

SHORT NOTE

An unusual influx of Snares crested penguins (*Eudyptes robustus*) on the Chatham Islands, with a review of other crested penguin records from the islands

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Crested penguins (*Eudyptes* spp.) are observed regularly on the Chatham Islands, but few sightings have been published. During January - February 2003 at least four Snares crested penguins (*E. robustus*) were observed on the Chatham Islands. We reviewed previous and subsequent sightings of crested penguins on the Chatham Islands to determine whether this influx was unusual. Of 33 other records of crested penguin where identification was to at least species level, one was of a Snares crested penguin, 23 were of erect-crested penguins (*E. sclateri*), and nine were of rockhopper penguins (*E. chrysocome*; two different subspecies). There were no confirmed records of Fiordland crested penguin (*E. pachyrhynchus*) from the Chatham Islands.

No crested penguins have bred on the Chatham Islands since the pre-1800 A.D. demise of an undescribed, apparently endemic *Eudyptes* penguin larger than extant species (Tennyson & Millener 1994; Millener 1999). The first record of a crested penguin from the Chatham Islands was a specimen of "*Eudyptes pachyrhynchus*" collected by Henry Travers in 1871 or 1872 (Travers & Travers 1872). At this time, *E. sclateri* and *E. robustus* were often lumped with *E. pachyrhynchus*, and so it is not possible to determine which species this record refers to. Oliver

(1955) accepted the record as *E. pachyrhynchus* (*sensu stricto*) in his introduction to the species, but did not list the record under "Distribution" for Fiordland crested penguin. Our attempts to locate the specimen have been unsuccessful.

Fleming (1939) reported that crested penguins were regular visitors to Chatham seas, with *E. sclateri* the most frequent "...as one would expect from the proximity of its breeding headquarters, the Bounty Islands". The source of this information is unknown, as the only crested penguin that Fleming himself saw was a juvenile erect-crested penguin on Rangatira (South East) Island on 21 Dec. 1937. Dawson (1955) also reported a single erect-crested penguin on The Forty Fours on 1 Feb. 1954.

Sightings of crested penguins on the Chatham Islands between 1960 and 1993 were summarised by Imber (1994), who reported one eastern rockhopper penguin (*E. chrysocome fillholi*), one Moseley's rockhopper penguin (*E. c. moseleyi*), one Snares crested penguin, and only two records of erect-crested penguins. More detail on one of the latter records was provided by Nilsson *et al.* (1994), who reported that there were "several" erect-crested penguins on the north coast of Rangatira Island in March - April 1992; this record is here assumed to be of at least two different birds. Further detail on the eastern rockhopper penguin (on Mangere Island in February - March 1988) was provided by Tennyson (1994), who also reported an additional rockhopper penguin record (subspecies unknown) from Rangatira Island in the late 1970s. Detail of the Moseley's rockhopper penguin record (one on Rangatira Island, August 1968 and November 1970) was provided by Moors & Merton (1984). The Snares crested penguin was a banded yearling found on the north coast of Chatham Island in February 1973 (Robertson 1974). A further record of Moseley's rockhopper penguin (Pitt Island, November 1998) was reported by King & Robertson (1999), who also reported that local residents had seen possibly the same bird a year previously.

The published record of crested penguins on the Chatham Islands 1937-2004 can be summarised as: at least five erect-crested penguins, two-three Moseley's rockhopper penguins, one eastern rockhopper penguin, one unidentified rockhopper penguin, and one Snares crested penguin. This is clearly a vast underestimate of the true number of crested penguins reaching the Chatham Islands. Our enquiries and observations have added another 35 previously unpublished records over this same time period, of which 27 were identified to species (Table 1).

Given that few people visit much of the coastline of the Chatham Islands, it is likely that small numbers of erect-crested penguins occur on the Chatham Islands annually, particularly during their moult (January - March). At least one Moseley's

Table 1 Records of crested penguins from the Chatham Islands 1871-2004. UBR = Unusual Bird Report accepted by the Ornithological Society of New Zealand's Rare Birds Committee (RBC). Note that there are no records of crested penguins from the Chatham Islands in published Classified Summarised Notes (*Notornis*) for the period 1942-2000, and only one record from the OSNZ Beach Patrol scheme (erect-crested penguin; Veitch 1981). The Thinornis Bay Snares crested penguin sighting (18 Feb. 2003) was not accepted by the RBC, as no description or photograph was submitted.

