

Some recent breeding observations of threatened shorebird species in Port Stephens

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The first successful breeding record of Australian Pied Oystercatcher *Haematopus longirostris* in Port Stephens is documented and a second Beach Stone-curlew *Esacus magnirostris* breeding pair is reported, indicating a local expansion of the population.

INTRODUCTION

Port Stephens has been shown to be an important site for a number of migratory and resident shorebirds (Stuart 2011), including Australian Pied Oystercatcher *Haematopus longirostris* and Beach Stone-curlew *Esacus magnirostris*. It often hosts more than 1% of the world population of Australian Pied Oystercatcher making it internationally significant for this species (Hansen *et al.* 2016). There have also been regular Beach Stone-curlew *Esacus magnirostris* records since 2012. The Australian Pied Oystercatcher and Beach Stone-curlew are respectively classified as Endangered and Critically Endangered under the *Biodiversity Conservation Act 2016* (NSW).

The Beach Stone-curlew was first recorded in 2012 and now breeds in Port Stephens (Hunter Bird Observers Club 2015; Mo 2016). Australian Pied Oystercatcher nests with eggs have been previously reported (Orobillah Island, early 2000s, G. Little pers. comm.; Corrie Island, late 2000s, L. Penman pers. comm.) but it is not known if those attempts were successful. Stuart (2011) reported average counts of 110 Australian Pied Oystercatchers in summer and 142 birds in winter, from boat-based surveys of known roosting sites. This account describes recent successful breeding-related observations of Australian Pied Oystercatcher and the expansion of the Beach Stone-curlew breeding population within Port Stephens.

RESULTS

Australian Pied Oystercatcher

The first record of successful breeding-related activity was obtained in September 2017. A nest with two eggs was located on a sandspit at Winda

Woppa (32°40'46"S, 152°08'44"E). One egg was subsequently predated; the remaining egg hatched 15 October 2017. The fledgling was observed on site with two adult birds in early December. A second pair established a nest with two eggs 160 m from the first site in late November. The nest was predated 19 days later by a Lace Monitor *Varanus varius*.

A nest with three eggs was located on Corrie Island (32°41'8"S, 152°08'15"E) in early October 2017. Another nest with one egg was reported in that month on Dowardee Island (32°42'8"S, 152°3'33"E) (T. Murray pers. comm.). The fate of these two nests is unknown. The nests on Winda Woppa and Corrie Island were located 5 and 5.5 km respectively west of the entrance to Port Stephens.

Beach Stone-curlew

In early October 2017, a Beach Stone-curlew nest with a single egg was located on a sandspit on the southwest end of Corrie Island (32°41'4"S, 152°07'43"E). An adult bird was observed nearby. Inspection of photos revealed the egg was in the process of hatching. A subsequent visit five days later found the nest to be deserted. The fate of this chick is uncertain.

DISCUSSION

The recent record of successful breeding-related activity by an Australian Pied Oystercatcher pair follows much previous conjecture regarding the status of the species in Port Stephens. Although there are records as early as 1882 (W. Boles pers. comm.), the population was not considered in the review of the species by the NSW Scientific Committee (2008). The significance of the population has only recently been recognised

(Stuart 2011). Stuart quotes M. Newman (pers. comm.) stating there are very few suitable locations for pairs to establish breeding territories in Port Stephens. Stuart further suggested that most of the birds are from breeding sites elsewhere and that they only spend part of their life cycle in the port. The nearest known breeding site is on Worimi Conservation Lands, Newcastle Bight, around 10 km south. Here, Fraser & Lindsey (2018) recorded between five and seven occupied breeding territories from 2014 to 2017. This number of breeding pairs cannot provide sufficient recruitment to sustain the population in Port Stephens (M. Newman pers. comm.).

Records of nesting-related activity by Australian Pied Oystercatchers now extend from Winda Woppa in the east of the port to Orobillah Island, 20 km west of the port entrance. The sites are on isolated shoreline or secluded islands within the port and habitat varies from shallow, marine tidal shoals to estuarine sand and mud flats. Preferred food is reported to be molluscs, worms and crabs (Marchant & Higgins 1993; Harrison 2009). These have been shown to be common along part of the shoreline (Stuart & Wooding 2018). Areas with similar characteristics are present west of Soldiers Point at Cromarty Bay, Taylors Beach, Fenninghams Island, Bull Island and Swan Bay. Future surveys of these locations during the peak breeding season (September/October) may identify further nest sites.

Beach Stone-curlew favour nest sites in secluded locations such as Corrie Island and Dowardee Island. These two sites are 7 km apart. The foraging ecology of Beach Stone-curlew is not well known but preferred food is reported to be crabs and other invertebrates (Marchant & Higgins 1993). Both groups of fauna are common along parts of the shorelines (Stuart & Wooding 2018).

CONCLUSIONS

Recent confirmation of successful breeding-related activity by Australian Pied Oystercatcher further enhances the importance of Port Stephens for this species. However, the contribution of breeding by resident birds is likely to be modest and the conclusion that the natal origin of most of the population lies outside the area is unchanged. The discovery of a second breeding pair of Beach Stone-curlew in the port further demonstrates the southern expansion of this species in NSW.

Despite the intensive residential development along the southern shores of Port Stephens, areas of suitable nesting habitat are present over a wide area of varying ecology. Undoubtedly the presence of several National Parks, Conservation Areas and Nature Reserves covering parts of the shoreline and islands plays a significant role in conserving this habitat.

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