



North-Eastern Tasmanian Field Naturalists Club Inc.

The North Eastern Naturalist

Newsletter of the NE Tasmanian Field Naturalists Club

Supplement to Number 219: December 2022

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: This is the Christmas supplement to the December 2022 issue of The North Eastern Naturalist (issue number 219).

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 is a fascinating account of a visit by Jill van den Bosch to the Flinders Ranges. Jill briefly describes the geological history of this spectacular region of Australia, in addition to its human and natural history.

The second article is a review by Lou Brooker of

Aunty Patsy Cameron's new book, *Sea Country*, a picture book for children. The third article is also by Lou. It consists of observations Lou made on some of the flora of Cape Portland during our visit there in November.

In addition, there are links to articles that may be of interest to members, and an interesting poem submitted by Debbie Searle.

I hope everyone enjoys a relaxing festive season, and I look forward to seeing many of you at our first outing for 2023, which will be in Bridport in February (details to be sent by email).

FLINDERS FORAY

Article and photos by Jill van den Bosch

Three hundred and fifty kilometres from Adelaide, and stretching 400 km north from Port Augusta to Arkaroola, lie the Flinders Ranges, a series of small mountains, tree-lined gorges and rugged quartzite cliffs. The mountains began as sediments laid down on the seabed about one billion years ago, making this one of the most ancient landscapes in the world. Over the following millions of years, huge forces within the earth's crust caused these rocks to be uplifted, buckled, folded and fractured to become the amazing

landscape we know now.

The Flinders Ranges have been of great significance to Aboriginal peoples for thousands of years, and more recently to geologists, naturalists, botanists, bird-watchers, artists, bushwalkers, photographers ... just about everyone, in fact. The famous Hans Heysen trail passes through there.

Three national parks lie within the Flinders Ranges. I spent six wonderful days based in Wilpena Pound—Adnyamathanha Country, in the Ikara/Flinders Ranges Park—and other nearby areas, doing day walks. There is much to tell, so I have selected several highlights.

We spent a morning with an Aboriginal Elder hearing about language, as well as the story and significance of Ikara to the Adnyamathanha people. Ikara means *meeting place*, and because of its amphitheatre or 'pound' shape, the area was a natural gathering place for tribes to meet for ceremonies, to trade, and to discuss rules for life.

The Dreaming story ('Yura muda') tells of two serpents—Akurras—who tracked Yurlu, the old Kingfisher man, from the north to a ceremony at Ikara. After eating everyone except Yurlu and two initiates, the Akurras then curled up to sleep, giving the pound its form. The story is depicted using charcoal and ochre in the Arkaroo Cave.

Following the arrival of Europeans, the whole Flinders Ranges area was leased for grazing and cropping. However, as droughts came and went, so did the farmers, leaving behind much evidence of their occupation—homesteads, fencing, disintegrating farm buildings, and many weeds. The weeds include Rosy Dock (*Rumex vesicarius*, aka *Acetosa vesicaria*), various cactus species, and Paterson's Curse (*Echium plantagineum*), which, despite its name, did look lovely with its blue blooms. Fortunately, there is an intensive Natural Resource Management weed control and eradication project in action.



Arkaroo Cave Art

My visit was in early September, so between the timing and three years of good rains, the whole area was green and starting to exhibit its wildflower display. The dominant colour was yellow, from dainty *Senna artemisioides* (silver cassia) shrubs, and *Acacia ligulata* (umbrella wattle), along with the rich reds through to greens of various *Dodonaea* species (hop-bush). It was sometimes hard to believe that we weren't in the hills of Greece when we wandered through forests of the native white cypress (*Callitris glaucophylla*), and of course, the riverbeds were dominated by the magnificent River Red



Senna, Acacia and Xanthorrhoea in flower

Gums (*Eucalyptus camaldulensis*).

Wedge-tailed Eagles (*Aquila audax*), Kites (genus *Haliastur*), and Kestrels (*Falco cenchroides*) were a frequent sight over the open spinifex plains. We watched one Kite drop from the sky, grab a small creature and rise up again, only to be harried by two Kestrels. They disappeared before we saw the result.



