



# North-Eastern Tasmanian Field Naturalists Club Inc.

## The North Eastern Naturalist

Newsletter of the NE Tasmanian Field Naturalists Club

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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:** This is the Christmas supplement to the December issue of the North Eastern Naturalist. As usual, it consists of material that is unrelated, or only indirectly related to our monthly activities, but may be of interest to members.

The first article, by Jill van den Bosch, describes her wonderful trip to Central Australia in August. The second article is based on a memorable trip Revel and Helen Munro made to Greenland in July. The final article describes my experience at the 2019 Mannalargenna Day.

In addition, I recommend visiting the 'old' campus of the Queen Victoria Museum and Art Gallery—the one in Wellington Street. There is an exhibition showing in considerable detail how the Tasmanian Aborigines lived for thousands of years before Europeans came to Tasmania.

I hope everyone enjoys a relaxing Christmas and New Year, and I look forward to seeing many of you at our first outing for 2020, which will be on 11 January (see the Calendar on p. 2 of the December newsletter for details).

### **ALICE IN AUGUST (or JILL IN WONDERLAND)**

Article and photos by Jill van den Bosch

**Editorial note:** In August, club member and immediate-past-president Jill van den Bosch spent 16 days touring central Australia, in the vicinity of Alice Springs. Jill's report and her stunning photos should convince anyone who hasn't seen this unique part of the world to put it on their 'bucket list'.

**With the vast vistas—rugged and red, stark and stony—my most used word was 'Wow!'**

**Where was I? In the MacDonnell Ranges, east and west of Alice Springs for ten days of exploring in a campervan, finishing with a six-day hike along the Larapinta Trail.**

The contrast with Tasmania could not be greater; the colour green was rarely seen, especially because wildfires had destroyed 40% of the West MacDonnell area in January 2019. Even so, there were tiny shoots of green emerging from the ash beds, and the various mallee gums were bristling with soft epicormic growth.

Interestingly, the tough old cycads, descendants of the ancient gymnosperms from 200 million years ago, were barely touched by the fierce fires that were fuelled by the introduced buffel grass (*Cenchrus cillaris*) which grows profusely throughout the Ranges. This grass was originally planted in the 1960s as a pasture crop and to control erosion, but now outcompetes the native grasses and is drastically reducing the biodiversity of a huge area.



Rugged and red, stark and stony and in the grip of drought; but even minimal rain would bring on abundant growth

A few days in Alice Springs to start with gave me an opportunity to become familiar with the rich European, indigenous and natural history of the region.

The Olive Pink Botanical Gardens were a must-see. Forget swathes of green lawns, profusely flowering perennial beds and massive oak trees; most things looked close to death, but they were biding their time. The region is in a period of drought, having had no significant rain for more than two years. However, it would take only a few millimetres to bring on fresh growth, flowering and seed bearing.



Ripples preserved on an ancient seabed

Olive Pink was a fascinating woman. Born in the 1880s and raised in Hobart, she was an anthropologist, an outspoken advocate for Aboriginal rights, a lover of plants and flowers, and a botanical artist. Many of her botanical drawings are held by the University of Tasmania. She strongly promoted the cultivation of native plants, creating these botanical gardens in 1956.

The Desert Nature Park was another must-see. It covers 1300 hectares and presents the history and stories of the local Arrernte people through three habitats—woodland, sand



country and desert rivers. It was a wonderful introduction to the people, plants and animals, and it gave me invaluable knowledge for the rest of my time in the Centre.

The geology of the area was breathtaking—the upheaval and buckling, tilting and eroding of some of the world’s most ancient igneous and metamorphic rock was everywhere you looked—the quartzite walls of Standley Chasm sparkling in the sun, the razor back ridges of the ranges which destroyed my footwear!



Ancient rocky ridges, contorted over the eons by irresistible geological and meteorological forces

mulgas and mallees, cassias (often in flower) eremophilias, and of course the beautiful river red gums (*Eucalyptus camaldulensis* subsp. *arida*) in the river beds, and the stunning ghost gums (*Corymbia aparrerinja*), often clinging to impossibly steep rock faces. There were Albert Namatjira scenes everywhere you looked!

A plant of interest was *Acacia tetragonophylla*, known as dead finish, the last species to peg out in a drought; some of them looked severely stressed.

The night skies in the Centre are famous for being so dark and vast, yet lit with millions of stars. I learned to identify the Dark Emu and Pleiades (the Seven Sisters), so important in

Unfortunately, many of the water-holes were dry, although water is never far away—the rivers are ‘upside down’, running below the surface, so the river beds gush only when heavy rain and runoff occur.

Birds and other animal life were not very evident, possibly because of the drought and the recent wildfires.

It was still too cold for reptiles, but the black-footed rock wallabies would sun themselves in the early morning, wedge-tailed eagles would soar overhead, and noisy groups of zebra finches would gather at any spring or puddle to bathe.

Spinifex was one of the most common plants, along with various



Red mulga (*Acacia cyperophylla*) with its distinctive curls of red bark



## Aboriginal story telling.

Lying there in my swag, watching the stars making their journeys across the sky, thinking of the incredible landscapes and the plants and animals that inhabit it, I began to understand how the First Peoples felt such a strong kinship and belonging to the land, how they valued it for what it offered them and understood the importance of living in harmony with it. There was much to ponder, much to learn on this truly wonderful trip.



