

## Update on breeding activity by threatened shorebird species on Corrie Island, Port Stephens

Neil Fraser

8 Flannel Flower Fairway, Shoal Bay NSW 2315, Australia [neil8fff@gmail.com](mailto:neil8fff@gmail.com)

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This note documents recent observations of breeding activity by three threatened shorebird species on Corrie Island, Port Stephens: Beach Stone-curlew *Esacus magnirostris*; Australian Pied Oystercatcher *Haematopus longirostris*; and Little Tern *Sternula albifrons*. Corrie Island is a relatively isolated location within Port Stephens, covering around 164 ha, situated at the mouth of the Myall River. The island is a low-lying, partly tidal landmass composed of river sand and gravel. It has been formed within the last 200 years (Thom 1965; Thom & Roy 1975) and is covered by

mangrove forest. Sandy beaches and sandspits are present on the southern side of the island where they are subject to constant erosion and sediment redistribution. Large numbers of shorebirds roost along the southern side of the island and forage on surrounding tidal flats (Stuart 2004). Corrie Island is part of the Myall Lakes Ramsar site (Office of Environment and Heritage 2014). Corrie Island is located about 200 m west of the Winda Woppa sandspit and is separated from it by the east arm of the Myall River (see **Figure 1**).



**Figure 1.** Corrie Island showing nesting locations for Beach Stone-curlew, Australian Pied Oystercatcher and Little Tern.

## Beach Stone-curlew

Beach Stone-curlew was first recorded in Port Stephens in 2006 (Stuart 2011) and a pair has been breeding on Dowardee Island in Port Stephens annually since 2011 (Murray 2019). A single bird near a nest with one egg was found on Corrie Island in October 2017 by Fraser & Stuart (2018) (see **Figure 1**). Hatching was imminent (a crack had formed in the egg) but the ultimate fate of that breeding attempt is not known. A survey of Corrie Island conducted in January 2020 by local volunteers found an adult pair of Beach Stone-curlew (P. Blair pers. comm.). This further confirms the consolidation of the southern range extension of this species in NSW.

## Australian Pied Oystercatcher

Large numbers of Australian Pied Oystercatcher (150-200 birds) were first reported in Port Stephens by Stuart (2004). The number present means that Port Stephens is an Internationally Significant site for the species. Stuart (2011) showed that numbers may have increased when current records are compared with historical data. Despite the large numbers of birds in Port Stephens, there had been no confirmed breeding records until a nest was found on Winda Woppa sandspit in October 2017 (Fraser & Stuart 2018). In October that year an additional two nests were found on Corrie Island (Fraser & Stuart 2018). The locations of those nests are given in **Figure 1**.

In September and October 2019, I surveyed the southern end of Corrie Island and recorded four pairs of Australian Pied Oystercatcher on defended territories, each territory centred *c.* 400 m apart. A nest with two eggs was in one of the territories (see **Figure 1**). The spacing of pairs on Corrie Island (3.3 pair/km), is considerably less than recorded on the Worimi Conservation Lands, Stockton Beach with 0.7-0.9 pair/km (Fraser & Lindsey 2018). Marchant & Higgins (1994) report Australian Pied Oystercatcher on ocean beaches have breeding densities of 0.5-4.7 pair/km (average 2.5 pair/km). The higher density on Corrie Island could be attributed to the limited disturbance experienced by breeding pairs at this isolated locality.

A survey conducted by NPWS personnel and local volunteers in December 2019 recorded adult birds with a recently fledged juvenile on Corrie Island and adults with two recently fledged juveniles on nearby Winda Woppa sandspit (P. Blair pers. comm.).

These successful breeding records highlight the importance of Corrie Island as a modern breeding site for this species.

## Little Tern

In the austral summers of 2016-2017 and 2017-2018, a colony of Little Tern successfully nested on the Winda Woppa sandspit (Fraser 2017; Fraser unpublished data). They did not nest at that site in 2018-2019 or 2019-2020, and instead the breeding colony re-located to the southern side of Corrie Island. The February 2019 Port Stephens Shorebird Survey recorded 152 Little Tern in the Corrie Island-Winda Woppa area including juvenile birds and at least 4 runners at the new breeding site (A. Stuart pers. comm.). Because of time constraints, the number of breeding pairs was not able to be estimated. However, surveys conducted by NPWS personnel and local volunteers in December 2019 and January 2020 recorded up to 30 breeding pairs with eggs, chicks, runners and recently fledged birds all present (P. Blair pers. comm.). There were 27 breeding pairs recorded on Winda Woppa in 2016-2017 and 58 pairs in 2017-2018 (Fraser 2017; Fraser unpublished data).

Factors that could have influenced the change in nesting location from Winda Woppa to Corrie Island were active construction associated with the removal of dredge spoil from the site, the extensive growth of Spinifex Grass *Spinifex sericeus* over parts of the site and the erosion of most of the southern section of the sandspit by the Myall River. Historical records indicate similar changes in location have occurred in the area previously and the species was recorded nesting on Corrie Island by Hitchcock (1959), Campion (1963) and Morris (1979). Morris recorded about 10 pairs nesting in 1972-1973 on a sandspit on Corrie Island that no longer exists, further highlighting the tenuous nature of the breeding sites preferred by this species.

## CONCLUSION

Corrie Island is an isolated location in Port Stephens with difficult access. Recent surveys of the southern part of the island have shown three threatened species breeding there successfully: Beach Stone-curlew; Australian Pied Oystercatcher; and Little Tern. The Beach Stone-curlew records also point to consolidation of the species' recent range expansion in NSW. The breeding records also highlight the important role

played by isolated islands within Port Stephens, such as Corrie Island and Dowardee Island, in the conservation of some threatened shorebird species.

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