

# The North Eastern Naturalist

## Newsletter of the NE Tasmanian Field Naturalists Club

## Number 195: December 2016

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From the President: Those of us who joined the October outing to Binalong Bay enjoyed the excellent hospitality of our leader Roy Skabo and his wife Louise (see the article starting on page 8).

Many thanks to Roy and Louise for a wonderful weekend, made more notable by the spotting by Pam Bretz of what Roy later identified as *Caladenia caudata*. This species is listed as *vulnerable* (one level higher than *rare*) by the Natural Values Atlas (NVA): <u>www.naturalvaluesatlas.tas.gov.au</u>

It had not been seen in the area since Phil Collier's records from Humbug Hill in the 1980s. Its existence in the Binalong Bay area has now been recorded on the NVA.

Well done citizen scientists!



Blue Daisy (*Brachyscome spathulata* subsp *glabra*) photo by Ross Coad





Silvereye (Zosterops lateralis) – photo by Mehrdad Abbasian

## **Program for Dec 16–Feb 17**

#### *NB Please read the notice at the bottom of this program about the cancellation process* DECEMBER 10: GROOM RIVER TRAIL – BLUE TIER

Join Lesley Nicklason on a walk that starts at Crystal Hill, drops to the Groom River and follows it to join the Big Tree track. 2–3 hours walking time. There's a steep section down to the river, so moderate fitness is required, but only a steady pace is needed to complete the walk in good time. Could have afternoon tea at the recently finished picnic table there.

Meet at 9.30 am at Little Plain, where Lottah Road joins the Tasman Highway, 6 km southeast of Weldborough.

Leader: Lesley 0400 557 418.

#### **FEBRUARY 11: MT STRONACH**

The ascent via the southern slopes from Three Mile Creek provides a different perspective of Mt Stronach and its vegetation. The route is steeper and rougher than the usual track from Buckney's Road, so reasonable fitness is required.

Meet at 9.30 am at the Three Mile Creek Car Park – from Scottsdale drive eastwards on the Tasman Highway 5 km to the Cuckoo Road junction [signposted]. Continue another 0.6 km on the highway, then turn left across the rail trail.

Leader: Mike Douglas 6356 1243.

The program for March and beyond will be sent by email when finalised.

#### **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.



Pacific Gull – photo by Merhrdad Abbasian



Rattler Range – photo by Lesley Nicklason

#### AUGUST 2016: AGM AND PRESENTATION ON TASMAN ISLAND

#### By Chris Forbes-Ewan with Liz Znidersic

As in previous years, our Secretary Lou Brooker graciously hosted the AGM and associated presentation at her very comfortable and spacious home in Bridport.

A total of 23 people attended the AGM, while 24 attended the fascinating presentation by the invited speaker, Liz Znidersic. Liz's presentation was in two (related) parts—how cats were eradicated from a small island off the south-east coast of Tasmania, and her research on 'cryptic' wetland birds.

The island that is now cat-free is Tasman Island, which is a stone's throw south of Cape Pillar (part of the Tasman Peninsula). At only 1.2 sq km, Tasman Island is small but it has a rich natural history. Dolerite cliffs and steep grassy boulder fields surround the island, which rises approximately 300 metres from the sea to the undulating central plateau. At its closest point it is only 500 metres from mainland Tasmania.

Before Europeans arrived, Tasman Island was thickly forested, but tree-cutting for firewood and two severe fires left it with few trees.



Tasman Island is only 1.2 sq km in area, but is an important breeding ground for several species of birds

Tasman Island is an important habitat for dozens of species of birds, including the Fairy Prion, Sooty and Short-tailed Shearwater, Lewin's rail, White-bellied Sea Eagle, Swamp Harrier and Yellow-throated Honeyeater. It is one of the most important breeding sites in Australia for the Fairy Prion, whose population was believed to number in the range 300,000–700,000 breeding pairs in 1979.

Unfortunately, the introduction of cats to the island by the lighthouse keepers as pets in the early 1900s led to widespread predation of seabirds after kittens became feral. The approximately 50 feral cats on Tasman Island were each eating at least 2 to 4 prions per night (from observation of stomach contents). Prions are present on the island for about 300 days of the year equating, at a minimum, to between 30,000 to 60,000 birds

killed each year. An attempt was made in 1984 to eradicate the cats, but this was not successful.

