Fraser Island Snapshot

Stretching over 123 kilometres along the southern coast of Queensland, Fraser Island (184,000 hectares) is the largest sand island in the world, and was inscribed on the World Heritage List: “in recognition of its natural values as an outstanding example representing significant ongoing ecological and biological processes and as an example of superlative natural phenomena ”.

The island is a place of exceptional beauty, with its long uninterrupted white beaches flanked by strikingly coloured sand cliffs, its majestic tall rainforests and numerous freshwater lakes of crystal clear waters. The massive sand deposits which make up the island are a continuous record of climatic and sea level changes over the last 700,000 years.

Fraser Island features complex dune systems which are still evolving, and the array of dune lakes is exceptional in terms of number, diversity and age. The highest dunes on the island reach up to 240 metres above sea level.

Forty perched dune lakes (half the number of such lakes in the world), including the much photographed Lake McKenzie, can be found on the island. These lakes are formed when organic matter, such as leaves, bark and dead plants, gradually builds up and hardens in depressions created by the wind.

The island also has *barrage lakes*, formed when moving sand dunes block a watercourse, and *window* lakes, formed when a depression exposes part of the regional water table.

A surprising variety of vegetation types grow on the island, ranging from coastal heath to subtropical rainforests. It is the only place in the world where tall rainforests are found growing on sand dunes at elevations of over 200 metres.

The low *wallum* heaths on the island are of particular evolutionary and ecological significance, and provide magnificent wildflower displays in spring and summer.

Birds are the most abundant form of animal life seen on the island. More than 350 species of birds have been recorded. A species of particular interest is the ground parrot, an endangered species found in the island’s wallum heathlands.

It is a particularly important site for migratory wading birds which use the area as a resting place during their long flights between southern Australia and their breeding grounds in Siberia.

Few mammal species are present on the island. The most common are bats, particularly flying foxes. The dingo population on the island is regarded as the most pure strain of dingoes remaining in eastern Australia.

The lakes on Fraser Island are poor habitats for fish and other aquatic species because of the purity, acidity and low nutrient levels of the water. Some frog species have specially adapted to survive in this difficult environment.

Appropriately called *acid frogs* these frog species are able to tolerate the acidic condition characteristic of the lakes and swamps on Fraser Island.

Called K'gari by its Aboriginal inhabitants, the island shows evidence of Aboriginal occupation of at least 5,000 years, although it is possible that further archaeological work may reveal evidence of earlier occupation.

Early European reports indicated that Fraser Island was heavily populated by Aboriginal people, but subsequent research suggests that there was a small permanent population of 400-600 which swelled seasonally to perhaps 2,000-3,000 in the winter months, when seafood resources were particularly abundant.

Fraser Island contains many sites of archaeological, social and spiritual significance. Middens, artifact scatters, fish traps, scarred trees and camp sites bear witness to the lives of the original inhabitants.

Early European contact, initiated by Matthew Flinders in 1802, was sporadic and limited to explorers, escaped convicts and shipwreck survivors. In 1836 a number of survivors of the shipwrecked Stirling Castle lived for about six weeks on the island before being rescued. During these six weeks, hostility and aggression developed between the Europeans and the Aborigines. One of the survivors was Eliza Fraser, the wife of the captain of the Stirling Castle, Captain James Fraser, after whom Europeans named the island.

Day-to-day management of the island is primarily the responsibility of the Department of Environment and Heritage through the Queensland Parks and Wildlife Service.

Since Fraser Island was World Heritage-listed, a complex system of peat swamps, generally known as patterned fens, has been identified along the western coast. These patterned fens occur almost at sea level and in places merge with mangrove areas near the sea.

Fraser Island has string fens found elsewhere as well as what is believed to be the only reticulated (leopard) patterned fens in the world. Both are found side-by-side near Moon Point. Other areas which have these *leopard* patterns are bogs not fens. (A bog is self growing in its own water supply and a fen has water flowing through from one side to the other).

Other patterned fens in the world are found in high altitudes and latitudes (Scotland, Siberia, Scandinavia, Canada and alpine regions of New Zealand) and were thought to have been formed by snow and ice.

This theory has been *blown out the water* by the discovery of patterned fens on Fraser Island. These patterned fens could be some of the oldest in the world, possibly 6,000 years old. They are found near Wathumba, Bogimbah and Wanggoolba Creeks, Ungowa and Moon Point.

A research programme to categorise and classify the fens of Fraser Island is being put in place by the Commonwealth World Heritage Unit, the Queensland Department of Environment and Heritage, the Australian Marine Conservation Society, the Queensland Museum and the International Mire Conservation Group.