

Heath plants

just the right shape to survive



Heaths are low growing vegetation communities that reach up to two metres high. Heath plants have adapted to survive moisture stress, fire, salt-laden wind and nutrient poor soils. They have high oil, resin and carbon content in their leaves (sclerophyllous) that makes them very flammable.

Graminoid heath is characterised by grasses (Gramineae or Poaceae) and grass-like plants such as sedges (Cyperaceae) and rushes (Juncaceae). The vegetation is stunted due to a lack of nutrients in the soil and the harsh conditions on the coast.

The Wallum Bottlebrush, *Callistemon pachyphyllus*, has adapted to survive the heath by growing only to about 1.5 metres. Its flowers provide food for nectar-eating birds in spring.



Epacris are shrubs that have a spectacular display of tubular or bell-shaped flowers during winter and spring. They have adapted to the harsh salt wind by minimising the area of their spiky leaves. The leaves of the Coral Heath, *Epacris microphylla*, are heart-shaped and only a few millimetres wide. Masses of small white flowers are displayed along the stem.



Banksias have adapted to fire. Lignotubers, a woody swelling that is partly or wholly underground, can resprout after fire. Woody fruit capsules protect banksia seeds from fire, yet the

heat of the fire also causes the seeds to release, where they can germinate in the burnt areas and be fertilised by ash from the fire.



Common Sundew, *Drosera spatulata*, is a carnivorous plant that can catch and digest insects to supplement its intake of soil nutrients. It is found in moist, open sunny patches and flowers in the spring and summer.

The Tongue Orchid, *Cryptostylis subulata*, is a terrestrial orchid that has thick leathery leaves and produces sprays of green and dark red flowers in summer. Tongue Orchids are found at ground level where they provide shade amongst their roots for fungi—in return the fungi provides the orchids with additional nutrients (symbiosis).



The Dwarf Heath Casuarina, *Allocasuarina defungens*, is a member of the she-oak family. Due to its limited range and scarcity, it is listed as a threatened plant in NSW.



The Pinnate Boronia, *Boronia pinnata*, is a low-growing plant with clusters of pink and white flowers. Its leaves have aromatic oils that help it retain moisture, deter insect attack and discourage animals from eating them.



Khappinghat

Walks

Moor Creek walk

This walk starts in a coastal heath swamp and passes into a coastal swamp forest—mostly eucalypts, paperbarks and some cabbage palms, and then south along Moor Creek. A fork just north of the footbridge turns east and the walk follows the edge of taller heath back to the road. Otherwise, continue south across the footbridge and then east back to the road.

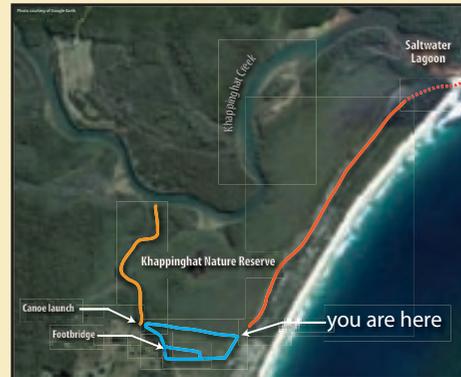
Khappinghat Creek walk

From the canoe launch at Moor Creek, an unformed track follows the east bank of Moor Creek to the north through Khappinghat Nature Reserve until it reaches Khappinghat Creek. The track is difficult to follow and is impassable after rain.

It is possible to canoe along Moor Creek to Khappinghat Creek, but the water level is often low and there are some obstacles. From the end of Moor Creek it is an easy one hour paddle through magnificent coastal scenery to Saltwater Lagoon.

Saltwater walk

To the east of this sign is the old mining road. Sandmining of the coastal strip ended in about 1995. While you can walk the old road, it is difficult by bicycle as it is very sandy in places. The old road goes most of the way to Saltwater Lagoon, but you need to walk the last part on the beach. It is exposed and hot in summer.



Animals

More than 30 species of birds are found in coastal heaths. Many of these are nectar-eaters that only appear when the heath is in full nectar production. Few birds nest in heaths because the heath has less food than the nearby forests and offers only limited protection.



The Red-browed Finch, *Neochmia temporalis*, is highly sociable and is usually seen in small flocks, which move between the forest, the creek and the nearby heath. They make a repeated, piping high-pitched "ssee-ssee". When disturbed, a flock will disperse noisily and regroup nearby. Red-browed Finches mostly eat grass and sedge seed. They build dome-shaped nests 2 to 3 metres above the ground in dense shrubs.

The Eastern Spinebill, *Acanthorhynchus tenuirostris*, is a small active honeyeater with a long bill and serrated tips on a tubular tongue—well suited for probing flowers for nectar. Spinebills flutter about the heath non-stop, swooping and zigzagging from flower to flower, close to the ground. In spring and summer, they build cup nests of grass and plant fibre, perched in dense shrubs. They migrate to inland mountain areas during winter.



The Whistling Kite, *Haliastur spheurnus*, is a medium-sized raptor (bird of prey) with a shaggy appearance. It has a light brown head and underparts, with pale streaks, and dark sandy-brown wings with paler undersides. Whistling Kites are found in woodlands, open country and wetlands and eat small mammals, birds, fish and insects. They build a bulky nest platform in a tall tree that they can reuse, which grows larger over time. Whistling Kites may breed two or three times a year.

The Black Wallaby, *Wallabia bicolor*, is also called the Swamp Wallaby. It is predominately dark and stocky with coarse fur that protects it from the heath vegetation. The Swamp Wallaby is a specialised browser that feeds on shrubs, ferns, sedges and some grasses. They hop with head and shoulders low, the tail roughly horizontal, to stay at or near the height of the heath.



The Jacky Dragon, *Amphibolurus muricatus*, is a grey to brown lizard with spines around its head. It grows up to 30 centimetres, most of which is tail. They are very fast and flee when disturbed. They are sometimes mistaken for frill-necked lizards.

The Yellow-faced Whip Snake, *Demansia psammophis*, is a slender and fast moving snake. It grows up to 80 centimetres, is a pale olive or bluish grey and has black marks under large yellow-rimmed eyes. It is mildly venomous but very shy.



The Striped Rocket Frog, *Litoria nasuta*, is only about five centimetres but has very long legs and a streamlined snout. Something like a rocket, it can leap up to four metres in a single bound. You may hear a fast "yip-yip-yip-yip" when males call from spring to early autumn. Breeding increases after heavy rain.