Eradication of the cats was finally achieved in 2010. The successful program—which was managed and supported by Parks and Wildlife Tasmania, DPIPWE and Pennicott Wilderness Journeys—used an aerial and ground baiting program that employed a bait called Curiosity®. The toxicosis of Curiosity® is regarded as a humane means of euthanising cats through an effect similar to carbon monoxide poisoning. Baiting was followed by trapping and hunting with the aid of remote sensing cameras, spotlighting and trained cat-detector dogs.

The removal of the cats has allowed the local bird populations to recover, including the Fairy Prion which nests among the *Poa poiformis* (commonly known as coast tussock-grass or blue tussockgrass) and the dolerite boulders. Sooty and Shorttailed shearwaters also nest on Tasman Island.



Fairy Prions nest on Tasman Island among the Poa poiformus and dolerite boulders

Adult Fairy Prions leave the island well before dawn to fish through the day, returning 2–4 hours after dark.

In addition to describing how Tasman Island was restored to its cat-free status, Liz told us about her research on the family Rallidae (commonly known as 'rails'). These are small-to-medium grounddwelling birds. The rails include the little-known Lewin's rail (*Lewinia pectoralis brachipus*) which, as previously mentioned, is found on Tasman Island.



Cats are 'surplus killers'—it was estimated in 2009 that they were killing at least 50,000 birds each year on Tasman Island until they were eradicated in 2010 – photo courtesy of DPIPWE and Dr Sue Robinson



Boulder field at dawn as the last birds leave on their daily fishing expedition



Some of the many species of birds that thrive on Tasman Island now it is free of feral cats

Liz investigated detection methods and collected biological information about the Lewin's rail. These results will assist in the conservation and management of these delicate birds, which are subject to rapid population declines that may go unnoticed due to their secretive behaviour.

Liz also described her numerous visits to the Cocos Keeling Islands to assist with monitoring the translocated population of the threatened Cocos buffbanded rails, and of her participation in the spring marsh bird surveys with the South Carolina Department of Natural Resources (USA).

Liz is continuing her research on detectability of cryptic birds (Lewin's rail and other rail species) by conducting a PhD through the Institute of Land Water

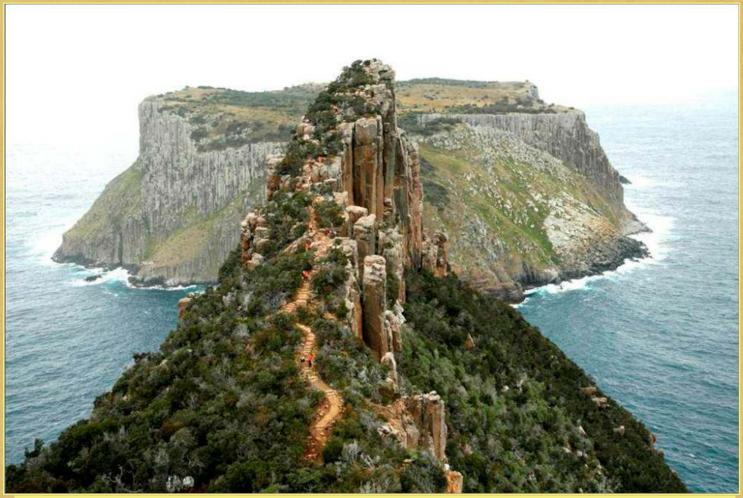


A Lewin's rail caught on 'candid camera' undertaking his early morning stretching – photo ©Liz Znidersic

conducting a PhD through the Institute of Land, Water and Society, Charles Sturt University, Albury.

In addition to being informative and of great interest, Liz's presentation included some wonderful natural history photos, such as the following spectacular shot of Tasman Island partially hidden by the newly-created Three Capes Walking Track at the southern end of Cape Pillar.

The North-Eastern Tasmanian Field Naturalists Cub is very grateful to Liz for giving up her valuable time to generously share her vast knowledge with us.



