

## Bird names commemorating Edgar Stead

COLIN M. MISKELLY

Museum of New Zealand Te Papa Tongarewa, PO Box 467, Wellington 6140, New Zealand

**Abstract** Edgar Stead (1881-1949) documented avian diversity on the islands around Stewart I during the 1930s and 1940s, and named 3 new passerine subspecies in 1936. Between 1912 and 1950, 6 other newly-recognised bird taxa were given the epithet '*steadii*'. Four of these were indisputably named after Edgar Stead: *Stictocarbo steadii* Oliver, 1930, *Pseudoprion turtur steadii* Mathews, 1932, *Thalassarche cauta steadii* Falla, 1933, and *Petroica (Miro) australis steadii* Fleming, 1950. *Carbo carbo steadii* Mathews & Iredale, 1913 was probably named after Edgar Stead. It is suggested that *Procellaria aequinoctialis steadii* Mathews, 1912 was most likely named after the Australian naturalist David Stead (1877-1957). Among the birds named by or for Edgar Stead, only *Thalassarche cauta steadii* Falla, 1933, *Xenicus longipes variabilis* Stead, 1936, and *Bowdleria punctata wilsoni* Stead, 1936 are recognised as valid taxa in the 2010 *Checklist of the birds of New Zealand*. *Stictocarbo steadii* Oliver, 1930 is permanently invalid. A list of type specimens collected by Stead is presented, representing 6 currently recognised taxa.

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### INTRODUCTION

The Canterbury-based ornithologist Edgar Fraser Stead (1881-1949) was an extraordinarily gifted field naturalist who was deeply respected by his peers (Wilson 1949, 1959; Falla 1950, 1975; Turbott 1998). He left his mark on New Zealand ornithology in numerous ways, including gifting his large collection of bird skins and eggs to Canterbury Museum, writing about 20 scientific papers and popular articles on birds in addition to his classic 1932 book, *Life histories of New Zealand birds*, and being an ardent and vocal champion of many bird conservation causes.

Stead devoted much effort to studying the birds of islands around Stewart I (Stead 1932, 1936a-f, 1948, 1953; Wilson 1959). Working in an era and area where there were still new birds to discover made it inevitable that Stead would have the opportunity to name new birds, and that others would honour his endeavours. Between 1912 and 1950 the epithet *steadii* was applied to 6 bird taxa. But how many were named after Edgar?

### ANALYSIS AND SYNTHESIS

#### Birds named after Edgar Stead

The first New Zealand birds to be named *steadii* were the white-chinned petrel *Procellaria aequinoctialis steadii* Mathews, 1912, and the black shag *Carbo carbo steadii* Mathews & Iredale, 1913. Edgar Stead's obituary in *The Press* (Anon. 1949) stated that "Three

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Correspondence: colin.miskelly@tepapa.govt.nz

native birds bear Mr Stead's name...*Stictocarbo steadi* [see below]...*Phalacrocorax carbo steadi* and *Procellaria aequinoctialis steadi*." It is not known whether there is any evidence for this claim for the 2 latter names other than the assumption that any New Zealand bird named '*steadi*' would be named after Edgar Stead.

For most of his career, the prolific Australian ornithologist Gregory Mathews (1876-1949) was the archetypal 'splitter', coining a plethora of trinomials. He created such confusion within seabird taxonomy that following his death, 15 of the world's leading seabird authorities published a letter seeking nomenclatural stability in the post-Mathews era (Alexander *et al.* 1965). History may yet prove Mathews right about *P. a. steadi* (Fraser *et al.* 2005; Techow *et al.* 2009), but the New Zealand black shag has long since been synonymised within *Phalacrocorax carbo novaehollandiae* (Fleming 1953; Peters 1979; Gill *et al.* 2010).

