

# Discovery and extinction of the South Island snipe (*Coenocorypha iredalei*) on islands around Stewart Island

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**Abstract** The South Island snipe (*Coenocorypha iredalei*) was described by Walter Rothschild in 1921 based on 3 specimens collected on Stewart Island in 1830s. It was considered extinct following introductions of weka (*Gallinallus australis*) or ship rats (*Rattus*) to its 2 last strongholds. I surveyed surviving museum skins, literature, and personal accounts of discovery and extinction. Seven only of the 24 known specimens had correct locality data associated with them; as a result, many were assumed until recently to be Snares Island snipe (*C. huegeli*). Based on specimen records, historic records and that the unknown collector of the type specimens of *C. iredalei* also collected bird specimens from Rangatira I in the Chatham Is in 1899 and 1900.

Miskelly, C.M. 2012. Discovery and extinction of the South Island snipe (*Coenocorypha iredalei*) on islands around Stewart Island. *Notornis* 59 (1&2):

**Keywords** South Island snipe; *Coenocorypha iredalei*; Stewart Island; Rangatira I; Chatham Islands; John McLean; Sigvard Dannefaerd

## INTRODUCTION

Few naturalists saw the South Island snipe (*Coenocorypha iredalei*) before it became extinct in 1964. Apart from a possible record from Dusky Sound in 1773 (Medway 2007), the only sites where naturalists encountered South Island snipe (known also as Stewart Island snipe) were Jacky Lee I and Big Jacky Lee I (Miskelly 2007). The name of the species is also given as Jack Lee, Jacka Lee, Jacques

Lees I, or even "Jackless Island" (Mathews 1936); all collected on Stewart Island in the 1830s. Big South Cape I or Taukihepa is an island; it lies just west of the southern tip of Stewart Island.

The published history of snipe on Jacky Lee I is brief and poignant. *Coenocorypha aucklandica iredalei* was described by Walter Rothschild (1921) based on 3 specimens collected there and received from Jacky Lee I. He had seen 5 specimens, and nominated a lectotype collected there in Dec 1932 (Wilson 1959)

Received 18 Oct 2011; accepted 28 Mar 2012

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**Table 1.** Registration no., Date, Locality, and Species for *Coenocorypha aucklandica iredalei*, *Bowdleria punctata stewartiana*, and *Hemiphaga novaeseelandiae*.

Registration no.	Date	Locality	Species
! ž ! - " %1523	18/3/97	Jack Lees Islands	South Island snipe
! ž ! fi	June 1897	Jack Lee I., South I.	Fernbird
! ž ! fi	July 1897	Jack Lees Isld, Southland	South Island snipe
! ž ! fi	"  .	Jack Lees Isld, Southland	South Island snipe
! ž ! fi	June 1898	Jack Lees Isld	South Island snipe
! ž ! fi	June 1898	Jack Lee I., South I.	Fernbird
! ž ! - " %533	14/7/99	Jack Lees Island	! " - " 3-2±
! ž ! - " %1522	24/4/01	Jack Lee	South Island snipe

*Gallirallus australis* (weka).

*C. iredalei* to be a subspecies of the Snares Island snipe (*C. huegeli*) and gave its name to the species. Wilson (1929) introduced wekas to the islands in 1929 (about 8 years before weka were introduced), with Major Wilson joining him for the last 8 days; Stead unpublished diary, David Macmillan archive Canterbury Museum ARC2001.12, Item 206; Wilson (1953) in considering both Stewart Island snipe and Snares Island snipe to be subspecies of *C. aucklandica*, and gave the distribution of the Stewart Island snipe as South Cape Island, Jacky Lee Island (now extinct); coast, snipe were formerly found and it was here that the type of the subspecies was collected. The snipe were subsequently exterminated on Jacky Lee Island by introduced wekas.

Subsequent observations were made on Big Island (Richdale 1945), and in Apr 1961 by Brian Bell and Don Merton (*Weekly news* 8 Aug 1962; Miskelly 1987). The last observations of the species were made by members of the Wildlife Service in 2006. The last observations of the species were made by members of the Wildlife Service in 2006. The last observations of the species were made by members of the Wildlife Service in 2006. The last observations of the species were made by members of the Wildlife Service in 2006.

