



Friends of Pallisters Reserve Inc.



Pallisters Reserve is a 254 ha wetland reserve at 457 Masons Road, Orford, owned by Trust for Nature, and managed by the Friends of Pallisters Reserve Inc. Established January 1990

**August
2023**

Next meeting: Sunday, August 27, 2023

10am: Working Bee

noon: Lunch

12:30pm: Meeting

August Working Bee Objectives

- Koala count – bring binoculars
- Mowing
- Planting
- Weed spraying?

Sighted at Barkers Road

Lisette Mill reports a couple of unusual sightings made just around the corner from Pallisters, at the Basalt-to-Bay project site along Barkers Rd.

In mid-July she photographed a golfball-sized slime mould: pure white and nacreous – like the interior of a pearl shell – it has been identified as *Reticularia lycoperdon* – False Puffball.

Not an animal, nor a plant, nor a fungus, *Reticularia l.* has two phases to its life cycle. First there is an actively feeding *plasmodial* stage where single cells fuse to form a single “super-cell” consisting of thousands of cell nuclei dispersed throughout cytoplasm within a single cellular membrane wall.

This develops into the fruiting *sporangial* phase – snapped by Lisette – which eventually splits to expose a mass of brown spores to be dispersed by wind and rain until only a few delicate threads remain.



Reticularia lycoperdon
– False Puffball
(Photo Lisette Mill)

Reticularia l. is also observed throughout Europe and in Mexico, where large *sporangial* fruit are wrapped in a leaf of maize and and, after cooking in campfire ashes for 20-40 minutes, develop a mozzarella-like consistency. Eaten with corn tortillas, it is said to taste like almonds and mushrooms.

Irrespective of its wide global distribution, few records exist for *Reticularia l.* in Victoria, and these are mostly concentrated around Melbourne. Indeed, prior to Lisette’s observation, *Reticularia l.* was unrecorded in Western Victoria.

On August 10 Lisette observed a Water Ribbon plant in flower at Barkers Road. Water Ribbons are common and widespread, yet their large variation in form and habit can make them tricky to identify to species level. The Water Ribbon *Cycnogeton Procerum* grows at Pallisters.



Water Ribbon –
(Photo Lisette Mill)

Lisette’s early bloomer is unusual: Water Ribbons do not generally flower until November.

Water Ribbons perform an important ecological function. Very often they are seen growing in slow-moving or still water with their long flat leaves extended across the water surface. In this habit the leaves are effective in absorbing sunlight, oxygenating and purifying the water and thus forming the basis of a rich and diverse ecosystem that includes macro-invertebrates, amphibians, fish, and birds.

The tuberous roots of Water Ribbons are consumed as bush tucker by First Nations Peoples.

Tree Planting

The 2000 seedlings funded by Pacific Hydro are about to be collected from the Coddington and Worn Gunditj Nurseries. Lisette Mill has initiated a visit from Gilson College students in early September to assist with planting of these seedlings at Pallisters. The participation of Friends of Pallisters in this effort is a topic for discussion at the upcoming August meeting.

Meetings are held at the Reserve; usually every fourth Sunday except July and December.

Co-leaders: Julia Schlapp 0427 778 265 & Anthony Leddin 0408 333 046 Sec./Treasurer: Trevor Kennedy 5565 8692;

Minute Sec.: Nick Glover; Newsletter Editor: Ross Hicks (pallisters_newsletter@proton.me).

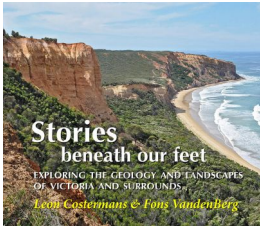
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<http://www.apswarnambool.org.au/pallisters/>

<http://www.facebook.com/pallisters>

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New Book

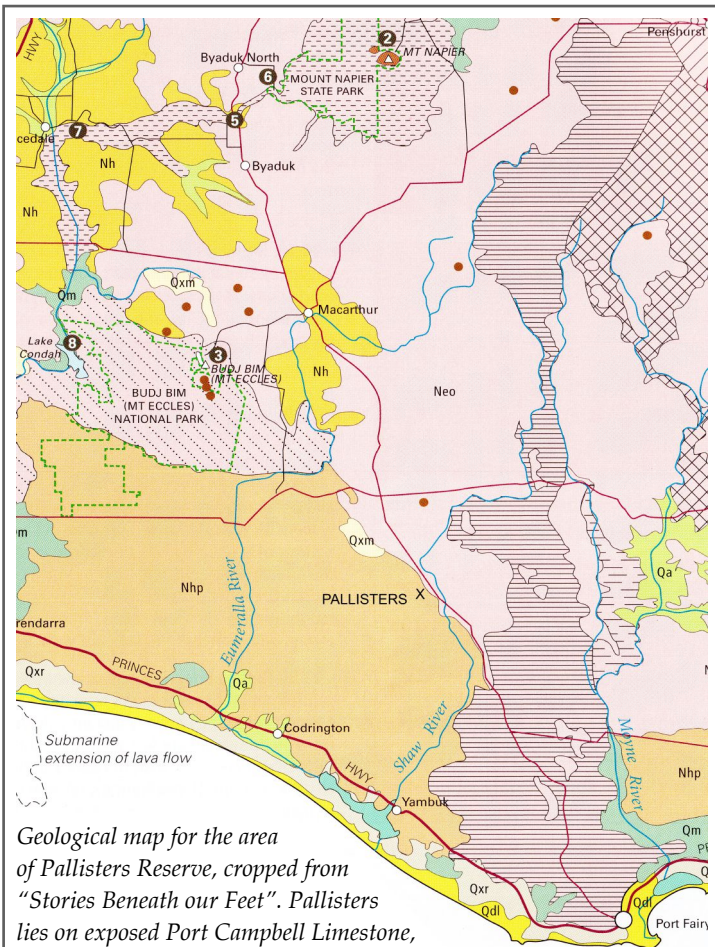
Stories Beneath our Feet: exploring the Geology and Landscapes of Victoria and Surrounds