Stead met Mathews in England in 1932 (EFS letter to Robert Wilson, see below), but it is not known when the 2 first corresponded. Stead was finding his feet as an ornithologist in 1912, having published just 2 scientific papers, the 2<sup>nd</sup> of which concerned the black shag (Stead 1906, 1908). Mathews (1912-13) and Mathews & Iredale (1913) did not provide etymologies for their names, and so the identity of the Mr Stead (or Messrs Stead) honoured in the 2 names is a matter of conjecture. Both birds were named after a single Mr Stead, as indicated by the masculine singular suffix "*i*", but they may not have been honouring the same person. The type specimens and type localities provide no clues as to why the birds were named to honour a Mr Stead. The type of *Procellaria aequinoctialis steadi* was supposedly collected on Antipodes I by Sigvard Dannefærd in Mar 1894 (Mathews 1912-13; Hartert 1918; Greenway 1973), although Dannefærd never travelled to the subantarctic, and there is no known record of any vessel visiting Antipodes I in Mar 1894 (Taylor 2006; Miskelly 2012; author unpubl.). The type of *Carbo carbo steadi* was collected on the Chatham Is by Henry Travers on 21 Nov 1871 (Travers & Travers 1873; Mathews & Iredale 1913; Warren 1966). Edgar Stead never travelled to the Antipodes or Chatham Is, and was not involved in the supply chain for either of these 2 type specimens.

It is plausible and appropriate that Mathews & Iredale (1913) would name the New Zealand black shag after Edgar Stead 5 years after he published a paper entitled "The black cormorant in New Zealand" (Stead 1908). Stead remained a champion for this much persecuted species for most of his life (Stead 1908; 1932; plus at least 20 letters and articles in newspapers throughout New Zealand 1908-33). Stead himself (1932) used *Phalacrocorax carbosteadii* [sic] as the scientific name for the black

shag, possibly as a typographical error for Oliver's (1930a) *Phalacrocorax carbo steadi*. Neither man in these publications expressed an opinion on whom the bird was named after.

The connection between Edgar Stead and the white-chinned petrel is even less obvious. Stead did not take an active interest in petrels until his trip to the Snares and Auckland Is on the government steamship *Tutanekai* in 1929, followed by visits to numerous petrel-breeding islands up to 1947 (Wilson 1959; author unpubl.). It is more likely that Mathews (1912) was honouring his fellow New South Welshman of the same age, the "energetic" David George Stead (1877-1957), who established the Wild Life Preservation Society of Australia in 1909, and was also an executive member of the Council of the New South Wales Gould League, and the Royal Zoological Society of New South Wales (Robin 2001).

In Nov 1929 Edgar Stead made the first of his 8 visits to islands around Stewart I and in Foveaux Strait, staying on Kundy I from 12 Nov to 4 Dec (unpublished diaries in Macmillan archive, Canterbury Museum). On 20 Nov he went across to the adjacent Stewart I mainland and shot 2 shags unfamiliar to him. He described these as "different from *P. punctatus* [spotted shag *Stictocarbo punctatus*], and I fancy they are Chatham Island Shags [Pitt Island shags *S. featherstonii*]". He forwarded these to W.R.B. (Brook) Oliver at the Dominion Museum who wrote: "Now, through the investigations of Mr. Edgar F. Stead, of Christchurch, a third species [of *Stictocarbo*] has been discovered" (Oliver 1930b). The male and female shags collected by Stead were in non-breeding plumage; Oliver chose to use a male in breeding plumage collected "some years ago" by Henry Travers as the holotype of the blue shag *Stictocarbo steadi* Oliver, 1930, with the male collected by Stead as the sole paratype.

Alas, Stead was not to benefit long from the honour intended by Oliver. Although Gregory Mathews never explained whom his *Carbo carbo steadi* was named after, he immediately recognised the confusion that would arise from having 2 shags named *steadi*. Within months he published a terse note "To those who put all the Cormorants into the genus *Phalacrocorax* the following change will be necessary: - For *Stictocarbo steadi* Oliver, 1930, read *Phalacrocorax oliveri*, new name - the name *steadi* being in use from 1913" (Mathews 1931).

Mathews' new name was immediately picked up by Peters (1931), but it was over-looked or ignored by New Zealand ornithologists for 80 years. (For a technical explanation of the reason why the blue shag must be named *Stictocarbo punctatus oliveri*, see Gill *et al.* 2010, p.152.) At least Stead had the satisfaction of believing he had 1, if not 2, shags named after him for the rest of his life.

