

U3A Port Fairy
Science...naturally!
South Beach – Self-guided nature walk

John Miller April 2020



This is the fourth in a series of self-guided walks around Port Fairy to help relieve the tedium of COVID-19. The aim of the walks is to provide enjoyable outdoor activities that can be undertaken either by yourself or your family (with appropriate COVID-19 separation and other precautions). I hope you enjoy them.

This walk introduces you to a few of the natural features of South Beach. It is a bit like a treasure hunt – locations are not marked on the ground so you will need to keep your eyes peeled for the plants and other features illustrated.

Start the walk at the steps down to the beach opposite the toilet block on Ocean Drive, about 200 m west of the James Street junction. The return trip is either to retrace your steps or walk back into town via Sandy Cove Reserve or the Southcombe Caravan Park.

The first thing you will see from the top of the steps is the stunning and awe-inspiring vista of the Southern Ocean. Looking due south out to sea, there is nothing solid for over 3,000 km until you hit the ice of Antarctica. No wonder such great “things” wash up on this beach.

As you arrive on the beach you will see the crescent of jet-black basalt rocks that mark the end point of the lava flow from the Mt Rouse volcano at Peshurst, 60 km to the north. The leading (seaward) edge of the rocks has what appears to be angled strata. Maybe this is the top of a tumulus (bubble of gas pushing the rocks up before they cooled) or maybe it is the natural roll of a leading edge. Whatever the reason, the weathered basalt makes great habitat for small snails, like the Banded Australwink and chitons (molluscs with eight shell plates).



Basalt strata



Banded Australwink



Chiton

The beach is almost always strewn with copious amounts of seaweeds. Two of the most common and easily recognised are the dark brown Bull Kelp *Durvillaea potatorum* with its very broad, leathery stems and Crayweed *Phyllospora comosa* with its narrow, flattened stems and yellowish coloured floats. On the beach the seaweed is eaten by little amphipod crustaceans, known as Sand Hoppers, which in turn are eaten by the hungry beach birds.



Silver Gull in the seaweed



Crayweed



Ruddy Turnstones prowling for hoppers

Other things that regularly wash up on the wild beach include Sea Cucumbers and Sea Tulips which, despite their names and appearance are actually animals; the blue By-the-wind-sailors which are actually a colony of animals a bit like a jellyfish; and, white cuttlefish “bones”.



Sea cucumber



Sea Tulip



By-the-wind-sailor



Cuttlefish bone



As you walk on to the rocks and around the point at the eastern end of the beach you enter a different world. Many of the rocks are clothed in a bright orange lichen (pronounced “liken”) (*Caloplaca* species) with some splodges of grey lichen (*Lecanora* species) making a strong contrast with the black basalt. Lichen is a symbiotic association of an alga (the greenish photosynthesising bit) and a fungus (the bit that gives it shape and attachment to rocks, trees etc). After dry periods the *Caloplaca* sp. is a vivid orange but after rain it takes on a more greenish look as the alga activates and starts photosynthesising.

The low grassy vegetation is dominated by introduced plants including Marram Grass *Ammophila arenaria* which was planted in Port Fairy to stabilise the dunes, Sea Spurge *Euphorbia paralias*, which was introduced to Western Australia about 70 years ago and has since invaded most of the southern coast on the prevailing currents, and the small rosetted Sicilian Sea-lavender *Limonium hyblaenum* with its dainty pink flowers. Port Fairy is its main stronghold in Victoria and it now covers large areas along the walking track near.



Sea Spurge



Sicilian Sea-lavender



Sicilian Sea-lavender infestation

Fortunately, there are still some native plants remaining including the low growing but edible Sea Celery *Apium prostratum*; the small yellowish Trailing Hemichroa *Hemichroa pentandra* poking its head up amongst the Sicilian Sea-lavender and the Australian Salt-grass *Distichlis distichifolium*. All of these species are adapted to the salty environment.



Sea Celery



Trailing Hemichroa amongst
the Sicilian Sea-lavender



Australian Salt-grass

There are many more sea creatures, plants and other good stuff to discover along the trail so take your time...and your hand lens.

If you find a plant, shell, bird, whatever, and want to know what it is, email me a picture and a short description and I will endeavour to work it out for you. jmiller3350@gmail.com

Please feel free to share this with anyone else who might enjoy the walk.