

Additions to the Chatham Islands' bird list, with further records of vagrant and colonising bird species

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Abstract 182 bird taxa have been recorded from the Chatham Is archipelago, including 32 reported here that are additional to the most recently published reviews in 1990 and 1994. Nine of these new records are from subfossil bone deposits; the remaining 23 are new records of vagrants or colonists, although 2 result from taxonomic revision of albatross species, where it is not clear how many terminal taxa had been recorded before 1994. Antipodean albatross (*Diomedea antipodensis*), Salvin's mollymawk (*Thalassarche salvini*), and Indian yellow-nosed mollymawk (*T. carteri*) were recorded breeding on the Chatham Is for the 1st time since 1994, with the latter being the 1st breeding record for the New Zealand region. Notable among the list of over 100 vagrant species recorded from the Chatham Is are the only New Zealand records to date of Atlantic yellow-nosed mollymawk (*T. chlororhynchos*), and willie wagtail (*Rhipidura leucophrys*).

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INTRODUCTION

The Chatham Is comprise a small archipelago (c.97,000 ha) lying on the subtropical convergence, about 870 km east of mainland New Zealand. The 4 largest islands (Fig. 1) have been extensively modified by farming, and retain little of their original forest cover. However, farm stock were removed from Rangatira and Mangere Islands over 30 years ago; these 2 islands are now free of all introduced mammal species, and are important breeding sites for many endemic and threatened bird species. The 2 largest islands are inhabited, and have a range of introduced pest species, including feral cats (*Felis catus*), feral pigs (*Sus scrofa*) and house mice (*Mus musculus*) on Pitt Island, and

these species plus 3 rat species (*Rattus* sp.), brush-tailed possums (*Trichosurus vulpecula*) and hedgehogs (*Erinaceus europaeus*) on Chatham Island. Feral and domestic cattle (*Bos taurus*) and sheep (*Ovis aries*) cause considerable damage to unfenced forest remnants on both islands. The weka (*Gallirallus australis*; a flightless rail endemic to mainland New Zealand) was introduced to Chatham I in 1905, and subsequently to Pitt Island; on both islands the weka is a significant predator of ground nesting birds. Farm goats (*Capra hircus*) have yet to spread to forest remnants.

The forests of the Chatham Islands have a low diversity of tree species, and those present rise to heights of only 6-10 m (Anon. 1996; Crisp *et al.* 2000). Most tree species are endemic to the Chatham Is, but all belong to genera widespread

on the New Zealand mainland, including *Olearia*, *Myrsine*, *Meliccytus*, *Pseudopanax*, *Coprosma*, *Hebe*, *Dracophyllum*, *Plagianthus*, *Corynocarpus*, *Myoporum* and *Rhopalostylis* (Crisp *et al.* 2000). Steep coastal slopes, dunelands, peat bogs and other wetlands have lower stature shrub, sedge, rush, tussock, fern and herbfield vegetation, including the only 2 endemic plant genera *Myosotidium* and *Embergeria*.

The breeding birds of the Chatham Islands are comparatively well known, largely as a result of intensive conservation effort that has occurred since Fleming (1939) documented the status of several critically endangered species. Much of the research on Chatham Is threatened bird species was summarised by Holdaway (1994), and further information can be found in Butler & Merton (1992), Anon (1996), Robertson (1999), Aikman *et al.* (2001), Aikman & Miskelly (2004), and the 7 volumes of the *Handbook of Australian, New Zealand & Antarctic birds* (e.g., Marchant & Higgins 1990). At least 23 species of birds on the Chatham Is have received conservation management or research, and some (most notably black robin *Petroica traversi* and Chatham Island taiko *Pterodroma magentae*) have achieved international renown following their dramatic rediscoveries and recoveries from near extinction (Butler & Merton 1992; Crockett 1994; Imber, Taylor *et al.* 1994; Imber, Crockett *et al.* 1994).

The most recent comprehensive reviews of the birds of the Chatham Is were those of Imber (1994) and Freeman (1994) for seabirds and landbirds respectively. Aikman & Miskelly (2004) provided an updated checklist, but did not provide details of the many additions to the bird list since 1994. The following list provides details of species listed in the appendix "Checklist of the birds of the Chatham Islands" in Aikman & Miskelly (2004) that were not recorded in any of Turbott (1990), Imber (1994), or Freeman (1994). In addition, we provide details of sightings of 3 further species recorded since June 2004 (royal penguin *Eudyptes chrysolophus schlegeli*, Hudsonian godwit *Limosa haemastica*, spine-tailed swift *Hirundapus caudacutus*) and one omitted by Aikman & Miskelly (Salvin's prion *Pachyptila salvini*) along with nine new subfossil species records not mentioned in Turbott (1990). One further species (king penguin *Aptenodytes patagonicus*) recorded in 2006 was known previously only from subfossil bone deposits. The opportunity is also taken to provide additional records of species listed by Turbott (1990), Imber (1994), and Freeman (1994) that are considered rare visitors to the Chatham Is.

At-sea records reported here are mainly birds seen on boat trips between islands. For records

received from the boat-based Heritage Expeditions (Rodney & Shirley Russ, pers. comm.), we have confined records to those within 20 km of the Chatham Islands. "UBR" refers to Unusual Bird Report reference numbers for records submitted to the Rare Birds Committee of the Ornithological Society of New Zealand. Albatross nomenclature follows Robertson & Nunn (1998).

SPECIES RECORDS

Wandering (snowy) albatross *Diomedea exulans*

One feeding at a stranded sperm whale (*Physeter macrocephalus*) at Te Hapupu, northern Hanson Bay, on 13 Aug 2004 (AB, pers. obs.).

Antipodean albatross *D. antipodensis* One pair nested unsuccessfully on the ridge between Kawhaki and Waipurua Creeks, southwest Chatham I in 2003, 2004, and 2005. Another pair successfully fledged a chick from Waipaua Scenic Reserve, Pitt I, in 2004/05. A 3rd pair was raising a chick on Mount Hakepa, Pitt I, in 2006. These are the 1st breeding records for the Chatham Is. Before breeding occurred at these sites, Antipodean albatrosses were recorded ashore on the following occasions: 1 inland from Otawae (= Otawae) Point, southwest Chatham I in 1998 (P. Seymour & R. Holmes, pers. comm.) and nearby in May 2001 (J. Holmes, pers. comm.); a male on the north-eastern flanks of The Horns in 1999 (R. Holmes, pers. comm.); a subadult male on Pitt I on 6 May 2002 (R. Cameron, pers. comm.); a male on Kawhaki ridge on 19 Feb 2003 (P. Seymour, pers. comm.); and a male in Waipaua Scenic Reserve, Pitt I, in Jan 2004 (Robin Seymour, pers. comm.). In 2003, the Kawhaki ridge pair had a fresh egg on 9 Apr (CM, pers. obs.) which had failed by 25 Apr (P. Seymour & R. Holmes, pers. comm.). In 2004, this pair moved about 270 m down the ridge, and were on a fresh egg on 8 Feb (G. Taylor, pers. comm.) but failed soon after hatching (dead chick seen on 15 Apr; AB, pers. obs). The female laid again on 4 Feb 2005, near the 2004 nest, but the male was never seen, and the egg was abandoned by 10 Feb (Ron Seymour, pers. comm.). Photographs of this pair were given in Aikman & Miskelly (2004). The Waipaua pair was found with a very young chick on 25 Apr 2004, and this fledged on 29 Jan 2005 (N. McNally, pers. comm.). The Mount Hakepa pair was found on an egg in early Jan 2006, and this hatched c.15 Apr (J. Lanauze & N. McNally, pers. comm.).

