

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:

Moulting Lagoon Game Reserve

4. Geographical coordinates:

Latitude: 42° 02'S ; Longitude: 148° 11'E

5. Altitude:

Less than 20 metres above sea level.

6. Area:

4580 hectares

7. Overview:

Moulting Lagoon is a large estuary formed at the mouths of the Apsley and Swan rivers. It contains areas of both shallow and deep water and is surrounded by periodically exposed mudflats and saltmarsh. The western shore has been largely cleared and is used for livestock grazing while the eastern shore is relatively undisturbed and covered with native vegetation.

The lagoon, several sections of coastal reserve surrounding it, and an additional area of dry land 1km north comprise Moulting Lagoon Game Reserve. The Ramsar boundary includes all but the additional dry section of the Game Reserve.

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*

The map of this site is based on digital data from the Tasmanian 1:25 000 Topographic Map series. The Ramsar boundary has been redefined since the original submission of the site, taking into account the boundaries of the recently proclaimed Moulting Lagoon Game Reserve. Grid referenced points have been used where previously contour lines of elevation were used.

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:

On the east coast of Tasmania, adjacent to Freycinet Peninsula and about 10km NE of Swansea.

14. Physical features:

The estuary has been formed by the near closure of the mouths of these two rivers by a bar of Holocene alluvial material that formed as sea levels rose some 10,000 years B.P. The restriction of flow has resulted in the flooding of the surrounding low lying land and the formation of extensive mudflats where silt carried down by the rivers has been deposited. Underlying rock type in most of the area is predominantly Jurassic dolerite and related rock types.

Catchment areas of the two rivers total just over 900 square kilometers, 228 square kilometers for the Apsley River and 682 square kilometers for the Swan, (Rivers and Water Commission 1983). Tasmanian general has a temperate maritime climate and temperatures in this area are among the warmest in the state. The average annual rainfall of the area is 500 - 625mm, the average annual rainfall recorded at Swansea being 614mm.

15. Hydrological values:

Filtration of runoff by foreshore vegetation.

16. Ecological features:

The plant communities around Moulting Lagoon reflect the wide diversity of terrain and consequent soil drainage. The immediate edge of the lagoon supports an almost continuous belt of *Sarcocornia quinqueflora*. Behind that is a continuous fringe of *Juncus kraussii* and beyond in wet areas is *Melaleuca ericifolia*, *Acacia dealbata*, or small stands of *Callitris rhomboidea* with scattered *Allocasuarina*, *Banksia marginata* and *Acacia dealbata* on the few rocky outcrops.

The vegetation of the shallower areas and edges of the lagoon provide important nesting, roosting and feeding habitat for the numerous waterfowl resident in the area.

The estuary is also a known nursery area for many fish species and at least fifty-nine species have been recorded in or near the estuary.

17. Noteworthy flora:

Three species located in this area are of particular significance for conservation because of their rarity. *Stenanthemum pimeleoides* and *Lasiopetalum micranthum* are endemic to Tasmania and found only in this part of the state. *Viminaria juncea* is common on the mainland but was previously known from only one location in Tasmania.

18. Noteworthy fauna:

Moulting Lagoon is an important breeding area for black swan (*Cygnus atrata*), and an important staging area for all the other species of waterfowl in Tasmania, with particularly large summer concentrations of Australian shelduck (*Tadorna tadoroides*) and chestnut teal (*Anas castanea*). It also supports the largest known Tasmanian flocks of greenshank (*Tringa nebularia*), and sharp-tailed sandpiper (*Calidris acuminata*). Seasonal fluctuations in numbers of birds occur with changes in rainfall.

19. Social and cultural values:

The area has been used fishing and the hunting of waterfowl since European settlement, and for the harvest of waterfowl eggs by Aboriginal groups living around the lagoon for an unknown length of time prior to this.