Mathews was able to make amends shortly after, when Stead visited England in 1932. In a letter to Robert Wilson dated 29 Aug (Wilson 1959, p.108), Stead stated "I have seen quite a lot of Matthews [sic] here, and when I told him that the blue-billed prion [fairy prion *Pachyptila turtur*] of Stewart Island was distinct from the Motunau Island form, he went to the Natural History Museum, got out the birds and told me to sort them without looking at their labels, and when I did so correctly, he forthwith named the Stewart Island bird a subspecies "steadi"." [The original letter in the Lethenty archive makes it clear that it was the Stewart Island bird that Mathews named *steadi*, as given in the corrected quote above, cf. "the South Island bird" stated in Wilson 1959]. Stead was a "Guest of the Club" at the 8 Jun 1932 meeting of the British Ornithologists' Club, where Mathews presented the name *Pseudoprion turtur steadi* Mathews, 1932, and gave its distribution as "Stewart Island and small islands near; breeding on Cundy, Woman, and Betsy Islands". The type (BMNH 1912.7.23.3) was collected by J.C. McLean on 3 Oct 1911 on "an island off Stewart Island". John Chambers McLean was Herbert Guthrie-Smith's companion on Stewart I during Sep-Dec 1911 (Guthrie-Smith 1914; Miskelly 2012). McLean and Guthrie-Smith were on Herekopare I, north-east of Halfmoon Bay, Stewart I, on 2-3 Oct 1911 (Guthrie-Smith 1914), and so this is the type location for *Pseudoprion turtur steadi*. Cundy, Woman, and Betsy Is are the principle islands of the Boat Group, off the south-west coast of Stewart I, and are now known as Kundy, Big, and Betsy Is, respectively. Stead stayed on Kundy I during 12 Nov – 4 Dec 1929, and visited Big I (which he called both Woman I and Long I) on 22 Nov, and Betsy I on 28 Nov & 3 Dec 1929 (Stead diary, Macmillan archive, Canterbury Museum). Note that Stead's "Woman Island" [= Big I or Stage I] is not the island now officially named Womens I, which lies 5 km north of Herekopare I, on the opposite side of Stewart I.

Mathews (1932) further commented that "Mr. Edgar Stead tells me that in his experience of over thirty years a Prion from any one breeding locality does not vary in any appreciable particular from its fellows in that colony". *Pseudoprion turtur steadi* has never been recognised as a valid taxon in New Zealand publications, and it is currently regarded as a synonym of *Pachyptila turtur*, which Gill *et al.* (2010) treated as monotypic.

Robert Falla named *Thalassarche cauta steadi* (white-capped mollymawk) in 1933 based on 2 specimens collected in "Foveaux Strait" by E.F. Stead. Stead's unpublished diary (Macmillan archive, Canterbury Museum) combined with R.A. Wilson's diary (Lethenty archive) and Falla (1933) makes it clear that the holotype male was among 4 birds collected off Port Pegasus, southern Stewart I,

on 14(3) & 15(1) Dec 1931, and the female paratype was collected between Jacky Lee and Kanetetoe Is (off Halfmoon Bay, Stewart I) on 18 Dec 1932. Falla noted that "This is the commonest mollymawk in the seas around Stewart Island during the summer months. Its distinctiveness from described forms was recognised by Mr. E.F. Stead, who collected the specimen on which the above description is based, and in recognition of whose valuable contribution to our knowledge of southern seabirds the subspecific name has been chosen". Unfortunately, this clear etymology was muddled by De Roy *et al.* (2008, p.206) stating that *Thalassarche steadi* was named "after David George Stead (1877-1957), Australian naturalist".

The sixth New Zealand bird to receive the epithet *steadi* was *Petroica (Miro) australis steadi*, intended as a name for the Stewart Island robin by Fleming (1950a, Part 1, p.14). Fleming (1950b, Part 2, pp 141-143) described and named the Stewart Island robin as *Petroica (Miro) australis rakiura* based on 6 specimens collected by Edgar Stead, apparently overlooking that he had given a different name for the bird (in error) in the contents for Part 2 listed at the start of Part 1. As *Petroica (Miro) australis steadi* was published without an accompanying description, it is a *nomen nudum*, and has been ignored subsequently.