Four Antipodean albatrosses were seen offshore from Rangatira I in Mar 2004 (J. Searle, pers. comm.). One was on the ground at Thomas Mohi Tuuta (Rangaika) Scenic Reserve, south-east Chatham I, in Nov 2003 (A. Preece, pers. comm.),

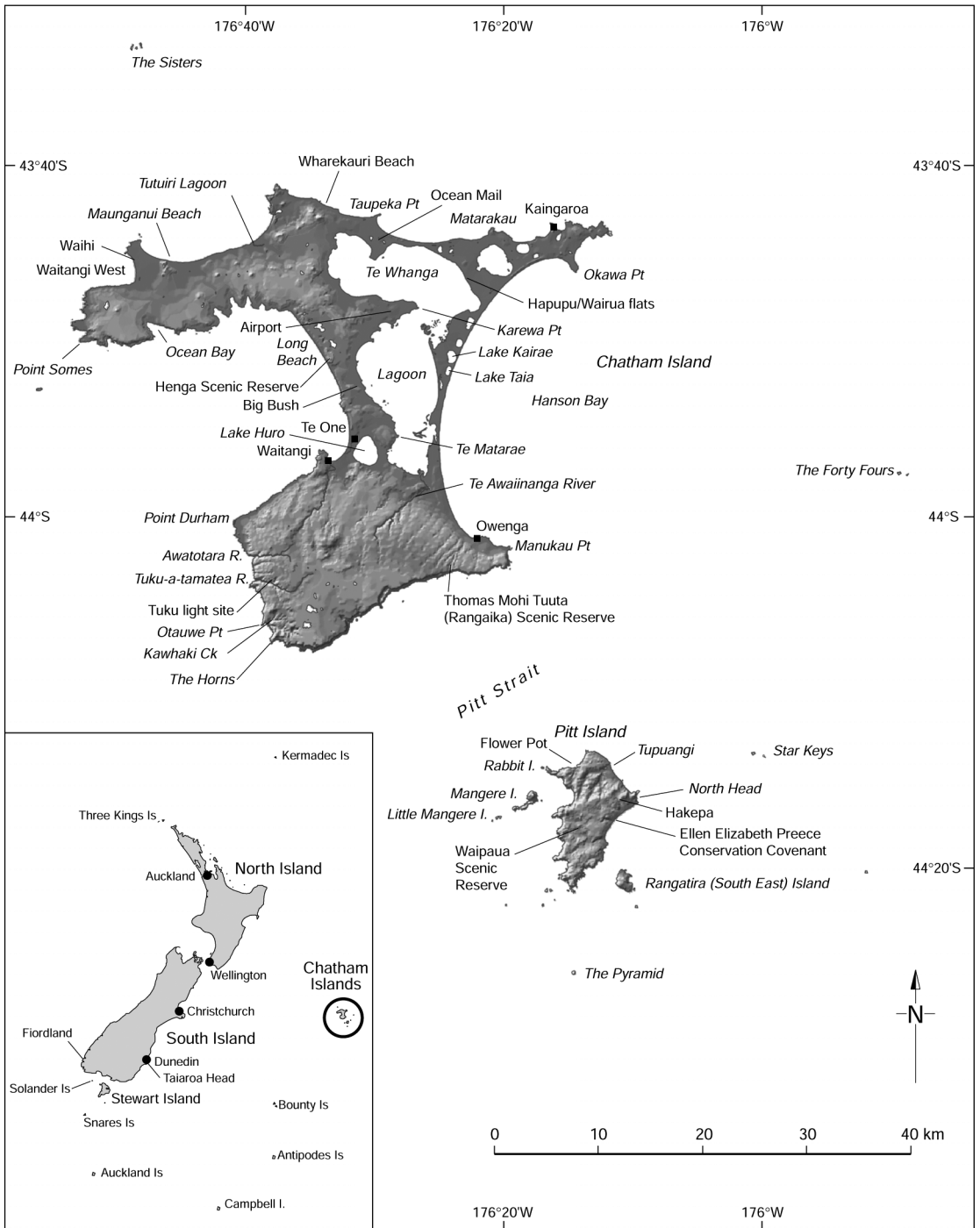


Fig. 1 The Chatham Islands, showing locations referred to in the text.

and a male was on the ground at Hakepa, Pitt I in Jan 2005 (K. Lanauze jnr, pers. comm.).

An Antipodean albatross found beach-cast on Long Beach on 17 Aug 1996 (MB, pers. obs.) had

been banded as an adult on Antipodes I on 9 Mar 1969. A juvenile "wandering" albatross at Maunganui Beach in late Jan 2003 (R. Williams, pers. comm.) is likely to have come from either Antipodes I (Antipodean albatross) or the Auckland Is (Gibson's albatross, *D. gibsoni*); birds from both populations begin to fledge in late Jan (Marchant & Higgins 1990). It is expected that Gibson's albatross will occur around the Chatham Is, but this has not been confirmed since the taxon was formally described by Robertson & Warham (1992). We note that more recent genetic analysis by Burg & Croxall (2004) showed limited differentiation between the 2 taxa, and led to a recommendation that *D. gibsoni* be reclassified as *D. antipodensis*. Single "wandering" albatrosses are often seen at sea around the Chatham Is (MB, pers. obs.). Previous to the records reported here, Imber (1994) reported 2 sightings of wandering albatrosses (*sensu lato*) at sea near the Chatham Is.

Southern royal albatross *D. epomophora* One found beach-cast on Maunganui Beach on 9 Jan 1998 (MB, pers. obs.; Taylor 2004), and 1 seen near The Pyramid on 18 Nov. 2004 (T. Wilson, pers. comm.). One previous record from the Chatham Is (Imber 1994).

Black-browed mollymawk *Thalassarche melanophris* Four were seen behind a fishing boat off The Horns on 5 Jun 2004 (AB, pers. obs.). This taxon was lumped together with *T. impavida* by Imber (1994), with none of the 6 records specifying the species or subspecies present. Black-browed mollymawks not identified to species were seen in Pitt Strait on 14 May 1997 (2), 17 Jul 1997, 6 Jun 1998 (3), and 15 May 1999 (2) (all records MB, pers. obs.).

Campbell Is mollymawk *T. impavida* One seen flying around The Pyramid on 6 Nov 1998 (C. Robertson, pers. comm.). See comments for *T. melanophris* above.

White-capped mollymawk *T. steadi* Singles have been recorded ashore on The Forty Fours, and The Pyramid (P. Scofield, C. Robertson & D. Bell, pers. comm.). A pair was on an egg on The Forty Fours in Dec 1991 and Dec 1996, and a female (banded O-26551) was on a small chick at the same nest site on 30 Jan 1997 (Robertson *et al.* 1997). The same adult was guarding a recently-hatched chick on The Forty Fours on 27 Jan 2005 (P. Scofield, pers. comm.). White-capped mollymawks are regularly seen at sea around the Chatham Is (MB, pers. obs.).

Salvin's mollymawk *T. salvini* Singles have been recorded ashore on The Forty Fours, and The Pyramid (P. Scofield, C. Robertson & D. Bell, pers. comm.). Fifteen individuals were banded on The

Pyramid between 1999 and 2003, including 1 previously banded as a chick on the Bounty Is in 1985. At least 1 bird bred with a Chatham Is mollymawk (*T. eremita*) on The Pyramid in 2003, and was seen rearing a chick to at least 1 month old (P. Scofield, pers. comm.). An unaccompanied large "cauta" mollymawk chick on The Forty Fours on 27 Jan 2005 was presumed to be this species as it was at a site where adult Salvin's mollymawks had been seen previously, and was far more advanced than the white-capped mollymawk chick seen on the same day (P. Scofield, pers. comm.). The colouration of this chick's face and bill matched *T. salvini* rather than *T. eremita* (CM, pers. obs from photographs); these 2 taxa have similar breeding chronology. Salvin's mollymawks have previously been recorded ashore on The Pyramid on at least 3 occasions (Imber 1994) and are regularly seen at sea around the Chatham Is (MB, pers. obs.).

Grey-headed mollymawk *T. chrysostoma* One beach-cast on Waitangi Beach on 18 Oct 1997 (MB, pers. obs.; Taylor 2004), and one seen in Pitt Strait on 29 Dec 1997 (MB, pers. obs.). The only previous record was a beach-cast bird (Imber 1994).

Atlantic yellow-nosed mollymawk *T. chlororhynchos* One seen ashore on Middle Sister I in Jan 1996 (Robertson 1996). This is the same site as for New Zealand's only previous records of this taxon (1 ashore on 21 Jan 1975, 1 collected Sep 1976; Robertson 1975; Imber 1994).

Indian yellow-nosed mollymawk *T. carteri* One pair nested on The Pyramid each year from Nov 1998 to Dec 2000 (C. Robertson; UBR 21/01; Medway 2001a), and through to at least Dec 2003 (P. Scofield, pers. comm.). First New Zealand breeding record, and 1st record for Chatham Is. A yellow-nosed mollymawk was seen offshore from Rangatira I by CM on 1 May 2001 (UBR 55/01; Medway 2001b).

