

SHORT NOTE

Incestuous breeding by sibling variable oystercatchers (*Haematopus unicolor*)

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On 16 Nov 2005, we observed a pair of variable oystercatchers (*Haematopus unicolor*) at the eastern end of Rabbit Island, Tasman Bay. Both birds were banded and each had an orange Darvic flag on the tibia indicating that they had been marked as chicks in Tasman Bay. A search revealed a nest with 2 eggs. On 16 Dec, 1 egg had been lost and the other was pipping; the adults were aggressive towards us. The chick was seen following the parents on 18 Dec and until 21 Dec but was not seen after that date. There were many stoat (*Mustela erminea*) tracks in the vicinity.

On 10 Dec we were able to read the metal bands of both parent birds and discovered that they were siblings, banded as chicks (2 of a brood of 3) on 13 Feb 2003 on Rabbit Island, some 5.8 km from their breeding site.

This appears to be the 1st record of breeding by 2-year-old variable oystercatchers. It is noteworthy that both parents appeared to be 'fully' adult in colouration of both the plumage and the soft parts. Marchant & Higgins (1993) state 'Probably do not start pairing or breeding until third year, when adult plumage is attained', and note that Baker's (1974) suggestion that 'some birds may breed when 4 y old; however, the majority do not reach breeding condition until they are at least 5 y of age' is based on unreliable ageing characters. However, Dowding & Moore (2006) note that some individuals may not breed until they are 7 years old.

This record is of particular interest as it involved an incestuous sibling pair, although in the absence of genetic studies we do not know whether they were full or half siblings. Incestuous relationships (parent/offspring pairings or sibling pairings) are generally uncommon in birds, even in species that breed co-operatively (Carlson *et al.* 1998; Coleman

et al. 1994; Koenig & Haydock 2004; Petty *et al.* 1986). Differences between sexes in the extent to which they disperse from natal areas is thought to be one mechanism by which birds avoid inbreeding (Ralls *et al.* 1986). The limited banding of variable oystercatcher chicks in Tasman Bay suggests however, that few chicks disperse away from the natal area: the greatest distance recorded so far is 8 km. Elsewhere in New Zealand chicks have been recorded breeding at their natal site and up to 61 km away (Dowding & Moore 2006).

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