20. Land tenure/ownership:

All of the area below mean high water (M.H.W) mark is Crown Land as well as approximately one half of the foreshore to a width of between 30 and 150 metres. Approximately 4760 hectares consisting of all of the estuary plus the adjacent Crown foreshore was declared a Game Reserve in December 1988. This status allows for the hunting of waterfowl during the State's open season, however, the 511 hectares that was previously a Conservation Area is still closed to hunting. All of the remaining foreshore and the surrounding land is privately owned and is mostly contained in five large pastoral properties.

21. Current land use:**(a) the site:**

- Nature conservation
- Fishing (small scale low intensity sport angling)
- Waterfowl hunting
- Aquaculture

(b) the surroundings/catchment:

- Livestock grazing
 - Recreation and tourism at nearby Freycinet Peninsula and Coles Bay
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22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:**(a) the site:**

- probable contamination of bottom sediments by lead shot pellets
- access of foreshore to off road vehicles resulting in damage to vegetation
- stock grazing and trampling around edges of lagoon causing damage to vegetation and soil structure, and alteration of plant community composition
- clearing of native vegetation and invasion by weeds
- sailboards and shallow draft jet boats have greatly increased the use of shallow protected waterways in other parts of the state. This type of activity would cause disturbance to roosting and feeding birds in this area.

(b) the surroundings/catchment:

- Continued land clearance for agriculture and the development of residential areas, resulting in siltation and eutrophication
- forestry operations in catchment area

plans to build a water catchment reservoir on the upper Swan river: these plans which would influence water regimes in the reserve have been shelved mainly for economic reasons, but are likely to be reconsidered in the future.

23. Conservation measures taken:

Moulting Lagoon Game Reserve was proclaimed in December 1988.

There is a draft management plan for the reserve and some of its recommendations have been implemented. Approximately ten kilometers of foreshore have been fenced to exclude livestock.

The draft plan will be revised following the submission of public comments, and the proposed final plan will then be forwarded to the State Minister.

24. Conservation measures proposed but not yet implemented:

The Department intends to actively manage parts of the reserve and to provide interpretive displays for the visiting public when time and finances permit.

25. Current scientific research and facilities:

Waterbirds are censused twice each year in mid winter and mid summer. A brief study was undertaken to determine the occurrence and distribution of lead shot pellets and their effect on birds.

26. Current conservation education:

The area is frequently visited by amateur bird observers. Interpretive displays are planned for the general public.

27. Current recreation and tourism:

Approximately 150 duck shooters and several hundred sport anglers use the Moulting Lagoon area.

The nearby Freycinet Peninsula is one of Tasmania's prime tourist locations: Freycinet National Park for bushwalking and Coles Bay for family holidays, water recreation and fishing. Visitor figures for Freycinet National Park were 168 808 in 1992-93 and are expected to reach 200,000 within a few years.

Incorporation of Moulting Lagoon in an ecotourism program based at Freycinet Lodge is being planned.

28. Jurisdiction:

Territorial: Glamorgan/Spring Bay Municipality

Functional: Tasmanian Department of Environment and Land Management, Parks and Wildlife Service, 134 Macquarie Street, Hobart, 7000.

29. Management authority:

Tasmanian Department of Environment and Land Management, however there is no active management of the subtidal or intertidal zones and the Department has little control over areas outside its tenure.

30. Bibliographical references:

Blackhall, S.A. (1986) Moulting Lagoon Proposed Game Reserve Stage II, Planning for the Reservation and Management of a Wetland of International Importance - Revised Draft Plan. National Parks and Wildlife Service, Tasmania.

Brown, Steve (1991) Aboriginal Archaeological Sites in Eastern Tasmania - A Cultural Resource Management Statement. Department of Parks, Wildlife and Heritage Occasional Paper No. 31, Hobart.

Smith, O.L. (1995) Lead contamination of waterfowl in Tasmania by ingestion of shotgun pellets from duck shooting. *Wildl. Res.* **22**, 611-23.