Buller's mollymawk *T. bulleri* One captured on Middle Sister I in Jan 1996 (Robertson 1996). This taxon breeds on the Snares and Solander Is. First record for Chatham Is.

Pacific mollymawk *Thalassarche* undescribed sp. A non-breeding bird was ashore on The Pyramid each Dec in 1997, 1999, 2001, and 2003 (C. Robertson, D. Bell & P. Scofield, pers. comm.). Elsewhere in the Chatham Is this taxon breeds abundantly on The Sisters and The Forty Fours (Aikman & Miskelly 2004).

Buller's shearwater *Puffinus bulleri* Buller's shearwaters are probably regular around the Chatham Is in summer. Recent records include 7 off Wharekauri on 15 Nov 1996 and 4 on 7 Feb 1997, 6 off Point Somes on 21 Dec 1997, 6 in Pitt Strait on 12 Mar 1998, 3 on 20 Nov 1998, 6 on 12 Feb 1999, and 4 on 13 Nov 1999, and 1 off Point

Durham on 18 Dec 2001 (all records MB, pers. obs.). Several Buller's shearwaters were seen in Pitt Strait in Jan 2001, Feb 1998, and Feb 2004 (G. Taylor, pers. comm.), and 1 on 23 Feb 2005 (R. McNeill, pers. comm.). The only record of a healthy Buller's shearwater on land on the Chatham Is was 1 found entering a burrow near the hut on Rangatira I on 20 Nov 2005 (D. Fastier & F. Moniz, pers. comm.). Beach-cast specimens were found on Waitangi Beach on 13 Feb 1996 (MB), Maunganui Beach on 17 Nov 1996 (F. Schmechel) and 10 Nov 1999 (MB), and Long Beach on 25 Apr 1997 and 11 Mar 1998 (MB); all these records were included in Taylor (1999 & 2004). A further beach-cast specimen was found on Maunganui Beach on 6 Dec 2004 (R. Williams, pers. comm.). At least 13 previous records of live and beach-cast birds were summarised by Jenkins (1988), Tennyson & Taylor (1989), and Imber (1994).

An unusual shearwater captured on Rangatira I on 18 Jan 1990 (Tennyson 1991; Nilsson *et al.* 1994) and held in Te Papa Tongarewa Museum of New Zealand (MNZ 24154) is now believed to be a hybrid, possibly between a male *P. bulleri* and a female sooty shearwater (*P. griseus*) (Holdaway *et al.* 2001).

Subantarctic little shearwater *P. assimilis elegans* Skua-killed little shearwaters found on Mangere I in Nov 1994 (O'Donnell & West 1996) and on 6 Dec 1997 (MB, pers. obs.), and on Little Mangere I on 15 Jan 1998 (MB, pers. obs.) are presumed to have been this taxon. A flock of over 200 subantarctic little shearwaters was about 2 km off the northeast coast of Pitt I on 28 Apr 2001 (CM, pers. obs.). The only confirmed breeding site in the Chatham Islands is on the Star Keys (Imber 1994).

South Georgian diving petrel *Pelecanoides georgicus* Subfossil records from Chatham I were reported by Worthy (1998).

Grey petrel *Procellaria cinerea* One beach-cast on Waitangi Beach on 29 Aug 1996 (MB; Taylor 1999), and 1 on Long Beach on 20 Jul 1997 (MB; Taylor 2004). Singles seen in Pitt Strait on 5 May 1996 (MB, pers. obs.) and on 12 May 2001 (CM, pers. obs.). Four previous records (1 beach-cast) were summarised by Imber (1994).

Black petrel *P. parkinsoni* Listed as a vagrant in subfossil deposits by Millener (1999).

Westland petrel *P. westlandica* One beach-cast on Long Beach on 25 Apr 1997 (MB; Taylor 2004). Two previous records of birds at sea (Imber 1994).

Antarctic fulmar *Fulmarus glacialisoides* One at sea near The Pyramid on 21 Oct 1995 (C. Robertson, pers. comm.). Two beach-cast on Long Beach on 8 Oct 1999 (MB; D. Bell; Taylor 2004), and 1 there

on 7 Oct 2005 (DOC records; observer not recorded). Eight previous records (1 live) summarised by Imber (1994).

Salvin's prion *Pachyptila salvini* Two beach-cast on Waitangi Beach 6-7 Oct. 1996 (MB; Taylor 1999). First record for Chatham Is.

Blue petrel *Halobaena caerulea* Beach-cast specimens found on Long Beach on 26 Oct 1996 and 25 Apr 1997 (MB), Waitangi Beach on 2 Dec 1997 (A. Tennyson), Maunganui Beach on 8 and 31 Oct 1999 (MB), and Wharekauri Beach on 27 Oct 1999 (MB); the last 5 records were included in Taylor (2004). Imber (1994) recorded 3 previous beach-cast specimens.

Mottled petrel *Pterodroma inexpectata* One beach-cast on southwest coast of Chatham I on 19 Nov 1993 (D. & J. Ballantyne; Powlesland & Powlesland 1994) and another there on 10 Dec 1997 (J. Ballantyne, R. Slack; Taylor 2004). One seen flying over surf, Te One Beach, 8 Dec 2004 (CM, pers. obs.). Three previous records of beach-cast or cat-killed specimens were given by Imber (1994).

Juan Fernandez petrel *P. externa* One was found in a burrow on the west summit of Rangatira I on 16 Mar 1997 (L. Perriman, G. Taylor, pers. comm.), and 1 was seen in flight at the Tuku light site, southwest Chatham I, at night on 31 Oct 1997 (G. Taylor, pers. comm.). Juan Fernandez petrels were heard regularly during summer months from the summit of Rangatira I from 1984 onwards, including on 8 occasions in Dec 1999 (D. Merton, pers. comm.). One was seen in flight at night over Kokopu Swamp, Rangatira I, on 2 Feb 1998 (G. Taylor, pers. comm.). Previous records from Rangatira and Mangere Is 1984-92, including a specimen found in a skua midden on Rangatira I, were summarised by Imber *et al.* (1991), Imber (1994), and Nilsson *et al.* (1994).

Kermadec petrel *P. neglecta* The record of a supposed Kermadec petrel from Rangatira I on 1 May 1986 (Nilsson *et al.* 1994) is considered unsubstantiated. The record of a bird at sea 80 km west of the Chatham Islands (Imber 1994) is beyond the area covered by this paper. We therefore exclude Kermadec petrel from the Chatham Is bird list.

Grey-faced petrel *P. macroptera gouldi* Several grey-faced petrels were seen near The Pyramid on 3 Dec 2003 (T. Marr, pers. comm.). The only previous record was of 2 beach-cast on Chatham I in 1987 (Imber 1994).

White-headed petrel *P. lessonii* Single specimens beach-cast on Long Beach on 15 Mar and 18 May 1997 (MB; Taylor 2004). Three previous records (1 live) were given by Imber (1994), and Fleming (1939) reported "a number of storm-killed specimens".

Soft-plumaged petrel *P. mollis* One caught at the Tuku light site, southwest Chatham I, at night on 1 Nov 1997 (G. Taylor, pers. comm.). One seen in Pitt Strait on 19 Jan 1998 (G. Taylor, pers. comm.). One previous capture at the Tuku lights in Nov 1980 (Imber 1994).

Gadfly petrel sp *Pterodroma* undescribed sp. A species similar to but larger than mottled petrel is known from subfossil deposits on the Chatham Is (Tennyson & Millener 1994; Millener 1996, 1999; Holdaway *et al.* 2001).

King penguin *Aptenodytes patagonicus* An immature king penguin photographed on the Star Keys on 10 May 2006 (K. Hedge, pers. comm.) was the first recent record from the Chatham Is (UBR 38/06). The only previous records from the Chatham Is were from midden deposits (Turbott 1990).

Yellow-eyed penguin *Megadyptes antipodes* One resident on Rangatira I from 1984 to 1993 was reported by Imber (1994). What is presumed to be the same individual was frequently seen on Rangatira I until at least 29 Jan 1998 (G. Taylor, pers. comm.).

