

## Magnetic Island World Heritage Values

**From: Kenchington, R. and Hegerl, E. (2005) World Heritage Attributes and Values Identified for Magnetic Island and the Surrounding Marine Environment. Report prepared for the Australian Government. pp.36-39**

Magnetic Island's World Heritage values are identified according to the criteria used in the 1981 nomination of the Great Barrier Reef World Heritage Area (GBRWHA) and are scored as follows:

- \*\*\* A value uniquely expressed on Magnetic Island
- \*\* A value for which Magnetic Island contains a highly significant expression or the majority of expressions in the GBRWHA; and
- \* A value for which Magnetic Island is a minor component of expressions in the GBRWHA

Many of the identified values are not uniformly expressed on Magnetic Island or within the areas in which they occur. In the context of management of a site or area where a particular value occurs, it is generally necessary to understand the condition and contribution of that site to the conservation and protection of that value in Magnetic Island as a whole.

Criterion from 1981 Nomination	Identified Magnetic Island Component Value	Relative World Heritage contribution
i) outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features	<ul style="list-style-type: none"> <li>• It is the largest continental island in the Dry Tropics of the GBRWHA and the seventh largest and fourth highest island within the entire World Heritage Area</li> <li>• The island provides significant examples of high geological and geomorphological diversity</li> </ul>	<p>***</p> <p>**</p>
ii) outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals	<ul style="list-style-type: none"> <li>• Combination of high terrestrial diversity and a high diversity of tidal and marine habitats in a relatively small area makes the island significant for addressing the range World Heritage obligations with respect to the natural and cultural values of the GBRWHA</li> <li>• The intact and regenerating ecosystems of the island provide a significant local example of the ecological processes of resilience in response to present and past impact of stock grazing, feral animals and introduced weeds</li> <li>• The marine ecosystems and communities are structurally and biologically diverse reflecting a gradient of exposure to marine and coastal influences and differences in oceanographic processes in their community composition</li> <li>• Cockle Bay represents an outstanding example of the inter-related intertidal and subtidal marine habitats that can be found in association with the continental islands of the GBRWHA. Cockle Bay is the longest established sea grass monitoring site in the GBRWHA</li> <li>• The nearshore seagrass beds are significant nursery areas for penacid prawn species and fishes of recreational and commercial importance to GBRWHA visitors and residents</li> </ul>	<p>**</p> <p>*</p> <p>**</p> <p>**</p> <p>*</p>
iii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance	<ul style="list-style-type: none"> <li>• The island has mountainous terrain and a shoreline with a rich variety of landscapes and seascapes of exceptional beauty</li> </ul>	<p>***</p>

<p>iv) contain the most important and significant natural habitats for in situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation</p>	<ul style="list-style-type: none"> <li>• With semi-permanent freshwater areas and a fairly large area of lowlands, the island supports a dry tropical, granite-associated continental island flora that is unique in the GBRWHA</li> <li>• Magnetic Island is the only Dry Tropics continental island in the GBRWHA with highly varied fringing reefs formed in many of the shoreline embayments</li> <li>• The island is one of the two most botanically diverse of the continental islands of the GBRWHA. It supports over twenty-five distinctive terrestrial ecosystems in less than 5,200 ha.</li> <li>• The island supports the third largest number of rare and endangered vascular plant species of the continental islands within the GBRWHA</li> <li>• The island has a rich butterfly fauna and supports an endemic butterfly subspecies - one of the two known from the GBRWHA</li> <li>• The island supports Sadliers dwarf skink that is one of only three known island endemic reptiles in Queensland</li> <li>• The general diversity of habitats, makes the island a nationally significant refuge for many species. These include the single striped Delma and twelve other species of animals that are listed as endangered, rare or vulnerable under the Queensland Nature Conservation Act</li> <li>• Part of the Gustav Creek Area supports one of the highest known densities and diversities of small lizards known in North Queensland</li> <li>• The nearshore seagrass beds associated with the island support the third highest diversity of seagrass species known from the GBRWHA and provide important nursery habitat for many fish and invertebrate species</li> <li>• The nearshore seagrass beds are a crucially important habitat for the survival of dugong in the southern GBRWHA and also are used as a feeding area by the endangered green and flat-back turtles, which nest in small numbers on several island beaches</li> <li>• The fringing reefs vary in physical and biological structure, are easily accessible and support a significant percentage of the total number of hard coral species known from the GBRWHA</li> <li>• One of the island's shallow water fringing reefs supports a rare deepwater soft coral that is not known from any other location in the GBRWHA</li> </ul>	<p>***</p> <p>**</p> <p>**</p> <p>***</p> <p>***</p> <p>***</p> <p>***</p> <p>*</p> <p>**</p> <p>**</p> <p>**</p> <p>***</p>
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<p>The area in this nomination contains many middens and other archaeological sites of Aboriginal or Torres Strait Islander origin</p>	<ul style="list-style-type: none"> <li>• Indigenous Place Florence Bay recognised on Register of the National Estate</li> <li>• Features identified as culturally significant for the Wulgurukaba people. Locations and details not available: <ul style="list-style-type: none"> <li>• Middens</li> <li>• Archaeological sites</li> <li>• Quarry sites</li> <li>• Stone artefact scatters</li> <li>• Burial sites</li> <li>• Fish traps</li> <li>• Rock shelters with cultural deposits</li> <li>• Contact sites where middens incorporate European materials in their upper level</li> <li>• Historic camping and fishing locations</li> </ul> </li> </ul>	<p>***</p> <p>**</p>
<p>There are over 30 historic shipwrecks in the area</p>	<ul style="list-style-type: none"> <li>• The national shipwrecks database records 553 wrecks within the GBRWHA. Seven of these are recorded for Magnetic Island: <ul style="list-style-type: none"> <li><u>Bee</u> 17/03/1901 Picnic Bay</li> <li><u>City of Adelaide</u> 01/01/1915 Cockle Bay</li> <li><u>Fate</u> 01/01/1896 Magnetic Island</li> <li><u>May Queen</u> 01/01/1913 Magnetic Island</li> <li><u>Moltke</u> 01/01/1891 Geoffrey Bay</li> <li><u>Norseman</u> 04/02/1893 Horseshoe Bay</li> <li><u>Presto</u> 01/01/1896 Nelly Bay</li> </ul> </li> </ul> <p>None is noted as having particular historic significance. A further 6 shipwrecks in Magnetic Island waters are identified by the Maritime Museum of Townsville. These are: Burdekin, George Rennie, Magnet, Octopus, Palmosa, Platypus (Vivienne Moran pers. comm.)</p>	<p>*</p>
<p>On the islands there are ruins and operating lighthouses that are of cultural and historic significance</p>	<ul style="list-style-type: none"> <li>• Places on Register of the National Estate: <ul style="list-style-type: none"> <li>Forts Complex, Radical Bay Road</li> </ul> </li> </ul>	<p>***</p>

Sources of heritage information include:

*Australian National Shipwreck database* <http://cicd.dch.gov.au/nsd>

*Register of the National Estate* <http://www.ahc.gov.au/register>

*Australian Heritage database* <http://www.deh.gov.au/heritage>

*Queensland Heritage Register* <http://www.epa.qld.gov.au/projects/heritage/listing.cgi>