Species	Date	Location	Observer/reference
Eastern rockhopper penguin	Feb.-Mar. 1988	Mangere I.	Tennyson (1994)
Moseley's rockhopper penguin	26 Aug. 1968	Rangatira I.	Moors & Merton (1984)
	8 Nov. 1970	Rangatira I.	Moors & Merton (1984)
	17 Feb. 1993	Glory Bay, Pitt I.	Mike Bell
	18 Nov. 1998	North Head, Pitt I.	King & Robertson (1999)
	March 2001	North Head, Pitt I.	Ken & Eva Lanauze
	3 Jan. 2004	Star Keys	Sarah Gregory-Hunt (UBR 26/04)
Unidentified rockhopper penguin	Late 1970s	Rangatira I.	Tennyson (1994)
	c.1987	Kaingaroa, Chatham I.	Rob Chappell
Snares crested penguin	21 Feb. 1973	North coast, Chatham I.	Robertson (1974)
	16 Jan. 2003	Washout Creek, Chatham I.	UBR 62a/03
	Jan.-Feb. 2003	Waitangi, Chatham I.	UBR 22/03
	Feb. 2003	Mangere I.	UBR 62b/03
	11 Feb. 2003	West Landing, Rangatira I.	UBR 62c/03
	18 Feb. 2003	Thinornis Bay, Rangatira I.	Rachel Johnstone
Erect-crested penguin	21 Dec. 1937	Rangatira I.	Fleming (1939)
	1 Feb. 1954	The Forty Fours	Dawson (1955)
	March 1979	Long Beach, Chatham I. (dead)	Veitch (1981)
	10 Jan. 1984	Rangatira I.	Colin Miskelly
	1987	Point Munning, Chatham I.	Rob Chappell
	26 Feb. 1992	Kaingaroa Point, Chatham I.	Amanda Baird
	Mar.-Apr. 1992	Rangatira I. ("several" birds)	Nilsson <i>et al.</i> (1994)
	2 Mar. 1996	Taupeka Point, Chatham I.	Mike Bell
	30 Jan. 1997	The Forty Fours	Dave Bell & Chris Robertson
	13 Feb. 1997	Rangatira I.	Mike Bell
	15 Feb. 1997	The Pyramid (2 birds)	Dave Bell & Chris Robertson
	30 Jan. 1998	Kaingaroa, Chatham I.	Mike Bell
	3 Feb. 1998	Maunganui Beach, Chatham I.	Mike Bell
	21 Feb. 1998	Waitangi West Beach, Chatham I.	Mike Bell
	26 Feb. 1998	Durham, Chatham I.	Mike Bell
	Jan.-Feb. 2001	Whalers Bay, Rangatira I.	Graeme Taylor
	25 Feb. 2001	Taupeka Point, Chatham I.	Mike Bell
	c. Feb. 2003	Flower Pot, Pitt I.	Bronwen Thompson
	Feb. 2004	West Landing, Rangatira I.	Matt Charteris & Graeme Taylor
	13 Mar. 2004	The Clears, Rangatira I.	Jo Hiscock & Jim Searle
	March 2004	Glory Bay, Pitt I. (died)	Nathan McNally
Unidentified crested penguin	1871-72	Mangere I.	Travers & Travers (1872)
	Undated	Otawae, sw Chatham I.	Mike Bell (from local residents)
	c. Jan. 1991	Rangatira I.	Alan Munn
	pre Dec 1995	Waitangi, Chatham I.	Mike Bell (from local residents)
	Dec. 1996	Flower Pot, Pitt I. land	Mike Bell (from local residents)
	Feb. 1997	Owenga, Chatham I.	Mike Bell (from local residents)
	c. Nov 1997	North Head, Pitt I.	King & Robertson (1999)
	Feb. 1998	Manakau, se Chatham I.	Mike Bell (from local residents)
	Feb. 1999	Whangamoe, Chatham I.	Mike Bell (from local residents)
	March 2001	Mangere I.	Mike Bell (from local residents)

rockhopper penguin appears to have been resident around Pitt Island and the adjacent Star Keys during 1993-2004.

Quite exceptional among this expanded list of 48 crested penguin records from the Chatham Islands was the occurrence of four-five Snares crested penguins in January - February 2003. Four of these birds were photographed and all four records have been accepted by the Ornithological Society of New Zealand's Rare Birds Committee (Unusual Bird Report 22/03 and UBR 62a-c/03).

The first record was of a subadult in pre-moult condition at Washout Creek, Maunganui, on the north coast of Chatham Island on 16 Jan. 2003 (R. Williams pers. comm.). This site was visited daily from late September 2002 to late February 2003 and the penguin was not seen subsequently.

The second record was a subadult that moulted under the Waitangi Wharf, Chatham Island, 28 Jan. - 10 Feb. 2003 (A. McKillop pers. comm.). A third subadult in the early stages of moult was seen on Mangere Island in early February 2003 (B. Gibb & R. Johnstone pers. comm.).

Two Snares crested penguins were observed on Rangatira Island; a subadult that had recently completed moult at West Landing on 11 Feb. 2003, and an unphotographed bird with shorter crests at Thinornis Bay on 18 Feb. 2003 (R. Johnstone & E. Wilson pers. comm.).

Based on chin colour, crest length and bill size, all four birds photographed appeared to be two-year-olds that would have fledged in January 2001 (C. Miskelly pers. obs.).

Given that only a single Snares crested penguin has been identified among 33 other crested penguins reaching the Chatham Islands (Table 1), we suggest the early 2003 influx of Snares crested penguins was anomalous, and probably reflected a brief change in at-sea distribution. As almost all Snares crested penguins return to the Snares Islands to moult (Warham 1974; Miskelly *et al.* 2001), we suggest the distribution of birds at sea varied in 2002, both in relation to other years and to other cohorts of pre-breeding birds in this year. However, sea surface temperatures and chlorophyll-a concentrations provide no evidence of any oceanographic anomaly around the Chatham Islands in late 2002 - early 2003 that could explain this incursion (Michael Uddstrom, pers. comm.).

We note that Fiordland crested penguins have not been recorded on the Chatham Islands. There are many records of Fiordland crested penguins from southern Australia (Marchant & Higgins 1990), indicating that the bulk of the population probably forage in the southern Tasman Sea when not breeding, rather than ranging to the east of mainland New Zealand.

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