Moseley's rockhopper penguin *Eudyptes chrysocome moseleyi* One was seen sporadically around Pitt I and the nearby Star Keys between 1993 and 2004 (Miskelly & Bell 2004). Two previous records from Rangatira I (1968, 1970) were reported by Moors & Merton (1984) and Imber (1994).

Royal penguin *E. chrysolophus schlegeli* An immature royal penguin just starting to moult was photographed near North Head, Pitt I, on 20 Feb 2005 (P. O'Regan, J. Baer, pers. comm.). This is the 1st record for the Chatham Is (UBR 21/05; Scofield 2005). Possibly the same bird was photographed near the end of its moult on Rangatira I on 5 Mar 2006 (D. Fastier, pers. comm.; UBR 37/06).

Snares crested penguin *E. robustus* At least 5 Snares crested penguins were present on the Chatham Is in Jan-Feb 2003 (Miskelly & Bell 2004). In addition to the birds reported by Miskelly & Bell (2004), photographs of a freshly-moulted adult Snares crested penguin at Flower Pot, Pitt I in Feb 2003 have since been located (UBR 20/05; Scofield 2005). This bird was recorded as an erect-crested penguin (*E. sclateri*) in Table 1 in Miskelly & Bell (2004). A further moulting immature Snares crested penguin was photographed on Mangere I (V. Neall, pers. comm.) on 5 Feb 2005 (UBR 22/05; Scofield 2005). One previous record was reported by Imber (1994). Thus, 7 Snares crested penguins have been recorded from the Chatham Is, with another 1 unconfirmed (Miskelly & Bell 2004).

Erect-crested penguin *E. sclateri* Miskelly & Bell (2004) summarised sightings of 23 erect-crested penguins on the Chatham Is between 1937 and 2004 (though note that 1 of these records was in

error; see under Snares crested penguin above). Records that have subsequently come to light include 1 in Thinornis Bay, Rangatira I on 15 Mar 1998 (R. Empson, pers. comm.), 1 on Rangatira I in Feb 1999 (F. Bancroft, pers. comm.), 1 on Mangere I on 21 Jan 2001 (D. Fastier, pers. comm.), 1 found dead in Thinornis Bay, Rangatira I, in Feb 2001 (H. Gummer, pers. comm.), 1 on The Clears, Rangatira I on 5 Mar 2001 (H. Gummer, pers. comm.), 1 at Wharekauri Beach, Chatham I on 26 Jan 2002 (J. Dowding, pers. comm.), 1 on Mangere I on 10 Feb 2005 (AB, pers. obs.), 1 on Star Keys on 23 Feb 2005 (S. Wood, pers. comm.), and 1 at Maunganui Bluffs, Chatham I, on 25 Feb 2005 (R. Williams, pers. comm.). These records bring the number of erect-crested penguins recorded on the Chatham Is to at least 31 individuals.

Chatham Is crested penguin *Eudyptes* undescribed sp. An undescribed large species of crested penguin is known from subfossil deposits on the Chatham Is (Tennyson & Millener 1994; Millener 1996, 1999; Holdaway *et al.* 2001).

Australasian gannet *Morus serrator* Singles recorded every year 1998-2003 around the southern islands (P. Scofield, D. Bell, pers. comm.). One was seen flying along the Wharekauri coast on 24 Dec 1996, and another off The Forty Fours on 17 Dec 1997 (MB, pers. obs.). One adult beachcast on Long Beach on 25 Apr 2002 (CM, pers. obs.). About 5 previous sightings were summarised by Imber (1994) and Nilsson *et al.* (1994).

Little black shag *Phalacrocorax sulcirostris* Listed in appendix to Aikman & Miskelly (2004) based on a hand-written annotation to D. Merton & B.D. Bell report "Endemic birds of the Chatham Islands" NZ Wildlife Service File: 30/3/5. No further detail available, and we therefore consider this record unsubstantiated.

Little shag *P. melanoleucos* One recorded from the vicinity of Lake Kairae, eastern Chatham I in 1988/89 (A. Grant, pers. comm.). First record for Chatham Is.

Frigatebird sp. *Fregata* sp. One seen flying over Mangere I on 27 Jan 2001 by D. Roberts (UBR 39/01; Scofield 2005). Imber (1994) reported 1 sighting presumed to be a lesser frigatebird *Fregata ariel*, and a specimen of *F. ariel* from the Chatham Is is referred to in Oliver (1955).

Cattle egret *Bubulcus ibis* At least 8 were present on Chatham I in May-Aug 1996, with records from Te Matarae on 6 May (8), Owenga on 11 May (2), and Te One on 14 May (7), 11 Jul (8) and 3 Aug (8). A single bird was seen at Awatotara on 7 May 1997 (all records, MB, pers. obs.). Cattle egrets

were previously recorded on the Chatham Is in 1983 (3) and 1986 (7; Freeman 1994).

Australasian bittern *Botaurus poiciloptilus* Reported as present by Travers & Travers (1873); no specimen obtained. Forbes (1893) stated simply that "The Moriori name for this bird is *Matuku*". Millener (1999) suggested that it formerly bred, and Fleming (1939) gave the date of extinction as 1910. Millener (1999: 102) stated "The Australasian Bittern (*Botaurus poiciloptilus*) may have suffered the same fate [victim of recreational hunting], although there is some doubt whether this species was ever really established in the Chatham Islands". Aikman & Miskelly (2004) accepted the Australasian bittern as a vagrant.

New Zealand little bittern *Ixobrychus novaezelandiae* Subfossil records from Chatham I were reported by Millener (1996, 1999) and Holdaway *et al.* (2001). Listed by Travers (1883) as "*Ardea maculata*", implying an extant population or vagrant individual, but no further details given.

Royal spoonbill *Platalea regia* One seen by R. Murphy (pers. comm.) on Kaingaroa Beach on 4 Mar 2004. First record for Chatham Is.

Canada goose *Branta canadensis* There were at least 10 sightings of Canada geese between 2002 and 2005. One was seen at Taia, eastern Chatham I, on 10 Nov 2002 (R. Smith, pers. comm.), 1 in Te Whanga Lagoon and another seen along the beach at Ocean Mail, northern Chatham I, in summer 2002/03 (AB, pers. obs.); 3 at Manukau Point, southeast Chatham I, on 25 Sep 2004 (R. Williams, pers. comm.); 3 were seen from the Tuku Road, southwest Chatham I, on 13 Oct 2004 (AB, pers. obs.); 1 at North Head, Pitt I in Oct 2004 (K. Lanauze snr, pers. comm.); 1 at Te Whanga Lagoon mouth on 27 Dec 2004 (AB, pers. obs.); 1 at Tupurangi Beach, Pitt I in Jan 2005 (N. McNally, pers. comm.); 4 on Lake Huro, Chatham I on 23 Jan 2005 (P. Reese, pers. comm.), and 1 on Rangatira I on 31 Jan 2005 (R. Williams, pers. comm.). At least 2 previous sightings were reported by Freeman (1994).

Feral goose *Anser anser* Common on both Chatham and Pitt Is.

Paradise shelduck *Tadorna variegata* Two seen on Chatham I in Nov 1994 (Oates 1996), and 1 in the lower Tuku-a-tamatea valley, southwest Chatham I, on 15 Nov 1998 (MB, pers. obs.). Freeman (1994) reported rare sightings by residents before 1961, and 1 on Rangatira I. in Jan 1984.

Chestnut-breasted shelduck *T. tadornoides* Three at Tupurangi, Pitt I on 4 Dec 1997 (Tennyson 1998). First record for Chatham Is.

Chatham Island shelduck *Tadorna* undescribed sp. An undescribed species of shelduck is known from

subfossil deposits on the Chatham Is (Tennyson & Millener 1994; Millener 1999; Holdaway *et al.* 2001).

Grey teal *Anas gracilis* Two at Tutuiri lagoon on 14 Dec 1998 (MB, pers. obs.) were the 2nd record for the Chatham Is (Bell 1955; Freeman 1994).

Australasian shoveler *A. rhynchotis* Three seen on Chatham I in Nov 1994 (Oates 1996). One male seen on northern Te Whanga Lagoon, 25 Nov 2003 (R. Silcock, S. Dinsmore, pers. comm.). One male shot at Matarakau on 2 May 2004. Shoveler are believed to have become extinct on the Chatham Is about 1925 (Millener 1999).

