

THE LITTLE BARRIER ISLAND SNIPE

By C. M. MISKELLY

ABSTRACT

A single snipe was captured on Little Barrier Island in 1870. The history of this specimen is traced up to its designation as the holotype of *Coenocorypha aucklandica barrierensis* 85 years later. Other records of snipe in the Auckland area seem to refer to the one Little Barrier specimen or to other species of wader.

Snipe apparently disappeared from Little Barrier Island in the 1870s, when cats became established, but apparently were rare before then. References by R.H. Shakespear to "snipe" on Little Barrier Island are given, but are regarded as probably referring to other species.

THE SPECIMEN FROM LITTLE BARRIER ISLAND

On 10 October 1870, Captain F.W. Hutton exhibited a specimen of snipe to a meeting of the Auckland Institute (Hutton 1871a). The bird had been "captured at the Little Barrier Island by Captain Bennett, of the schooner *Mary Ann*, and presented to the institute by Mr. T.B. Hill". Hutton stated that:

Two specimens only were seen, of which the one now exhibited was caught alive but died in confinement; the other escaped. It answered tolerably well to the description of *Gallinago pusilla*. Buller, although it appeared rather larger than that bird and somewhat different in colour. But as Buller's description was from the single specimen captured at the Chatham Islands, much importance could not be attached to the discrepancies, which were of a trivial nature.

Mr. Baber stated that he had seen this bird in Hobson's Bay, Auckland some years ago.

Buller (1869) had described his "Little Snipe" from the Chatham Islands only the year before, and no skins of Chatham Island Snipe were available to compare with the new specimen. The snipe was added to the collection of the Auckland Institute and Museum, then curated by T. Kirk (Curator, 1868-1874 - Powell 1967).

The next mention of the snipe in the records of the museum was in a large catalogue entitled *New Zealand and Foreign Vertebrates*. This register (the "Blue Book" of Gill 1984) was evidently made in 1898. The entry is in T.F. Cheeseman's handwriting, and reads:

Number	When Received	Name	From whom received	Locality
869	In Mus 1874	<i>Gallinago pusilla</i>	no history	Little Barrier Island
872	1870	<i>Gallinago pusilla</i>	Presented by Mr T.B. Hill	Raglan District

Cheeseman was Curator, Auckland Institute and Museum, from 1874 to 1923. The crossings-out were by Cheeseman (G. Archey, unpublished letter to E.G. Turbott, 9 March 1959). Archey interpreted the crossings-out as showing that Cheeseman "evidently thought *subsequently* that [869] was the Little Barrier specimen" (Archey's emphasis).

All subsequent records of snipe from the Auckland region were apparently based on the 1870 specimen, although there was some confusion in the literature. Cheeseman (letter to Buller, 2 June 1884) wrote "I have a specimen of *Gallinago pusilla* in the Auckland Museum, obtained by Mr. T. B. Hill in the Raglan district many years ago; but I have never met with the bird myself" (Buller 1888: 34). This was almost certainly the bird mentioned by Hutton (1871a) because the donor and the date (in the catalogue) are the same. The locality "Raglan District" was apparently attributed to the specimen in error (see below).

Buller (1888: 33) recorded *Gallinago pusilla* from the Chatham Islands, and "...the next record of its occurrence was from the Gulf of Hauraki, near Auckland" – then he went on to quote Cheeseman on the Raglan specimen. Buller's reference to a bird from the Hauraki Gulf must, therefore, have been based on either Hutton's (1871a) original report or Hutton (1871b), where the range of *Gallinago pusilla* was given as "Little Barrier Island and Chatham Islands".