Painted finch, *Emblema pictum*



Black-footed wallaby *Petrogale lateralis* with joey on board



Corroboree Rock in the East MacDonnell Ranges; originally built up from silts and algae on the seabed, it is believed to be over 800 million years old





**Humpback whale diving off Greenland amid majestic icebergs**

## **GREENLAND—A HARBINGER OF GLOBAL WARMING?**

**By Chris Forbes-Ewan with Revel Munro; photos by Revel Munro**

**Editorial note:** In July, club members Revel and Helen Munro went on a cruise in the Arctic and North Atlantic oceans. This included several stops in Greenland. I used text provided by Revel, combined with information gathered from various internet sites, to produce the following article.

**Greenland is the world's largest island, and is located between the Arctic and Atlantic oceans. Although humans have lived intermittently on Greenland for at least 4500 years, it was first settled by Europeans only in the 10<sup>th</sup> century.**

**Three quarters of Greenland is covered by ice, in the form of the largest ice sheet outside Antarctica.**

**Six stops were planned for Revel and Helen's trip to Greenland, but icebergs blocked the entrance to Uummannaq—a barren outpost and**



**Qaqortoq, the largest town in southern Greenland**

their most northerly destination at 590 km north of the Arctic Circle—so only five stops were made.

Ilulissat (the ‘tourist capital’ of Greenland) was the most interesting port of call. Nearby is the UNESCO Icefjord associated with Sermon Kujalleq glacier. But the Icefjord is a melting mess. As we arrived, an Inuit matriarch could be heard singing a plaintive lament to the drastic diminishment of the ice field since her last visit, nine months earlier.



Sheep raising community of Qassiarsuk, first European settlement in Greenland, established at the end of the 10<sup>th</sup> century

Later that night she presented a cultural lecture on board the ship. Her message again dwelt on the rampant icemelt around her settlement.

Such observations had even more impact when the audience learned that the Sermon Kujalleq glacier calves, on average, 46 cubic kilometres of ice a year, and much more of late. It’s the largest and most active glacier in the Northern Hemisphere.

A recent study concluded that the melting of Greenland’s ice is the single largest contributor to rising sea levels. According to an article published this year by National Geographic:

A recent study concluded that

Data from NASA’s GRACE satellites and GPS stations scattered around Greenland’s coast showed that between 2002 and 2016, Greenland lost approximately 280 billion (US) tons of ice per year. This average annual ice melt is enough to cover the entire states of Florida and New York hip deep in meltwater, as well as drowning Washington, D.C. and one or two other small states ...

In the 20<sup>th</sup> century, Greenland has lost around 9,000 billion tons of ice in total, accounting for 25 millimeters of sea-level rise. (It takes about 360 billion tons of ice to produce one millimeter of global sea-level rise.)

Greenland is giving us a glimpse of the future of our planet if we fail to curb global climate warming.



Morainial glacial streaks in Prins Christian Sund at the southern tip of Greenland

Yet we continue to pour greenhouse gases into the atmosphere as if there is no tomorrow. For example, the UN World Meteorological Organisation recently reported that greenhouse gas emissions reached record levels last year and are showing no signs of slowing down.

The long-term trend means that future generations will suffer from severe droughts, continually rising temperatures, extreme weather and rises in sea level, the report said.



## MANNALARGENNA DAY

By Chris Forbes-Ewan; photos by Jay Wilson and Chris Forbes-Ewan

Several NE Field Nats members were among the hundreds of people who attended the 2019 Mannalargenna Day, which was held in December at the Tebrakunna Visitors Centre, Cape Portland.

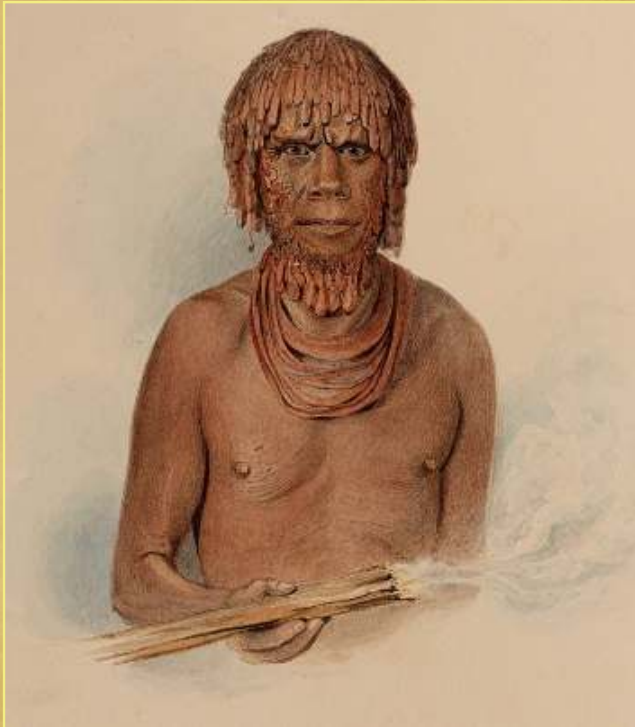
Mannalargenna was a revered *bungunna* (Aboriginal leader), a formidable warrior, and in his later years was regarded as a 'seer', that is, he was thought by his people to have supernatural powers. The annual Mannalargenna Day honours and celebrates his life.