An example of uplifting and tilting in Brachina Gorge

We were lucky enough to spot a small group of the endangered Yellow-footed Rock-wallaby (*Petrogale xanthopus*), which inhabit steep, rocky outcrops and slopes, of which there is an abundance in the Flinders Ranges.

Unfortunately, goats are rife and inhabit the same areas; they are just one of many threats to this dainty little creature. It was

still too cool for reptiles to emerge from their winter hibernation.

We spent a whole day exploring Brachina Gorge, which is one of the best examples in the world of sedimentary deposition. This gorge formed here between about 800 million and 500 million years ago. Sandy and silty sediments were deposited into an extensive marine basin; these then hardened, were pushed up and about, and now erosion reveals the evidence of this.

Fossilised sections of seabed were frequently seen, as was debris from the impact of a huge meteorite that fell to earth 300 km to the west of here about 600 million years ago. Its area of impact was 30 km wide and several km deep. Had there been significant life on land at the time, it would probably have been completely obliterated by the dust cloud created by the impact.

There is more to tell, but I will conclude by saying there is much to see, hear, explore, learn and enjoy in the Flinders Ranges and its national parks. If you haven't been there already, put it on your list!

BOOK REVIEW – SEA COUNTRY BY AUNTIE PATSY CAMERON

Reviewed by Lou Brooker

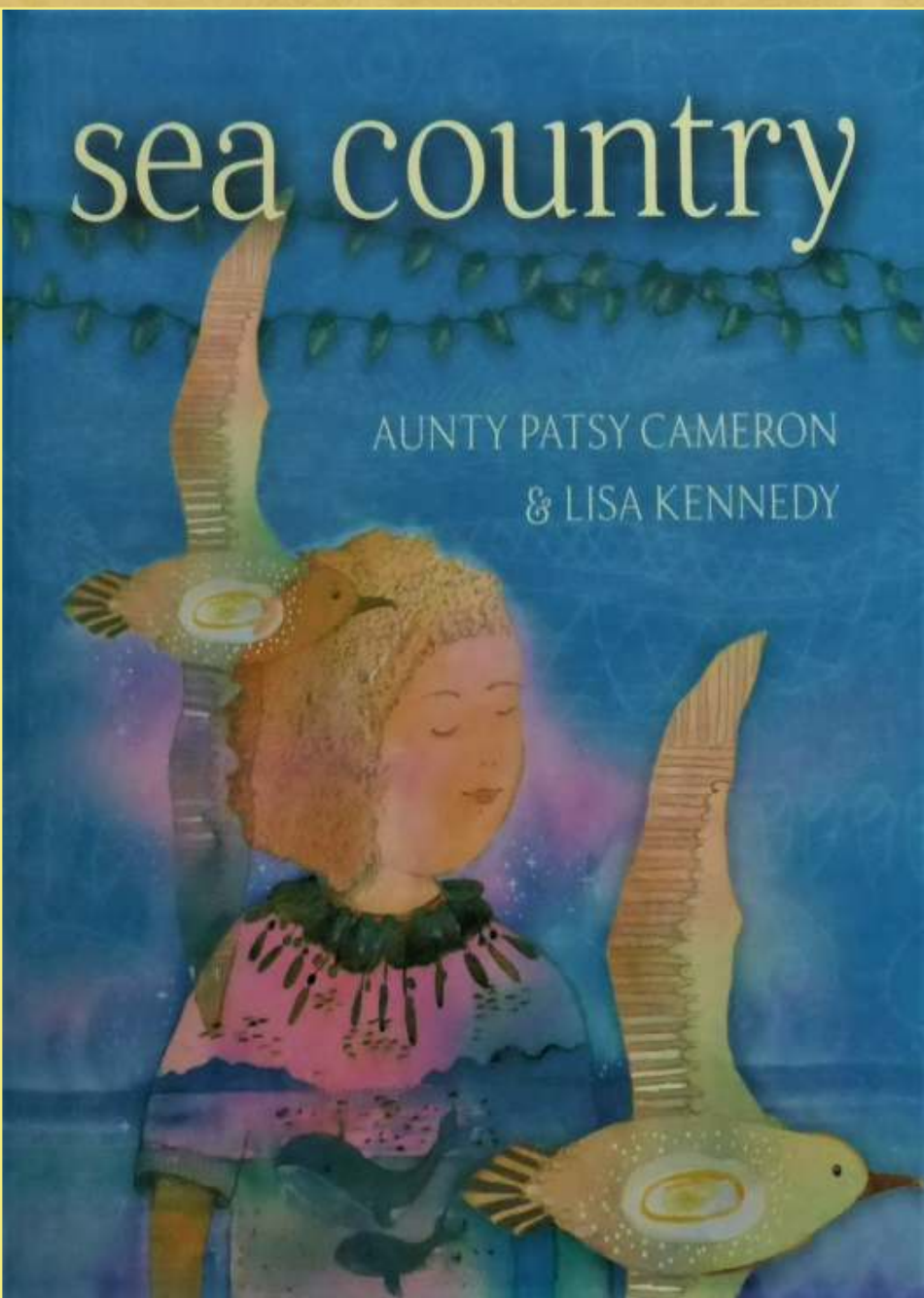
Sea Country is a delightful children's picture-book that is for sale in the Bridport Visitors Pavilion. Aimed at an early childhood audience, it is suitable to be read aloud or independently. The book can certainly promote great conversations.