Canon H. B. Tristram (1893), writing from England, further confused the issue with his apparent lack of local geographical knowledge. Tristram, referring to *Gallinago pusilla*, wrote: "Very few specimens have been received, but the species has twice been obtained in New Zealand (to which it is evidently an occasional wanderer): once by Sir James Hector in the Gulf of Hauraki, and once by Mr. F. [sic] B. Hill on Little Barrier Island." In 1893, the only published reference linking Mr Hill with a snipe from Little Barrier Island was Hutton (1871a), which Tristram must have seen. The reference to Sir James Hector is confusing, but I suspect that the answer can be found in the first paragraph on Chatham Islands Snipe in Buller (1888): "In 1868 I received from Dr. (now Sir James) Hector a small Snipe obtained by Mr. Charles Traill during a visit to the Chatham Islands". The mention of "the Gulf of Hauraki" comes later in the same paragraph. It is apparent that Tristram was unaware that "Little Barrier Island" and "the Gulf of Hauraki" could be referring to the same place; I further suggest that Tristram confused the bird obtained from the Chatham Islands via Hector with the locality "the Gulf of Hauraki".

The comment by Mr Baber (Hutton 1871a) that he had seen "*Gallinago pusilla*" in Hobson's Bay was repeated by Oliver (1955: 275) when describing the Little Barrier Snipe *Coenocorypha aucklandica barrierensis*:

Snipe, possibly belonging to this subspecies, were reported as having been seen by Mr. J. Baker [sic] earlier in the century on the shore of Hobson Bay, Waitemata Harbour.

I agree with Turbott (1961) that Baber was probably referring to Arctic migrant waders.

The Little Barrier snipe specimen received little attention for 60 years after Tristram's (1893) comments. During this time the bird specimens in the Auckland Institute and Museum were renumbered, and a new catalogue, *New Zealand Mammals and Birds*, was filled in by L. T. Griffin, apparently between 1919 and 1922 (Gill 1984). Griffin was museum assistant and preparator of specimens from 1908 to 1922 and assistant curator from 1923 to 1935 (Powell 1967). The entries in this catalogue read:

Number	When Received	Name	From whom received	Locality	Remarks
185		Gallinago pusilla no sex		Little Barrier Island	AV 78.1
186	1870	Gallinago pusilla	Presented by: -T.B. Hill	Raglan District	AV 78.2. 1389.1 See Proc. NZ Inst. vol.3, p. 86.

The crossing-out, arrow, and comments in the remarks column were made by E.G. Turbott in 1953 (unpublished letter to Archey, 15 April 1959). Turbott was Ornithologist at Auckland Institute and Museum from 1946 to 1957 (Powell 1967).

Griffin started to transcribe all the details from *New Zealand Mammals and Birds* to cards in 1924, and gave each specimen an "AV" number (B.J. Gill *in litt.*).

In 1953, W.R.B. Oliver (unpublished letter to Turbott, 24 April) asked about the snipe from "the Raglan District" mentioned by Buller (1888) and asked to borrow the specimen from the Auckland Institute and Museum. On receiving the specimen, Oliver realised that it was distinct from the other forms of New Zealand snipe, and that it may have been the one mentioned by Hutton (1871a) from Little Barrier Island. Oliver's comments prompted Turbott (unpublished letter to Oliver, 3 August 1953) to search through the old consecutive catalogue and discover the mix-up in labelling of "185" and "186". Turbott and Oliver agreed that 186 was the bird mentioned by Hutton (1871a), and Turbott suggested that the locality "Raglan" had been given in error by either Cheesman or, more likely, Kirk, who was Curator in 1870.

If 186 was the Little Barrier Island specimen, why was 185 labelled "Little Barrier Island"? Turbott (unpublished letter to Oliver, 3 August 1953) suggested that "185 was a stray bird in the collections and that the locality 'Little Barrier Island' had been attached to it by mistake", and posted both specimens to Oliver.