Scarlett's duck *Malacorhynchus scarletti* Subfossil records from the Chatham Is were accepted by Holdaway *et al.* (2001), *contra* Worthy (1995).

Osprey *Pandion haliaetus* One reported seen from a ship between Pitt and Rangatira Is on 7 Dec 2004 was not accepted by the Rare Birds Committee of the Ornithological Society of New Zealand (UBR 12/05; Scofield 2005).

California quail *Callipepla californica* California quail are very rare on the Chatham Is, but may still be present on both Chatham and Pitt Is. The only records that we know of since 1985 (Müller 1989) are 2 sightings at Te Matarae in Dec 1996 (MB, pers. obs.; C. Robertson, pers. comm.).

Spotless crane *Porzana tabuensis* A possible spotless crane was heard in Henga Scenic Reserve on 20 Mar 2005 (T. Rothermal, pers. comm.). Otherwise no records since 1949 (Bell 1955) despite surveys with tape-recorded calls at numerous sites in 1996/97 and 1997/98 summers (MB, pers. obs.).

Marsh crane *P. pusilla* One responded to a tape at the mouth of the Te Awaainanga River, Te Whanga Lagoon c.1997 (MB, pers. obs.). The most recent previous confirmed record before that was a specimen obtained in 1872 (Travers & Travers 1872).

Oriental plover *Charadrius veredus* One seen at Te Whanga Lagoon on 12 Nov 2000 (UBR 20/01; Medway 2001a). First record for Chatham Is.

Wrybill *Anarhynchus frontalis* One near Hapupu, northeast Te Whanga Lagoon on 13 Jun 1999 (Bell & Bell 2000). First record for Chatham Is.

Spur-winged plover *Vanellus miles novaehollandiae* One dead on Little Sister I on 2 Nov 1995 (C. Robertson, pers. comm.). Now common on Chatham and Pitt Is.

Chatham Island snipe *Coenocorypha pusilla* Two snipe were seen on Rabbit Island (off the north-west coast of Pitt I) on 11 Feb 2006, and 1 on 14 Feb 2006 (J. Dowding unpubl. report and Nathan McNally, pers. comm.). These birds are presumed

to have colonised from Mangere I, 2.5 km to the south. There are no previous records from Rabbit I. Chatham Is snipe are known to be resident on Rangatira I, Mangere I, Little Mangere I, and Star Keys, and as vagrants on Pitt I (Higgins & Davies 1996; Aikman & Miskelly 2004).

Curlew sandpiper *Calidris ferruginea* One on Hapupu/Wairua flats, 12 Jan 1997 (MB, pers. obs.). Previously reported from the Chatham Is by Heather & Robertson (1996), but no details available.

Sharp-tailed sandpiper *C. acuminata* One on Hapupu/Wairua flats, 12 Jan 1997, and 2 on 13 Jan 2001 (MB, pers. obs.); 4 there on 22 Feb 2005 (R. McNeill, pers. comm.). Seven previous records (max. 20 birds at a time) were summarised by Freeman (1994).

Pectoral sandpiper *C. melanotos* Two on Hapupu/Wairua flats on 27 Jan 1997 (MB, pers. obs.), 2 there on 27 Nov and 4 Dec 2004 (S. Money, J. Ballantyne, pers. comm.), and 1 on 22 Feb 2005 (R. McNeill, pers. comm.). Recorded previously, but no details available (Freeman 1994).

Red-necked stint *C. ruficollis* Three on the eastern shore of Te Whanga Lagoon on 21 Nov 1994 (Oates 1995, 1996), 2 on Hapupu/Wairua flats on 5 Oct 1999, 1 there on 10 Nov 1999, and 4 on 17 Dec 2000 (MB, pers. obs.). Three previous sightings (max. 2 birds) reported by Freeman (1994).

Eastern curlew *Numenius madagascariensis* One at Kaingaroa station (near northeast Te Whanga Lagoon) in May 1993 (O'Donnell & West 1995), 1 at Taupeka Point on 21 Dec 1997 (MB, pers. obs.), and 1 present for about a week at Wharekauri Beach c. Oct 2000 (R. Williams, pers. comm.). Previous undated records referred to by Freeman (1994).

Asiatic whimbrel *N. phaeopus variegatus* One at Taupeka Point on 2 Dec 1996 (MB, pers. obs.), and 1 at Te Whanga Lagoon entrance on 25 Nov 2003 (R. Silcock, S. Dinsmore, pers. comm.). Two previous records for Chatham Is (Freeman 1994).

American whimbrel *N. phaeopus hudsonicus* Two at Okawa Point, northeast Chatham I, on 23 Nov 1994 (Oates 1995). First record for Chatham Is.

Black-tailed godwit *Limosa limosa* One seen at Te Whanga Lagoon on 17 Dec 2000 (UBR 19/01; Medway 2001a). First record for Chatham Is.

Hudsonian godwit *Limosa haemastica* One on the northern shore of Te Whanga Lagoon on 6 Nov, 14 Nov and 9 Dec 2004 (UBR 18/05; Scofield 2005). First record for Chatham Is.

Wandering tattler *Tringa incana* Two at Taupeka Point on 13 Dec 1995, and 1 there on 21 Dec 1999; 1 at Manukau Point on 29 Jan 1998 (MB, pers. obs.).

Four previous records of single birds listed by Freeman (1994).

Arctic skua *Stercorarius parasiticus* Numerous recent records. An annual migrant during austral summer.

Pomarine skua *S. pomarinus* Two were seen off The Horns on 18 Nov 2004 (T. Wilson, pers. comm.). Two previous records for the Chatham Is (Imber 1994; Nilsson 1994).

Black-fronted tern *Sterna albobriata* Listed as a vagrant in subfossil deposits by Millener (1999).

Caspian tern *S. caspia* One between Mangere and Pitt Is on 6 Feb 2005 (AB, pers. obs.) was the 2nd record from the Chatham Islands (Müller 1989; Imber 1994).

Antarctic tern *S. vittata* One seen at Ocean Bay, northwest Chatham I on 12 Nov 1997 (Bell & Bell 2002) was the 1st record for the Chatham Is.

Little tern *S. albifrons* One seen at Karewa Point, Te Whanga Lagoon, 29 Dec 1997 - 13 Feb 1998 (Bell & Bell 2002) was the 1st record for the Chatham Is.

Rock pigeon *Columba livia* Hand-written annotation to D. Merton & B.D. Bell report "Endemic birds of the Chatham Islands" NZWS File: 30/3/5. No further detail available. One was seen on Rangatira I on 10 May 2004 (J. Hiscock pers. comm.); 2 (including a banded bird) were seen on Airport Rd, Chatham I on 4 Nov 2003 (A. Gregory-Hunt, pers. comm.); and a "racing pigeon" was seen on Pitt I on 6 Nov 2004 (N. McNally, pers. comm.). There are no previous documented records for the Chatham Is, but details of several other sightings of rock pigeons/racing pigeons were not kept, as observers did not realise their significance.

Chatham Island kaka *Nestor* undescribed sp. An undescribed species of kaka is known from subfossil deposits on the Chatham Is (Tennyson & Millener 1994; Millener 1996, 1999; Holdaway *et al.* 2001).

Long-tailed cuckoo *Eudynamis taitensis* One heard in Waipaua Scenic Reserve, Pitt I on 17 Jan 1996 (MB, pers. obs.). A dead long-tailed cuckoo was brought in by a domestic cat at North Head, Pitt I in Sep 2003 (B. Thompson, pers. comm.). One was heard in Ellen Elizabeth Preece Conservation Covenant, Pitt I, and also in Big Bush, central Chatham I, in Nov 2003 (M. Charteris, pers. comm.). Two previous records known: Chatham I 1946 (Freeman 1994) and Rangatira I 1982 (Nilsson *et al.* 1994).

Spine-tailed swift *Hirundapus caudacutus* One seen at Awatotara, southwest Chatham I by T. Wilson

on 16 Nov 2004 (UBR 56/04; Scofield 2005) was the 1st record for the Chatham Is.

Fork-tailed swift *Apus pacificus* One seen on 2 Jan 1991 at both North Head, Pitt I and at Rangatira trig, Rangatira I was the 1st record for the Chatham Is (O'Donnell & West 1992; Nilsson *et al.* 1994).