### Birds named by Edgar Stead

The bird most strongly associated with Edgar Stead's name is Stead's bush wren *Xenicus longipes variabilis* Stead, 1936, one of the terminal victims of the 1964 rat irruption on the South Cape islands (Bell 1978; Morris & Smith 1988; Beolens & Watkins 2003; Ballance 2007). The bush wrens on Solomon I (Rerewhakaupoko) had been studied by Herbert Guthrie-Smith in 1913 (Guthrie-Smith 1925), but it was Stead in 1931 who recognised that the wrens on Big South Cape, Solomon and Pukeweka Is differed from those then barely extant on the South I mainland (Stead 1936d). Stead took specimens from the South Cape islands to England with him in 1932 to compare with those in the British Museum (export permit issued 14 Mar 1932; Department of Internal Affairs file 47/123); he missed the opportunity to study Lord Rothschild's bush wren specimens, as nearly the entire Rothschild collection had just been sold to the American Museum of Natural History (Rothschild 1983); "Everybody here is frightfully wild about it" (Edgar Stead letter to Robert Wilson, 26 May 1932; Lethenty archive).

Stead (1936d) noted that measurements of the Stewart I birds averaged slightly smaller than mainland ones, they had much larger eggs, they were more variable in dorsal plumage colour (from brown to green, and all shades between, with the brownest birds lacking a white superciliary stripe),

and they were more terrestrial, often nesting in holes in the ground (cf. mainland birds nesting in trees). Stead considered the colour variation to be independent of sex or age, and that the birds of various colours paired indiscriminately.

The same issue of the *Transactions and Proceedings of the Royal Society of New Zealand* that held the bush wren type description also held Stead's descriptions of 2 subspecies of fernbirds *Bowdleria punctata* from the Stewart I region (Stead 1936c). Guthrie-Smith (1914) considered that there were 2 varieties of fernbird on Stewart I. The larger form lived on the banks of the Rakeahua River and appeared identical to the birds on Piko-mamaku-itī (North I, just north of Womens Is) in Foveaux Strait, having a more distinct white supercilium, more distinct markings on the breast, and perhaps a louder call. The Mason Bay 'species' was "a smaller bird, more furtive in habit and with the white streaking and pencilling less well marked". Stead (1936c) similarly recognised 2 forms of fernbirds on Stewart I and Kundy I, with the commonest form on both these islands also occurring on 4 other islands that Stead had visited off Stewart I (Big South Cape, Solomon, Pukeawa [sic – should be Pukeweka] and Jacky Lee Is). He noted that Robert Falla considered the rarer, darker form to be "indistinguishable from some forms of the North Island fernbird, *B.p. vealeae*".

Although Stead was certain that there were 2 forms of fernbird on Kundy I, he apparently failed to get a specimen of the darker form during his 3 week visit in late 1929 (Stead 1936c, and see dates given above). He went to considerable effort over the next 8 years to get the Morrison family (muttonbirders on Kundy I) to collect specimens for him when they visited the island in Apr-May each year to harvest muttonbirds (chicks of sooty shearwater *Puffinus griseus*). The direct evidence for this is a letter from John Morrison to Stead dated 10 May 1933 (among Robert Wilson's correspondence in the Letheny archive):

"I received the syringe & your instructions re fern-birds. Unfortunately our boys did not go down to the island at the beginning of the season but intended to go at ½ time. The season is now just about finished & still the boat that landed the "Cundy" party has not got down. Now it is too late to go. The weather down here has been exceptionally rough. Thompson of the launch "Pegasus" has made two attempts to get to "Cundy" & failed. I do not think much of the syringe idea as there is little chance of you receiving the birds four days after they are caught. One cannot tell to within a week when the boat will arrive. I think a better idea would

be to treat them as you were going to do the snipe (in liquid). I will return the syringe when I am sure there is no chance of getting the birds this season."

The indirect evidence of the Morrison family collecting on Stead's behalf are the Kundy I fernbird specimens in the Canterbury Museum (7) and Te Papa (3) and Auckland Museum (1) collections. One is dated Dec 1929 (Stead's visit), plus there are 2 dated Apr 1933, 1 dated Apr 1935, 4 dated Apr 1937, 1 dated 1938, and 2 undated.

While Stead was trying to sort out this confusion, Oliver (1930a) jumped in and named the Stewart Island fernbird "*B. p. stewartiana* n. subsp", noting that it "is more rufous than the mainland forms, the bill stouter, the superciliary streak ill defined and the throat thickly covered with large black spots" (Fig. 1). Stead (1936c) decided that his specimens from Kundy I did not match Oliver's description, and commented: "Unfortunately the specimen on which Oliver founded this subspecies has been mislaid and is not available for comparison, but the description does not fit the form I have found to be commonest on Stewart Island and the surrounding islets, and for which I now propose the name *Bowdleria punctata insularis*, the type being in my collection". These birds differed from mainland New Zealand fernbirds in having "the forehead and crown a richer chestnut brown, and the sides of the breast and flanks much browner, each feather of these parts having a narrow black streak down its centre. The chin and the upper part of the throat may be either quite devoid of spots or faintly spotted with black, the spots increasing in size on the breast" (Fig. 1).

