Shark Bay, Western Australia

Inscribed on the World Heritage List in 1991

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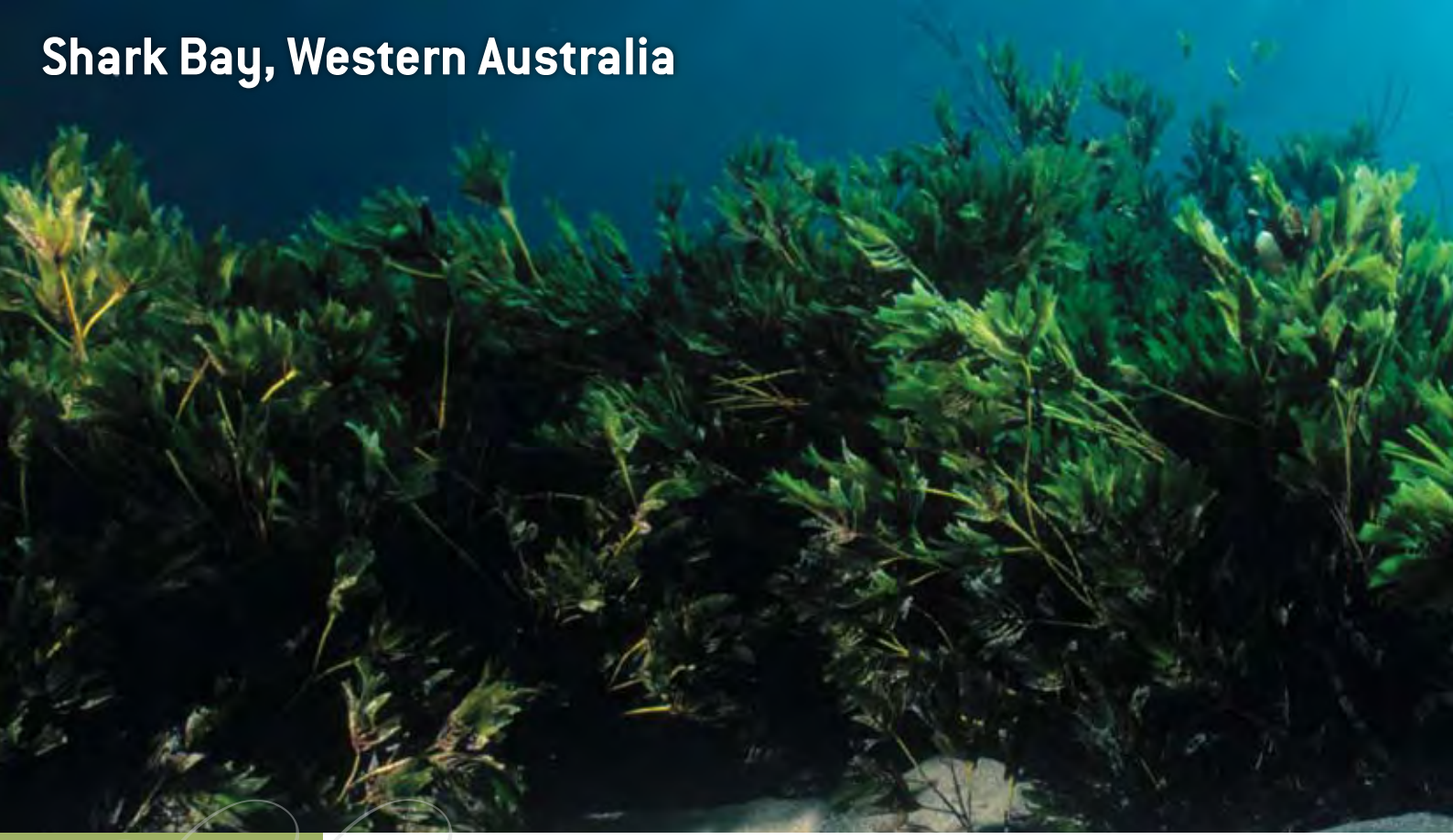


Shark Bay lies at the most westerly point of the Australian continent.

Its vast seagrass meadows are the largest and richest in the world, providing safe haven for one of the world's largest dugong populations.

Shark Bay contains, in one place, the world's most diverse and abundant examples of Stromatolites, the oldest life form on Earth. It is the only place in the world with a range of Stromatolites comparable with fossils in ancient rocks.

A refuge for many rare and endangered species, the Shark Bay area contains significant populations of approximately one fifth of Australia's threatened mammal species.

Shark Bay, Western Australia was inscribed on the World Heritage List in 1991, and is one of the few properties listed for all four outstanding natural universal values:

- as an outstanding example representing the major stages in the earth's evolutionary history
- as an outstanding example representing significant ongoing ecological and biological processes
- as an example of superlative natural phenomena
- containing important and significant habitats for in situ conservation of biological diversity.

Shark Bay is located on the most western point of the coast of Australia and covers 23,000 km^2. The area represents a meeting point of three major climatic regions and forms a change-over between two major groups of plant species – the South West and Eremaean provinces.

