

Observations of birds on Moon Island, 17 December 2008

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Moon Island, composed of Late Permian sandstone and conglomerate, lies half a kilometre offshore from Swansea Heads (33°05'14"S, 151°40'23"E). When fully exposed at low tide it is about 400m long by 160m wide. The southern half is mostly submerged during high tide whereas the northern half, which is flat-topped and surrounded by cliffs, rises to a height of about 10m.

Landing on the island is difficult as a boulder strewn sea-floor makes approaching and anchoring hazardous. Consequently, the island is rarely surveyed for birds. However, it is well known as a breeding area for gulls, terns and oystercatchers (Gray & Gwynne 1974). An excursion to the island on 17 December 2008 was intended to be a reconnaissance visit to evaluate the possibility of conducting more regular surveys. Observations were made at rising mid-tide from 9.00am to 10.30am. Counts were carried out only on the less abundant birds as large numbers of gulls and terns precluded accurate counts of these species in the time available.

Twelve species of birds were observed (**Table 1**). Three species were confirmed as breeding: Little Penguin *Eudyptula minor*; Crested Tern *Thalasseus bergii*; and Silver Gull *Chroicocephalus novaehollandiae*. The agitated behavior of a pair of Sooty Oystercatchers *Haematopus fuliginosus* indicated that they had also bred on the island, but the juveniles were hidden from view.

BREEDING BIRDS

Silver Gulls were the most abundant bird with more than 500 estimated. About 100 nests had from one to three eggs or birds sitting on the nest. Some eggs were newly hatched or actually in the process of hatching. Many young were in all stages of growth up to fully fledged juveniles. Nests were widely spaced from one another and generally located on the higher parts of the northern half of the island (a few were only a metre or two above high water). A small number located their nests within Crested Tern nest aggregations. In past

years at least 1000 nesting pairs of Silver Gulls have been observed (Gray & Gwynne 1974).

Many hundreds of Crested Terns roosted on the southern part of the island and more than a hundred nests were present on the northern half. Most of the nests were located on grassy patches on the flat-topped summit (**Figure 1**). The nests were often grouped with as many as 70 birds within a 10m diameter area. A complete range of newly hatched to almost fledged juveniles were dispersed over the northern half of the island (**Figure 2**). In the past about 700 nests were observed on the island by Gray and Gwynne (1974) towards the end of October.

Three Little Penguins, advanced juveniles, occupied small, burrow-like, caves under overhanging sandstone ledges on the northwestern side of the island. The caves were located only a few metres above high-tide level. One juvenile was alone in its burrow (**Figure 3**), and another two were side by side in another very wide burrow. From 12 to 15 nests were noted by Gray and Gwynne (1974).

As the middle section of Moon Island was approached a pair of Sooty Oystercatchers suddenly flew in and appeared very agitated (**Figure 4**). Their behavior indicated that they had youngsters hidden in close proximity. A search unfortunately failed to find them. Thus, although breeding could not be confirmed, it is almost certain that they had, in fact, hatched young. Gray and Gwynne (1974, p. 36) stated that ... "One pair usually nests each year on the shingle between the plateau and rock platform to the west."

Although not observed during this visit, a pair of Kelp Gulls *Larus dominicanus* were first discovered breeding on Moon Island in 1958 and nested there each year until 1966 when two pairs were recorded (Gwynne & Gray 1959, Gray & Gwynne 1974). The 1958 observation was also the first breeding record for Australia. Morris (1975, p. 58) stated that ... "two pairs breed there annually". Kelp Gulls were last recorded on Moon Island in



Figure 1. Nesting Crested Tern.



Figure 2. Juvenile Crested Terns.



Figure 3. Juvenile Little Penguin in burrow.



Figure 4. Agitated Sooty Oystercatcher.



Figure 5. Red-necked Stint roosting.



Figure 6. Pied Cormorants roosting.

1983 when a dead bird was found (Lindsey 1985). Of nine chicks banded between 1959 and 1973 two were later recovered; one at Stockton and one, about four years after banding, at Fremantle, WA (Gray & Gwynne 1974). Occasional sightings indicate that Kelp Gulls still visit the region. One bird was observed at Newcastle Ocean Baths in 1998 (Stuart 1999, p.31), and another was photographed at Stockton as recently as December 2008 (Warren Mayers pers. comm.).