Oliver eventually selected Stead's 1929 specimen from Kundy I as his type specimen for *B. punctata stewartiana* (see below), and so Kundy I became the type location for 2 fernbird subspecies. Stead's name was dispensed with in the first Ornithological Society of New Zealand checklist (Fleming 1953): "Oliver's type was a rufous bird with large black ventral spots. Stead recorded two forms from Stewart and Cundy Islands, one with small ventral spots, the other with large spots like *vealeae*, and named the paler-breasted form *insularis*. In default of further information, the Stewart Island Fernbird is here considered dimorphic and Oliver's prior name used." All subsequent checklists have followed Fleming (1953).

Fernbirds survived on Kundy I for only a few decades after Stead's 1929 visit. Weka *Gallirallus australis* were introduced there by the muttonbirders c.1937 (Veitch & Bell 1990) and they extirpated local populations of fernbird, banded rail *G. philippensis*, white-faced storm petrel *Pelagodroma marina* and common diving petrel *Pelecanoides urinatrix* (Russel

**Fig. 1.** A sample of fernbird specimens collected by or for Edgar Stead on islands around Stewart I from 1929 to 1935; including the holotypes of *Bowdleria punctata insularis* and *B. p. wilsoni*, the neotype of *B. p. stewartiana*, and the 2 additional fernbird specimens known to have been sourced from Kundy I before 1936. Left to right: A. CMNZ AV175 *B. p. stewartiana* Oliver, 1930, neotype, Kundy I, Dec 1929; B. NMNZ OR.016691 Kundy I, Apr 1933; C. NMNZ OR.21789 Kundy I, Apr 1933; D. CMNZ AV173 *B. p. insularis* Stead, 1936, holotype, Kundy I, Apr 1935; E. CMNZ AV167 *B. p. wilsoni* Stead, 1936, holotype, female, Codfish I, 6 Jan 1935.



Trow and Pete McClelland pers. comm. 31 Mar 2011; *author pers. obs.*). The last fernbird record was one collected there by Robert Falla on 21 May 1956 (NMNZ OR.8700). The 12 fernbird specimens collected on Kundy I between 1929 and 1956 were the only specimens obtained from the type population (or populations) of both *B. p. stewartiana* and *B. p. insularis* before they became extinct. Weka were eradicated from Kundy I by the New Zealand Wildlife Service in 1985 (Veitch & Bell 1990); 24 fernbirds from nearby Big I were reintroduced in Apr 1995 (Russel Trow and Pete McClelland op. cit.), resulting in a thriving population (*author pers. obs.*, Mar 2011).

In the same 1936 fernbird paper, Stead also named a much darker form of fernbird that he and his companions found on Codfish I (Whenua Hou) in Dec 1934 – Jan 1935 (Fig. 1). This he named *Bowdleria punctata wilsoni* “in honour of Major R. A. Wilson, of Bulls, who has done so much to help me in my studies of birds” (Stead 1936c); this name has stood the test of time. Stead also intended to name a new race of snipe, presumably from Big South Cape I, but the paper was never published (Anon. 1942; Miskelly 2012).

#### Type specimens collected by Edgar Stead

The data below are as given on specimen labels, with corrections and comments in square brackets. Taxonomic sequence follows Gill *et al.* (2010). Institution abbreviations: AIM = Auckland Museum; BMNH = The Natural History Museum, UK; CMNZ = Canterbury Museum; NMNZ = Museum of New Zealand Te Papa Tongarewa.

*Thalassarche cauta stedi* Falla, 1933 Holotype: AIM 153.3, male, Foveaux Strait, Dec 1931 (Gill 1983). Paratype: CMNZ AV155, female, off Halfmoon Bay, Dec 1932. [Stead’s diary shows that the holotype was collected at Port Pegasus on 14 or 15 Dec 1931. Wilson’s diary shows that the paratype was collected between Jacky Lee and Kanetotetoe Is on 18 Dec 1932.]