Tasman Island (background) and Three Capes Walking Track at the southern end of Cape Pillar, Tasman Peninsula

#### SEPTEMBER 2016: CUBE ROCK WALK

#### Article by Mike Douglas; photos by Mike Douglas, Claudia Bohme and Chris Forbes-Ewan



Arriving at Cube Rock in time for lunch as the rain starts to fall – photo by Claudia Bohme

On a day with typical spring weather (warm and sunny to begin with, cool and light rain by noon, heavy rain by early afternoon) 28 members and guests assembled at Little Blue Lake for the walk to Cube Rock—a well-known monolith perched atop Windy Ridge on the Mt Cameron Range.

This range consists of granitoid rocks, mainly adamellite, of Devonian age. These rocks are part of the Blue Tier Batholith, a massive granitoid intrusion at depth that occurred about 380 million years ago, and has since been exposed by erosion of the covering sediments.

Cube Rock is a remnant of a much larger expanse of fractured rock than is now seen at Windy Ridge. The fractures are due to ancient earthquake activity, cooling stresses during the solidification of molten magma, and an unloading phenomenon caused by lifting the granitoid surface during the removal of several kilometres of

overburden by erosion, giving rise to subhorizontal 'relaxation' joints.

The fractured rock was dissected into blocks by chemical and physical weathering, with the joints as the primary focus. The main agent was slightly acidic water, abetted by exfoliation of layers due to alternate heating and cooling of the surfaces.

Erosion basins known as 'gnammas' are seen on Windy Ridge. These are often filled with water and have their origin in the chemical attack of feldspar minerals in the rock by rainwater charged with carbon dioxide (forming carbonic acid).



Erosion basins ('gnammas') on Windy Ridge – photo by Mike Douglas

Cassiterite (tin oxide) is found among weathered granitoid gravels around the base of the range. This mineral crystallised from metal-rich liquids within the granitoid melt. Concentrations of cassiterite were often discovered below the surface in old stream channels. The Little Blue Lake occupies a hollow created when miners excavated one of these deep leads by pressure sluicing.

The endemic granite health *Epacris graniticola* is found at Cube Rock and other places high on the range. The only other occurrences are on Mt Stronach and near Rossarden. For many years this plant was known only as the Mt Cameron heath. Eventually, botanists



Granite heath *Epacris graniticola,* endemic to northeastern Tasmania – photo by Mike Douglas

undertook a review of the genus *Epacris* across southeastern Australia—as a result, this heath and several other new species were described and named.

The original plan for the day included a foray below Windy Ridge to view another endemic plant, the feather heath *Pentachondra involucrata;* however, at the onset of solid rain we decided to make a hasty retreat back to the cars.

A few flowering orchids were seen during the walk, including the mayfly orchid *Nemacianthus caudatus* and the nodding greenhood *Pterostylis nutans*.

The yellow rock orchid Dockrillia striolata subsp. chrysantha was just coming into bud.

Apart from some wattles, such as the fiendlshly prickly spreading wattle *Acacia genistifolia*, and caterpillar wattle *Acacia mucronata*, it was too early for the main flush of spring wildflowers.

In the heyday of tin mining South Mt Cameron was more populous than today, and a popular outing was to ascend Cube Rock. According to a report from 1910, thylacines—commonly referred to as 'hyenas' at that time—were sometimes seen during these walks.

Editorial footnote: As we approached Cube Rock we noticed a large drone hovering overhead. No-one knew what it was doing there, and there was much speculation about this. It was later revealed that the drone belonged to Club member Jeff Jennings, who was using it to film the activity. Jeff included this footage in a video which is



Yellow rock orchid *Dockrillia striolata* subsp. chrysantha in full flower – photo by Mike Douglas

available at: https://youtu.be/jmisF9ISeEo



A 'patchwork quilt' beside the path to Cube Rock – photo by Chris Forbes-Ewan

### OCTOBER 2016: ROY SKABO'S BINALONG BAY

#### Article by Lou Brooker; photos by Lou Brooker and Sandra Snow

Led by botanist Roy Skabo, guests almost outnumbered members at the outing on October 11 at Binalong Bay. A total of 24 people attended the activity, which consisted of two parts—looking for wildflowers near Binalong Bay in the morning, then a longer walk of about 4–5 km at nearby Doctors Peak Reserve in the afternoon.

The weather was perfect, spirits were high and the wildflowers prolific. It was difficult to organise a group of 24 on one track during the morning activity, so people tended to roam at leisure. If they found a plant of potential interest, they would ask Roy or another knowledgeable person to identify the plant and explain its relevance.

