

SHORT NOTE

First record of little black cormorant (*Phalacrocorax sulcirostris*) nesting in Canterbury and presumed first breeding for the South Island

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The little black cormorant (*Phalacrocorax sulcirostris*) ranges from Indonesia to New Guinea, Australia, New Caledonia and New Zealand. It is the least abundant and least widespread of the 4 species of *Phalacrocorax* found in New Zealand and has a national population estimated at 1000-5000 pairs by Heather & Robertson (1996) and 2000-4000 individuals by Taylor (2000). The New Zealand checklist (Gill *et al.* 2010) does not distinguish subspecies and follows Marchant & Higgins (1990) in lumping little black cormorants in this country with those elsewhere. However, some overseas authorities (*e.g.*, Delaney & Scott 2006; Li *et al.* 2009) classify New Zealand birds as subspecies *purpuragula*, while Australian birds in the south are assigned to *sulcirostris* and Indonesian, New Guinea and northern Australian birds are assigned to *territori*.

The bulk of the New Zealand little black cormorant population is centred in the northern and central North I (Robertson *et al.* 2007), with breeding colonies reported from Auckland, Waikato, Rotorua Lakes, Lake Taupo, Hawke's Bay and Lake Wairarapa (Marchant & Higgins 1990; Heather & Robertson 1996; Gill *et al.* 2010). Birds

disperse widely to North I coastal habitats after breeding, with small numbers regularly wintering in Nelson and Marlborough (Heather & Robertson 1996; Parkinson 2006). Very small numbers reach other parts of the South I and Stewart I (Marchant & Higgins 1990; Gill *et al.* 2010). Taylor (2000) stated that the species bred only in the North I and there is no report of South I breeding in the literature.

The first verified little black cormorant record in the Christchurch area (Central Canterbury, South I) was 1 bird observed at the Avon-Heathcote Estuary on 10 Dec 1991 (Crossland 1993; 1994). This was followed by another bird at Quail I, Lyttelton Harbour on 17 Apr 1992 (Crossland 1994). From 1993 onwards, little black cormorants were recorded all months of the year and have been classified as a non-breeding, resident species (Crossland 1996; 2009). Locally, the species is mainly found on waterways and estuaries on the eastern side of Christchurch City where an average of 5-8 birds were present between 1993 and 2010, increasing to 17 birds by mid 2012. They tend to stay together as a single flock and regularly follow a feeding circuit which includes the Avon-Heathcote Estuary, Linwood Avenue Canal, the lower Avon River, Bexley Wetland and Lake Kate Sheppard (*pers. obs.*). At night they roost with other cormorant species, frequenting either a little cormorant (*P. melanoleucos*) colony at Horseshoe

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Fig 1. Two juvenile little black cormorant (distinguished by their slightly smaller size and brownish plumage) with 4 adults at Lake Kate Sheppard, Christchurch, 30 Dec 2008.

Lake; a little cormorant and black cormorant (*P. carbo*) might roost in the Lower Heathcote River; or a little, black and pied cormorant (*P. varius*) colony at the Bromley Oxidation Ponds. Beyond eastern Christchurch, little black cormorants have been observed at Lake Ellesmere, Lyttelton Harbour, Akaroa Harbour, Brooklands Lagoon, Ashley Estuary and Taranaki Creek wetland but they are rare visitors to all these sites and numbers rarely exceed 1 or 2 birds (*pers. obs.*).

The first indication that little black cormorants may breed locally came on 2 Jan 1999 when Crocker (2001) observed a little black cormorant at Taranaki Creek, Waikuku force a little cormorant from its nest and then settled on the nest as if incubating. The following breeding season, Crocker (2003) reported a single little black cormorant present at the Taranaki Creek little cormorant colony on 20 Aug 2000. One to 2 birds have been seen at this colony in subsequent years (*pers. obs.*), but breeding by little black cormorant at this site has not been confirmed.

Between 2003 and 2008, little black cormorants were occasionally observed roosting at a mixed species cormorant colony on "Rat I" in pond 5, Bromley Oxidation Ponds. In Sep 2008 this colony supported 55 pairs of pied cormorant, 37 pairs of black cormorant and 21 pairs of little cormorant. A pair of little black cormorants was present through the winter of 2008 and on 30 Sep, this pair (presumed to be the same individuals as observed earlier) was found with a nest on the northern side of the island. The nest was located about half way up a mature macrocarpa tree (*Cupressus macrocarpa*) and was

within a few metres of 2 pied cormorant and 2 little cormorant nests. Both parents were in attendance with 1 bird incubating and the other roosting on an adjacent branch. The stage of incubation was unknown. The adult birds had fine white plumes on the side of their faces and eyebrows. This was the first time I have seen little black cormorants in breeding plumage anywhere in Canterbury.

The nest site was next visited 2 weeks later on 14 Oct 2008 when 1 bird was observed at the nest and the other roosting close by. I was unable to determine if the nest contained eggs or small chicks. That it contained small chicks is certain, as a visit on 21 Oct revealed half-grown chicks in the nest. On 11 Nov, 1 adult bird was seen close to the nest site but there was no sign of the other adult and the chicks. On 26 Nov 2008, 2 adults and 2 recently fledged juveniles were observed roosting together close to the nest site, confirming a successful breeding attempt. Subsequently, this family joined other local little black cormorants to form a group of 6-10 which frequented the Avon-Heathcote Estuary and local waterways. On 30 Dec 2008, I photographed the 2 juveniles (distinguished by their slightly smaller size and brownish plumage) with 4 adults at Lake Kate Sheppard (Fig. 1). Successful breeding attempts by at least 1 pair of little black cormorant was recorded again in 2010 (2 fledged juveniles sighted) and in 2011 (3+ fledged juveniles). By autumn 2012, the Christchurch little black cormorant population had grown to 17 birds.

The observations reported here represent the first confirmed breeding of little black cormorant in the Canterbury Region. These are also the first

documented breeding records for the South I. The establishment of a small breeding population at Christchurch represents a range expansion of c.320 km south of the nearest known breeding location at Lake Wairarapa, near the southern tip of the North I. At latitude 43° 32', Christchurch now marks the southern-most breeding location in the international range of this species.

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