**HISTORICAL ACCOUNTS**

**Henry Travers and Jacky Lee Island, 1897-1905**

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including the statement "I have a considerable number of skins from all parts of this country"

Although there are 5 only South Island snipe skins labelled as from Jacky Lee I and collected by Travers (Table 1), it is probable that he obtained at least 15 snipe skins from the island. There are another 5 South Island snipe skins labelled as Travers specimens but with incorrect or no locality data...

A likely causative factor of incorrect labelling by Travers was the long time that elapsed between 1893 and 1927 (see above), and a further 25 snipe skins (including at least 7 with incorrect locality data) were sold to the Dominion...

and it was probably acquired as part of a bulk lot by the Dominion Museum in 1936 (Dell 1965). The Robert Falla (Director of the Dominion Museum) while researching this paper in May 2011: (vide dated catalogue card annotations made by Sandy Bartle, former Curator of Birds).

A specimen of c.1900 vintage in Canterbury Museum (AV1817) was originally in the collection of Dr Benjamin Moorhouse. The Moorhouse collection was loaned to the museum following the outbreak of World War I, then acquired by the museum following...

Stewart I region specimen labels undertaken by Trish Hemphill (Hemiphaga novaeselandiae), Jacky Lee I, 14 original label, although 2 have subsequently had his name added as the collector.

Table 2. Details of all 24 known skin, mount and spirit specimens of South Island snipe. Date, age/sex, locality and collector data are all from the original labels or ...

Table with 6 columns: Registration no., Specimen, Date, Age/Sex, Locality, Collector, Type status, and comments based on this review. The table lists 24 specimens with details on their registration numbers, specimen types (skin, mount), dates, ages and sexes, localities (Jacky Lee I, Snares Is, Auckland Is, Solomon I, Big South Cape I), collectors, and their current status (e.g., Lectotype, Imm, etc.).

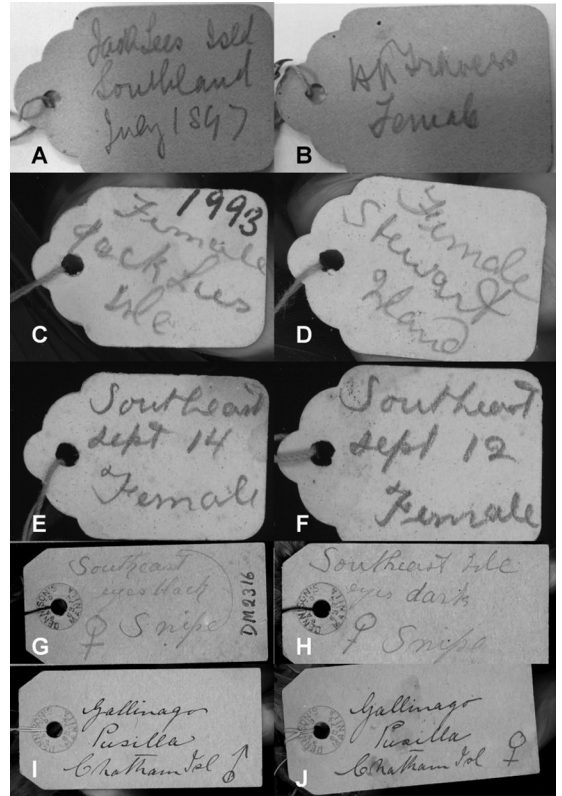
1. Specimen ex Moorhouse Collection; 2. Specimen with the torso kept in alcohol. when the specimen was prepared as a study skin, with the torso kept in alcohol.

Travers or his collector apparently labelled most specimens with their date and sex at the time of collection or preparation, and so the dates should be more reliable than the localities, which in some cases appear to have been added years later. The accuracy of date data was checked with 2 South Island snipe collected on Jacky Lee I on 18 Mar 1897 and 24 Apr 1901. Based on the fact that snipe moult their primary feathers in Mar and Apr, soon after their chicks become independent: 20 of the specimens collected in Jun and Jul have completed their primary moult. The specimens are too fragile for further moult analysis.

If the dates on snipe, fernbird and pigeon specimens supposedly collected on Jacky Lee I by Travers are accurate, they would indicate at least 8 occasions between 1897 and 1905; 15 snipe specimens were collected, with apparently few collected on any 1 visit (8 specimens lack complete dates and 4 are undated).