Oliver (unpublished letter to Turbott, 9 August 1953) recognised 185 as an Auckland Island Snipe *C. a. aucklandica*:

The large one is aucklandica so doesn't alter the position as regards the small one. It does in a way confirm the locality of the small specimen as Little Barrier Island, as obviously this locality is wrong for the large bird but presumably was intended for the small bird, Cheesman evidently forgetting which one came from Little Barrier Island. Raglan is I suppose Hill's address. Taking all things together I think it is safe to say that the small specimen which does not definitely agree with any described subspecies, comes from Little Barrier Island, was collected by Captain Bennet [*sic*], and given to the Museum by T.B. Hill.

It was at this stage that Turbott made the changes to Griffin's entry in the catalogue (Turbott, unpublished letter to Archey, 15 April 1959).

Oliver (1955: 275) described the Little Barrier Snipe as a new subspecies, *C. a. barrierensis*, based on the unique specimen in the Auckland Institute and Museum. The specimen (now AV 1389. 1, Fig. 1) is most like the Stewart Island Snipe *C. a. iredalei* in size (Table 1). The bird, which had

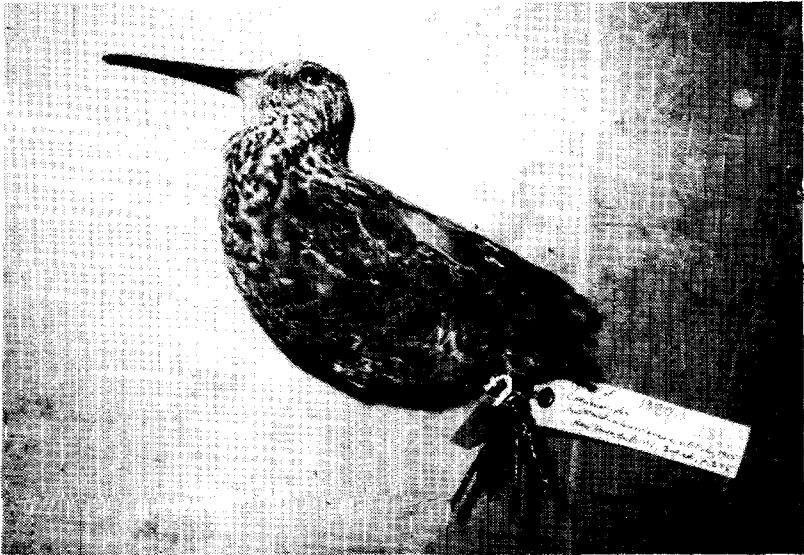


FIGURE 1 — The Little Barrier Island snipe, Auckland Museum AV 1389.1

been mounted as a display specimen, is very faded on its right side; the left side may also be somewhat faded. Compared with *C. a. iredalei*, the Little Barrier snipe has a greater amount of buffy white on the chin and throat, has light, mid-brown crescentic subterminal bars from upper throat to mid-belly, and has the lower belly unbarred. Stewart Island Snipe have a heavy gorget of blackish blotches extending from upper throat to lower breast, and their belly is buffy white with some blackish bars. Overall, *C. a. barrierensis* has finer, lighter markings on the undersurface, compared with the bold gorget of *C. a. iredalei*.

TABLE 1 — Comparison of measurements of the holotype of *Coenocorypha aucklandica barrierensis* (LBI) with measurements from skins of *C. a. iredalei* in Canterbury Museum, National Museum, and British Museum (Natural History). All measurements in millimetres.

	L B I	<i>C. a. iredalei</i>			
		\bar{x}	n	SD	Range
Culmen	51.9	53.1	11	3.40	46.1 - 58.3
Tarsus	21.3	24.0	7	0.64	23.2 - 25.0
Mid-toe and claw	29.0	33.0	5	1.11	32.2 - 34.9
Tail	32.0	39.8	6	1.83	36.7 - 41.6
Wing	103	108	7	2.8	105 - 113

There was further correspondence on the Little Barrier snipe between Turbott (then Assistant Director and Keeper of Zoology, Canterbury Museum) and Sir Gilbert Archey (Director, Auckland Institute and Museum, 1924-1964) from February to April 1959. Turbott was working on a manuscript on the birds of Little Barrier Island (published in Hamilton 1961) in which he included an account of the snipe. This correspondence culminated in Turbott writing a new label for the Little Barrier specimen and Archey assigning it a new catalogue number as the holotype for *C. a. barrierensis* (Gill 1983). After 89 years in the collections of Auckland Institute and Museum, the Little Barrier snipe had been recognised as distinct and the true collection details were entered on its label.