Written by respected local Elder, Auntie Patsy Cameron, it portrays the remembered life of her people as she grew up on Flinders Island. The book is a very successful collaboration between the author and the illustrator Lisa Kennedy, also a descendant of the great North Eastern clan leader and warrior,

Mannalargenna. Together, author and illustrator reveal the wonders of Sea Country.

Aunty Patsy says the beach was their playground, but it also provided shellfish for food and for their traditional necklace-making, a cultural skill she practises to this day.

As a way of explaining how close her people were to Country, Aunty Patsy talks about how to watch for the signs nature provides, such as rings around the moon, boobyallas flowering, and mutton birds arriving back from their migrations. These explanations are done in a very gentle, personal, tender way, resulting in a beautiful text which is both clear and simple, yet evocative. For example, the paper nautilus shells 'smelled like the deepest ocean'.



Front cover of *Sea Country* by Auntie Patsy Cameron, illustrated by Lisa Kennedy

heritage and culture.

Sea Country is available at the Visitors Pavilion in Bridport, but if supplies run out, please add your name to the waiting list for the next print run.

Alongside the text are the stunning illustrations by Lisa Kennedy. They are done in a delicate way and using many different styles. There are intricate collages, labels, maps, diagrams, and close-up drawings, presented in subtle colours.

I feel as though there is so much detail in the illustrations that children will find something different each time they return to the book. The front cover shows the creative interweaving of many features of the life experienced by Aboriginals on Flinders Island.

Much of this is familiar territory for those who live at the seaside, but in drawing it to our attention, it seems that Aunty Patsy is encouraging us all to learn to love Country as she does, and in so doing we may learn to care for it more.

The book reflects Aunty Patsy's quiet way of using her voice and perspective to create an understanding of Tasmanian Aboriginal history,

OBSERVATIONS ON SOME PLANTS AT TREGARON LAGOON, CAPE PORTLAND

Text and photos by Lou Brooker

Editorial Note: *Our November activity was a walk near Tregaron Lagoon, at Cape Portland. An article about this is in the December newsletter. Lou Brooker took special interest in some plants we saw, and conducted further research on them. This article is the result of her research.*

To begin with, our wanderings at Cape Portland were spent on saline sedgeland and aquatic herb-fields. [These are represented in TasVeg as AHS & ARS.]



Broad view of aquatic herbfield and saline sedgeland – Tregaron Lagoon, Cape Portland

Seen here in the centre of the picture is a lentic wetland; the term *lentic* means the water is motionless. This usually refers to a lake or pond. The water is brackish and probably salty to taste. Unlike a saltmarsh, these wetlands are not inundated by sea water, though many of the species found here are common to both lentic wetlands and saltmarshes.

On the edges of the water are the aquatic herb-fields and the plant communities that can live in hypersaline water. These herb-fields are fairly species-poor, and require inundation with fresh water for most of the year, but can survive periodic drying out. When the wetland dries out for extended periods, the aquatic species are reduced to vegetative tubers that survive in the wetland soil.