**Herbert Guthrie-Smith and John McLean on Jacky Lee Island, 1911**

Herbert Guthrie-Smith and John McLean (1891-1911, 1914, 1925, 1936). These fascinating accounts make it clear that the snipe were collected on Jacky Lee I in 1911 was an extremely competent ornithologist and a very experienced collector of birds. He became an early member of the Australasian Ornithologists Union in 1901. He collected many birds in the journals *Ibis* and *Emu* between 1889 and 1912; his substantial egg collection and more than 650 of his photographs are held in the Auckland



**Fig. 1.** Specimens collected by Travers and Danneferd on Jacky Lee I and Stewart Island. The labels show the date and sex of the specimens. The labels are: A: 'Jacky Lee South Island July 1897'; B: 'An Snipe Female'; C: '1993 Female Jacky Lee'; D: 'Female Stewart Island'; E: 'South Island Sept 14 Female'; F: 'South Island Sept 12 Female'; G: 'South Island unshak eyes dark ♀ Snipe DM 2316'; H: 'South Island unshak eyes dark ♀ Snipe'; I: 'Gallinago pusilla Chatham Sol ♂'; J: 'Gallinago pusilla Chatham Sol ♀'.

Zealand Museum. Travers and Danneferd wrote 4 indexed volumes of notes regarding his collection of birds on Jacky Lee I and Stewart Island. The volumes are held in the Alexander Turnbull Library, and contain detail that puts modern naturalists to shame. The volumes are held in the Alexander Turnbull Library, and contain detail that puts modern naturalists to shame. The volumes are held in the Alexander Turnbull Library, and contain detail that puts modern naturalists to shame.

about 3 hours each time. They were unaware of the presence of snipe on islands around Stewart I until but subsequently learnt more about the birds from Truill, and Mr Bragg (probably Tom Bragg; Cockayne (NZ Truth 26 Apr 1928, p.4). The chicks of sooty shearwater [#, harvested for food) for the 1st time the previous weka being present (Vol. 1, p.24; Vol. 3, p.78).

Bill 2/3 slightly curved (sketch taken [Fig. towards tip (lower 3rd) Legs heavy. Climbed careful walk or quick run of Rail, but a run like a plover. Did not appear frightened or try to hide but fed along dodging the side of head when facing" I may say I was thinking of the "Mioweka" [banded rail *Gallirallus philippensis* something of the sort has been seen by a friend of Leasks lately climbing about the branches of the trees on this same island. It was described as like a small weka. So I surprised to see a snipe in the bush! back again shortly after we lost it the second tallies with mine. I heard no note of any sort. As said before, the bird shewed no concern at my presence except that it kept amid the Chestnut with black longitudinal markings. & side of head when facing" I may say I was thinking of the "Mioweka" [banded rail *Gallirallus philippensis* something of the sort has been seen by a friend of Leasks lately climbing about the branches of the trees on this same island. It was described as like a small weka. So I surprised to see a snipe in the bush!

Bill 2/3 slightly curved. It was I should say of a rusty colour marked with large black splashes to back feathers. A light band ran above the eye from the bill to the back of the eye. These stripes appeared to be greyish. Feeding, was greyish striped with black. The bill was longish comparatively. Bill dark brown. Chestnut with black splashes, legs yellow. This work to take any more heed of us than to keep just out of our way.

The snipe was mentioned again in Vol. 3, p.68 as part of a summary of birds seen during "3 hours on islands around Stewart I".

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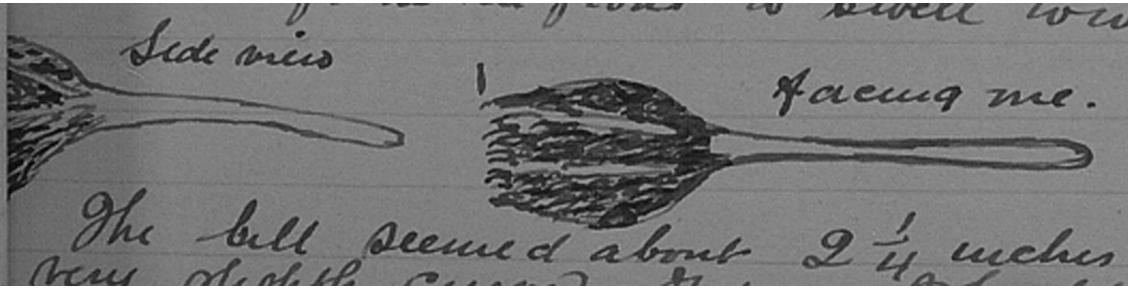


Fig. 2. The bill seemed about 2 1/4 inches

australis ... 2nd penguin nest. Right in the bush on top of the Island. For full particulars see the yellow sheet of this date.