New Zealand kingfisher *Todiramphus sancta* One was seen on Rangatira I in Jun 1985 (Nilsson *et al.* 1994), another near The Horns on 19 Jan 2000 (MB, pers. obs.), 1 at Ellen Elizabeth Preece Conservation Covenant, Pitt I on 31 Aug 2004 (N. McNally, pers. comm.), and 1 at Waihi, northwest Chatham I on 22 Oct 2004 (J. Tuanui, pers. comm.). No previous records for the Chatham Is.

Australian tree martin *Hirundo nigricans* One seen at Te Whanga Lagoon on 22 Nov 1988 (O'Donnell & West 1990) was the 1st record for the Chatham Is. A sighting of a possible tree martin at Waitangi wharf on 8 Dec 2004 was not accepted by the Rare Birds Committee of the Ornithological Society of New Zealand (UBR 10/05; Scofield 2005).

Willie wagtail *Rhipidura leucophrys* One on Mangere I on 27 Oct 1999 was the 1st New Zealand record (Gummer 2002).

Yellowhammer *Emberiza citrinella* One dead on The Pyramid after a storm on 15 Oct 1995; a pair on Little Sister I on 1 Nov 1995 (both records C. Robertson, pers. comm.). Yellowhammers are rare on the Chatham Is, and may not have a resident population.

DISCUSSION

The total bird list for the Chatham Is stands at 182 taxa (Appendix 1), of which 31 are endemic (13 extinct), 74 native taxa bred or are breeding (of which 21 are locally or globally extinct), and 15 introduced species have established (excluding black swan (*Cygnus atratus*), which died out and was reintroduced; but including species introduced to mainland New Zealand that have since colonised the Chatham Is). The pre-human bird fauna is estimated to have been about 61 species, of which 22 (36%) became extinct and 1 (black swan) was reintroduced. The total Chatham Is endemic taxa would increase to 33 but for recent breeding range expansions of northern royal albatross (*Diomedea sanfordi*) and Pacific mollymawk. The New Zealand shore plover (*Thinornis novaeseelandiae*) is not considered endemic to the Chatham Is, as it occurred throughout mainland New Zealand in historic times (Davis 1994). The ongoing presence of spotless crane is unconfirmed, and it may be extinct on the Chatham Is. If spotless cranes are no longer present, then the

extinction rate among the pre-human bird fauna climbs to 38%. However, cranes are difficult to find, and more effort is needed to search for them in the many extensive areas of suitable habitat.

With the possible exception of the endemic Chatham Is duck (*Pachyanas chathamica*) (relationships uncertain), the indigenous landbirds and waterbirds of the Chatham Is are all derived from species present (or formerly present) on mainland New Zealand. The breeding seabirds of the Chatham Is show a strong connection to the Stewart I/Snares Is region, with 14 shared species, and several other close species pairs. The only seabird species breeding around Stewart I or the Snares Is in any numbers that apparently did not have an ecological equivalent on the Chatham Is were the Antarctic tern (*Sterna vittata*) and, until recently, the Snares Cape pigeon (*Daption capense australe*) (latter now breeding in small numbers on The Forty Fours and The Pyramid). Seabirds effectively confined to Stewart I/Fiordland/Snares Is and the Chatham Is within the New Zealand region are broad-billed prion (*Pachyptila vittata*) and southern diving petrel (*Pelecanoides urinatrix chathamensis*), plus the closely related Buller's mollymawk/Pacific mollymawk pair. The only seabird species that breed on the Chatham Is and also on subantarctic islands but not on Stewart I/Fiordland/Snares Is are the subantarctic little shearwater (also on Antipodes Is) and grey-backed storm petrel (*Oceanites nereis*) (also on Antipodes, Auckland and Campbell Is). However, little shearwater may breed in the Fiordland region, with several records from the Solander Is (Cooper *et al.* 1986).

For the 110 vagrant or recently colonised species on the Chatham Is, 39 (35%) were likely to have come from mainland New Zealand; 31 (28%) are subantarctic species, of which at least 13 (12%) came from the New Zealand sector, and up to 26 (24%) may have done so; 25 (23%) were holarctic migrants that regularly reach both Australia and New Zealand; 6 (5.5%) were from Australia, 5 (4.5%) were from Antarctica, 3 (2.7%) were of tropical or subtropical origin, and 1 (0.9%) was from South America. The Chatham Is provide the only records from the New Zealand region for Atlantic yellow-nosed mollymawk and willie wagtail.

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APPENDIX 1

CHECKLIST OF THE BIRDS OF THE CHATHAM ISLANDS

Species marked with † formerly bred on the Chatham Is, but are no longer present (locally or globally extinct). The so-called Chatham Island sea eagle "*Haliaeetus australis*" is not included, as these bones are no longer considered to have come from the Chatham Is (Holdaway *et al.* 2001). We also do not accept the undescribed teal, and fairy tern reported by Millener (1999); see Holdaway *et al.* (2001). National threat rank, See Molloy *et al.* (2002) for an explanation of the New Zealand Threat Classification System. **National threat rank** is given for Chatham breeders only.

Species name	Scientific name	Status in New Zealand and Chatham Is	National threat rank
Snowy albatross	<i>Diomedea exulans</i>	Regular visitor NZ, vagrant Chathams	
Antipodean albatross	<i>D. antipodensis</i>	NZ endemic, 2 pairs breeding Chathams	Range restricted
Southern royal albatross	<i>D. epomophora</i>	NZ endemic, regular visitor Chathams	
Northern royal albatross	<i>D. sanfordi</i>	Chatham Is near endemic, breeding	Nationally vulnerable
Black-browed mollymawk	<i>Thalassarche melanophris</i>	NZ native, vagrant Chathams	
Campbell Is mollymawk	<i>T. impavida</i>	NZ endemic, vagrant Chathams	
White-capped mollymawk	<i>T. steadi</i>	NZ endemic, 1 pair breeding Chathams	Range restricted
Salvin's mollymawk	<i>T. salvini</i>	NZ native, a few breeding Chathams	Range restricted
Grey-headed mollymawk	<i>T. eremita</i>	Chatham Is endemic, breeding	Serious decline
Atlantic yellow-nosed mollymawk	<i>T. chrysostoma</i>	NZ native, vagrant Chathams	
Indian yellow-nosed mollymawk	<i>T. chlororhynchos</i>	Vagrant Chathams (only NZ records)	
Buller's mollymawk	<i>T. carteri</i>	NZ coloniser, 1 pair breeding Chathams	Coloniser
Pacific mollymawk	<i>T. bulleri</i>	NZ endemic, vagrant Chathams	
Light-mantled sooty albatross	<i>Thalassarche</i> undescribed sp.	Chatham Is near endemic, breeding	Range restricted
Flesh-footed shearwater	<i>Phoebastria palpebrata</i>	NZ native, vagrant Chathams	
Buller's shearwater	<i>Puffinus carneipes</i>	NZ native, vagrant Chathams	
Sooty shearwater	<i>P. bulleri</i>	NZ endemic, regular visitor Chathams	
Short-tailed shearwater	<i>P. griseus</i>	NZ native, breeding	Gradual decline
Fluttering shearwater	<i>P. tenuirostris</i>	Passage migrant NZ & Chathams	
Subantarctic little shearwater	<i>P. garvia</i>	NZ endemic, vagrant Chathams	
Southern diving petrel	<i>P. assimilis elegans</i>	NZ native, breeding	Range restricted
†South Georgian diving petrel	<i>Pelecanoides urinatrix chathamensis</i>	NZ endemic subspecies, breeding	Not threatened
Grey petrel	<i>P. georgicus</i>	NZ native, locally extinct Chathams (subfossil)	Nationally critical
Black petrel	<i>Procellaria cinerea</i>	NZ native, regular visitor Chathams	
Westland petrel	<i>P. parkinsoni</i>	NZ endemic, regular visitor Chathams	
White-chinned petrel	<i>P. westlandica</i>	NZ endemic, regular visitor Chathams	
Kerguelen petrel	<i>P. aequinoctialis</i>	NZ native, regular visitor Chathams	
Cape pigeon	<i>Lugensa brevirostris</i>	Regular visitor NZ, vagrant Chathams	
Snares Cape pigeon	<i>Daption capense capense</i>	Regular visitor NZ, vagrant Chathams	
Antarctic petrel	<i>D. capense australe</i>	NZ endemic subspecies, breeding	Range restricted
Antarctic fulmar	<i>Thalassoica antarctica</i>	Vagrant NZ & Chathams	
Southern giant petrel	<i>Fulmarus glacialis</i>	Regular visitor NZ, vagrant Chathams	
Northern giant petrel	<i>Macronectes giganteus</i>	Regular visitor NZ & Chathams	
	<i>M. halli</i>	NZ native, breeding	Not threatened

