

# AUSTRALIA

## Shark Bay, Western Australia

### II.1 Introduction

**Year of Inscription** 1991

**Organisation Responsible for the Report**

- Environment Australia  
Department of Conservation & Land Management  
(Western Australia)  
Australia

### II.2 Statement of Significance

**Inscription Criteria** N i, ii, iii, iv

**Statement of Significance**

- Proposed as follows: “The Shark Bay region represents a meeting point of three major climatic regions (subtropical, grasslands and desert) and forms a transition zone between two major botanical provinces.  
It is home to a population of 5 species of endangered mammals; 2 marine mammals considered vulnerable; over 230 species of birds (35% of Australia’s recorded total); nearly 100 species of amphibians and reptiles; and vast sea-grass beds which are the largest and most species rich in the world.  
Stromatolites are also found on the site which are the oldest life forms on earth dating from some 3,500 million years ago”.

**Status of Site Boundaries**

- The borders and buffer zone of the property are considered adequate.

### II.3 Statement of Authenticity/Integrity

**Status of Authenticity/Integrity**

- The WH value is considered to have been maintained.
- No changes are foreseen.

### II.4 Management

**Administrative and Management Arrangements**

- A Ministerial Council is composed of ministers of the Australian Commonwealth (Environment Australia) and the Western Australian Dept. of Conservation & Land Management (DCLM).



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*Beach scene at the Shark Bay*

- The ‘Scientific Advisory Committee’ provides advice to the Ministerial Council on scientific research.
- The ‘Community Consultative Committee’ provides advice to the Ministerial Council on protection.
- There are several other Western Australian and local Government agencies involved in management.
- The main legislation includes: the Environment Protection & Biodiversity Conservation Act (1999) and the Conservation & Land Management Act (1984).
- A comprehensive planning framework has been developed for Shark Bay, including a partnership between government and the local community.
- Several short and long term management plans are also underway.

**Present State of Conservation**

- The conservation status is considered adequate.

**Staffing and Training Needs**

- Staffing is considered sufficient with a district manager, 24 full-time and 6 temporary staff.
- Training needs have not been identified.

**Financial Situation**

- The estimated budget for Monkey Mia was approx. US\$637,700 for 2002.
- The Dept. of Fisheries further contributes approximately US\$500,000 annually for fisheries management
- Commonwealth funding for projects within the WH area was US\$200,796 in 2001-2002



Map of Shark Bay showing WH Area (in darker blue)

- \* International Assistance from WHF: none.

### Access to IT

- Computer facilities include local & wide area networks with internet access.
- State-of-the-art GPS satellite radio tracking is used.

### Visitor Management

- The 'Cape Peron recreation management project' provides wildlife and coastal scenery viewing opportunities for visitors.
- Local government authorities and land managers manage recreation areas outside conservation reserves.
- Visitor surveys have been carried out in different sites. 'VISTAT' is the official visitor information and statistics data collection system.
- The 'Tamala-Carrarang Recreation & Tourism Plan' (1998) has identified certain access management requirements.

### II.5 Factors Affecting the Property

#### Threats and Risks

- Risk of oil spillage from salt ships and introduction of exotic biota from ballast water discharge.
- Activities on pastoral leases such as overstocking and clearing of native vegetation.
- Invasive species (feral animals, weeds, exotic marine organisms).
- Shell extraction & processing (aesthetic impact).
- Fire hazards to human & natural resources.

- Recreational impacts of remote camping and fishing.

#### Counteractive Plans

- Shell extraction is undertaken according to the conditions of an environmental management plan.
- All salt operations are managed in accordance with the 'Shark Bay Solar Salt Industry Agreement' (1983).

- 'Project Eden' was commenced in 1994 to control feral animals in various parts of the property.
- The 'Terrestrial Reserves Management Plan' includes a weed control program. A Commonwealth project is underway to investigate the risks associated with introduced marine pests.
- The Bush Fire Act (1954) has the responsibility to protect natural resources from wildfire.

### II.6 Monitoring

#### Monitoring Arrangements

- There are several ongoing marine, terrestrial, climate and Landsat Satellite monitoring programmes and scientific studies.
- Numerous other research projects have yet to be undertaken including the "geological oceanography of inlets", and the genetic variation in the shell beach cockle.
- Identified gaps in monitoring are management-oriented research; impact of human activities and threatening processes; and the monitoring of mammals on Bernier & Dorre Islands.
- The ACIUCN reactive monitoring reports have also identified priority action areas for visitor management; the control of invasive species; and the strategic framework for the site.

#### Monitoring Indicators

- Current indicators include the: (i) annual monitoring programme of Loggerhead Turtle (started in 1994); (ii) baseline marine water quality; (iii) 5-yearly Dugong monitoring; (iv) floristic survey of Peron Peninsula; (v) visitor surveys; (vi) fire buffer zone monitoring; (vii) 'Project Eden's' collection of long-term climatic data; and (viii) monitoring of terrestrial ecology by Landsat Satellite.

### II.7 Conclusions and Recommended Actions

#### Conclusions and Proposed Actions

- The property has been maintained in terms of conservation and management arrangements to address potential threatening processes.
- The 'Shark Bay Ministerial Council' will provide direction in the identification of priority actions for different agencies.
- As the lead agency, the Dept. of Conservation & Land Management will liaise with other agencies with regard to programme implementation.
- The proposed future actions for 2003-2008 are the: (i) completion of a management plan for South Peron; (ii) transfer of the tenure of Dirk Hartog Island to the national park; (iii) completion of a management plan for Edel Land; (iv) extension of the Shark Bay Marine Park; (v) finalization of the strategy plan; (vi) completion of a communication plan; (vii) completion of a WH Interpretive Centre;

(viii) continued involvement of indigenous groups; and (ix) continued feral predator control.

