

The North Eastern Naturalist

Newsletter of the NE Tasmanian Field Naturalists Club

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President: Ross Coad, Phone: 0417 190 046; email: rosscoad@hotmail.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 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 Editor: Our 2021 AGM was conducted on 11 August at the home of Secretary and Public Officer Lou Brooker. Twenty-one members attended. There was only one change to the Office Bearers—following a successful two years as President, Ann Scott has handed the reins over to Ross Coad.

Members are reminded that subs of \$20 (individual) or \$30 (couple or family) are now due.

Payment may be made electronically to:

North East Tasmania Field Naturalist Club; BSB: 633000: Account number: 128381860.

Please record your name on the transaction so we know who has paid the sub. Alternatives are to pay in cash at the next activity you attend, or to send a cheque to:

Sue Wilson (Treasurer, NE Field Nats) 246 Lalla Road, Lilydale TAS 7268



Gymnopilus eucalyptorum – Susan McClenaghan

Members' photos of NE Tasmanian wildlife



Mixed forest near Mt Morris – Chris Forbes-Ewan



Thelymitra flexuosa (Twisted Sun Orchid) – Lou Brooker

Program for Sep-Dec 2021

SEPTEMBER 11th: Cameron Range with Mike Douglas

Walk to summit of Wedgetail peak overlooking Gladstone. Easy walking for an hour to the Galloway Creek Rockpools [graded Easy] where some may choose to stay. The one-hour walk from the pools to summit [graded Medium] is steep and rocky.

Meet 10 am on Waterhouse Road, 7.3 km from Old Port Road junction and 3.5 km west of Gladstone. Look for yellow tapes. This walk will suit a range of people.

OCTOBER 9th: Granite Knob with Liese, Paul and Pam

Some Field Nats will remember exploring the Scamander River catchment last year. This attempt at Granite Knob will take place from Hogans Road. The outing is still in the planning stage. More information will be sent by email when the planning is complete.

NOVEMBER 13th: Mt Barrow Discovery Trail with Len Gillett

A day of both botanical and historical interest beckons. From the Nunamara Store we will explore the Discovery Trail by car, learning about the history of the timber Industry based around Mt Barrow. Easy walking on a graded surface looking at waratahs—which should be in bloom—boronia, pepper bush and heath. There may be orchids.

Timings and meeting point TBA by email.

December 11th: Cape Portland

Exploring the north-east tip of Tasmania again. Details still to be decided.

Cancellation Process: If there is unpredictable and severe weather, or for any other reason, including if the leader considers the conditions to be unsafe, it may occasionally be necessary to cancel with short notice. Here is the process for cancellation: a global email will be sent by 1900 (i.e. 7.00 pm) on the previous day, or by 0700 (7.00 am) at the latest on the day of the outing. A notice will also be posted on the website:

netasfieldnats.com.au

SUGGESTIONS FOR FURTHER READING

The first step in using trees to slow climate change: Protect the trees we have https://www.sciencenews.org/article/planting-trees-protect-forests-climate-change

Friday essay: a rare bird — how Europeans got the black swan so wrong

https://theconversation.com/friday-essay-a-rare-bird-how-europeans-got-the-black-swan-so-wrong-161654

Huge egg from extinct dwarf emu found in sand dune

https://www.livescience.com/dwarf-emu-egg-found.html

Egg-laying mammals and peacock spiders: Meet some of Australia's weirdest creatures

https://www.livescience.com/australia-weirdest-animals-creatures.html

JUNE 2021: NOTLEY FERN GORGE

Article by Chris Forbes-Ewan; photos by Chris Forbes-Ewan (CFE), Len Gillett (LG) and Ross Coad (RC)

Our June activity was a walk through beautiful Notley Fern Gorge. Twenty-one members and guests took part in the walk, which was led by Louise Brooker.

Located west of Exeter, and close to the western bank of the Tamar, Notley Fern Gorge consists of 'remnant' rainforest—that is, it shows what much of that area would have been like before occupation by Europeans a couple of centuries ago. It is dominated by *Dicksonia antarctica*—whose common name is man fern in Tasmania, tree fern on the mainland—with some majestic eucalyptus trees playing second fiddle. The

man ferns are not only numerous, but in many cases enormous. We also saw man ferns that had apparently joined together above ground level, forming intricate patterns with their trunks and fronds.