Fairy prion	<i>Pachyptila turtur</i>	NZ native, breeding	Not threatened
Chatham Island fulmar prion	<i>P. crassirostris pyramidalis</i>	Chatham Is endemic subspecies, breeding	Range restricted
Antarctic prion	<i>P. desolata</i>	NZ native, vagrant Chathams	
Salvin's prion	<i>P. salvini</i>	Regular visitor NZ, vagrant Chathams	
Broad-billed prion	<i>P. vittata</i>	NZ native, breeding	Not threatened
Blue petrel	<i>Halobaena caerulea</i>	Regular visitor NZ, vagrant Chathams	
Black-winged petrel	<i>Pterodroma nigripennis</i>	NZ native, breeding	Not threatened
Chatham petrel	<i>P. axillaris</i>	Chatham Is endemic, breeding	Nationally endangered
Mottled petrel	<i>P. inexpectata</i>	NZ endemic, vagrant Chathams	
Juan Fernandez petrel	<i>P. externa</i>	Vagrant, possible coloniser	
Grey-faced petrel	<i>P. macroptera gouldi</i>	NZ endemic subspecies, vagrant Chathams	Nationally critical
Chatham Island taiko	<i>P. magentae</i>	Chatham Is endemic, breeding	
White-headed petrel	<i>P. lessonii</i>	NZ native, vagrant Chathams	
Soft-plumaged petrel	<i>P. mollis</i>	NZ native, vagrant Chathams	
†Gadfly petrel sp	<i>Pterodroma</i> undescribed sp.	Chatham Is endemic, extinct (subfossil)	Extinct
Leach's storm petrel	<i>Oceanodroma leucorhoa</i>	Vagrant NZ & Chathams	
Wilson's storm petrel	<i>Oceanites oceanicus</i>	Passage migrant (rare NZ & Chathams)	
Grey-backed storm petrel	<i>O. nereis</i>	NZ native, breeding	Not threatened
White-faced storm petrel	<i>Pelagodroma marina maoriana</i>	NZ endemic subspecies, breeding	Not threatened
Black-bellied storm petrel	<i>Fregetta tropica</i>	NZ native, vagrant Chathams	
King penguin	<i>Aptenodytes patagonicus</i>	Vagrant NZ & Chathams	
Yellow-eyed penguin	<i>Megadyptes antipodes</i>	NZ endemic, vagrant Chathams	
Chatham Island blue penguin	<i>Eudyptula minor chathamensis</i>	Chatham Is endemic subspecies, breeding	Range restricted
Eastern rockhopper penguin	<i>Eudyptes chrysocome filholi</i>	NZ native, vagrant Chathams	
Moseley's rockhopper penguin	<i>E. c. chrysocome moseleyi</i>	Vagrant NZ & Chathams	
Royal penguin	<i>E. chrysolophus schlegeli</i>	NZ endemic, vagrant Chathams	
Snares crested penguin	<i>E. robustus</i>	NZ endemic, vagrant Chathams	
Erect-crested penguin	<i>E. sclateri</i>	NZ endemic, vagrant Chathams	
†Chatham Island crested penguin	<i>Eudyptes</i> undescribed sp.	Chatham Is endemic, extinct (subfossil)	Extinct
Australasian gannet	<i>Morus serrator</i>	NZ native, vagrant Chathams	
Masked booby	<i>Sula dactylatra</i>	NZ native, vagrant Chathams (subfossil)	
Black shag	<i>Phalacrocorax carbo</i>	NZ native, breeding	Sparse
Little shag	<i>P. melanoleucus</i>	NZ native, vagrant Chathams	
Chatham Island shag	<i>Leucocarbo onslowi</i>	Chatham Is endemic, breeding	Nationally endangered
Pitt Island shag	<i>Stictocarbo featherstoni</i>	Chatham Is endemic, breeding	Nationally vulnerable
Lesser frigatebird	<i>Fregata ariel</i>	Vagrant NZ & Chathams	
White-faced heron	<i>Ardea novaehollandiae</i>	NZ native, breeding	Not threatened
Reef heron	<i>Egretta sacra</i>	NZ native, vagrant Chathams	
White heron	<i>Casmerodius alba</i>	NZ native, vagrant Chathams	
Cattle egret	<i>Bubulcus ibis</i>	Migrant to NZ, vagrant Chathams	
Australasian bittern	<i>Botaurus poiciloptilus</i>	NZ native, vagrant Chathams	
†New Zealand little bittern	<i>Ixobrychus novaehollandiae</i>	NZ endemic, extinct (subfossil)	Extinct
Glossy ibis	<i>Plegadis falcinellus</i>	Vagrant NZ & Chathams	
Royal spoonbill	<i>Plataleia regia</i>	NZ native, vagrant Chathams	

Black swan	<i>Cygnus atratus</i>	Re-introduced to NZ & Chathams	Re-introduced
Canada goose	<i>Branta canadensis</i>	Introduced to NZ, vagrant Chathams	Introduced
Feral goose	<i>Anser anser</i>	Introduced to NZ & Chathams, breeding	Introduced
Paradise shelduck	<i>Tadorna variegata</i>	NZ endemic, vagrant Chathams	Extinct
Chestnut-breasted shelduck	<i>T. tadornoides</i>	Chatham Is endemic, extinct (subfossil)	Introduced
+Chatham Island shelduck	<i>Tadorna</i> undescribed sp.	Introduced to NZ, breeding	Serious decline
Mallard	<i>Anas platyrhynchos</i>	NZ native, breeding	Nationally endangered
Grey duck	<i>A. superciliosa</i>	NZ native, vagrant Chathams	Not threatened
Grey teal	<i>A. gracilis</i>	NZ endemic, locally extinct (recent)	Extinct
+Brown teal	<i>A. chlorotis</i>	NZ native, locally extinct (recent) & vagrant	Extinct
+Australasian shoveler	<i>A. rhynchos</i>	Chatham Is endemic, extinct (subfossil)	Extinct
+Chatham Island flightless duck	<i>Pachyanas chathamica</i>	NZ endemic, locally extinct (subfossil)	Extinct
+New Zealand scaup	<i>Aythya novaeseelandiae</i>	NZ endemic, extinct (subfossil)	Extinct
+New Zealand merganser	<i>Mergus australis</i>	NZ native, breeding	Not threatened
+Scarlett's duck	<i>Malacorhynchus scarletti</i>	NZ endemic, locally extinct (recent)	Nationally vulnerable
Australasian harrier	<i>Circus approximans</i>	Introduced to Chathams	Introduced
+New Zealand falcon	<i>Falco novaeseelandiae</i>	NZ endemic introduced to Chathams	Not threatened
California quail	<i>Callipepla californica</i>	Chatham Is endemic, extinct (recent)	Extinct
Buff weka	<i>Gallinallus australis hectori</i>	Chatham Is endemic, extinct (recent)	Extinct
+Dieffenbach's rail	<i>G. dieffenbachii</i>	Chatham Is endemic, extinct (recent)	Extinct
+Chatham Island rail	<i>Cabalus modestus</i>	Chatham Is endemic, extinct (recent)	Extinct
+Hawkins's rail	<i>Diaphorapteryx hawkinsi</i>	NZ native, possibly locally extinct	Sparse
Spotless crane	<i>Porzana tabuensis</i>	NZ native	Sparse
Marsh crane	<i>P. pusilla</i>	NZ native, breeding	Not threatened
Pukeko	<i>Porphyrio melanotus</i>	Chatham Is endemic, extinct (subfossil)	Extinct
+Chatham Island coot	<i>Fulica chathamensis</i>	NZ endemic, vagrant Chathams	Nationally critical
New Zealand pied oystercatcher	<i>Haematopus finschi</i>	Chatham Is endemic, breeding	Not threatened
Chatham Island oystercatcher	<i>H. chathamensis</i>	NZ native, breeding	Gradual decline
Australasian pied stilt	<i>Himantopus himantopus leucocephalus</i>	NZ endemic, breeding	Nationally critical
Banded dotterel	<i>Charadrius bicinctus bicinctus</i>	Vagrant NZ & Chathams	Not threatened
Mongolian plover	<i>C. mongolus</i>	Vagrant NZ & Chathams	Not threatened
Oriental plover	<i>C. veredus</i>	Near endemic to Chathams, breeding	Nationally critical
New Zealand shore plover	<i>Thinornis novaeseelandiae</i>	NZ endemic, vagrant Chathams	Not threatened
Wrybill	<i>Anarhynchus frontalis</i>	Migrant NZ & Chathams	Range restricted
Pacific golden plover	<i>P. squatarola</i>	Vagrant NZ & Chathams	Extinct
Grey plover	<i>Vanellus miles novaehollandiae</i>	NZ native, breeding	Not threatened
Spur-winged plover	<i>Arenaria interpres</i>	Migrant NZ & Chathams	Not threatened
Turnstone	<i>Coenocorypha pusilla</i>	Chatham Is endemic, breeding	Range restricted
Chatham Island snipe	<i>C. chathamica</i>	Chatham Is endemic, extinct (subfossil)	Extinct
+Forbes' snipe	<i>Calidris canutus</i>	Migrant NZ & Chathams	Extinct
Lesser knot	<i>C. alba</i>	Vagrant NZ & Chathams	Extinct
Sanderling	<i>C. ferruginea</i>	Migrant to NZ, vagrant Chathams	Extinct
Curlew sandpiper	<i>C. acuminata</i>	Migrant to NZ, vagrant Chathams	Extinct
Sharp-tailed sandpiper			