Oliver was quite correct when he guessed that Raglan was Hill's address. Turbott succeeded in tracing T. B. Hill through the Waikato Branch of the Royal Society and the Raglan Old Settlers' Association; the following information is from unpublished letters to Turbott from C. G. Hunt in February and March 1962.

Thomas Boucher Hill owned a chemist's shop in Mt Eden (Auckland) and bought a farm in the Te Mata district near Raglan in the late 1860s. He eventually sold his Mt Eden business and set up as a chemist in Raglan township, where, in the absence of a local medical practitioner, he was in effect the local doctor. Mr Hill had many interests, not least of which was a keen interest in natural history. He died in Raglan about 1920, aged 88, and is buried in the Raglan graveyard.

One mystery remains: what was the provenance of 869 (now AV 77.4), an Auckland Island Snipe with no collection data, that once bore the locality "Little Barrier Island"?

SNIPE ON LITTLE BARRIER ISLAND

Although the unique specimen of *C. a. barrierensis* has received sporadic attention over the years, little is known about the fate of snipe on Little Barrier Island. Turbott (1961) suggested that snipe became extinct owing to the introduction of cats.

When cats were introduced to Little Barrier I. is uncertain. They were certainly present by 1885, along with wild pigs and dogs (Reischek 1886b, 1886c, 1886d, although Hamilton 1961: 134 suggested that pigs on Little Barrier Island were confined to a small area of coastal forest behind Ngamanaururu Bay). Reischek visited Little Barrier Island five times between October 1880 and May 1885 (Reischek 1887a). Referring to the Stitchbird (*Notiomystis cincta*), Reischek (1886a) wrote:

These very rare birds will soon disappear, even from these lonely wilds, owing to the domestic wild cats, which are very numerous, and commit great havoc among them. . . .

There is circumstantial evidence that cats became established on Little Barrier I. in the 1870s: Hutton (1869) reported Saddlebacks (*Philesturnus carunculatus*) as very common on a 4-day visit in December 1867, whereas Reischek (1887b) found them to be rare in October 1880, still scarcer in October 1882, and not at all subsequently. Turbott (1947 and 1961) argued

that cats were responsible for the extinction of Saddleback on Little Barrier I.; this is supported by the successful reintroduction of Saddleback to the island in 1984, after the eradication of cats by the NZ Wildlife Service in 1980 (Veitch 1985).

Veitch (1985) gave the date of cat introduction as "about 1870", on the strength of Hutton's (1869) and Reischek's (1887b) observations (C.R. Veitch, pers. comm.).

If cats did become feral on Little Barrier I. in the 1870s, this agrees well with the presumed date of disappearance of snipe, the only record of snipe on Little Barrier Island being the two seen in 1870 (Hutton 1871a). However, snipe were probably rare on Little Barrier Island even before cats were present, as Layard (1863) and Hutton (1869) did not record snipe. Reischek (an avid collector of rare birds) made no mention of seeing snipe during his "ten months" on the island between 1880 and 1885.

I suggest that snipe were scarce on Little Barrier I. in 1870 because of predation by kiore (*Rattus exulans*), and perhaps wild pigs and dogs. No other form of New Zealand snipe is known to have survived in the presence of any species of rat (Miskelly 1987). Perhaps kiore had not, in 1870, been on Little Barrier I. long enough to eliminate snipe. The introduction of cats would have sealed the fate of snipe.

