a water rat.



Visitors to Lou’s garden have included a water rat and this inquisitive bandicoot – LB

Her suspicions were heightened when her reference book told her that a water rat may leave part of a meal in a safe place and come back to it later.

Lou recently set up an infrared camera triggered by movement. Imagine her delight when, about a week after the wildlife camera had been installed, it took a photo of a water rat scurrying up the bank of the dam.

Lou also said that she has never had an egg hatch in the nesting box. She speculates that water rats may also eat the eggs laid there.

MAY 2019: VISIT TO JOHN SKEMP FIELD CENTRE

Article by Chris Forbes-Ewan; photos by Penny Reeves (PR), Lou Brooker (LB),
Chris Forbes-Ewan (CFE) and Jay Wilson (JW)



The countryside around Launceston Field Naturalists Club’s John Skemp Field Centre, Myrtle Bank (PR)

Our May outing was a visit to the John Skemp Field Centre (commonly called 'Skemps') at Myrtle Bank.

The Centre is on a property that originally belonged to John Skemp, a founding member of the Launceston Field Naturalists Club, which maintains the 60-hectare property and the impressive Centre.

Built in the late 1980s, the Centre resembles a large, comfortable country residence. There is bedding for 20 people in two bunkrooms and two bedrooms. There are also two bathrooms (each with toilet and shower), a small private study area, a large furnished living area with an efficient wood heater, and a fully equipped kitchen. An undercover area attached to the Centre has a barbecue and outdoor seating.

The countryside around the Centre consists of a mixture of open grassland, wet and dry sclerophyll forest, fern gullies, and ponds on Skemp Creek. Several nature trails have been developed, but in a way that maintains the integrity of the natural environment.

Twelve members and guests of NE Field Nats attended the outing, which was hosted by three members of Launceston Field Nats—Noel and Karen Manning, and Tom Trelloggen. The weather gods smiled on us, and although it was cool in the rainforest, it was sunny and warm in the open, grassy areas.

We started with a walk through a patch of wet sclerophyll forest, marvelling at the profusion of delicate, mostly tiny, but almost invariably gorgeous fungi.



Golden yellow cushions; jelly fungus (*Dacrymyces stillatus*) – gelatinous or rubbery fungus found on wood that is already fairly well rotted – LB



Looking for fungi in the wet sclerophyll forest – PR

The group then split into two—those who wanted exercise walked to the waterfall on Skemps Creek, while the more sedentary members stayed in the rainforest, photographing and identifying (as far as we could) the fungi.

When the more energetic members returned from their walk, everyone slowly made their back to the Centre, where we had lunch and our hosts told us about the history of Skemps. Noel also told us that members of Launceston Field Nats volunteer to maintain and upgrade the building, grounds and nature trails. This work is done by a small group of members who regularly attend the property, in addition to the work conducted on monthly “Skemp's days”.

We were also told that a Covenant has been placed on the property, ensuring that the forested areas will not be logged or otherwise disturbed.



Coral fungus – CFE

Although this is clearly a huge tree, it pales into insignificance compared to some other specimens of *E. regnans*, the tallest known example being the ‘Centurion’ in southern Tasmania. This has a height of 100 metres and is the tallest flowering plant in the world.

On the walk we also saw many dogwoods, silver wattles and blackwoods, as well as some more fine specimens of fungi.

The final leg of the walk back to the Centre was a pleasant stroll in mid-afternoon sunshine through open grassland.

NE Field Nats is very grateful to Noel, Karen and Tom for showing us the wonderful John Skemp Field Centre.

Editorial note: I was ‘gobsmacked’ by the delicacy and beauty of some the fungi we saw at Skemps. I knew very little about these fascinating organisms, so I looked up some internet sites and came up with the following article, which is illustrated with photos of fungi we saw at Skemps.

FUNGI

A fungus is a member of the group of eukaryotic organisms (organisms whose cells have a nucleus) that belong to the kingdom Fungi. These include microorganisms such as yeasts and moulds, mildews, smuts

After lunch we set off for a short walk along one of the seventeen nature trails—the Zigzag path. This is a walk of about 45 minutes through a variety of vegetation and undulating terrain.

Along the way we saw a massive *Eucalyptus regnans* (common name mountain ash on the mainland, swamp gum or stringy gum in Tasmania). Various estimates were made of its height, with most being in the range 50–60 metres.

