



North-Eastern Tasmanian Field Naturalists Club Inc.

The North Eastern Naturalist

Newsletter of the NE Tasmanian Field Naturalists Club

Number 200: March 2018

President: Jill van den Bosch, 6 Albert St Bridport; 0429 644 329; email: jdvdbosch@gmail.com

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

Secretary: Louise Brooker, 20 Edward St Bridport; 0417 149 244; email: brooker@vision.net.au

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

Committee: Mike Douglas, Jay Wilson, Lloyd Reeves

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

Web address: <http://www.netasfieldnats.org.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: This newsletter marks a milestone in our history, the 200th edition.

The early newsletters were typed, roneoed and 'snail mailed' out by the then editor, Charles Taylor, an early stalwart of the NE Field Naturalists.

Phil de Salis took over from Charles, before we moved into the 'new age' with Lou Brooker as editor and computer word-processed photocopies.

Another technological change came in 2015 when our current editor, Chris, began to produce colourful

newsletters that were sent by email to most of our members.

So there have been big changes in production techniques over the years, but the quality of articles has been consistently good, with many non-active members maintaining their subscriptions so they could continue to receive the newsletter.

Thank you to all who have contributed to the newsletter; we look forward to more issues helping us to keep in touch with our natural environment.

Photos of Northern Tasmanian wildlife



Blue spotted sun orchid –
Claudia Bohme



Platypus at Scottsdale – Mehrdad Abbasian



Spider orchid – Claudia Bohme

Program for March-June 2018

NB Please read the notice at the bottom of this program about the cancellation process

MARCH 10th: EXPLORE SCAMANDER RIVER WITH LIESE FEARMAN

Leise is a geography tutor at UTAS. She will tell us about the river's catchment characteristics, geomorphology and social history. Meet at 10 am in the park on the south side of the Scamander River, just over the bridge.

Leader: Pam Bretz 0439 547 529

APRIL 14th: DORSET DREDGE – GLADSTONE

Peter and Claudia, who live nearby, will lead us to this relic of mining history. Historians and geologists will tell the story. Meet at 10 am opposite the Gladstone store.

Contact: Lou Brooker 0417 149 244

MAY 12th: VISIT SCOTT BELL'S DEVIL ENCLOSURE

Scott has invited us back to hear about how the project has progressed. Steve Cronin has agreed to share some information on different habitat types, as there are quite a few on Scott's place.

A bonus is the chance to see a carbonised piece of pine between 20 and 23 million years old revealed by an excavator whilst digging a dam. Meet at 10 am at the junction of Bridport Road [B82] and Pipers Brook Road [C818].

Contact: Lou Brooker 0417 149 244

JUNE 9th: BRID RIVER RESERVE AT DUNCRAGGEN HILL

An easy 5-km walk through a little known Crown River Reserve near Duncraggen Hill, about 7 km south of Bridport. Shorter options as well.

Meet at 10 am at the junction of the Duncraggen and Dogwood Park Roads, reached as follows: From Bridport, drive 9 km towards Scottsdale and then turn right along Duncraggen Road, opposite Gillespie's Mill. The junction is 1.8 km along this road. From Scottsdale travel 11 km towards Bridport, then turn left onto Duncraggen Road.

Leader: Mike Douglas 6356 1243

Cancellation of Field Nats Outings

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 Jill, Lou or the leader. Note that phone reception is not always available, so you may have to try alternative numbers.

DECEMBER 2017: BIG WATERHOUSE LAKE

Our December outing was to Big Waterhouse Lake, about 25 km east of Bridport.

On a blustery but otherwise fine day, 20 members and guests took part in two activities. First, Liz Znidersic told us about a project she initiated at Big Waterhouse Lake involving identifying 'secretive birds'. (Secretive birds are wetland birds such as rails and bitterns that vocalise only infrequently and prefer inaccessible wetland habitat, so are rarely seen or heard.) Then Debbie Searle sampled the waters of the lake to examine the variety of invertebrate species (animals without backbones) living in this impressive body of water.



Big Waterhouse Lake (CFE)

1. DETECTING SECRETIVE BIRDS – Article by Chris Forbes-Ewan; photos by Chris Forbes-Ewan (CFE) and Liz Znidersic (LZ)

Liz is completing her PhD on how secretive birds can be detected. Liz was the invited speaker at our 2016 Annual General Meeting where she spoke about her work on secretive birds in southern Tasmania, on Cocos/Keeling Islands and in South Carolina.

At Big Waterhouse Lake Liz told us about the methods she is using to detect secretive birds in the Waterhouse area and elsewhere on the east coast. Her methods include new and old technology. Old techniques include 'playback'—whereby recorded bird calls are played, with the aim of receiving a 'reply' from any nearby members of that species—and the use of passive listening surveys.

More recent technology includes the use of camera traps—a camera equipped with a motion sensor takes a photo of the bird or animal that triggered the sensor.

But Liz is also using cutting-edge technology in the form of bioacoustics recording, specifically the Wildlife Acoustics Song Meter SM3 Bioacoustics Recorder, to try to identify secretive birds in this area and elsewhere on the east coast of Tasmania.