However, there are records of "snipe" from Little Barrier I. long after cats were introduced.

Little Barrier I. was purchased as a reserve for the preservation of rare birds in 1894 (Hamilton 1961). The last of the previous Maori owners were removed in 1896. R.H. Shakespear, appointed curator of Little Barrier Island Reserve by the Auckland Institute, was on the island from 19 January 1897 until 28 February 1910 (Hamilton 1961). During his 13 years on Little Barrier I., Shakespear kept a meticulous diary, which included many natural history observations, and he also corresponded frequently with T.F. Cheeseman (then Curator of Auckland Institute and Museum and Shakespear's superior). These unpublished diaries and letters are in the Auckland Institute and Museum Library; I thank Ian Thwaites for permission to quote from them.

Shakespear made several references to "snipe" or snipe-like birds; these are quoted as written:

Wednesday 29 September 1897 (diary)

Gloriously fine day...went around in the boat to the west side in order to collect the remains of the whale...we also saw a beautiful little snipe. he was very tame & allowed us to approach within a few feet. he was feeding on the whale. the top of his head was a rich brown. I saw no white stripe.

Monday 4 October 1897 (letter)

...They had very rough weather down here & never expected to see me. there had been an unusually severe Easterly gale with high tides & there was a heavy sea running here on Monday [27 September]...I am sorry to say the whale was washed away, but so far we have managed to collect most of the bones...I noticed a most beautiful little snipe feeding on the remains. he was a real snipe, & very tame. his markings were rather more like a woodcock than a snipe. yesterday when we put him up he flew up Turner's Gully, so perhaps he may remain here.

There used to be a snipe many years ago indigenous to the island but this one seems to me more like the Auckland Id. species, however he is a very welcome visitor & his flight made me think of other days, he had a reddish brown patch on his head - & his markings were much darker than the ordinary snipe more mottled on the wing feathers.

Wednesday 27 October 1897 (diary)

Fine day. S.S.W. breeze...Saw a large snipe today, a different variety to the one we saw by the whale, this bird seemed rather larger than the English snipe.

Friday 29 October 1897 (letter)

I told you that we saw a beautiful little snipe by the whale's remains, it stayed about for some time, the patch on the top of its head was a rich dark brown, yesterday I saw another snipe he was down by the boathouse, he was a far larger bird, & breast & wing feathers lighter, he got up just like an ordinary snipe & gave the same cry, the boy saw him feeding up Turner's this morning close to the creek, I think he is altogether another variety."

Monday 1 November 1897 (diary)

It commenced to rain this morning about 5 a.m. & continued until 9 a.m...I saw the bird that I thought was a snipe, It is far larger than the real snipe which we saw at the carcass of the whale.

This is a very handsome bird & very tame, I am going to try & get a photo, about 8 inches long, strong pointed beak, about 1 1/2 inches long, palish brown with greyish white tint which ran through all the feathers, so that looking at him you would say he was greyish white deepening into a rich brown on the back, Sides of the throat whitish grey, brown patch on the top of the head, but not nearly of such rich a hue as the little snipe.

Thursday 6 October 1898 (diary)

Squally morning, Wind S.W. fresh breeze.

The children saw a bird which they describe as something like a snipe with a very long beak, it was on the spit, probably I shall come across it tomorrow.

Friday 7 October 1898 (diary)

Cloudy morning, Westerly wind, fresh breeze.

In the evening we caught a bird something like a large curlew, it was nearly dead with exhaustion & want of food, it tried to swallow the worms we gave it, but could not & died during the evening so I shall put it in spirits for Mr. Cheeseman.

Monday 20 November 1899 (diary)

Weather, raining hard, Wind Northerly.

I was along at the spit in the morning & again at sunset, I flushed the Little Barrier Snipe, & he went up Turner's Crk. (he has been about now for about 10 days).