Born around 1780, Mannalargenna was a young adult when Europeans made first contact with the Aboriginal inhabitants of Tasmania around 1800. He was a key leader in the resistance to the forced occupation of Tasmania.

In 1830, Mannalargenna joined George Arthur Robinson's mission, which aimed to round up all the Aborigines who had survived the 'Black War'—a period of six or seven years of virtual all-out war between the occupying Europeans and the indigenous Tasmanians. He was supposed to be helping Robinson in this endeavour, but Mannalargenna managed to fool Robinson by leading him away from any known groups of his people.

Robinson promised that if Mannalargenna helped him he would not be sent to Flinders Island (where the remaining Aborigines were to be taken when captured). But Robinson did not keep his word, and Mannalargenna died in captivity.

In addition to being entertained, attendees at the 2019 Mannalargenna Day were educated in a wide variety of cultural and environmental issues.



Mannalargenna - photo by Jay Wilson

At no cost (other than a gold coin donation) we could choose to learn about spear-making, weaving, Aboriginal dance, snake behaviour and how 'cool burns' were used by the Aborigines to appropriately modify and maintain the environment for tens of thousands of years.

The free entertainment included interpretive Aboriginal dancing by the Pakana Cultural Traditional Dance Group, and music and singing by Madalena, a very talented Hobart-based singer.

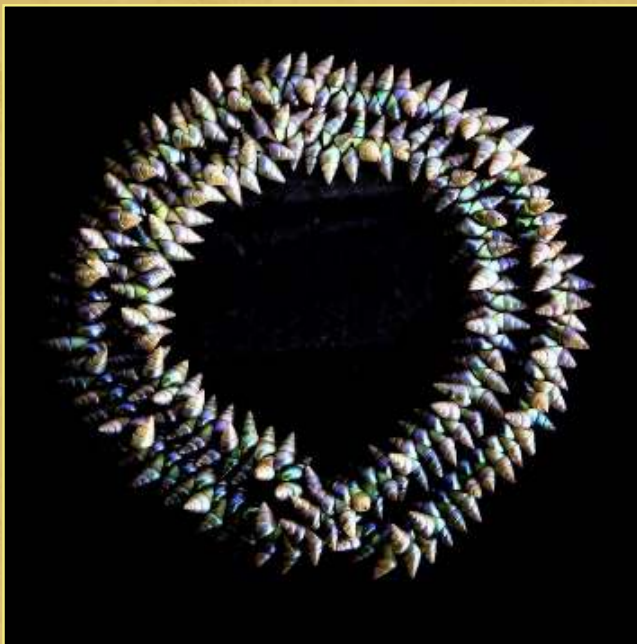
In addition to learning about Tasmanian



Aboriginal Dancing - photo by Chris Forbes-Ewan



Aboriginal culture, I also learned that some of my 'knowledge' about snakes was simply wrong. For example, I previously believed that male Tasmanian snakes were likely to be aggressive during the mating season (late summer/early autumn). The snake handler told me that they are more active, but still quite docile, even during this period. Provided that you don't disturb or frighten them, Tasmanian snakes will not attempt to harm you.



Aboriginal shell necklace - photo by Jay Wilson

I also learned how to readily differentiate between the two large species of Tasmanian snake—the copperhead has a thin head, about the same width as its upper body, while the tiger snake has a somewhat triangular-shaped head that is much wider than its body.

Of great interest in the present climate (with uncontrolled bushfires raging in several mainland states) was the talk by Uncle Harold Riley on firestick land management. For thousands of years, Aborigines used burning to modify and/or maintain the environment in a way that was advantageous to them.

Now known as 'cultural burning', the technique involves the application of fire to cause a slow and cool burn, aimed at bringing about hazard reduction,

better access to country, controlling weeds or clearing pathways.

Uncle Harold told the audience that cultural burning has the potential to assist landholders to better maintain their land, but the knowledge acquired over thousands of years is largely ignored by authorities.

A recent article from Bloomberg suggests that the advice of Uncle Harold (and others) is finally being taken seriously:

<https://www.bloomberg.com/news/articles/2019-12-16/there-s-a-60-000-year-old-way-to-help-stop-australia-burning>

The powers-that-be are apparently taking note of the possibility that firestick burning may contribute to a reduction in the number and severity of bush fires. From the above reference:

Natural Disaster and Emergency Management Minister David Littleproud has ordered a parliamentary inquiry to develop a national approach on reducing fuel loads and is calling for proponents of indigenous land management techniques to make submissions.

This was my first visit to Mannalargenna Day, but it won't be my last one. I found it to be thoroughly entertaining, educational, and very satisfying to see how well Tasmanian Aboriginal culture is being preserved.



Traditional Aboriginal baskets - photo by Jay Wilson