In the foreground of the picture are the saline sedgeland which can also include some of the herbs. The coastal forest and woodland consists of *Eucalyptus amygdalina* (black peppermint).

We saw species that are fairly well known to us—*Mimulus repens* (the creeping monkey flower); *Leptinella reptans* (yellow water buttons); *Samolus repens* (creeping brookweed); and *Spergularia tasmanica* (greater sea spurrey).



***Mimulus repens* (creeping monkey flower)**



***Samolus repens* (creeping brookweed)**

Those with sharp eyesight spotted *Cuscuta tasmanica* (the rare golden dodder), and it is this species that I chose to find out more about. A strange, twining creeper, its distinct yellow-orange thread-like stems

contain no leaves. Well, that is almost true! The leaves are actually reduced to small scales, which are barely visible. It can be seen as the yellow in the picture shown below right, forming colonies and covering extensive areas.



Spargularia tasmanica (greater sea spurrey)



Golden threads of *Cuscuta tasmanica* (golden dodder) weaving across its host, *Goodenia radicans*

Golden dodder looks similar to a *Cassytha* species seen in coastal heathlands, but I was informed by James Wood—botanist at the Tasmanian Herbarium—that the dodder is in a different genus. Here is his reply to my enquiry:

Cuscuta and *Cassytha* provide a great example of convergent evolution. Species in the genus *Cassytha* are members of the Lauraceae (Laurel family), whereas *Cuscuta* species are members of the Convolvulaceae (Bindweed family). These families are NOT closely related. The most obvious difference (to me) between the two genera are the seeds and fruits. *Cuscuta* species typically disperse true seeds (up to four) from a dry capsule, whereas *Cassytha* species develop a single seeded indehiscent nut surrounded by a fleshy hypanthium similar to a rose hip in structure. Interestingly, both genera have physically dormant (impermeable to water) 'seeds', but the water barrier is formed by the seed coat in *Cuscuta*, and by the mesocarp in *Cassytha*.

The dodder is a parasitic plant, seen in the pictures above right and to the right being hosted by *Goodenia radicans* [which I remembered as *Selleria radicans*], but it parasitises a range of species. Being a parasite means it benefits from its host—in this case by obtaining all or part of its nutrition from the host—while harming the host, in some cases causing extreme damage. The defining structural feature of a parasitic plant is the haustorium, a specialised organ that penetrates the host and forms a vascular union between the plants. The haustorium is a short, root-like structure that grows into or around the host to absorb water or nutrients.



Cuscuta tasmanica (golden dodder)

SUGGESTED ADDITIONAL READING (FROM JAY WILSON)

What the World's Largest Organism Reveals About Fires and Forest Health

<https://tinyurl.com/yckh9dww>

River Garden Diaries: The Mind is a Garden

<https://wonderground.press/culture/river-garden-diaries-the-mind-is-a-garden/>

Talking magpies, grieving tawny frogmouths and canny galahs

<https://www.abc.net.au/radio/programs/conversations/gisela-kaplan-rpt/12294122>

POEM SUBMITTED BY DEBBIE SEARLE

Debbie found the following hand-written poem, whose author is unknown, in the Parks hut at Melaleuca:

May your mornings be enlivened by the scent of *Coprosma hirtella*.

May your lives be brightened by the colours of *Neophrema chrysogaster*.

May the songs in your hearts match that of *Colluricincla harmonica*.

May the music of *Lomatia tinctoria* accompany your wanderings.

May your beds be warmed by *Bedfordia linearis*.

May a faithful *Pomaderris elliptica* one day be a loyal companion.

May *Patersonia fragilis* wave merrily in the breeze as you pass.

May your tables always be laden with *Pimelea sericea*, *Bellenden montana*, *Tasmania lanceolata*,
Cyathodes glauca, and the sweetness of *Rubus gunnianus*.

May your sight remain as keen as *Euphrasia gibbsiae*.

May your winters be filled with *Helichrysum milliganii*.

And may each and every Christmas be accompanied by *Blandfordia punicea*.



***Colluricincla harmonica* (Grey Shrike Thrush) – Susan McLenaghan**



***Bellenden montana* (mountain rocket) – Ross Coad**