Sunday 14 September 1902 (diary)

Weather - stormy, sky windy, scud coming over fast from W.S.W. Wind W. strong breeze, glass inclined to rise, some sea on the west landing. A specimen of the "Little Barrier Snipe" was on the lawn this morning he was very tame, & I had a good look at it through the glasses, it was very tame & in the evening was still on the lawn at the back of the house.

Sunday 19 October 1902 (diary)

Weather, squally, sky cloudy, thick over the mainland, Wind, Sou West: strong breeze, fair sea on, glass low & steady...Blowing & raining all day, heavy sea running...A whip of snipe about 15 were on the flat yesterday, & today, I have not seen any like them before, They are very handsome little birds, I watched them for some time through my field glasses.

Wednesday 2 November 1904 (diary)

Weather, improving, sky, cloudy with sunshine. Wind, Sou West moderate breeze...The "snipe" still remain round the house.

It is apparent than Shakespear used "snipe" as a general term for shorebirds. I suggest that most, if not all, of the sightings refer to stray Arctic or local waders. First, all the records are from September to November, when Arctic waders are arriving in New Zealand from their breeding grounds. Secondly, all but one of the records followed bad weather and strong winds – likely conditions for migrants to get blown off course. Thirdly, all of the sightings were from the coast or around Shakespear's house at Te Maraeroa – likely habitats for vagrant waders.

From my own experience with New Zealand snipe and Little Barrier Island, I suspect that snipe would have survived longest in areas of sedge at the mouths of streams and wherever damp, forested gullies had dense ground cover. New Zealand snipe are not known to feed in the open during the day and so would be unlikely on a lawn. Shakespear also mentioned flushing snipe and having them fly considerable distances. It is unusual for extant forms of New Zealand snipe to fly more than 30 m if flushed during the day (pers. obs.), although *C. a. barrierensis* was apparently the form of *Coenocorypha* that flew best (Miskelly in prep.).

If Shakespear was not seeing Little Barrier Snipe, what was he looking at? Six species of waders have been recorded as stragglers to Little Barrier I. Hutton (1869) and Reischek (1887a) recorded Variable Oystercatcher (*Haematopus unicolor*), Turbott (1961) recorded Banded Dotterel (*Charadrius bicinctus*), Far-eastern Curlew (*Numenius madagascariensis*), Bar-tailed Godwit (*Limosa lapponica*) and Pied Stilt (*Himantopus himantopus*), and Veitch (pers. comm.) reported Least Golden Plover (*Pluvialis fulva*); other species are likely also.

The bird seen on 29 Sep 1897 may have been a Sharp-tailed Sandpiper (*Calidris acuminata*), judging by its small size, the reddish-brown top of its head and "no white stripe". The larger, greyish "snipe" with a 1½ inch bill of 27 Oct - 1 Nov 1897 may have been a Knot (*Calidris canutus*) or New Zealand Dotterel (*Charadrius obscurus*). The "large curlew" caught on 7 Oct 1898 cannot be traced in the collections of Auckland Institute and Museum (B.J. Gill, pers. comm.).

Shakespear's other records are too vague to allow speculation as to identity, but the 15 birds seen on 19 Oct 1902 were obviously not snipe, which do not flock. The balance of evidence suggests that snipe disappeared from Little Barrier I. soon after they were discovered in 1870.

ACKNOWLEDGEMENTS

I am indebted to Dr Brian Gill (Curator of Birds, Auckland Institute and Museum) for allowing access to the Little Barrier snipe specimen, providing copies of the Oliver/Turbott, Turbott/Archey and Turbott/Hunt correspondence, and answering many queries about the early days of the Institute. I am very grateful to Ian Thwaites and Peggy Sayes (Auckland Institute and Museum Library) for locating the snipe references in Shakespear's diaries and letters and giving permission to quote from them.