The walk was along a well-defined path and consists of a 'loop' of about 1.8 km. However, recent strong winds had caused several trees to fall over, blocking the way and forcing those who wanted to complete the loop to climb over (or under) these fallen trees.

Some members were discouraged and returned to the starting point, but most of the group rose (or in the case of those who crawled under the trees, lowered themselves) to the occasion and completed the loop.

Fungi-spotting was the order of the day. This was a veritable fungi-lovers paradise, with the short walk taking most people more than two hours to complete, we were so enthralled with the variety and quantity of fungi we saw. Among the many species we noted were:

- Geastrum triplex (collared earth star)
- Stereum ostrea (false turkey-tail)
- Lycoperdon pyriforme (puffball)
- Tyromyces merulinus
- Trametes versicolor (turkey tail)
- Fuligo septica (dog vomit slime mould)
- Coprinellus disseminatus (fairy inkcap mushroom)
- Hericium coralloides (lion's mane)
- Mycena interrupta (pixie's parasol)
- Mucronella pendula and
- Clavulinopsis sulcata (coral fungus)

Some of us saw an unusual-looking worm, which was bright yellow. Known as a canary worm (*Fletchamia sugdeni*), this is a platyhelminth, i.e. a flatworm. It comes out at night to feed on small invertebrates (it is carnivorous).



NE Field Nats Secretary Lou Brooker demonstrates that no obstacle is too great for a keen field naturalist to overcome – LG



Stereum ostrea (false turkey tail) - CFE



Fletchamia sugdeni (canary worm) – RC



Microsorum pustulatum (kangaroo fern) - RC

We were also impressed with the huge eucalyptus trees, including several specimens of *Eucalyptus regans*, known as stringy gum or swamp gum in Tasmania, and mountain ash on the mainland. One of these was more than four metres in diameter at ground level and was estimated by one member to be at least 60 metres high. Several of these trees were hollow at the base and would have made good shelters from the weather for Aborigines or bushrangers.



Gaestrum triplex (collared earth star) - LG



Trametes versicolor (turkey tail) - CFE

One hollow stringy gum has been dubbed Brady's Tree, because it is commonly believed that the notorious bushranger Matthew Brady and his gang used it for shelter in the 1820s.

Other plants we noted included kangaroo ferns, fork ferns, various mosses and liverworts. We also heard several bird calls, including those of the pink robin and golden whistler.

After the walk, nine of the group met at Goaty Hill Winery, Kayena, for a very pleasant wine tasting.

JULY 2021: MOVIES WITH BLUE DERBY WILD, AND MEMBERS' PHOTOS

Text by Chris Forbes-Ewan; photos by Chris Forbes-Ewan, Ross Coad, Ann Scott, Jay
Wilson and Lou Brooker

Our July activity was a 'film and photo' day at the Scottsdale Library.

Held in conjunction with Blue Derby Wild (BDW), and attended by 31 members and guests, the morning session involved the screening of two films, with members' photos shown in the afternoon.

Louise Morris and Mike Bretz explained that BDW aims to protect the native forests of north-eastern Tasmania by promoting the area's natural values and supporting appropriate eco-tourism development.

The success of the Blue Derby mountain bike trails is a testament to the potential of nature-based tourism. It showcases to the world the unique environments and landscapes that stretch from Derby through to the Blue Tier, and through to St Helens and the Bay of Fires. The Blue Derby MTB trails are in state forests that are to be logged by Sustainable Timbers Tasmania.

Environment-based tourism can also help to preserve Aboriginal heritage, especially in areas such as the Tarkine (Takayna in the Aboriginal language) region of north-western Tasmania, where forestry and mining could damage aspects of the Aboriginal culture that dates back tens of thousands of years.



