

## Bird Notes

# A recent record of Osprey nesting in mangroves in South Australia

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Although there is a dearth of coastal or near-coastal forests in South Australia, extensive areas of Grey Mangrove, *Avicennia marina*, occur in the intertidal areas of Spencer Gulf and Gulf St Vincent, and in sheltered bays on western Eyre Peninsula in the Great Australian Bight region. These commonly form a continuous low woodland formation extending inland as far as the limit of regular flooding, with individual trees to 3.5-5 m in height (Specht 1972). The furthestmost westerly occurrence of mangrove woodland in South Australia is at Tourville Bay, ~25 km west of Ceduna, where it covers an area >10 km<sup>2</sup> interspersed with tidal creeks, including Davenport Creek, a popular camping and aquatic recreation area for residents of the region.

The mangrove complex within Tourville Bay provides sheltered habitat for large cormorant rookeries and the intertidal area incorporates salt-marsh habitats with extensive sand and mudflats exposed at low tide, providing foraging habitat for significant numbers of threatened migratory bird species. These habitats are recognised internationally as occurring within the Tourville and Murat Bay IBA (Important Bird Area), which extends over an area of 11,689 ha (Birdlife International 2014).

In November 2011, a substantial nest structure was found by one of us (AB) in mangroves

overhanging an isolated tidal creek channel in Tourville Bay. The nest was unoccupied and therefore the species involved was not determined. When the location was revisited in October 2012 this nest had disappeared, but further searching revealed another similarly constructed nest 500 m distant, again unoccupied.

The species involved remained a tantalizing mystery until a return visit in December 2013 revealed the later nest to be occupied by Ospreys, *Pandion haliaetus*, and active, with at least one advanced nestling present (see Figure 1). This is the first confirmed nest placement in mangroves by Ospreys in South Australia since the 1960s, when young were banded at a nest near Murninnie Beach on the western shore of upper Spencer Gulf (Table 1). The nearest (known) occupied Osprey territory to the Tourville Bay site is ~15 km NE in Murat Bay. This was also active in 2013.

Throughout its range in Australasia, Osprey nest sites are most often found in trees (Marchant and Higgins 1993; Dennis and Clancy 2014) and although there are several historical records of tree nests occurring in South Australia, recent examples are rare and therefore exceptional (Table 1). For example, among the 58 occupied territories identified during Statewide surveys conducted between 2008 and 2010 only one pair was found using a tree-nest (Dennis *et al.* 2011), and that nest was <3m above ground level constructed on the nearly horizontal trunk section of a fallen dead tree situated on a small islet. The majority of other nests were constructed on broken sections of coastal cliff and near-shore rock-stacks, with a small number on man-made structures (Dennis 2007; Dennis *et al.* 2011).

Both tropical and subtropical mangrove habitats are recognised worldwide as important nursery habitats for juvenile and sub-adult fish (Laegdsgaard and Johnson 2001), and large schools of Mullet, *Myxus elongatus*, and Garfish, *Hemiramphus melanochir*, are seen regularly by fisherman in tidal creeks among mangroves and adjacent open waters of Tourville and Smoky Bays (AB) and upper St Vincent Gulf (P. Dennis pers. comm.). From this apparent abundance of prey and relatively isolated nest site availability, any expansion of the Osprey population in South Australia, as has occurred in New South Wales in recent decades (Rose 2000; Clancy 2006; Dennis and Clancy 2014), may become evident by re-occupation of former mangrove woodland habitats.

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Figure 1. Nest constructed ~3.5m above high-tide level, shown here with the female present and feeding a large pre-fledged nestling in late-December 2013

Photo: Andrew Brooks

Table 1: Records of Osprey tree-nest placements in South Australia

Region	Location	Date/period	Source
Eyre Peninsula	in dead tree at Lake Wangary	last active <i>ca</i> 1991	Dennis 2007
Spencer Gulf - west	'nest in mangroves' near Murninnie Beach	1965	ABBBS banding records; Dennis <i>et al.</i> 2011
Spencer Gulf - east	'nest in mangroves' near Mambray Creek	1897	SA Museum - Oology collection; Dennis <i>et al.</i> 2011
"	'nest in mangroves' near Port Germein	1898 & 1903	"
"	'nest in mangroves' near Port Broughton	1918	" (SAO 3:132-133)
Kangaroo Island	in dead tree (location withheld)	2004-13	Dennis 2007; Dennis <i>et al.</i> 2011
"	nest on boxthorn bush 2.5 m above ground, Nepean Bay	2001-02	TED pers. obs.
Murray River	in dead tree near Nildottie	last active in 1980	Robinson 1980; Dennis <i>et al.</i> 2011
"	in dead tree near Waikerie	1974	Dennis 2007
"	in dead tree over the Pike River, near Paringa	<i>ca</i> 1970s	I. Falkenberg pers. comm.