Pectoral sandpiper	<i>C. melanotos</i>	Vagrant NZ & Chathams	
Red-necked stint	<i>C. ruficollis</i>	Migrant to NZ, vagrant Chathams	
Eastern curlew	<i>Numerius madagascariensis</i>	Migrant to NZ, vagrant Chathams	
Asiatic whimbrel	<i>N. phaeopus variegatus</i>	Migrant to NZ, vagrant Chathams	
American whimbrel	<i>N. phaeopus hudsonicus</i>	Vagrant NZ & Chathams	
Eastern bar-tailed godwit	<i>Limosa lapponica baueri</i>	Migrant NZ & Chathams	
Black-tailed godwit	<i>L. limosa</i>	Vagrant NZ & Chathams	
Hudsonian godwit	<i>L. haemastica</i>	Vagrant NZ & Chathams	
Wandering tattler	<i>Tringa incana</i>	Vagrant NZ & Chathams	
Grey-tailed tattler	<i>T. brevipes</i>	Vagrant NZ & Chathams	
Greenshank	<i>T. nebularia</i>	Vagrant NZ & Chathams	
Marsh sandpiper	<i>T. stagnatilis</i>	Vagrant NZ & Chathams	
Lesser yellowlegs	<i>T. flavipes</i>	Vagrant NZ & Chathams	
Brown polar skua	<i>Catharacta skua lonnbergi</i>	NZ native, breeding	Sparse
South polar skua	<i>C. macconnicki</i>	Passage migrant (rare NZ & Chathams)	
Arctic skua	<i>Stercorarius parasiticus</i>	Migrant to NZ & Chathams	
Pomarine skua	<i>S. pomarinus</i>	Vagrant NZ & Chathams	
Southern black-backed gull	<i>Larus dominicanus</i>	NZ native, breeding	Not threatened
Red-billed gull	<i>L. novaehollandiae scopulinus</i>	NZ endemic subspecies, breeding	Not threatened
Black-fronted tern	<i>Sterna albobristata</i>	NZ endemic, vagrant Chathams (subfossil)	
Caspian tern	<i>S. caspia</i>	NZ native, vagrant Chathams	
White-fronted tern	<i>S. striata</i>	NZ native, breeding	Gradual decline
Antarctic tern	<i>S. vittata</i>	NZ native, vagrant Chathams	
Little tern	<i>S. albigrons</i>	Migrant to NZ, vagrant Chathams	
Arctic tern	<i>S. paradisaea</i>	Passage migrant (rare New Zealand & Chathams)	
Parea	<i>Hemiphysa chathamensis</i>	Chatham Is endemic, breeding	Nationally critical
Rock pigeon	<i>Columba livia</i>	Introduced to NZ, vagrant Chathams	
+Chatham Island kaka	<i>Nestor undescribed sp.</i>	Chatham Is endemic, extinct (subfossil)	Extinct
Chatham Island red-crowned parakeet	<i>Cyanoramphus novaeseelandiae chathamensis</i>	Chatham Is endemic subspecies, breeding	Range restricted
Forbes' parakeet	<i>C. forbesi</i>	Chatham Is endemic, breeding	Nationally endangered
Shining cuckoo	<i>Chrysococcyx lucidus</i>	NZ native, breeding	Not threatened
Long-tailed cuckoo	<i>Eudynamis taitensis</i>	NZ endemic, vagrant Chathams	
Spine-tailed swift	<i>Hirundapus caudacutus</i>	Vagrant NZ & Chathams	
Fork-tailed swift	<i>Apus pacificus</i>	Vagrant NZ & Chathams	
Sacred kingfisher	<i>Todiramphus sancta</i>	NZ native, vagrant Chathams	
Skylark	<i>Alauda arvensis</i>	Introduced to NZ, breeding	Introduced
Welcome swallow	<i>Hirundo tahitica neoxena</i>	NZ native, breeding	Not threatened
Australian tree martin	<i>H. nigricans</i>	Vagrant NZ & Chathams	
Chatham Island pipit	<i>Anthus novaeseelandiae chathamensis</i>	Chatham Is endemic subspecies, breeding	Not threatened
Dunnock	<i>Prunella modularis</i>	Introduced to NZ, breeding	Introduced
Blackbird	<i>Turdus merula</i>	Introduced to NZ, breeding	Introduced
Song thrush	<i>T. philomelos</i>	Introduced to NZ, breeding	Introduced
+Chatham Island fernbird	<i>Bowdleria rufescens</i>	Chatham Is endemic, extinct (recent)	Extinct
Chatham Island warbler	<i>Gerygone albofrontata</i>	Chatham Is endemic, breeding	Range restricted

Chatham Island fantail	<i>Rhipidura fuliginosa penita</i>	Chatham Is endemic subspecies, breeding	Not threatened
Willie wagtail	<i>R. leucophrys</i>	Vagrant (1 record Mangere I., only NZ record)	
Chatham Island tomtit	<i>Petroica macrocephala chathamensis</i>	Chatham Is endemic subspecies, breeding	Nationally endangered
Black robin	<i>P. traversi</i>	Chatham Is endemic, breeding	Nationally critical
Silvereye	<i>Zosterops lateralis</i>	NZ native, breeding	Not threatened
†Chatham Island bellbird	<i>Anthornis melanocephala</i>	Chatham Is endemic, extinct (recent)	Extinct
Chatham Island tui	<i>Prothemadera novaeseelandiae chathamensis</i>	Chatham Is endemic subspecies, breeding	Nationally endangered
Yellowhammer	<i>Emberiza citrinella</i>	Introduced to NZ, probably breeding	Introduced
Chaffinch	<i>Fringilla coelebs</i>	Introduced to NZ, breeding	Introduced
Greenfinch	<i>Carduelis chloris</i>	Introduced to NZ, breeding	Introduced
Goldfinch	<i>C. carduelis</i>	Introduced to NZ, breeding	Introduced
Redpoll	<i>C. flammea</i>	Introduced to NZ, breeding	Introduced
House sparrow	<i>Passer domesticus</i>	Introduced to NZ, breeding	Introduced
Starling	<i>Sturnus vulgaris</i>	Introduced to NZ, breeding	Introduced
Rook	<i>Corvus frugilegus</i>	Introduced to NZ, vagrant Chathams	Introduced
†Chatham Island crow	<i>C. mortorum</i>	Chatham Is endemic, extinct (subfossil)	Extinct