Louise Morris and Mike Bretz of Blue Derby Wild explaining the purpose of BDW - Chris Forbes-Ewan

Another advantage of maintaining native forests is that they are more resistant than tree plantations to bushfires. Research in Victoria and Tasmania has shown that intact native forests can slow large fires, because they contain more soil moisture than plantation forests. Native forests also constitute a complex ecosystem of many species, with the rainforest understorey being highly fire-retardant.

Maintaining large stands of high conservation value native forests is vital to counteracting the severe damage caused by bushfires, and it recognises the vital role of native forests in tackling climate change.

Louise and Mike then showed the first film—What if Running Could Save the Rainforest? This followed the story of a Smithton doctor, Nicole Anderson, who took up running in the Tarkine, which is one of the largest temperate rainforests in the world. Nicole used her love of running to help protect these areas from logging. The Tarkine is now one of the premier ultramarathon destinations in Tasmania, with the Patagonia Ultramarathon taking place there annually. This is just one example of a health-promoting and popular activity that will not be possible if our forests are logged unsustainably.

Discussion took place on the importance of avoiding divisive language such as 'forest wars' when referring to appropriate use of public forests. Sustainable forestry and conservation can (and should) live side-by-side.

Louise and Mike then showed the second film, *Tasmanian Big Tree Hunters*, which featured five Tasmanians who 'love big trees'.

Tasmania is home to the tallest species of flowering plant in the southern hemisphere, *Eucalyptus regnans* (commonly known as stringy gum or swamp gum in Tasmania, mountain ash on the mainland), and some of the tallest trees in the world. We are renowned internationally for our magnificent forests, yet we don't capitalise on this. Perhaps on the grounds that familiarity breeds contempt, many Tasmanians seem to be unaware of the potential for our awe-inspiring giant native trees to be the basis of flourishing eco-tourism in this state.

The southern hemisphere's tallest tree, the Centurion, was shown. This tree, which is 100 m tall, survived the 2019 bushfires, but most of the forest around it was destroyed. Without the protection of other trees nearby, the future looks bleak for the Centurion. Those fires were also responsible for the loss of 15 of the largest 25 trees in the southern hemisphere.

We then adjourned for a shared lunch.

After lunch, four members who are keen photographers—Ross Coad, Ann Scott, Jay Wilson and Lou Brooker—showed some of their favourite photos of Tasmania's natural environment. On the grounds that 'a picture is worth a thousand words', the remainder of this article consists mostly of a selection of the photos presented after lunch.

1. Ross Coad



Shell of Argonauta nodosa (paper nautilus or argonaut)



Nest and eggs of *Cygnus atratus* (black swan) on Cape

Barren Island

2. Ann Scott



Ramaria capitata var. ochraceosalmonicolor (coral fungus)



Trametes versicolor (turkey tail)



Mycena aff. epipterygia (yellow-stemmed mycena)



Cortinarius submagellanicus

3. Jay Wilson



Meridiastra calcar (eight-armed or cushion sea star)

Jay presented several photos of the eight-armed or cushion sea star *Meridiastra calcar* (aka *Patiriella calcar*). Some of the photos were taken at Bicheno, others at Bridport.

From Wikipedia:

Like other sea stars, the Cushion Sea Star is a slow-moving animal using its tube feet to move about, collecting or subduing the food items that constitute this omnivorous species' diet, namely, algae, detritus, mussels and other invertebrates. This species is viviparous like a few others classified in the genus *Patiriella*, brooding its young within the body.

3. Jay Wilson (continued)





Meridiastra calcar (aka Patiriella calcar), common names eight-armed sea star and cushion sea star

4. Lou Brooker



Neosparassus sp. (badge huntsman)



Larva of Doratifera oxleyi (painted cup moth)

The larva of the painted cup moth feeds on eucalyptus leaves. Beware: these caterpillars sting!



Badge on underside of badge huntsman



Diphucephala colaspidoides (green scarab beetle)

This is a small, highly metallic, bluegreen scarab beetle found in southeastern Australia.