*Stictocarbo stedi* Oliver, 1930 Paratype: CMNZ AV649, male, S.W. of Stewart I, 4 Dec 1929. [Stead’s diary shows that the paratype, along with another bird, was collected on the coast of Stewart I., near Kundy I, on 20 Nov 1929.]

*Phalacrocorax oliveri* Mathews, 1931 Paratype: CMNZ AV649, male, S.W. of Stewart I, 4 Dec 1929. [See comment for *Stictocarbo stedi*.]

***Xenicus longipes variabilis* Stead, 1936** Holotype: CMNZ AV227, male, Big South Cape I, Dec 1931 (Freeman & Tunnicliffe 1997). Paratypes (11): CMNZ AV225, AV226, AV229 (male), AV230 (male), AV231, AV232 (male), AV233, AV237 (female), AV238, and NMNZ OR.18126 (male) (all 10 from Big South Cape I, Dec 1931); BMNH 1932.10.25.2, Solomon I, Dec 1931. [Stead is known to have collected at least 16 bush wren specimens in Dec 1931: 14 are in CMNZ [12 adults and 2 fledglings], an adult is in NMNZ, and an adult in BMNH; all the New Zealand specimens are labelled as collected on Big South Cape I, and the BMNH specimen is labelled as from Solomon I. The 2 fledglings in Canterbury Museum are likely to have come from Solomon I; Robert Wilson's diary (Lethenty archive) records collection events for 12 wrens: 9 adults on Big South Cape I between 4 & 12 Dec 1931, an adult on Solomon I on 11 Dec 1931, and 2 fledglings on Solomon I on 13 Dec 1931. Stead (1936d) referred to measurements of 12 birds (presumably adults) without specifying reference numbers, although the holotype was labelled "Type". His export permit dated 14 Mar 1932 (see above) allowed for up to 12 wren specimens to be taken out of New Zealand; it is likely that Stead took 12 adult wrens to England with him, and that he prepared the type description while there later that year. One paratype was left in the British Museum (Natural History) (1932.10.25.2). The specimen in NMNZ (OR.18126), ex Fleming collection, is labelled as a paratype (Tennyson & Bartle 2008), and also bears a British Museum label, indicating that it was one of the 12 birds that Stead took to England. The remaining 9 paratypes are in Canterbury Museum, and also have British Museum labels. All 12 type specimens have hand-written numbers between 1 & 12 on the label obverse, with no. 1 being the holotype, no. 5 in Te Papa, and no. 10 in the Natural History Museum. The 4 specimens not taken to England (and not used in the type description) included the 2 fledglings (siblings collected on Solomon I on 13 Dec 1931), and the 2 poorest quality adult specimens.]

***Petroica (Miro) australis rakiura* Fleming, 1950** Holotype: CMNZ AV270, male, Jacques Lees I, Dec 1932. Paratypes (5): CMNZ AV271, male, Jacques Lees I, 17 Dec 1932; AV272, female, Jacques Lees I, 17 Dec 1932; AV273, female, Jacques Lees I, 12 Feb 1933; AV274, male, Jacques Lees I, 17 Dec 1932; AV275, male, Solomon I (no date). [AV275 will have been collected between 10 Nov and 13 Dec 1931.]

***Bowdleria punctata stewartiana* Oliver, 1930** Neotype (see below): CMNZ AV175, female, Kundy I, Dec 1929 (cf. Freeman & Tunnicliffe 1997; Fig. 1 in this paper). [Oliver 1930a did not mention any specimens in his brief type description. It is inferred that he had used a particular specimen, as when

