

Broulee Island treasure hunt



Activity checklist:

- ✓ Activity sheets
- ✓ Pencil
- ✓ Sun protection (hat, sunscreen and sunglasses)
- ✓ Container or bag to collect any plastic washed ashore

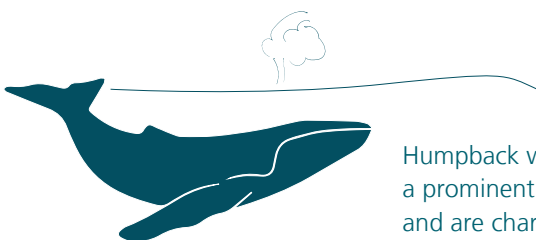
Broulee Island sits within the traditional Aboriginal country of the Yuin people, whose boundaries stretch the length of the south east coast of NSW and continue west to the Great Dividing Range. The local Yuin are known as Walbanja. The plant and animal resources of Broulee Island, together with those of the adjoining land and sea, were and still are utilised by Aboriginal people for food, shelter, decoration, ceremonial and medicinal purposes.

The island also sits within a sanctuary zone of the Batemans Marine Park – providing a great opportunity to improve public understanding and enjoyment of the unique marine environment while helping conserve marine life for present and future generations. The

tombolo – or sand bar – currently connecting Broulee Island to the mainland is periodically cut by waves, only to be reconnected when sand accumulates again. The tombolo was in place when surveyed and sketched by Thomas Florance in 1828 and remained so until 1873 when a severe storm cleared vegetation on the spit and the island was cut from the mainland. Since then, it has repeatedly reformed and then breached, with the most recent breaches in 1966, 1969, 1971, 1974, 1981 and 1988.

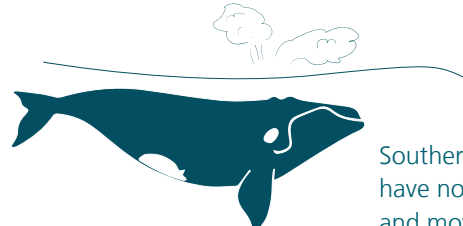
If you're visiting between June and October be sure to keep your eye out to sea. You may be lucky enough to see passing humpback and southern right whales – they can sometimes come quite close to shore.

Humpback whales



Humpback whales have a prominent dorsal fin and are characterised by a 'hump' back.

Southern right whales



Southern right whales have no dorsal fin and move slowly close to shore.

While the coastal and marine environments are beautiful, they can be dangerous. Take care while walking and remind children to be wary of slippery rocks or broken glass. Make sure they know how to recognise venomous creatures like bluebottles and blue-ringed octopuses.

Spot it at low tide! (tick the checkbox)

Walk from the surf club heading east along the rock platform to the sandy beach of Shark Bay where you see a sign that says, 'Broulee Island Nature Reserve'. Allow approximately one hour to continue around the southern side of the island and see if you can find the marine life and features below.

Waratah anemone (closed)



Waratah anemone (open)



The waratah anemone, with tentacles and mouth region drawn in on the left – make it look like a blob of jelly with a hole in the middle. Its tentacles are extended on the right. Anemones are not stuck to the spot but move very slowly over rocks to find food or attack other anemones.

Chiton



Chitons are primitive molluscs – the same group that includes snails, squid and other shellfish, like scallops. They have eight protective armour plates and can live up to 20 years or more. Chitons are a favourite food of sooty oystercatchers. Shellfish were, and still are, part of the local Aboriginal people's diet.

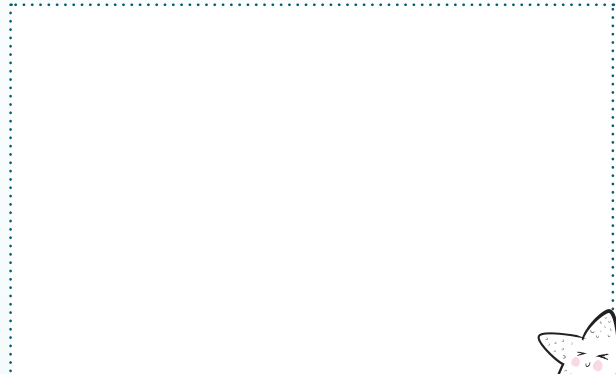
How many chitons can you find?