AUGUST 2021: AGM AND PRESENTATION ON DRAGONFLIES

Text by Chris Forbes-Ewan; photos by Nigel Forteath

The August activity of the NE Field Nats Club was our Annual General Meeting, which was held at the spacious and comfortable home of our Secretary, Lou Brooker. The AGM was followed by a presentation by Nigel Forteath—the first Professor of Aquaculture in Australia and best known for his research on seahorses, which he conducted at Seahorse World, Beauty Point.

Twenty-one members attended the AGM. Including Nigel, 24 members and guests attended his presentation.

In addition to being an internationally recognised expert on seahorses, Nigel is also a very keen fly fisherman, a pastime that initiated his interest in the biology of dragonflies. His talk on this occasion was

about Tasmanian dragonflies.



Male red and blue damselfly (Xanthagrion erythroneurum)

(One easy way to distinguish dragonflies from damselflies is that the two eyes on a dragonfly are very close together, while those on a damselfly are clearly separated.)

Dragonflies are usually found close to water, where they hunt smaller insects, although their hunting trips can take them several kilometres from water. They have very small antennae, which may have a sensory function, especially for detecting prey.

Although they have strong jaws, and may at times appear intimidating, dragonflies are

Dragonflies, and their close relatives the damselflies have existed for at least 250 million years, that is, even before the dinosaurs first appeared on Earth. The 'ancient greenling damselfly'—considered to be a virtual living fossil and found in only a few small areas in Tasmania and Victoria—is very similar to the remains of damselflies that are found solely in 250–300 million-year-old fossil records from Brazil to Russia.

The success of dragonflies is due in no small part to their remarkable flying abilities—they are capable of flying at speeds greater than 50 km/h, they can hover, move in a zigzag motion, and even fly backwards. They also have two large compound eyes, with about 30 000 ommatidia* per eye, that provide very effective vision.



Male blue skimmer dragonfly (Orthetrum caledonicum)

^{*}Ommatidium (plural ommatidia): A visual system consisting of a lens unit and light-sensitive cells

harmless to people. In fact, they perform a useful service by eating insect pests such as flies and mosquitoes.

During mating, before depositing his sperm in the female, the male dragonfly will brush out any sperm that were deposited as a result of previous matings. Unlike dragonflies, male damselflies do not use this strategy to maximise the likelihood of passing on their genes.



Male and female common bluetail damselflies (Ischnura heterosticta tasmanica) mating

Some dragonflies lay their eggs on the surface of the water, others in plants. All damselflies lay their eggs in plants.

The female of the darner dragonfly uses a small needle-like structure on its abdomen to cut a hole in a plant where it then lays its eggs.

Although most adult dragonflies live for only a few weeks or months, the larval form can live for several years before turning into an adult. At the upper extreme, the Australian emperor dragonfly larva can survive for up to eight years before emerging as an adult.

Unlike many insects, dragonflies have only three stages in their life cycle—egg, larva and adult (they do not go through a pupal stage).

Tasmania is home to several dozen species of dragonfly, with the blue skimmer being one of the most common in the north-east of the state. The blue skimmer—so named because the male has a powder blue thorax and abdomen—is about 5 cm long and has a wingspan of around 7 cm.

At 7 cm in length, and with a wingspan of about 11 cm, the Australian emperor is the largest dragonfly in Tasmania.



Darner dragonfly (Austroaeschna tasmanica)

The larva of one variety of dragonfly in south-west Tasmania is found only in the 'splash zone' of waterfalls. Its nearest relative is in Patagonia, the southern-most part of South America, confirming that Tasmania and South America were once part of the great southern continent Gondwana.

Nigel has taken photos of twenty species of dragonfly around Launceston. The QVMAG (Launceston museum) is in the process of producing a book about Tasmanian dragonflies and damselflies. The aim is to publish this book in the near future as a field guide to these fascinating insects.

Postscript: Jay Wilson alerted me to an article about the largest insect that ever lived—a flying monster that was similar to, but much larger than today's dragonflies, and only distantly related to them. *Meganeruopsis*, which lived more than 250 million years ago, is estimated to have been 47 cm long and to have a wingspan of 75 cm! Reference: https://eartharchives.org/articles/the-biggest-insect-ever-was-a-huge-dragonfly/index.html