



## Imagination

### Dune Walk.

Imagine yourself standing on the beach with your back to the ocean facing the Darling Ranges to the east. Start walking forward. The first part of the dune system that you come to is the **foredune**. This is closest to the beach and is exposed to the wind and salt spray blowing in from the ocean. Feel the sand stinging the back of your legs as the wind whips it off the beach. Can you taste the salt on your skin? How are your eyes coping with the glare of the sun on the sand? How easy is it to walk on the sand as it falls away under your feet? The plants living here have adapted to these harsh conditions by growing low to the ground and are often covered in fine white or grey hairs for protection. Their roots spread out underneath the sand helping to stabilise it (hold together), preventing it from blowing away. If you walk a little further inland you may come to a slightly sheltered site just behind the foredune. Take a seat for a moment and observe what has happened to the wind and salt spray.

Okay, that's enough relaxing, let's continue the walk. As you move away from the foredune you will come across a slope taking you to the top of a rise. If your calf muscles are beginning to ache that's because the slope can be a bit steep. The first thing you will probably notice while up here is the wind! Pretty blowy isn't it? Now don't worry too much about your hair, you can fix that later. You are now on the **primary** dune, meaning the first dune. Have a look around and check out the plants. The plants growing here form what is called a shrub-land and are really tough. They often have a bad-hair day themselves, being shaped by the wind blowing from a particular direction. Can you now see why these plants are quite small and grow fairly close to the ground? The salt winds certainly help to keep them this way.

Let's get out of this wind! From the top of the primary dune it's a downhill run into the swale. These are the dips in between the ridges



of sand. You may have had a great time running or rolling down the slopes of the swales without knowing what they were. Pause for a moment or two at the bottom of the swale. These sheltered areas are protected from the wind and salt spray. What do you notice about the temperature here compared to on the foredune? Is it cooler or warmer? What has happened to the wind? Because the conditions here are much calmer the plants grow taller. Here the vegetation is often described as shrubby, with some species of plants forming dense thickets, which you may find difficult to walk through.

Just when you thought this walk was getting easy you will need to climb out of the protection of the swale and begin to walk up quite a steep slope. You are now heading for the **secondary** dune. These dunes tend to be more stable because they are further from the ocean and wind and are not so easily blown about. They are also held together by more plants. This part of the dune system is able to hold more plant nutrients (food) in the soil, so here the vegetation can get quite dense, forming a thicket of scrub more than 2 metres high.

You have now come to the end of the Quindalup dune system. Now all you need to think about is how you are going to get back on to the beach to pick up your towel without disturbing the plants and animals.