

BREEDING LITTLE PIED CORMORANTS *Phalacrocorax melanoleucos* IN THE ADELAIDE AREA. Further to my note on breeding Little Pied Cormorants *Phalacrocorax melanoleucos* along the River Torrens over the spring/summer of 2002–03 (Paton 2003), additional breeding locations were found over the past two nesting seasons. The original breeding trees in St Peters have not been used since February 2003, but birds have bred nearby in the St Peters Billabong and also along the River Torrens at Lockleys.

While conducting bird surveys along the River Torrens following a chemical spill in Torrens Lake, I found several nests of Little Pied Cormorants in November 2003 just west of Rowells Road at Lockleys. The nests were in a tall tree along the river. The predominant species planted along the River Torrens at this site are

black box *Eucalyptus largiflorens* and willow wattle *Acacia salicina*, but my notes were not sufficiently detailed to identify the nesting tree. On 7 November there were two adult birds sitting on nests as well as an old nest. Two weeks later an adult was sitting on one nest and an adult and four almost fully grown young were in or near the other nest. A local resident indicated that the cormorants had nested at this site in at least one year prior to 2003.

Bob Whatmough (pers. comm.) also reported eight nests at this site in January and February 2005, in densely foliated eucalypts. On 3 January, two adult birds appeared to be incubating and two attempted copulation. On 16 January, three adults were sitting on nests, but no young were visible. Two weeks later one nest had a sitting adult and two visible young, a second had one visible young and no adult, and an adult arrived

and fed three young in a third nest. Only one adult was present and no young were visible on 20 February.

More detailed records of the Billabong nests were kept as this site is close to my home and almost weekly counts are made at this site. The St Peters Billabong is an old section of the River Torrens that was isolated from the main stream in the 1970s because of bank erosion. Work by the Torrens Catchment Water Management Board and the local council in 2001–03 altered the Billabong's hydrology and separated the lagoon into two basins to improve water quality in the river. This also led to the Billabong's now two lagoons becoming more visible from the river or western side and making bird observation easier. Regular observations began in May 2003, with one or two Little Pied Cormorants being seen occasionally from May to October 2003. On 23 October one bird was either building or sitting on a nest in a river red gum and on 3 November three adult birds were present, with two sitting on nests. Numbers of birds and nests increased through November and in early December a nest was being built in a nearby pepper-tree *Schinus areira* (= *molle*). All nests were about eight to 12 metres above the level of the water and several metres below the top of the trees.

Vegetation impeded the view across the lagoon so no accurate count of nests was possible over the entire breeding season, but there were at least five nests and perhaps some were used more than once. Weekly counts of nests and birds also made it impossible to give an accurate record of young produced, but on 13 February 2004, of 34 birds, at least 15 were juveniles. The highest count, of 41 adults and young, was on 27 February. The largest number of young seen in a nest at one time was three juveniles. Some time between the end of February and 13 March, adults ceased to sit on nests and the last juveniles were seen on 29 March. Numbers of Little Pied Cormorants in the Billabong fluctuated from none to nine birds through the April to August period. However the River Torrens is only a hundred metres from the nesting site so birds can move easily between the river and the Billabong.

Little Pied Cormorants again used the same river red gum for nesting in spring 2004, with a nest being built on 29 August. By 4 September there were two nests but a week later these were deserted and broken down, despite five adults sitting in the tree. Strong winds and rain occurred during

this period which may account for the nests' abandonment. I was absent for October and November, so observations began again in early December. By 5 December there were five large young and five nests with small young and a week later, seven nests were counted, with some in use. On this date in the nest-tree two adults and six large young were perched, one adult was on a nest and there were at least three juveniles in a nest. In mid-January 2005 there were 16 birds in the nest tree—two adults, six full-sized immature birds and two groups of four juveniles with all-black plumage and beige heads. These latter juveniles were not in nests and one group was being fed by one of the adults. The last juvenile on a nest was recorded in mid-February and by mid-March all immature birds had dispersed from the Billabong.

In both breeding seasons, 2003–04 and 2004–05, one to several Little Black Cormorants *P. sulcirostris* were sometimes in the nest tree as they had been recorded along the river in the 2002–03 season (Paton 2003). Numbers of this species in the Billabong peaked in the summer, both in 2004 and 2005, with 11 birds on 16/1/04 and eight birds on 1/1/05.

These records demonstrate that breeding of Little Pied Cormorants on or near the River Torrens is now an annual event, with two sites being used for at least two or three years. This begs the question of whether this breeding has occurred before, but in such inaccessible sites as to make observation difficult, or whether it is a new phenomenon. The publication of Paton (2003) has prompted another record of breeding birds in the Adelaide suburbs—Brian Furby (pers. comm.) reports breeding at the Roy Amer Reserve lakes at Oakden in the north-eastern suburbs. Several nests in small gum trees on islands have produced young over the past three years. A total number of seventeen young and mature birds were counted at one time.

REFERENCE

- Paton, P. 2003. Little Pied Cormorants *Phalacrocorax melanoleucos* breeding on the River Torrens, St Peters. *South Australian Ornithologist*, 34 (4), 151–152.

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