The number of species that reach the end of their range is a major feature of the region's flora. Twenty-five per cent (283 species) of the area's vascular plants are at the limits of their range in Shark Bay. Many vegetation associations and plant species are found only in the areas between different biological zones.

The area south of Freycinet Estuary contains the unique type of vegetation known as tree heath. There are also at least 51 species endemic to the region and others that are considered new to science.

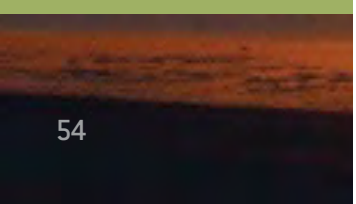
The Shark Bay region is an area of major zoological importance, primarily due to habitats on peninsulas and islands being isolated from the disturbance that has occurred elsewhere. Of the 26 species of endangered Australian mammals, five are found on Bernier and Dorre Islands. These are the boodie or burrowing bettong, rufous hare wallaby, banded hare wallaby, the Shark Bay mouse and the western barred bandicoot.

The Shark Bay region has a rich avifauna, and over 230 species or 35 per cent of Australia's bird species have been recorded. A number of birds attain their northern limit at Shark Bay including the regent parrot, western yellow robin, blue-breasted fairy wren and striated pardalote.

The region is noted for the diversity of its amphibians and reptiles, supporting nearly 100 species. Again, many species are at the northern or southern limit of their range. The area is also significant for the variety of burrowing species, such as the sandhill frog, which apparently needs no surface water. Shark Bay is home to three endemic sand swimming skinks, and 10 of the 30 dragon lizard species found in Australia.

The 12 species of seagrass found in Shark Bay make it one of the most diverse seagrass assemblages in the world. Seagrass covers over 4,000 square kilometres of the bay, and the 1,030 square kilometres Wooramel Seagrass Bank is the largest structure of its type in the world.

Seagrass has contributed significantly to the evolution of Shark Bay. It has modified the physical, chemical and biological environment as well as the geology and has led to the development of major marine features such as Faure Sill. Faure Island is an emergent portion of the 'Faure Sill', a sandbar overlaying sandstone that crosses the eastern gulf of Shark Bay from Peron Peninsula to the mainland. Interestingly, it is this sandbar that has created the vast areas of sandy hypersaline shallows that support the famous Stromatolites of Shark Bay.



The barrier banks associated with the growth of seagrass over the last 5,000 years – and the low rainfall, high evaporation and low tidal flushing – have produced the hypersaline Hamelin Pool and L'haridon Bight. This hypersaline condition is conducive to the growth of cyanobacteria which trap and bind sediment to produce a variety of mats and structures including Stromatolites.

Stromatolites represent the oldest form of life on earth. They are representative of life-forms which lived some 3,500 million years ago. Hamelin Pool contains the most diverse and abundant examples of Stromatolite forms in the world.

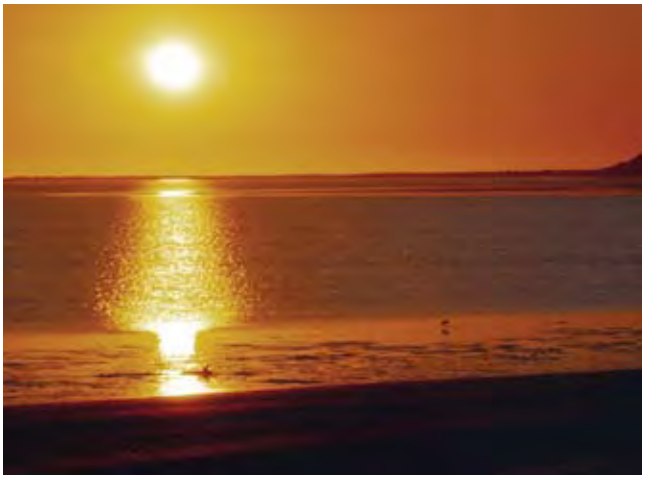
Shark Bay is renowned for its marine fauna. The population of about 10,000 dugong, for example, is one of the largest in the world, and dolphins abound, particularly at Monkey Mia.

Humpback whales use the Bay as a staging post in their migration along the coast. This species was reduced by past exploitation from an estimated population of 20,000 to around 800 whales in 1962. The population is recovering and is now estimated at up to 3,000.

Green and loggerhead turtles are found in Shark Bay near their southern limits, with loggerhead turtles nesting on the beaches of Dirk Hartog Island and Peron Peninsula. Dirk Hartog Island is the most important nesting site for loggerhead turtles in Western Australia.

Shark Bay is also an important nursery ground for larval stages of crustaceans, fishes and medusae.

The Western Australian Government is responsible for day-to-day management of the Shark Bay World Heritage Area.



title page: Shark Bay, Western Australia Lochman Transparencies
top strip: The largest seagrass banks in the world, covering 4,000 km^2, are found in Shark Bay Lochman Transparencies
top: The Greater Bilby has been successfully reintroduced onto the Peron Peninsula Lochman Transparencies
above centre: Sunset over Shark Bay Lochman Transparencies
above: One of the world's largest populations of Dugong is found in Shark Bay where they feed on sea grasses B. Cropp, GBRMPA