



5. Australian Capital Territory

Introduction

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THE AUSTRALIAN CAPITAL TERRITORY (ACT) IS THE SMALLEST OF AUSTRALIA'S STATES AND TERRITORIES (235,600 ha) but has a diverse range of aquatic habitats ranging from small subalpine bogs to the larger riverine systems such as the Murrumbidgee River. However the geographic location and altitude of the ACT preclude some wetland types which are common in other States and the Northern Territory.

For example the inland location of the ACT means that there are no marine, estuarine or brackish wetlands. Similarly, with the location of the ACT in the south-eastern highlands, large lowland floodplain systems are also absent.

The first substantial review of aquatic ecosystems in the ACT was conducted by Hogg and Wicks (1989). This review dealt mainly with lotic systems and did not attempt to cover the high altitude wetlands such as fens and bogs. Subsequently Evans and Keenan (1993) reviewed the published and unpublished literature on high altitude wetlands in the ACT.

The ACT is located within two biogeographic regions defined by Thackway and Cresswell (1995) as the Australian Alps, and the South Eastern Highlands, with the majority of its important wetlands being found in the Australian Alps bioregion.

Most of the significant high altitude wetlands of the ACT are located in the Cotter and Gudgenby River catchments. The Cotter River catchment lies between the Brindabella Range in the west, the Bimberi and Scabby Ranges in the south and the Cotter/Gudgenby divide in the east. The tops of these ranges form the western and southern borders of the ACT. The Naas and Gudgenby rivers lie further to the east and have a catchment boundary with the Cotter River catchment. Locations of each of the wetland sites are shown in Figure 3. Most of the wetlands described here are above 1,000 metres altitude with the highest being Cotter Source Bog at 1,718 metres.

In the subalpine and montane zones of the ACT, vegetation communities in wet areas often constitute *Sphagnum* bog or *Carex* fen (or swamp) interspersed with patches of wet heath and wet herbfield. The bogs are generally acidic and have a low nutrient content (Hope and Southern 1983). Bog and fen are distinguished in this region as indicated by Costin (1954) who stated that bogs are dominated by hummock-forming mosses whereas fens lack hummock-forming mosses (Beadle 1981) and contain mainly grass-like plants, such as sedges or rushes (Hope and Southern 1983).

As a representative example of subalpine ecosystems, the wetland sites included here are of 'National Significance' (National Capital Planning Authority 1990) as well as regional or local significance.

The ACT is fortunate in that the vast majority of its remaining wetlands are protected in nature reserves or national parks. Approximately 52% of the ACT is managed for nature conservation purposes with the largest reserved area being Namadgi National Park, covering 105,900 ha. This park contains all the wetlands within the Australian Alps bioregion listed in this chapter.

The majority of the larger lowland aquatic habitats in the ACT are also protected in nature reserves such as the Jerrabomberra Wetlands Nature Reserve and the four nature reserves which make up the Murrumbidgee River Corridor. Since the publication of the second edition of *A Directory of Important Wetlands in Australia* in 1996, a preliminary survey of lowland wetlands in the ACT has been completed. This survey was based on aerial photo interpretation and did not locate any additional wetlands of national or regional importance.

The Cotter Source Bog has been added to the list of nationally important wetlands in the ACT since the second edition. Big Creamy Flats has been removed from the list because it is no longer considered to exhibit the characteristics of the wetland types it was nominated for, and is no longer considered to be of regional or national significance.

The ACT does not have a formal wetlands policy but wetlands issues are addressed in the management plans for the respective nature reserves (ACT Parks and Conservation Service 1986, 1994; ACT Government 1998a, 1997b), or in action plans for threatened aquatic species (ACT Government 1997a, 1999a,b,c,d). The *ACT Nature Conservation Strategy* (ACT Government 1998b) also recognises the importance of aquatic communities and wetlands and provides a framework for guiding the development of nature conservation priorities and directions, and their integration into the overall planning and management process.

This chapter updates the work of Evans and Keenan (1993) and Lintermans and Ingwersen (1996).

Summary analysis

The Directory describes 13 nationally important wetlands in the Australian Capital Territory. The distribution of nationally important wetlands in the ACT (including Ramsar wetlands) is shown in Figure 3. A list compiling data on bioregion, site area, wetland type and criteria for inclusion for each wetland is provided at the end of this chapter.

Only two bioregions occur in the ACT, both of which are shared with Victoria and New South Wales (refer to Table 5.1). The total of nine wetlands listed in the Australian Alps bioregion in the ACT is more than the combined number of sites listed in this bioregion for the other two States, although the ACT contains only 3.4% of the 11,718 km² total area of the bioregion. An overview of the IBRA regionalisation and a map of IBRA regions is included in Appendix 2.

Table 5.1 Number and area of nationally important wetlands in the ACT by IBRA region

IBRA Region	IBRA code	No. of Sites	Area (ha)
Australian Alps	AA	9	909
South Eastern Highlands	SEH	4	348
Total	2	13	1257

The geographic location of the ACT in the elevated south-east of the continent, and its small area, significantly limit the range of wetland types present (refer to Table 5.2). Only eight of the 40 types are represented, with the most common being B10—Seasonal/intermittent freshwater ponds and marshes (n=6). The Wetland classification system and Criteria for inclusion in the Directory are explained in Chapter 2.

Table 5.2 Number of ACT sites in each Wetland type

A—Marine and Coastal Zone wetlands

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
Total	0	0	0	0	0	0	0	0	0	0	0	0

B—Inland wetlands

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19
Total	3	1	0	1	0	0	0	0	3	6	0	0	0	0	3	0	0	0	0

C—Human-made wetlands

	C1	C2	C3	C4	C5	C6	C7	C8	C9
Total	1	0	0	0	0	1	0	0	0

Most ACT wetlands are included in the Directory as good examples of their types within their bioregion (Criterion 1, n=9), but a high number are also included for their outstanding historical or cultural significance (Criterion 6, n=7) (refer to Table 5.3).

Table 5.3 Number of ACT sites included under each Criterion

	1	2	3	4	5	6
Total	9	3	2	1	3	7

List of nationally important wetlands in the Australian Capital Territory

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Big Creamy Flats	AA001AC	Deleted				
Cotter Flats	AA004AC	ACT001	AA	41	B1, B10	1
Ginini and Cheyenne Flats	AA006AC	ACT002	AA	125	B15	1, 2, 4, 5, 6
Rock Flats	AA010AC	ACT003	AA	12	B10	1
Rotten Swamp	AA011AC	ACT004	AA	30	B10	1, 6
Scabby Range Lake	AA012AC	ACT005	AA	5	B10	2
Snowy Flats	AA014AC	ACT006	AA	35	B10, B15	5
Upper Cotter River	AA015AC	ACT007	AA	600	B1	1, 6
Upper Naas Creek	AA016AC	ACT008	AA	56	B9	1
Bendora Reservoir	SEH002AC	ACT009	SEH	81	B1, C1	5
Horse Park Wetland	SEH007AC	ACT010	SEH	40	B2, B9	1, 3, 6
Jerrabomberra Wetlands	SEH009AC	ACT011	SEH	174	B4, B10, C6	3, 6
Nursery Swamp	SEH018AC	ACT012	SEH	53	B9	1, 6
Cotter Source Bog		ACT013	AA	5	B15	1, 2, 6

Note: area figures for the above tables are approximate only.