



FACTSHEET

# Coastal Habitat



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**Habitat type:** Coastal Habitat

**Habitat description:**

Rottnest's coastal habitat is made up of sandy beaches, sand dunes and limestone cliffs. This habitat is home to a variety of birds including Wedge-tailed Shearwaters, Cormorants, Terns and the impressive Osprey.

**Limestone Cliffs:**

Limestone is made from sea shell particles and mainly quartz sand which were blown into sand dunes. These dunes then solidified and the original overlapping curved layers of the dunes can be clearly seen today in the solid limestone.

Tamala limestone occurs over most of Rottnest and the oldest has been dated to 140,000 years old.

**Sand dunes:**

There are two types of sand dune:

1. Mobile sand dunes migrate across the land through the process of sand erosion. Sand is eroded from one side and deposited on the other. This is

mainly caused by strong on-shore winds. On the Rottnest mobile sand dunes, plants such as Beach Spinifex, Coastal Sword-sedge, Bower Spinach and Saltbush can be found.

2. Stationary dunes start out as mobile dunes and as they move inland, they become more stable. This helps plants to grow. This in turn further stabilises the dunes. Their movement is stopped as the presence of vegetation limits the sand erosion. Stable stationary sand dunes are found behind the mobile sand dunes and are generally older. Their soils are often more fertile and can therefore provide habitat for more plant types. Coastal Daisy Bush, Fan Flower and Seaberry Saltbush and are found on Rottnest's stable sand dunes and limestone cliffs.

**Blowouts:**

Blowouts are features which can be seen on Rottnest's sand dunes. Blowouts are saucer-shaped sandy depressions which are caused by wind erosion. They tend to form when wind erodes into patches of exposed

sand on dunes otherwise covered by plants. Blowouts are a natural process but human activities on the dunes make this phenomenon more likely to happen.

### Conservation Status:

Under the *Wildlife Conservation Act 1950*, a Priority 3 ecological community, 'Coastal Shrublands on Shallow Sands' has been identified as occurring within the south-eastern portion of the Island near Henrietta Rocks.

### Local species:

Beach Spinifex (*Spinifex longifolius*), Coastal Sword-sedge (*Lepidosperma gladiatum*), Bower Spinach (*Tetragonia implexicoma*), Saltbush (*Atriplex cinerea* and *A. isatidea*), Coastal Daisy Bush (*Olearia axillaris*), Fan Flower (*Scaevola crassifolia*), Seaberry Saltbush (*Rhagodia baccata*), Guichenotia ledifolia, Wedge-tailed Shearwaters (*Ardenna pacifica*), Little Pied Cormorant (*Microcarbo melanoleucos*), Eastern Osprey (*Pandion cristatus*), Crested Tern (*Thalasseus bergii*), Bridled Tern (*Onychoprion anaethetus*).

### Threats:

- Unnatural erosion (blowouts) caused by human activity
- Weed invasion
- Changes in sea level
- Storms

### DID YOU KNOW?

The Rottnest dune rehabilitation program uses weed control, seed collection and propagation of coastal plant species at the Rottnest Island nursery for planting.

Jute matting, sand-trap fencing, boardwalks and stairways are also used to reduce erosion.

The task of keeping the coastal and dune habitat healthy through rehabilitation works is largely done by community volunteers.