Sooty oystercatcher



Draw an oystercatcher



Sooty oystercatchers are plump black birds with bright red bills. They forage along the shore and on the rock platform and make a distinct loud 'hueep' call in flight or when disturbed. Oysters, limpets and mussels are a favourite food of sooty oystercatchers.

Spot it at low tide (Continued)

3.

On your walk you might find dead short-tailed shearwaters – also known as muttonbirds – washed up on the rocks or beach. Usually the birds have died from exhaustion after flying an incredible 30,000 kilometres to our region from the Arctic in the northern hemisphere. Their eggs were harvested by Aboriginal people, but only one egg from each nest was taken to ensure ongoing food for future generations.

You'll see a lot of pink algae in the rock pools on the north side of the island. This is coralline algae and will either have erect fronds, like feathers, or encrust the rock like pink paint. The feathery kind is a favourite of feeding adult abalone. The surf break here is called 'Pink Rocks' because of this algae.

Erect coralline algae



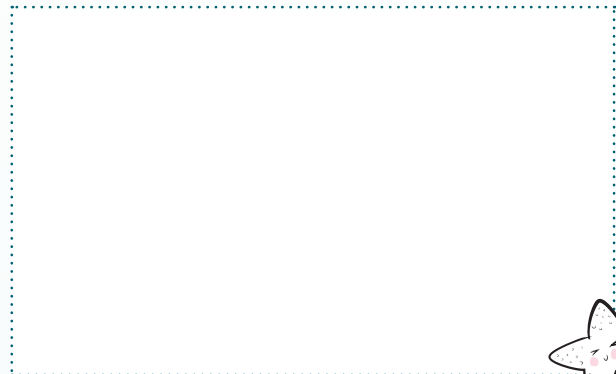
Encrusting coralline algae



Neptune's necklace



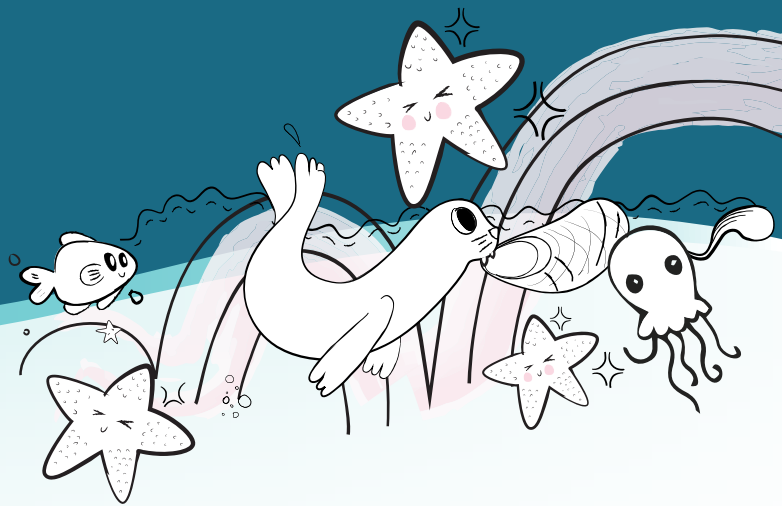
Draw some Neptune's necklace



The dense fronds of Neptune's necklace – made up of strings of hollow, water-filled beads – provide a protective habitat for molluscs, worms and small crustaceans. Although this distinctive algae may be exposed to the sun at low tide, it remains moist and protected under the dense mat of fronds. When you lift them up from the rock platform, some snails will retreat inside their shell and close their operculum.



This hard protective 'door' grows with the snail to ensure a snug fit with the shell. You can often find operculum in Aboriginal middens – when the snail was cooked the operculum would open with the slug-like animal attached, easily removed and then eaten.



There are so many interesting things to find. List or draw your favourites:





How to be a citizen scientist

You can help save marine life by becoming a citizen scientist. Discarded plastic or fishing tackle can injure or kill marine life – we need to learn more about litter so we can stop it at the source and that's where you can help. It's easy to download Tangaroa Blue's Australian Marine Debris Initiative App from www.tangaroablue.org/resources/clean-up-data-collection/amdi-app then record the type of any litter you find.

For more information or to get involved visit www.esc.nsw.gov.au/living-in/environment/

If you see illegal activity in the marine park, contact Batemans Marine Park office on 1800 043 536 or log it on the NSW Fisheries website www.dpi.nsw.gov.au/fishing/compliance/report-illegal-activity

This environmental treasure hunt was developed by Eurobodalla Council with assistance from Minga Aboriginal Cultural Services.