However, all conjecture about the height of the tree ceased when it was suggested that ‘it might be appropriate to say that it’s at least 60 metres ... if not less!’



***Eucalyptus regnans* (common names mountain ash, swamp gum, stringy gum) – JW**

and rusts, as well as the more familiar mushrooms.

The kingdom Fungi is one of the oldest and largest groups of living organisms, and is a 'monophyletic group', meaning that all modern fungi can be traced back to a single ancestral organism. This organism diverged from a common ancestor with animals about 800–900 million years ago.



Yellow leg bonnet (*Mycena epipterygia*) – LB



Ruby bonnet (*Mycena viscidocruenta*) – PR

Until the latter half of the 20th century fungi were classified in the plant kingdom. However, nearly all fungal cell walls contain chitin, which is also found in the exoskeletons of many invertebrate animals, but not in plants. Also, each zoospore (the reproductive cell of a true fungus) has a flagellum, an organelle that is also found in sperm (male animal reproductive cells) but not in plants.

As a result of these and other differences between plants and fungi, by the middle of the 20th century the three major kingdoms of multicellular eukaryotes—kingdom Plantae, kingdom Animalia, and kingdom Fungi—were recognised as being distinct.

The crucial difference between the three kingdoms is the mode of nutrition: animals engulf food; plants photosynthesise; while fungi excrete digestive enzymes and absorb externally digested nutrients.

Many organisms, including slime moulds, are no longer considered to be true fungi, and their relationship to other organisms—especially animals—remains unclear.

Most fungi are multicellular organisms. They display two distinct morphological stages—the vegetative and



Coral fungus (genus *Ramaria*) – CFE

reproductive. The vegetative stage consists of a tangle of slender thread-like structures called hyphae (singular, hypha), whereas the reproductive stage can be more conspicuous and consists of a fruiting body. (Mushrooms are a familiar example of a fungal fruiting body). The mass of hyphae of a fungus in the vegetative stage collectively constitutes a mycelium (plural, mycelia). Mycelia are typically found in



Colourful fungi growing on a tree trunk – CFE

soils and on other organic matter.

The mycelium extends the area in which a fungus can feed by growing outwards to seek water and nutrients such as nitrogen, carbon, potassium and phosphorus, which are absorbed into the mycelium so it can continue to produce biomass and grow. Mycelia have rigid cell walls, allowing them to move through soil or other environments that require extra protection.

Mycelia come in many sizes, from microscopic to the size of a forest. For example, in eastern Oregon there is a 970-hectare site that had a contiguous growth of mycelium before logging roads cut through it, making it possibly the largest organism in the world. It may also be one of the oldest—it is estimated to be at least 2400 years old!

Mycelia are vital in terrestrial and aquatic ecosystems for their role in the decomposition of plant material, and they are an important food source for many soil invertebrates.

Fungi prefer a moist and slightly acidic environment, and they can grow with or without light or oxygen. Fungi are 'saprophyte heterotrophs', that is, they use dead or decomposing organic matter as a source of carbon.

Fungi reproduce either asexually, sexually or both. In both sexual and asexual reproduction, fungi produce spores that disperse from the parent organism by either floating on the wind or hitching a ride on an animal. Fungal spores are smaller and lighter than plant seeds. The giant puffball mushroom bursts open and releases trillions of spores. The huge number of spores released increases the likelihood of landing in an environment that will support the growth of a new mycelium.

Some fungi have mutualistic associations with other organisms (mutualism being a form of symbiosis in which each organism gains benefit from the association); examples are mycorrhizae (fungi and plants) and lichens (fungi and algae).



***Cordyceps gunnii* (Dark Vegetable Caterpillar) – LB**

This is an intriguing fungus. Cordyceps are parasitic fungi, but rather than choose a plant as a host, as many other parasitic fungi do, the mycelium invades a moth larva, feeding on it and eventually replacing the host tissue. An elongated fruiting body is then sent to the surface to distribute spores to aid in the spreading of the fungus.

It is well-known that many fungi are edible, but it may be less well-known that yeasts and moulds play important roles—both positive and negative—in relation to human food and health.

As examples, yeasts are essential for making bread, beer, and wine, while cheese-making depends on moulds.

Some moulds produce antibiotics such as penicillin, while others cause harm, e.g. by spoiling food.

Other moulds cause skin infections, and some yeasts can cause adverse health conditions such as candidiasis.