

Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

1. Date this sheet was completed/updated:

1998

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Designation date

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Site Reference Number

2. Country:

Australia

3. Name of wetland:

Bool and Hacks Lagoons, South Australia

4. Geographical coordinates:

Latitude: 37° 06'S to 37° 10'S; Longitude: 140° 39'E to 140° 44'E

5. Altitude:

Approximately 50 metres.

6. Area:

Approximately 3,200 ha.

7. Overview:

Bool Lagoon Game Reserve and Hacks Lagoon Conservation Park reserves one of the most important wetland areas remaining in the South East of the State of South Australia. The wetlands provide major drought refuge and breeding habitat for waterbirds and act as a buffer storage basin in the regional drainage system. The area is also used for duck hunting and is becoming increasingly popular for recreational visitor use.

8. Wetland Type:

marine-coastal: A B C D E F G H I J K

inland: L M (N) (O) (P) Q R Sp Ss (Tp) Ts

U Va Vt W Xf Xp Y Zg Zk

man-made: 1 2 3 4 5 6 7 8 9

9. Ramsar Criteria:

(1a) (1b) (1c) 1d | (2a) (2b) (2c) 2d | (3a) 3b (3c) | 4a 4b

Please specify the most significant criterion applicable to the site:

10. Map of site included? Please tick *yes* -or- *no*.

11. Name and address of the compiler of this form:

12. Justification of the criteria selected under point 9, on previous page.

13. General location:

Naracoorte, South Australia

14. Physical features:

Bool and Hacks Lagoon Basins lie in an ancient interdune drainage system that gently slopes towards the coast in a northwest direction. Prior to flood mitigation developments, the lagoons were filled from the overflow of Mosquito Creek during the winter rainfall season. Following European settlement, the interdune corridor was drained and the lagoons now receive water as part of this scheme.

15. Hydrological values:

The Lagoons serve as a holding basin as part of a regional water drainage scheme.

16. Ecological features:

The wetland is artificially manipulated to act as an equalisation basin for the control of flood waters draining off surrounding farmland.

It is an outstanding area for a wide range of waterbirds. 79 species of waterbirds having been recorded with 48 of these known to have bred there. It is particularly important for waterfowl and common species include Pacific Black Duck (*Anas superciliosa*) and Grey Teal (*A. gibberifrons*).

Other species include:

Pink-eared Duck	<i>Malacorhynchus membranaceus</i>
Hardhead	<i>Aythya australis</i>
Chestnut Teal	<i>Anas castanea</i>
Blue-billed Duck	<i>Oxyura australis</i>
Musk Duck	<i>Biziura lobata</i>
Freckled Duck	<i>Stictonetta naevosa</i>
Maned Duck	<i>Chenonetta jubata</i>
Magpie Goose	<i>Anseranas semipalmata</i>
Cape Barren Goose	<i>Cereopsis novaehollandiae</i>

Population counts have proved difficult because of vegetation cover, however, typical duck numbers are believed to commonly vary between 15,000 and 50,000 and Black Swan numbers between 1,000 and 5,000. Straw-necked Ibis (*Threskiornis spinicollis*) and Sacred Ibis (*T. aethiopicus*) are common in the nesting season and numbers often exceed 50,000.

Other species of interest include:

Great Egret	<i>Egretta alba</i>
Yellow Spoonbill	<i>Platalea flavipes</i>
Royal Spoonbill	<i>P. regia</i>
Eurasian Coot	<i>Fulica atra</i>
Purple Swamphen	<i>Porphyrio porphyrio</i>
Dusky Moorhen	<i>Gallinula tenebrosa</i>
White-faced Heron	<i>Ardea novaehollandiae</i>
Hoary-headed Grebe	<i>Poliocephalus poliocephalus</i>
Great Cormorant	<i>Phalacrocorax carbo</i>
Pied Cormorant	<i>P. varius</i>
Little Black Cormorant	<i>P. sulcirostris</i>
Little Pied Cormorant	<i>P. melanoleucos</i>
Brolga	<i>Grus rubicundus</i>
Whiskered Tern	<i>Chlidonias hybrida</i>
Australasian Bittern	<i>Botaurus poiciloptilus</i>

A wide range of waders and nine rare species including the Intermediate Egret (*Egretta intermedia*) and Little Bittern (*Ixobrychus minutus*), also occur in the area.

17. Noteworthy flora:

None

18. Noteworthy fauna:

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19. Social and cultural values:

The area is recognised for its conservation values as it is a remnant wetland in an area that has been extensively drained and developed for agriculture use.

20. Land tenure/ownership:

(a) **the site:** Crown land: the area is reserved under the National Parks and Wildlife Act as the Bool Lagoon Game Reserve and Hacks Lagoon Conservation Park.

(b) **the surroundings/catchment:** private land

21. Current land use:

The land immediately surrounding the Lagoons is permanent reserve, and this in turn is bordered by sheep and cereal growing areas. The Bool Lagoon Game Reserve is usually opened for duck hunting on several mornings each year, but this is dependent upon suitable seasonal conditions. The presence of rare or nesting birds may also affect the decision to open the reserve to hunters.

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

The Lagoons act as sumps for a 1215 km² catchment. Consequently, a range of nutrients, salts and pesticides accumulate within the basins. In addition, herbicides are used to maintain a vegetation-free flow path across Bool Lagoon. Bool Lagoon also contains high levels of lead shot which accumulated from past hunting practices.

Increased salinization due to rising water tables as a result of extensive clearing.

23. Conservation measures taken:

The area is managed in accordance with a management plan and the use of lead shot is prohibited on the Game Reserve. The plan provides for management of water regimes and other identified concerns related to the conservation of the wetland.

24. Conservation measures proposed but not yet implemented:

None

25. Current scientific research and facilities:

The South Australian National Parks and Wildlife Service supports ongoing monitoring and research programs on the Lagoons. Current programs include determining the effects and management requirements of accumulated lead shot within the Game Reserve, studies on the aquatic vegetation habitats and monitoring of waterbird use.

26. Current conservation education:

The South Australian National Parks and Wildlife Service provides visitor information and on site interpretation programs.

27. Current recreation and tourism:

Bool Lagoon Game Reserve has traditionally been used for recreational duck hunting on a limited seasonal basis. The Lagoons are becoming increasingly popular with visitors, currently estimated at 16,000 per year, whose major activities involve wildlife observation.

28. Jurisdiction:

Government of South Australia

29. Management authority:

South Australia National Parks and Wildlife Service

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30. Bibliographical references:

South Australia National Parks and Wildlife Service (1988). Bool Lagoon Game Reserve and Hacks Lagoon Conservation Park Management Plan. Department of Environment and Planning, Adelaide.

Note: An extensive bibliography is held by the South Australian National Parks and Wildlife Service on the wetlands and management considerations of the area.