Stead (1936c) described *B. p. insularis* he stated that the specimen that Oliver had used to found *stewartiana* had been "misaid and was not available for comparison". CMNZ AV175 bears a label stating "type, selected 22 November 1950 by W.R.B. Oliver in my presence, R. J. Scarlett" (Freeman & Tunnicliffe 1997). Based on surviving specimens, Stead had apparently collected 1 only fernbird from the Stewart I region (on Kundy I in Dec 1929) before Oliver completed the text for his book in Apr 1930 (the 2 undated Kundy I specimens are likely to have been collected after 1930). Six years later Stead (1936c) had at least 6 specimens (including 4 from Kundy I) in his collection; he stated that there were 2 forms on Kundy I, but that he had no specimens of the dark form. He then proceeded to describe the paler form as *insularis*. If Scarlett's 1950 annotation is interpreted *prima facie* as Oliver identifying the actual specimen that he had used when drafting the type description 20 years earlier, then Oliver (1930a) had described the dark *stewartiana* based on Stead's sole Kundy I specimen, yet Stead (1936c) did not believe that he had any dark specimens, and Stead's own 1929 specimen misaid in 1936 had been refound by 1950! As the 1929 specimen is not noticeably darker than the 1933 and 1935 specimens (Fig. 1), and there was limited opportunity for Oliver to access it, a more plausible explanation is that Oliver did not have a type specimen in 1930, and that in 1950 he chose the sole available specimen dated prior to 1930 as his type. Oliver's (1930a) fernbird text did not mention either the specimen or Kundy I, and there is no evidence that he had seen the specimen before his book was published; therefore CMNZ AV175 cannot be the holotype, and should be considered the neotype for *B. p. stewartiana*. Freeman & Tunnicliffe (1997) similarly recognised that it was unlikely that Oliver had viewed AV175 before publishing his 1930 book, and listed the specimen as "?HOLOTYPE". It is unknown whether Oliver deliberately misled Stead over the existence of a type specimen in 1936. There is no known evidence of Stewart I fernbird specimens being held by New Zealand museums before 1930, although at least 4 had been collected before 1899: 2 from Jacky Lee I ended up in Lord Rothschild's collection and are now in the AMNH (Miskelly 2012), and the 2 from Stewart I referred to by Buller (1897, 1899, 1905) were among Walter Buller's third collection sold to the Carnegie Museum of Natural History in 1905 (Bartle & Tennyson 2009; Steve Rogers pers. comm., 20 Jun 2011). Oliver (1926) referred to the Buller specimens, although he appears to have forgotten this 29 years later when he stated (Oliver 1955) that "The first record of a Fernbird on Stewart Island that I am aware of is that of Dr. L. Cockayne [1907]". It is likely that Oliver's (1930a) description was based on Guthrie-Smith's (1914) text and photographs, and

possibly Oliver's own observations on Stewart I in 1910 (Pitt 1982). There is no suggestion that Oliver saw fernbirds on his 1926 visit (Oliver 1926).]

***Bowdleria punctata insularis* Stead, 1936** Holotype: CMNZ AV173, female, Kundy I, Apr 1935 (Freeman & Tunnicliffe 1997; Fig. 1 in this paper). [Stead had at least 6 'Stewart Island' fernbird specimens in his collection in 1936: 4 from Kundy I (Fig. 1), and 1 each from Big South Cape and Jacky Lee Is (2 Kundy I specimens are in NMNZ, and 2 are in CMNZ). His description referred to variability in markings on the chin and upper throat, but as Stead had observed the birds in the field, and he did not explicitly base the description on the specimens in his collection, there are no paratypes. The holotype was most probably collected by one of John Morrison's sons (Jim, Lloyd or Aka Morrison) at the request of Edgar Stead (Russel Trow pers. comm., 18 Jun 2011; see above).]

***Bowdleria punctata wilsoni* Stead, 1936** Holotype: CMNZ AV167, female, Codfish I, 6 Jan 1935 (Freeman & Tunnicliffe 1997; Fig. 1). [There are no paratypes, although Stead collected 3 others at the same time (all in CMNZ).]

## CONCLUSIONS

Of the 6 New Zealand bird taxa given the epithet *stedi*, 4 (*Thalassarche cauta stedi*, *Stictocarbo stedi*, *Pseudopron turtur stedi* and *Petroica (Miro) australis stedi*) were definitely named after Edgar Stead, and 1 (*Carbo carbo stedi*) probably was. Of these, *Thalassarche cauta stedi* only is currently considered valid, and *Stictocarbo stedi* is permanently invalid (Gill *et al.* 2010). *Procellaria aequinoctialis stedi* was probably named after the Australian naturalist David Stead.

Two of the 3 subspecies named by Stead are considered valid currently: *Xenicus longipes variabilis* and *Bowdleria punctata wilsoni*.

This review has revealed that many type specimens in the Canterbury Museum collection were overlooked by Freeman & Tunnicliffe (1997); these include the holotype and 5 paratypes of *Petroica australis rakiura*, single paratypes of *Thalassarche cauta stedi* and *Stictocarbo stedi* (and therefore *Phalacrocorax oliveri*), and 9 paratypes of *Xenicus longipes variabilis*.

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