

Ecological Communities

As well as protecting the fragile dunes, the plants growing here are the basis of a complex ecological community. The profile from the beach to the hind dune that extends beyond David Low Way presents an ecology that has developed as the dunes have stabilized and more fertile soils have formed.

Closest to the shoreline are the incipient dunes, which may be only a few years old. Here is a pioneer zone where hardy trailing plants and grasses colonise fresh sand. Ghost crabs feed on the detritus washed up by the tides. On the exposed front of the fore dunes, trees such as Casuarinas and Banksias can gain a hold, and low-growing herbs cover the sand. These not only further stabilise the sand dunes, but also provide organic matter to enrich the soil through leaf litter. The plants support insects, birds and some mammals. They, in turn, are food for snakes, goannas and carnivorous birds.

Further inland, a woodland community can flourish. Beach Bird's - eye trees, shaped and stunted by on-shore winds and salt spray form a canopy, and there are fewer ground-cover plants. On the hind dune, which has had time to establish itself over perhaps thousands of years, there is enough soil moisture for more complex woodland and rain-forest plants to survive.

Along the creek, fringed with Broad-leaved Paperbarks, are permanent waterholes. You're likely to hear the sharp crack of the Eastern Whipbird's call or the rustle of a Brush Turkey raking the leaf litter to build a nesting mound. You may be lucky enough to see a wallaby nibbling on a Casuarina seedling.

This community has in the past been threatened by weeds which disrupt plant germination and interrupt feeding cycles. Weeds invade mainly from the edges of the reserve, where it meets roads or private property. Property owners can help the natural community survive by choosing not to grow plants known to become problems, and ensuring that garden waste is not dumped in the bush.



Eastern Whipbird



Brush Turkey

Location information

The Peregian Creek interpretive walk is at Beach Access 49, branching off the walking path on the northern side of The Retreat resort. It has a companion walk about 700 m north, at Marcus Beach, Beach Access 47. You can reach this by walking along the beach, or by following the walking path across the creek to the end of Callitris Crescent, then walking along Tristiana Drive to the car park.



Our project has been supported by Noosa Council

Marcus Beach Bushcare Association mbba.org.au

PEREGIAN CREEK INTERPRETIVE WALK

BEACH ACCESS 49



Beach Access 49 traverses the Peregian Creek Reserve and the Peregian Beach Foreshore Reserve North, both of which are maintained by the Noosa Council. These reserves are designated in the Noosa Plan as both Coastal Protection Areas and Environmental Protection Areas.



This interpretive walk is an initiative of the Marcus Beach Bushcare Association. For more information, see our website at mbba.org.au.



Geological History

Coastal dunes build up when sand deposited on the beach by wave action is blown inland and stabilised by vegetation. The dunes grow when seas are calm, and are eroded when wave action is more intense.

The dunes in this area consist of a relatively thin layer of white sand, deposited from about 5 thousand years ago, overlying darker sand (often hardened into “coffee rock”) which was laid down about 100 thousand years ago.

As sea levels rise over the coming years, these dunes will be threatened by increased erosion.

What to look for at each station.

1. Entrance

Here, on the front face of a hind dune a certain degree of soil fertility has been established. You can see a mixture of eucalypt and other woodland species, including several Moreton Bay Ashes with their distinctive tessellated lower bark.



Trunk of Moreton Bay Ash

2. Hind Dune

There is quite a mixture of trees of various heights here, from the Moreton Bay Ashes to Tuckeroos and Acacias. Midyim bushes form a thick cover over the ground, while Monkey Rope Vine, which is important to the Blue Tiger butterfly, is seen climbing over many of the trees.



Blue Tiger on Monkey Vine

3. Hind dune - foredune transition

This is a transition ecology between the taller, more diversified nature of the hind dune and the hardier, wind and salt spray tolerant species of the foredune. The main species is Beach Bird's-eye, which forms a relatively dense low canopy that inhibits understory species except for Crinum Lilies, Shepherd's Crook Orchids and weeds, such as a Ground Asparagus and Gloriosa Lily.



Crinum Lily

4. The impact of weeds

Invasive weeds have been degrading local bushland for a number of years. The principal weed species here are Ground Asparagus, Singapore Daisy, Para Grass, Gloriosa Lilies and Broad-leafed Pepper Trees. A lot of the weeds have been removed from this area, but you can still see Ground Asparagus, and in summer, Gloriosa Lilies emerge from underground tubers that are difficult to remove. Further down the creek Para Grass and Singapore Daisy are still endeavouring to suppress the natural vegetation.



Gloriosa Lily - a weed

5. Creek Wetlands

The water in the creek and moist soils on its banks enable a rich diversity of species from reeds and sedges within the creek to paperbarks and Climbing Maidenhair Ferns on the banks. Much of the creek was infested by Singapore Daisy, but this has been almost totally cleared now.



Climbing Maidenhair Fern

6. The struggle for the foredunes

The incipient fore dunes inhabited with Spinifex Grass, vines and other ground cover is where the dune stabilisation process starts. Inland from here, more established foredunes support limited tree growth such as Beach Casuarina under which grows a multitude of herbaceous plants and grasses that further stabilise the dunes.



Beach Casuarina seed cones