Wildlife Acoustics Song Meter SM3

Each monitor can record all the sounds made nearby over a period of about ten days. Experts from Queensland University of Technology are using machine learning methods to teach the computer how to identify relevant sounds among all the recorded data. (The alternative would be to listen to ten days of recorded sounds in the hope that the bird of interest was recorded at some time in those ten days—this would be analogous to trying to find a needle in a haystack!). Liz is collaborating with these experts and finding ways to answer some of the detection questions around secretive birds.

At this stage, bioacoustics recording is in its infancy and is very expensive (supercomputing power is required for the analysis, and each monitor costs about \$1000) but the technique is showing promise.

So far, Liz has monitored 50 sites on the east coast of Tasmania using bioacoustic recording, and is currently monitoring ten sites in the Waterhouse area. She has baseline sound data, but the data has not yet been analysed.

Based on the results of studies using old technology, Liz has confirmed that rails and bitterns are present in the Waterhouse area.



Liz Znidarsic describes the techniques she is using to detect secretive birds in the Waterhouse region (LZ)

2. INVERTEBRATES IN BIG WATERHOUSE LAKE — Article and photos by Chris Forbes-Ewan

After lunch we changed tack, with Debbie Searle sampling the waters of Big Waterhouse Lake and a small adjacent wetland to determine which invertebrates inhabit these wetlands, and to investigate the state of health of the wetlands.

We found a rich habitat for aquatic animal life, with abundant food sources in the form of native plants growing around the edges, reeds emerging from the water, and much floating vegetation.

Guided by Debbie, Field Nats members patiently separated the (mostly tiny) animals from the vegetation they were hiding in, with Debbie identifying them as they emerged.



Debbie Searle (far left) collects invertebrates from Big Waterhouse Lake for identification

The invertebrates we found included flatworms, water mites, three types of snails, adult diving beetles, and the larvae of beetles, midges, dragonflies, damselflies and two types of flies. In addition, there were freshwater clams, seed shrimps, shrimps, scuds, backswimmers, creeping water bugs, water boatmen and giant water bugs.

Debbie explained that dragonfly and damselfly larvae (also known as nymphs) have ‘extendable’ mouth parts that allow them to eat just about any small living thing that moves in their field of view. To see a short but rather dramatic video of a dragonfly nymph feeding, go to:

<https://www.youtube.com/watch?v=6AWu6vBkAIA>



Identifying the collected invertebrates

The highlight of this part of the outing was the discovery of a male giant water bug (where ‘giant’ implies about one centimetre long) carrying eggs all over his back.

The eggs had been laid by a female, but the male looks after the eggs by stroking them with his hind legs to keep fresh water flowing over them until they hatch.

Based on the number and variety of invertebrates we observed, Debbie concluded that these wetlands are in a very healthy state.

NE Field Nats is very grateful to Liz and Debbie for taking the time to share their vast knowledge with our members and guests.



Constable Creek, near St Helens, north-eastern Tasmania (JW)

On a cool and overcast February morning an enthusiastic group of 13 members and guests gathered at St Helens for a 6-km rock hopping/wading excursion up Constable Creek, led by Adrian Astley and Revel Munro.

Although the creek was nearly dry, walking in shallow water was occasionally unavoidable. Members had been advised to 'wear strong shoes that can get wet', but there was considerable variation in how to interpret that advice—rubber boots, sandals, tennis shoes and hiking boots were all in evidence. During the walk, dry feet weren't!

Revel demonstrated his rock-smashing prowess in a futile search for wolfram, also known as tungsten, which is a valuable metal.

Revel and Adrian both provided a wealth of information about local history and mining. Revel also showed the group an old hut, the 'Bill Franks Hut'. The main remaining relic is an unstable concrete block chimney. Although only about 50 years old, the hut is believed to have historical significance through a possible link to the South Echo Wolfram prospect. However, the yield of tungsten in this area was very low and commercial mining did not take place. Iron pyrite, aka fool's gold, was identified.

Many ferns were identified during the walk, including the rough tree fern (*Cyathea australis*), king fern (*Todea barbara*), fishbone waterfern (*Blechnum nudum*), bracken fern (*Pteridium aquilinum*) and coral fern (*Gleichenia dicarpa*).

A variety of other riparian vegetation was identified, including the following trees:

- Dogwood (*Pomaderris apetala*) – found only in Tasmania and New Zealand, the dogwood is widespread in Tasmania and is one of the main components in the canopy of wet sclerophyll forests
- Silver wattle (*Acacia dealbata*) – native to south-eastern Australia, silver wattle has been introduced through much of the Mediterranean
- Bull oak (*Allocasuarina littoralis*) – a canopy tree that is also found in NSW, Victoria and Queensland
- Native cherry (*Exocarpos cupressiformis*) – endemic to Australia, the fruit (which resembles a small cherry) is edible and was used as food by indigenous Australians and by early European settlers
- White kunzea (also known as poverty bush or tick bush), species *Kunzea ambigua* – belonging to the myrtle family, its oil was used by Aborigines to relieve pain, and is now registered with the

Therapeutics Goods Administration as providing relief against the pain associated with arthritis.

