Shorebird values at the Meredith River, Swansea

Report to Glamorgan Spring Bay Council, April 2018 Eric J Woehler, BirdLife Tasmania

Executive Summary

The mouth of the Meredith River is of conservation significance for shorebirds. The area is the management responsibility of Crown Land Services in accordance with the *Crown Lands Act 1976*. The conservation significance is largely arising from its connection with the adjacent Moulting Lagoon Ramsar site, which is of international and national significance to resident and migratory shorebirds. It is one component of a local network of coastal feeding and roosting habitats used by resident and migratory shorebirds depending on the tide, prevailing winds and weather conditions, and human disturbance regime. It is critical that shorebirds have alternative sites available to them if their preferred feeding or roosting sites are unavailable due to high tides, poor weather and disturbance arising from human recreational activities. An increasing recreational human presence at the mouth of the Meredith River poses the greatest risks to resident breeding and migratory shorebirds.



Male Red-capped Plover in flight. ©Eric Woehler, BirdLife Tasmania.

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1. Location

The mouth of the Meredith River is approximately 1km north of Swansea, at the western end of Nine Mile Beach and the Dolphin Sands community (Figure 1). The area's tenure is *Crown Land* under the managementof Crown Land Services in accordance with the *Crown Lands Act 1976*. The river is part of a complex of coastal foreshores associated with the adjacent Moulting Lagoon Ramsar site. The river mouth is highly dynamic, changing its configuration as a function of storms and winter erosion, all tides and normal weather events such as rainfall and hence river flow. BirdLife Tasmania (formerly the Bird Observers' Association of Tasmania and Birds Tasmania) have an extensive data set of woodland, wetland and shorebird observations for the area since 1976 when members became aware of the shorebird and wetland bird values present.



Figure 1. Satellite image showing the mouth of the Meredith River and the township of Swansea. Orange symbols show Hooded Plover breeding territories (including nests), red symbols (Pied Oystercatcher), black symbol (Sooty Oystercatcher) and brown symbol (Red-capped Plover), based on BirdLife Tasmania field surveys in 2002, 2007 and 2015.

2. Shorebirds recorded

Table 1 lists the species of shorebird recorded at the mouth of the Meredith River by BirdLife Tasmania from December 1976 to present. A total of six resident species has been recorded on site, but breeding records (nests, eggs or chicks) are only known for three species: Hooded and Red-capped Plovers and Pied Oystercatchers (Figure 1, Table 1).

Three other resident species have been recorded but not nesting (Black-fronted Dotterel, Sooty Oystercatcher and Fairy Tern). In light of the habitat present at the mouth of the Meredith River, it is believed that Black-fronted Dotterels are likely to nest there during suitable conditions.

Two Critically Endangered species (Curlew Sandpiper and Eastern Curlew) have been recorded at the mouth of the Meredith River (Table 1). The observed numbers are relatively low, but reflect their low population status throughout southeast Tasmania (BirdLife Tasmania, unpublished data).

In total, 11 EPBC-listed shorebird species have been recorded at the mouth of the Meredith River (Table 1),

comprising eight migratory and three resident/breeding species.

Shorebird species		R/M	EPBC Thr	EPBC Mar	EPBC Mig	Max #s
Actitis hypoleucos	Common Sandpiper	М		Х	X	2
Arenaria interpres	Ruddy Turnstone	М		Х	Х	1
Calidris ferruginea	Curlew Sandpiper	М	C End	Х	Х	8
Calidris ruficollis	Red-necked Stint	М		Х	Х	210
Charadrius ruficapillus	Red-capped Plover	В		Х		37
Elseyornis melanops	Black-fronted Dotterel	R				7
Haematopus fuliginosus	Sooty Oystercatcher	R				2
Haematopus longirostris	Pied Oystercatcher	В				2
Heteroscelus brevipes	Grey-tailed Tattler	М		Х	Х	4
Limosa lapponica	Bar-tailed Godwit	М	Vul	Х	Х	19
Numenius madagascariensis	Eastern Curlew	М	C End	Х	Х	4
Sterna nereis	Fairy Tern	R	Vul	Х		10
Thinornis rubricollis	Hooded Plover	В	Vul	Х		6
Tringa nebularia	Common Greenshank	М		Х	Х	152

Table 1. Shorebird species recorded at the mouth of the Meredith River by BirdLife Tasmania December 1976 to present (n = 14). R/M column indicates whether a species is resident (R) or migratory (M); B denotes breeding recorded for a resident species at the mouth of the Meredith River (Figure 1). The conservation status of five species under the EPBC Act is shown (C End is *Critically Endangered*, Vul is Vulnerable) as are their inclusion on the Marine and Migratory Species' appendices to the Act. The maximum numbers for each species are shown. The two species listed as *Critically Endangered* are highlighted.

3. Discussion

Based on the shorebirds observed at the mouth of the Meredith River, including breeding records of resident species (Figure 1) and of migratory shorebirds from the Northern Hemisphere (Table 1), BirdLife Tasmania has identified the mouth of the Meredith River to be of significance for shorebirds. This significance is largely arising from its connection with the adjacent Moulting Lagoon Ramsar site, which is of international and national significance to resident and migratory shorebirds (Woehler and Ruoppolo 2014).

It is appropriate to recognise the mouth of the Meredith River as one component of a local network of coastal feeding and roosting habitats used by resident and migratory shorebirds depending on the tide, prevailing winds and weather conditions, and human disturbance regime. It is critical that shorebirds have alternative sites available to them if their preferred feeding or roosting sites are unavailable due to high tides, poor weather and disturbance arising from human recreational activities.

An increasing recreational human presence at the mouth of the Meredith River poses the greatest risks to resident breeding and migratory shorebirds. Recreational horse and motor bike riding have the potential to destroy nests and eggs, and to kill chicks of nesting species. Recreational dog walking disturb nesting, feeding and roosting shorebirds, and dogs off leash disturb shorebirds and are known to take eggs and chicks (BirdLife Tasmania unpubl. obs).

4. Recommendations

Based on the shorebird species present at the mouth of the Meredith River and the threats they face, BirdLife Tasmania recommends the following actions in the short-term:

 ongoing surveys and low-level monitoring by BirdLife Tasmania to obtain contemporary population data for resident and migratory shorebirds, and for these survey data to be made available to Crown Land Services (CLS), and other relevant agencies including PWS and Glamorgan Spring Bay Council (GSBC),

- consideration by CLS for the need for updated/new signs on the shorebird values. In the first instance, there is a need for the replacement of the interpretation sign at the southern side of the bird sanctuary (on the walking track from the Shaw St access),
- consideration by CLS in consultation with PWS and GSBC for the need for a new Dog Policy sign at the fork in the access track from the end of Cambria Drive,
- support by all land managers for community involvement in monitoring, educational activities and temporary fencing and signage as required,
- consideration by CLS in consultation with PWS and GSBC for the need for a new Dog Policy sign at the access track between 151 and 137 Cambria Drive, and
- consideration of signage prohibiting the riding of motorbikes and horses within the bird sanctuary.

The signage and an associated community education effort (eg information sheet sent out with rates notices) will address the primary threats to shorebirds in the area arising from recreational activities. Regular reviews of the area and its shorebird values will be required in light of the dynamic nature of the foreshore due to storms and erosion, tides and weather events.

5. Reference cited

Woehler EJ, Ruoppolo V 2014. *Resident and migratory shorebirds of the Moulting Lagoon Game Reserve Ramsar Site*. Report to NRM South and PWS, May 2014. BirdLife Tasmania Technical Report 2014 - 04, 29 pp.