The manuscript was improved by comments from Brian Gill, Barrie Heather, Ian McLean, Graham Turbott and Richard Veitch. Funding was provided by the Department of Conservation (formerly Department of Lands & Survey) and the Royal Forest & Bird Protection Society.

LITERATURE CITED

- BULLER, W. L. 1869. On some new species of New Zealand Birds. *Ibis* 5 (2nd series): 37-43.
- BULLER, W. L. 1888. A History of the Birds of New Zealand. 2nd edn. 2 vols. London: The Author.
- GILL, B. J. 1983. Type specimens of amphibians, reptiles, birds and mammals in the Auckland Institute and Museum. *Rec. Auckland Inst. Mus.* 20: 203-215.
- GILL, B. J. 1984. Specimens of rare or recently extinct New Zealand non-passerine birds in the Auckland Institute and Museum. *Rec. Auckland Inst. Mus.* 21: 77-82.
- HAMILTON, W. M. 1961. History. Pages 18-30 in Hamilton, W.M. (compiler) Little Barrier Island (Hauturu). 2nd edn. NZ DSIR Bull. 137.
- HUTTON, F. W. 1869. Notes on the birds of Little Barrier Island. *Trans. NZ Inst.* 1: 162.
- HUTTON, F. W. 1871a. [Comments on a snipe from Little Barrier Island]. *Proc. NZ Inst.* 3: 86.
- HUTTON, F. W. 1871b. Catalogue of the Birds of New Zealand. Wellington: Government Printer.
- LAYARD, E. L. 1863. Ornithological notes from the antipodes. *Ibis* 5 (1st series): 241-250.
- MISKELLY, C. M. 1987. The identity of the hakawai. *Notornis* 34: 95-116.
- OLIVER, W. R. B. 1955. New Zealand Birds. 2nd edn. Wellington: Reed.
- POWELL, A. W. B. (editor) 1967. The centennial history of the Auckland Institute and Museum 1867-1967. Auckland: Auckland Institute & Museum.
- REISCHEK, A. 1886a. Notes on New Zealand ornithology: observations on *Pogonomis cincta* (Dubus); Stitch-Bird (Tiora). *Trans. Proc. NZ Inst.* 18: 84-87.
- REISCHEK, A. 1886b. Notes on New Zealand ornithology: observation on *Procellaria parkinsoni* (Grey), Brown Petrel (Taiko). *Trans. Proc. NZ Inst.* 18: 87-90.
- REISCHEK, A. 1886c. Observations on Gould's Petrel (Hutton), *Procellaria gouldi* (Ohi), their habits and habitats. *Trans. Proc. NZ Inst.* 18: 90-91.
- REISCHEK, A. 1886d. Observations on Cook's Petrel (Grey), *Procellaria cooki* (Ti Ti), their habits and habitats. *Trans. Proc. NZ Inst.* 18: 92-93.
- REISCHEK, A. 1887a. Description of the Little Barrier or Hauturu Island, the birds which inhabit it, and the locality as a protection to them. *Trans. Proc. NZ Inst.* 19: 181-184.
- REISCHEK, A. 1887b. Ornithological notes. *Trans. Proc. NZ Inst.* 19: 188-193.
- TRISTRAM, H. B. 1893. An undescribed species of snipe from the New Zealand region. *Bull. Brit. Orn. Club* 1: 46-48.
- TURBOTT, E. G. 1947. Birds of Little Barrier Island. *NZ Bird Notes* 2: 92-108.
- TURBOTT, E. G. 1961. Birds. Pages 136-175 in Hamilton W. M. (compiler) Little Barrier Island (Hauturu). 2nd edn. NZ DSIR Bull. 137.
- VEITCH, C. R. 1985. Methods of eradicating feral cats from offshore islands in New Zealand. Pages 125-141 in Moors, P. J. (ed.) Conservation of Island Birds. ICBP Tech. Publ. 3.
- COLIN MISKELLY, *Department of Zoology, University of Canterbury, Christchurch 1, New Zealand*