#### \*State of Conservation Reports

1994 Bureau WHC-CONF.001/3b In response to concerns expressed in its original technical evaluation, IUCN reported that complementary legislation to provide for joint management structures (including a Ministerial Council, Community Consultative & Scientific Advisory Committees) had not yet been established. In the interim, the 1988 Shark Bay Region Plan remained the guiding management document. Substantial progress in conservation status had nonetheless occurred, including an expansion of education & information services, removal of feral animals, construction of barrier fences and boardwalks, provision of improved visitor services, and the reintroduction of burrowing *bettong*. A series of management plans for the marine reserves & Monkey Mia were also underway, along with a Fisheries plan and a Terrestrial Reserves plan. Available staff to manage such a large area were however still considered as insufficient.

1998 Bureau WHC-CONF.201/3b The Australian Minister for the Environment informed WHC that he would provide further information concerning a letter from The Wilderness Society referring to threats to Shark Bay.

1998 Ext Bureau WHC-CONF.202/4 The Bureau was informed that a petroleum exploration permit had been granted by the State Government of West Australia (WA) for an area located within the WH site. The Observer of Australia assured the Bureau that no development that threatens the WH value of the site would be allowed to take place. IUCN voiced its concern, however, concerning the issue of the granting of prospecting licences by State Governments of WA and Queensland, for locations within WH areas, and called for closer liaison between Commonwealth and State Governments on this matter. The Australian authorities informed the Centre that a mining lease of the Shark Bay Salt Joint Venture (SBSJV) had attracted public comment but was outside the WH area. The WA Dept of Environment conducted two environmental compliance audits and concluded that SBSJV had satisfactorily implemented environmental conditions during the construction phase. Furthermore, in accordance with a post-construction environmental requirement, marine mega-fauna which were trapped behind the levee, were transferred to open marine waters with the help of the Dept of Conservation & Land Management.

1998 Committee WHC WHC-CONF.203/8rev The Bureau was informed that IUCN had received a report on the state of conservation of the site from its Australian National Committee, and that it was in the process of reviewing that report. The Bureau requested the Centre to transmit the report from IUCN Australia to the State Party for review, and recommended that IUCN provide an up-to-date state of conservation report on the site.



1999 Bureau WHC-CONF.204/5 The Bureau took note of information provided by the Centre, the Australian Government, and IUCN on the consultative process involving the ACIUCN, the State Government of WA and other stakeholders. IUCN noted that the issues addressed would include potential threats of mining (for shells, salt extraction, gypsum leases & mineral sands), tourism development, and the need to finalize an overall management plan. The Bureau urged the State Party and IUCN to finalise the consultation process as soon as possible, and provide a detailed state of conservation report for Shark Bay.

1999 Committee WHC-CONF.209/14 The Australian Government informed the Centre in September 1999 that the consultative process involving ACIUCN, the State Government of WA, and other stakeholders, to prepare a state of conservation report for Shark Bay was being finalised.

2000 Bureau WHC-CONF.202/5 ACIUCN submitted its report on the 'Shark Bay WH Area: Condition, Management and Threats' including 15 recommendations adopted in March 2000. The consultation process involved a questionnaire circulated to various organisations involved in the SBWH Area (including Commonwealth, State & Local Government authorities; conservation groups; members of the Shark Bay Community Consultative & Scientific Advisory Committees; scientists; locals; and industry groups) as well as a series of working group discussions. IUCN further undertook a participatory cluster analysis to identify the following 5 focused recommendations:

- (1) Overall Management Framework. ACIUCN recommended that the SBWH Property Strategic Plan be completed, and that outstanding reserve proposals identified be implemented as a matter of priority.
- (2) Minerals and Petroleum. It was not possible to achieve unanimous agreement in the ACIUCN report concerning shell mining and salt extraction. Nevertheless, ACIUCN affirmed its policy position that mining and mineral exploration should not take place in IUCN Protected Area Categories I & II (or in Categories III & IV according to another WCPA position paper); that the Coquina Shell remained an important feature of the WH area; and that proposals to expand salt extraction in the WH area were of concern. ACIUCN suggested that the Commonwealth and State Government report on actions taken to ensure that such activities would not cause damage to the WH property.
- (3) Biological Resource Harvest. Management plans need to ensure that all grazing, aquaculture and fisheries leases are ecologically sustainable and not likely, individually or cumulatively, to cause adverse impacts to the WH property.
- (4) Invasive Species. Strategic plans need to address the eradication, or adequate control, of feral and exotic species (including in the ballast discharge from ships) to prevent future entry of invasive species.
- (5) Visitor Management. ACIUCN recommended that an overall visitor management strategy be developed to

ensure that tourism and recreational fishing are consistent with the maintenance of WH value.

2000 Committee WHC-CONF.204/10 The Australian Government's response to ACIUCN's report on Shark Bay indicated that the State Party supported the Focused Recommendations 1, 2 & 3. In the case of Recommendations 4 & 5, the Australian Government expressed its support in principle. For each of the IUCN



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Stromalites, the oldest life forms on earth

Recommendations, the Australian Government proposed several actions, a responsible authority for implementing actions, the level of priority assigned to the activity, as well as achievements and commitments. The Bureau commended the State Party and IUCN to have successfully repeated the process applied to the Great Barrier Reef for the SBWH area, and urged them to develop a 'Framework for Management' that could be used as a basis for annual monitoring of progress based on the 5 Focused Recommendations.