

## ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

**Threatened Species Profile** 

Department for Environment and Heritage

### Botaurus poiciloptilus

AUS	SA	AMLR	Endemism	Residency
-	V	V	-	Nomadic



Photo: © Keith Hindley

#### **Conservation Significance**

The AMLR distribution is part of a limited extant distribution in adjacent regions within SA.<sup>3</sup> The species has been described as 'probably declining' within the AMLR.<sup>2</sup> Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'. Relative to all AMLR extant species, the species' taxonomic uniqueness is classified as 'High'.<sup>3</sup>

#### Description

Heavy-set, partially nocturnal heron. Upperparts patterned dark brown, buff and black, and underparts streaked brown and buff. Eyebrow and throat pale, side of neck dark brown, bill brown and legs greenish. Also known as Australian Bittern or Brown Bittern. Deep booming call, often heard at night.<sup>1</sup>

#### **Distribution and Population**

Found in coastal and sub-coastal areas of southeastern and south-western mainland Australia, and the eastern marshes of TAS.<sup>1</sup> Most of the global population occurs in Australia. Small sub-populations are found in NZ and New Caledonia (Marchant and Higgins 1990).<sup>4</sup> Occasionally irruptive (suddenly occurring in great numbers) after heavy rains, but mainly sedentary.<sup>1</sup>

#### BIRD Australasian Bittern

Across the entire range, population contains about 2,500 mature individuals, with no sub-population thought to contain more than 1,000 individuals. The estimated extent of occurrence across their range is  $1,000,000 \text{ km}^{2.4}$ 

Post-1983 AMLR filtered records predominantly coastal or from the eastern slopes of the AMLR, from Buckland Park in the north to Victor Harbor in the south, with a record in the Barossa Valley near Krondorf and at Greenfields (G. Carpenter *pers. comm.*). Numerous records from the Onkaparinga area.<sup>3</sup>

Pre-1983 AMLR filtered records scattered from Police Point/Victor Harbor in the south to Bolivar/Waterloo Corner in the north, on the eastern side of the MLR.<sup>3</sup>

#### Habitat

Fairly narrow habitat preferences, preferring shallow, vegetated freshwater or brackish swamps. They are seen most frequently in exceptionally wet years, possibly because the population size increases and they occupy isolated ephemeral wetlands. Pairs occupy territories containing a mixture of tall and short sedges for breeding, though will feed in more open swamp vegetation (Marchant and Higgins 1990).<sup>4</sup>

Within the AMLR the preferred broad vegetation group is Wetland.  $^{\scriptscriptstyle 3}$ 

#### **Biology and Ecology**

Forage mainly at night on a wide range of small animals, including birds, mammals, fish, frogs, yabbies, snails, insects and spiders. As with other herons, these birds use several techniques to capture prey, including: standing and waiting, slow stalking, and active pursuit. Wing and leg movements are used to confuse or attract prey items.<sup>1</sup>

Breeding season is September to December; clutch size four to six eggs.  $^{1}\,$ 

Nests are well-constructed cups of reeds, in reed beds, in which the birds lay four to five eggs (Hobbs 1961, Marchant and Higgins 1990).<sup>4</sup> Several females will nest within one male's territory.<sup>1</sup>

#### **Aboriginal Significance**

Post-1983 records indicate the majority of the AMLR distribution occurs in Kaurna Nation. It also occurs in northern Peramangk Nation and southern Ngarrindjeri Nation.<sup>3</sup>

#### Further information:

Biodiversity Conservation Unit, Adelaide Region Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999 http://www.environment.sa.gov.au/ Government of South Australia

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Prepared as part of the Regional Recovery Plan for Threatened Species and Ecological Communities of Adelaide and the Mount Lofty Ranges, South Australia 2009 - 2014





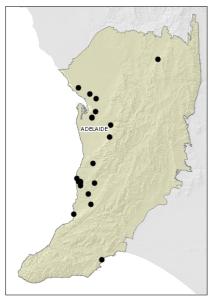
Department for Environment and Heritage

#### Threats

The main threats are diversion of water for irrigation and salinisation or drainage of permanent swamps (Kingsford and Thomas 1995, Kingsford 2000). Overgrazing by stock and inappropriate fire regimes can also reduce habitat suitability (Marchant and Higgins 1990). Bitterns are able to move between wetlands as suitability changes; however, they have comparatively specialised habitat requirements, so are more sensitive to overall habitat loss than are many wetland species.<sup>4</sup> Climate change and drought are also considered threats (G. Carpenter *pers. comm.*).

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

#### **Regional Distribution**



Map based on filtered post-1983 records.<sup>3</sup> Note, this map does not necessarily represent the actual species' distribution within the AMLR.

#### References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

1 Australian Museum (2006). *Birds in Backyards: Bird Finder.* Available from <u>http://www.birdsinbackyards.net</u> (accessed November 2007).

**2** Cale, B. (2005). *Towards a Recovery Plan for the Declining Birds of the Mount Lofty Ranges.* Scientific Resource Document for Birds for Biodiversity. Unpublished Report.

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**3** Department for Environment and Heritage (2007). Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.

**4** Garnett, S. T. and Crowley, G. M. (2000). *The Action Plan for Australian Birds*. Environment Australia, Commonwealth of Australia.