In addition to the above trees, an attractive small plant of the genus *Wahlenbergia* (possibly species *saxicola*) was seen growing on a rock face at a waterfall and in the river bed.

Pam Bretz observed a yellow-tailed black cockatoo (*Calyptorhynchus funereus*) and the common bronzewing pigeon (*Phaps chalcoptera*).

Although they were not seen, Pam heard the yellow throated honeyeater (*Nesoptilotis flavicollis*) and the superb fairy wren (*Malurus cyaneus*).



Jewel beetle (*Scutiphora pedicellata*) - JW

A pretty *Scutiphora pedicellata*, commonly known as jewel bug, was one of several invertebrates (animals without backbones) to be observed. Being in the order Hemiptera, it is a true bug, not a beetle.

A Tasmanian water spider, *Megadolomedes johndouglasi*, was also seen. This species was only recently described by arachnophile John Douglas, who made a memorable presentation on spiders at our 2015 AGM. This spider can have a leg span of up to 9 cm. It can also walk on water, and dive under water while obtaining oxygen from air bubbles that adhere to its legs.



Tasmanian water spider, *Megadolomedes johndouglasi* (JW)



Waterfall on Constable Creek (PR)



Lunch was enjoyed on the rocky banks of Constable Creek (JW)

The homeward journey was split between those who were keen to complete the walk quickly—so they could dry their feet while enjoying a well-deserved libation—and those who wanted to prolong the experience.

Adrian and Revel were amiable and generous guides; the NE Field Nats Club greatly appreciates the contribution they made to an entertaining and informative walk.

Post-excursion drinks and nibbles were enjoyed by all.

THE LAST FATAL SNAKE BITE IN TASMANIA REVISITED

By Chris Forbes-Ewan with Mike Douglas

The supplement to the December issue of the North Eastern Naturalist included an article about the controversy surrounding the year in which the last fatal snake bite in the bush occurred in Tasmania. The article provided evidence that this most likely happened in 1948.

This contradicts the commonly believed story that a young woman was killed in embarrassing circumstances in 1966—she was reportedly bitten on the bottom during a walk near Cradle Mountain, and her reluctance to reveal this to her male companions supposedly contributed to her death.

Mike Douglas, who first alerted me to the likelihood that the latter story is an ‘urban myth’, also sent me an article that was in a 1979 issue (No. 23) of the ‘Tasmanian Tramp’, the newsletter of the Hobart Walking Club. The article is an extract from a manuscript written in the mid-19th century about the treatment of a snakebite in Tasmania at that time. To me, the most interesting aspect is that the victim managed to survive not only the snake bite, but also the treatment!

But first, current advice on first aid for snakebite in Tasmania (downloaded from <http://dpi.pwe.tas.gov.au/wildlife-management/living-with-wildlife/living-with-snakes#FirstAid>) includes:

Bandage the bitten area immediately with a broad, firm bandage ... and cover as much of the surrounding area or limb as possible and leave it covered ... A tourniquet is not recommended.

Immobilise the bitten area immediately – if the bite is on a limb, secure with a splint.

Bring transport to the victim, if possible, for transfer to medical care.

DO NOT cut the bitten area.

Although not specifically stated, the advice to ‘Bring transport to the victim’ implies that the patient should not walk or be physically active in any other way.

By way of contrast, here is the treatment that was applied in 1852, when the victim told the doctor (Dr Story) that he had been bitten on the leg while loading hay near Kelvedon (a property near Swansea):

Hurriedly, Dr Story got his cupping instruments. These consisted of a spirit lamp, and a glass dome, the size of an eggcup.

“This glass is heated over the flame and put quickly over the wound, when the contraction of the cooling air draws blood, and in this case, the Venom also from the wound”, Dr Story said later.

However, cupping was found to be impossible because of the ‘leathery’ nature of the victim’s skin. As a result, Dr Story ... injected Ammonia into the leg, (with) Brandy taken into his stomach and sleep precluded. He was kept awake and moving until the morning.

Not only did the victim survive the twin attacks (by the snake and Dr Story), he later ‘took up land at the mouth of the Prosser at Orford, married a young girl and had many children.’

They were tough people in Tasmania in the mid-19th century!

Perhaps also of interest, cupping—a form of traditional Chinese medicine—has recently come into vogue among athletes. Perhaps the most famous adherent is the great American swimmer Michael Phelps: <http://www.independent.co.uk/news/world/americas/rio-2016-cupping-what-is-it-olympics-athletes-suction-cups-skin-marks-a7178731.html>

However, in the same article, the authors of a book titled *Trick or Treatment* (published in 2008) state that ‘there is no evidence that (cupping) generates positive effects in any medical condition.’ So Dr Story’s cupping treatment for snakebite was probably useless at best, while the other components of his treatment regime (especially keeping the patient physically active all night) were almost certainly of negative value.