We were targeting an area adjacent to the road verge approaching the township where, purely by chance, the council mowers had left a swathe of interesting wildflowers.

We found common heath-land plants such as the wax-lip orchid (*Glossodia major*); the prickly spreading wattle (*Acacia genistifolia*); the curling everlasting (*Helichrysum scorpioides*); the showy bossia (*Bossiaea cinerea*); the short purple flag iris (*Patersonia fragilis*), which is often mistaken for an orchid; a member of the genus *Pimelea*; and the ubiquitous coast beard heath (*Leocopogon parviflorus*). Overall, it was a very colourful display.



Wax-lip orchid (Glossodia major) – photo by Lou Brooker

Other plants sighted included pine heath (*Astroloma pinifolium*), which was interesting to those who spotted the fruit near the ground under the low-growing heath; a cream coloured lily of the species *Thelionema umbellatum*; and the striking purple flowers of the *Tetratheca labillardieri*, which is described as having 'black eyed susan flowers'.

Hosts Roy and Louise had marked the numerous *Pyrorchis nigricans* the day before. These are known as Fire orchids or Red beaks and were of great interest to all who attended the walk.



Curling everlasting (Helichrysum scorpioides) – photo by Lou Brooker



Red beaks (Pyrochis nigricans) – photo by Lou Brooker

Other interesting sightings included a species of sedge with botanical name *Caustis pentandra*, which is listed as *rare* under the Tasmanian Threatened Species Act. Although officially rare, it is reasonably common in the heathland between Binalong Bay and Swimcart Beach.

Also listed as *rare* is *Hibbertia virgata* which can be seen here and in healthy heath land between Binalong Bay and Scamander.

In the afternoon we drove to The Gardens and into the wet buttongrass heathland of the Doctors Peak Reserve to look for *Hibbertia rufa*, a plant previously not seen for 120 years. [*For more on this, see the article by Roy Skabo in the supplement to the December issue, which will be published shortly before Christmas.*] Though not quite in flower, it was fascinating to hear Roy's story of 'rediscovery' and to see *H. rufa* in its natural environment.



Hibbertia rufa in bud – photo by Sandra Snow



The swamp melaleuca Melaleuca squamea, which was putting on a magnificent display – photo by Lou Brooker

## WALK BLUE TIER

by Lesley Nicklason, Friend of the Blue Tier

## Friends of the Blue Tier invite you to join us for a walk on the Tier SATURDAY 17 DECEMBER

Meet at Poimena (on top of the Tier) @ 11 am

Come along and enjoy one (or more) of the ten fantastic walks on the Blue Tier Support Friends of the Blue Tier by purchasing a recycled 'friends of the Blue Tier' T-Shirt for just \$4 (kids and adult sizes available)

Also available: Tea / coffee and cake; Northeast Forest Snail brooches & 'Friend of the Blue Tier' stickers; Friends of the Blue Tier: Northeast Highlands National Park proposal

THE WALKS	Approx. Distance	Track Grade	Trail Head
Goblin Forest	500 m loop	Wheel chair access	Poimena
Anchor Stamper	800 m return	Easy	Anchor Road
Halls Falls	2.5 km return	Easy	Anchor Road
Crystal Hill	2.5 km loop	Easy	Lottah Road
Big Tree	3.5 km return	Moderate	Lehners Ridge
Full Moon Valley / Mt Poimena	3.5 km loop	Moderate	Poimena
Australia Hill	4.5 km loop	Moderate	Poimena
Don Mine / Duco Adit	3.5 km loop	Moderate / rough	Lottah Road
Mt Michael	3 km loop	Moderate / boulders	Poimena
Blue Tier Descent	10 km one way	Moderate	Poimena

Friends of the Blue Tier are dedicated to gaining the permanent protection of the Blue Tier as part of the proposed Northeast Highlands National Park. The Blue Tier encompasses the headwaters of six river systems (Anson's, Great Musselroe, Groom, Ransom, Frome and Wyniford), and provides habitat for numerous threatened/rare species, including the Northeast Forest Snail, Simpson's Stag Beetle, Goshawk and Spotted Tail Quoll. The north and southeast slopes of the Blue Tier are recognised as glacial refugia, having survived the last ice-age, and contain a wide range of plant species. The Blue Tier forests are an important carbon store and the native forest continues to convert carbon dioxide to oxygen.