



BRIEF BACKGROUNDS

KEPPEL BAY LANDSCAPES

CAPRICORN COAST

The Keppel Bay islands off the Capricorn Coast are striking in their form, with rocks rising high out of the sea, sometimes seeming to float over a white rim of sandy beach. They are remnants of an ancient landscape, whose origin dates back to the Palaeozoic era.

The rocks of the main Keppel group and the inner Bay were once marine sediments laid down about 300 million years ago in deep water off the edge of the Australian continent. These were subsequently compressed, folded and uplifted to mountainous country on the continent, which immediately began to be worn down by erosion.

The outer group-Barren Island, The Child and Egg Rock-resulted from a volcanic episode which was extensive east of the present Queensland coastline about 130 million years ago. Some headlands of the coast-Double Head, Bluff Point-, and peaks farther west-Mount Jim Crow, Mount Wheeler etc- originated as plugs within the vents of volcanoes that erupted about 71 million years ago. Continued erosion has exposed these plugs as the peaks of today.

For most of its history, the Keppel district has simply been part of the mainland. However, in the late Tertiary period (5 million years ago) the edge of the continent subsided and the sea advanced to isolate the higher hills as islands.

This was not permanent, as sea levels have fluctuated dramatically during the last million years or so of the Quaternary period as ice ages have come and gone. At the peak of the last

glacial period about 18 000 years ago sea level was about 150m lower than at present, and the coastline was at least 20km farther east.

After this time there was a rapid rise in sea level, and about 10 000 years ago the sea flowed over the coastal plain once again. Some dunes on Great Keppel Island were probably formed then as the advancing coast swept abundant supplies of sand before it. The level stabilised about 6000 years ago, and the old hills became the islands we see today. This was not so long ago, when you consider that there were Aboriginal tribes that watched their land disappear beneath the sea!

Since then, sand has accumulated around the coastal fringes of the islands, mostly on the western sides away from the prevailing winds and rough seas. Some has formed low dunes above the beaches and become covered in grasses and creepers, and eventually shrubs and trees, to become part of the landscape.

So the islands you see today are a mixture of ancient rocks, soils derived from them, and newly arrived sands. The Keppels are known as continental islands, because they were once part of the mainland. In contrast, many of the Barrier Reef islands, such as those in the Capricorn group to the south, are low-lying coral cays, formed entirely from reef sediments and never connected to other land.