

Shark Bay's World Heritage Values

What features contributed to Shark Bay's World Heritage listing? Here is a list of Shark Bay's values that contributed to each of the four natural criteria for World Heritage listing.

1. Outstanding examples representing the major stages of the Earth's evolutionary history.

- Stromatolites and microbial mats of Hamelin Pool
- Hamelin Pool and L'haridon Bight and Holocene deposits

2. Outstanding examples representing significant ongoing geological process, biological evolution and man's interaction with his natural environment.

Marine environment

- Unique hydrological structure, banks and sills, steep salinity gradients, three biotic zones
- Faure Sill
- Hypersaline environment of Hamelin Pool
- Microbial communities
- *Fragum erugatum* shell deposits
- High genetic biodiversity (eg snapper, venerid clams, bivalves)
- Seagrass meadows and their role in the evolution of the marine environment
- Wooramel seagrass bank, expanse of meadows and diversity of seagrass species
- Carbonate deposits and sediments
- Northern limit of transition region between temperate and tropical marine environments, resulting in high species diversity (eg 323 fish, 218 bivalve and 80 coral species).

Terrestrial environment

- Botanical province transition zone
- Range limits (145 plants at northern limit, 39 species at southern limit and 28 endemic plants)
- Isolation of fauna habitats on islands and peninsulas resulting in survival of threatened species
- Range limits and fauna species richness - 100 reptile species (9 endemic), 230 bird species - 35% of Australia's total
- Species evolution illustrated in rufous hare-wallaby and banded hare-wallaby.



*The *Fragum erugatum* shell deposits at Shell Beach are a World Heritage value.*

3. Superlative natural phenomena, formation or features, for instance, outstanding examples of the most important ecosystems, areas of exceptional natural beauty or exceptional combinations of natural and cultural elements.

- Stromatolites
- Hypersaline environment of Hamelin Pool
- Faure sill
- Wooramel seagrass bank
- Coastal scenery - Zuytdorp Cliffs, Dirk Hartog Is., Peron Peninsula, Heirisson & Bellefin Prongs
- Fragam beaches of L'hardion Bight
- Inundated birridas and lagoons such as Big Lagoon
- Strongly contrasting colours of the dunes, beaches and adjacent ocean of Peron Peninsula
- Abundance of marine fauna (dugongs, dolphins, sharks, rays, turtles and fish)
- Annual wildflower display.



Peron Peninsula and its contrasting colours are an example of exceptional natural beauty.

4. The most important and significant natural habitats where threatened species of animals or plants of outstanding universal value still survive.

- Five of Australia's 26 endangered mammals (Shark Bay mouse, banded hare-wallaby, rufous hare-wallaby, western barred bandicoot and burrowing bettong) survive in Shark Bay.
- Bernier Island subspecies of ash-grey mouse
- 12 threatened reptiles (eg Baudin Island skink and woma python)
- Endemic sandhill frog
- 35 migratory bird species
- Threatened thick-billed grasswren
- Endemic Dirk Hartog Island subspecies of the southern emu-wren
- Dugong (approx ten percent of the world's population)
- Humpback whales
- Loggerhead and green turtles