Although a systematic count of nests was not carried out it appears that Moon Island is still an important breeding site for a large number of Silver Gulls and Crested Terns. Only three Little Penguin nests were found as compared to the usual 12-15 nests (Gray & Gwynne 1974) and 10 pairs (Morris 1975). The usual presence of one pair of breeding Sooty Oystercatchers was almost certainly confirmed. The present breeding status of Kelp Gulls and Wedge-tailed Shearwaters *Ardenna pacifica* (the latter occasionally recorded breeding on the island by Morris (1975), with one to two burrows noted in 1958-1960 by Gray and Gwynne (1974)) was not determined.

FORAGING BIRDS

Five species of migratory shorebirds foraged on the southern intertidal part of Moon Island (Table 1). Foraging and resting Red-necked Stints *Calidris ruficollis*, numbered about 20 (Figure 5). At least 16 Ruddy Turnstones *Arenaria interpres*, two Whimbrel *Numenius phaeopus*, two Bar-tailed Godwits *Limosa lapponica*, and six Grey-tailed Tattlers *Tringa brevipes*, were also foraging and resting, sometimes together. An Eastern Reef Egret *Egretta sacra* was recorded by Gray and Gwynne (1974), but shorebirds were not recorded.

Table 1. Birds observed on Moon Island, 17 December 2008

Common Name	Scientific Name	No.	Behaviour
Little Penguin	<i>Eudyptula minor</i>	3	Nesting on northwestern side
Great Cormorant	<i>Phalacrocorax carbo</i>	~10	Roosting at southern end
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>	2	Roosting at southern end
Pied Cormorant	<i>Phalacrocorax varius</i>	~20	Roosting at southern end
Bar-tailed Godwit	<i>Limosa lapponica</i>	2	Foraging at southern end
Whimbrel	<i>Numenius phaeopus</i>	2	Foraging at southern end
Grey-tailed Tattler	<i>Tringa brevipes</i>	6	Foraging at southern end
Ruddy Turnstone	<i>Arenaria interpres</i>	16	Foraging at southern end
Red-necked Stint	<i>Calidris ruficollis</i>	~20	Foraging at southern end
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>	2	Foraging at southern end, probably breeding
Silver Gull	<i>Chroicocephalus novaehollandiae</i>	100s	Nesting in northern half, roosting northern & southern ends
Crested Tern	<i>Thalasseus bergii</i>	100s	Nesting in northern half, roosting northern & southern ends

ROOSTING BIRDS

About 20 Pied Cormorants (Figure 6), 10 Great Cormorants *Phalacrocorax carbo* and two Little Black Cormorants *Phalacrocorax sulcirostris* roosted on the southern part of the island. Numbers were estimated owing to many arrivals and departures. Little Pied Cormorants *Microcarbo melanoleucos* and White-fronted Terns *Sterna striata* have been recorded in the past by Gray and Gwynne (1974) but were not observed on this visit.

ACKNOWLEDGEMENTS

I thank Frank Cosgrove who provided and skippered the boat to transport us to the island, and Dan Herbert who carried out the photography. Many thanks to Alan Morris for reviewing the manuscript and providing help with historical literature. Sue Hamonet generously researched and provided literature for this paper.

REFERENCES

- Gray, D.F. and Gwynne, A.J. (1974). Seabird Islands No. 7 – Moon Island, New South Wales. *The Australian Bird Bander* 12 (2): 36-37.
- Gwynne, A.J. and Gray, D.F. (1959). Breeding of the Black-backed Gull on Moon Island, New South Wales. *Emu* 59: 141-142.
- Lindsey, T.R. (1985). New South Wales Bird Report for 1983. *Australian Birds* 19 (4): 87.
- Morris, A.K. (1975). The Birds of Gosford, Wyong and Newcastle (County of Cumberland). *Australian Birds* 9 (3): 37-76.
- Stuart, A. (Ed.) (1999). Hunter Region of New South Wales Annual Bird Report Number 6 (1998). (Hunter Bird Observers Club Inc., New Lambton.)