by

Leon Costermans & Fons VandenBerg

Many of us have on our bookshelves a copy of Costermans' *Native Trees and Shrubs of South-East Australia*, first published in 1981. Although usually identified as a botanist, Costermans' degree from the University of Melbourne is in geology and geomorphology. Now, 40 years on from *Native Trees...*, Costermans has returned to his geologist roots by teaming up with Fons VandenBerg to write an encyclopaedic volume not only about the geological origins of the diverse landscapes in south-eastern Australia but also how these landscapes have influenced ecosystems.

Much of the first half of this 660-page hard-bound book introduces the foundations of geology, covering the essential ideas of tectonics and volcanism, strata and folding, sedimentation and metamorphism, weathering and erosion, as well as ground-water and coastline dynamics.

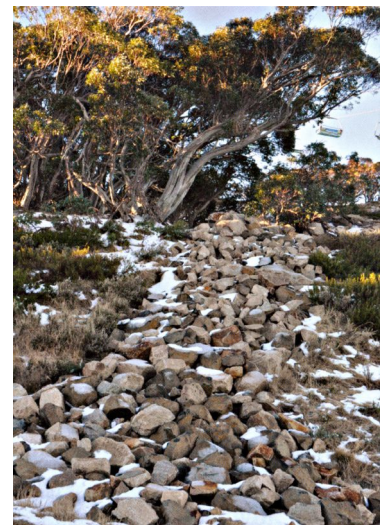


Geological map for the area of Pallisters Reserve, cropped from "Stories Beneath our Feet". Pallisters lies on exposed Port Campbell Limestone, laid down when the region was inundated by the sea 16–8 million years ago. Indicated in pink are subsequent (5–1 My) overlying basalt lava flows, now heavily eroded. Pallisters lies about 12 km SE of the newer Budj Bim lava flow (37,000 y) and about 8 km W of the (300,000 y) lava flow from Mt. Rouse to Port Fairy.

The second half of the book provides examples on how these processes are expressed throughout Victoria, which is divided into 8 different regions. Our part of the world is well covered in the chapters on the Southwest Coast and Newer Volcanics Province. Pallisters members will be familiar with many of the sites discussed.

Two decades in the making, this book contains over 1870 high quality photos, maps, and diagrams; it has a comprehensive glossary, user-friendly indexes and supplementary descriptive lists. It would be a valuable and accessible resource for any curious travellers interested in what lies beneath their feet. The extracts reproduced here serve to illustrate the breadth of the material covered in the book.

Fig. 17.6 from "Stories beneath our feet":
The critically endangered Mountain Pygmy-possum inhabits just a few rocky subalpine to alpine environments. Females occupy higher sites, but the males need basalt boulder corridors to reach them for mating. Because ski trails and roads can be barriers, artificial boulder corridors have been created in some places, as here at Mt Buller.



For SW Victoria, *Stories beneath our feet* complements the indispensable *Plants of the Great South West* by Pallisters member Kevin Sparrow and the Australian Plants Society. There is much overlap between the ecological perspective of the two books, with the concentration of one primarily on geology, while the other is on plants.

Stories Beneath our Feet is available by mail-order from <https://mucklefordbooks.com>. Given its comprehensive scholarship and production standards, it is good value at \$98, including postage and handling.

What are the chances of future eruptions? (p.434)

When one looks at the history of eruptions over many millions of years, and given that the most recent eruptions were only a matter of thousands of years ago, it is hard to believe that we have reached the end of southeastern Australia's volcanic story (though the trend in compositional change in the basalts suggests a waning of activity in the last couple of million years). In fact, based on the possible time between eruptions (calculations suggest that on average there has been an eruption every 10–20 thousand years), and considering that the youngest are in South Australia, it is suggested that Victoria could be due for another one. It is unlikely that any existing volcano would re-erupt, but there is presently no way of predicting where such an eruption might occur, or in what form. Depending on the type of eruption, a large eruption near a city such as Melbourne ...