" ... It is doubtful more likely an undescribed one. Strange it should have escaped observation ... easily make the mistake of identifying this bird as a Mioweka, which is credited with climbing about the trees.

" ... sand hoppers are here and constitute the greater part of its food. It was not seen to use ... 122. ± 2. ... got a creepers nest. We should have at once investigated here!

... took us over to Jacky Lees

" ... Wilson in 1931 were described in detail by Miskelly ... which came to light 57 years after his death. Additional information on snipe recorded by both Stead and Wilson has been since found in the David Macmillan archive (see above) and in Major

... on all the Islands..."

... on all the Islands..." (Vol. 3, p.81). McLean also

Edgar Stead and Major Robert Wilson on Jacky Lee Island, 1932

... 1964) encountered the South Island snipe for the 1st and only time on Big South Cape I in 1931 (see below). ! ... Wilson in 1931 were described in detail by Miskelly

... they would have quickly exterminated the snipe if it was really here. If the snipe was here previously it may be that there were no wekas these being later introduced by the maoris or if they were here they would be kept in check by the maoris snaring ... they were living here" (unpublished diary held by ... c.1929 (Wilson 1959).

Edgar Stead and Robert Wilson on Big South Cape Island, 1931

" ... Wilson in 1931 were described in detail by Miskelly ... which came to light 57 years after his death. Additional information on snipe recorded by both Stead and Wilson has been since found in the David Macmillan archive (see above) and in Major

« "S ¥¼« « S ¼ a. " µfi ~ rµp/afi r1/2 | @ r. « " f r. " ¼  
\* ~ r1/2 ± « 2° " Z " « ± ¼ ± " ~ f

Stead and Wilson stayed on Solomon I, just  
± 2 µ « 2° « ¼ & ¼. « " r³ " fi r1/2° ! 21 . 2 " " |  
1931. Snipe were encountered on Big South Cape I  
only, which they visited on 13 days (mostly in Dec)  
using a small boat. Stead and Wilson saw snipe on  
6 days between 2 Dec and 10 Dec 1931, plus their  
| 2° 3 r± r± & µ r² « ± fi r± « r° f r° r µ ± r³ " 2 ± ° ¼  
& ¼. « " r³ " fi 2 ± ! 21

Stead collected 7 snipe specimens during  
the expedition (Table 2); 6 are in the Canterbury  
Museum, and he gifted 1 to the British Museum  
during a visit in 1932. Stead had taken snipe  
f r³ " | ° " ± f | . 2 ~ ± a r± S . 2 | 2° 3 rµi " ° ~ « Z 2 rS  
% 2° « f | « ~ S f r± | @ ¼ Z " " fi r³ " | ° " ± f | " » 3 2 µ 3 " µ r ~  
~ f | | . S z rµ " " 3 rµ " " ± . 2° f r. " µ r r. " r µ f |  
r± S « " ° r f | S ~ r³ 3 2 ± " S . 2 ± S . « r  
% 2° « f | « ~ S f | r± S | 2 " | . r ± « r S ~ f | ¥ " ± f r S . 2 . « " |  
° " µ r r± z . f | . 2° | r. µ r fi ~ f 2 µ ¼ ~ 1 " µ ¼ 2 S ¼  
« " µ r ~ f | r³ « . © ~ ¼ ° ~ S r± r² . ~ S a rµ & " r S " ~ µ  
to Robert Wilson, 26 May 1932; Letheny archive).

! 2 ± " 2° « . & " r S f r³ " | ° " ± f | « r S | 2 " | . r ±  
S " r. r µ r » S 21 " µ f | ¥ f | . " ± ¼ r µ f r " « r " ¥ " ±  
assigned incorrect locality data, and the only date  
r f r³ r ± S ~ f | r r² ° µ r ± a ' r² ¥ " & " r S f | S r µ p/4  
, 2 . " S " » . " ± f | r " ¼ ¥ ¼ z ~ f | @ " ¼ S " Z r± a "

described the collection of 4 clutches of snipe eggs,  
but made no mention of adult or juvenile snipe  
¥ ~ ± a | 2 " | . S \* ~ r f ± f | S r µ p/4 S " f | µ ¥ f | f r ± r³ " f r³ " | ° " ± f | ¥ ~ ± a | 2 " | . S ¥ . " " ± ±

all on Big South Cape I. Based on the opportunities  
Wilson described, it is likely that the 2 remaining  
specimens were collected on 4 Dec and/or 7 Dec:

Wednesday 2nd Dec. After lunch about 3  
2 | 2 | r | @ " ° " f | . 2 . © µ & . « " r³ " fi | ± . « " ¥ r r a 2 . « " µ r r² . . fi r± « r°

I went on up to the top. Shortly after we  
µ r r | « " S . « " 2 3 " ± | 2 . ± µ p/4 fi r± « r° " f | « " S r µ f r ± r³ " " » | r r³ " S fi " µ r ~ f | r ± " f | ° ~ «  
two eggs!" We tried to capture the bird but  
~ S ~ f | r³ 3 " rµi S f r° " " © . « " ± " f | ° " ± .  
on. We saw some burrows high up which  
fi « ± @ " ° " µ r " " f | µ r r r r ° 2 " ~ S 3 " µ r ~  
*Pterodroma inexpectata* ¥ . ± 2 f 2 µ r 3 " µ r f |  
& 2 ± r° µ r r µ S f | fi f | « " S r µ f r ± r³ " ° ~ « r ± " f |  
of two eggs but failed to catch it. The eggs  
were just chipping but I brought them in  
© µ ~ S a rµ " 2° ~ ± a ¥ r | @ " ° " « r S S r | . ~ ¼  
± S ± a . « " ± " f | . 2° « " f r ± r³ " " ± r µ r ¼ | r° " ±  
° ~ « 2 . . a " ± a ~ r µ f ~ r ° r µ f a " ± a r r .  
\* " « r S ± 2 . ° r µ @ S ~ r r r ° " ~ fi 2° " 1 " µ  
" 1 " ± . r µ ¼ fi © . ± S ~ r ° ~ « " ¥ r S 2 ±  
killed it with a stick when she rose from the  
ground...The snipe eggs were a beautiful  
¥ µ r° ± | 2 2 . µ ~ S a rµ f r µ ¼ f | . « " ¼ r µ i . « " 2 ± ¼ 4  
eggs collected.

Thursday 3rd " | f r° " µ r . µ r S " ° " ± .  
on to South Cape landing where we pulled  
. « " ¥ r² r . 3 " ° " ± . 3 r° © µ f r ± r³ " \* " . « " ±  
f r³ µ r S 2 . . ± r ± " ¥ r a r± rµ r µ r © µ f r ± r³ " ~  
S a rµ . f | « " S 2 ± " f | « 2 . r ~ r 3 µ r 1 " S . 2 ¥ r  
r° " r . " © µ r r² . r± « 2 . µ f | . f | « " S r µ r S  
2 " µ ± " f | ° ~ « . ° 2 " a a f | @ µ r ¼ Q i f | « fi " °  
r° " ¼ r S f | . « " ± f | 2 3 3 " S f | . " r° S ± r  
protecting manner. We left the eggs with the  
intention of photographing it tomorrow... We  
saw a good many (about 8 or 10) woodhens  
° " r° " ° r° r ± a r² . . ± . « " f | µ ¥ | 2 . ± µ ¼  
we were looking for snipe in.

Friday 4th Dec. " ¥ r . ° . © ~ ± " ° 2 µ r ± a  
° ~ « r f r³ « . ¥ µ r ½ Q r° . « " ! \* " a 2 . 3  
¥ r © µ r f | " 1 " ± r ± S a 2 . r° r° ¼ r µ r² . . 2 | 2 | @  
µ r r | « " S © µ & . « " r³ " fi | \* " r ± S " S r  
. « " ± r µ r r ± S ± a " ¼ r µ r | ~ r° ¥ r S . 3  
° ~ « ~ S a rµ f | r° " µ r 3 . « µ r² . a . « " ¥ r f | «  
. 2 ° « " µ r " ° " r S © . ± S . « " f r ± r³ " f | ± " f | . « "  
day before. We approached it carefully and  
~ r r 2° " S . f | . 2 3 « 2 . 2 a µ r³ « ~ r 2 ± . « " ± " f |  
~ S a rµ " 1 " ± | . ± a r° ¼ « " f | µ ¥ r µ r² . ± S ~  
. 2 a . r ¥ r ~ µ r³ « 2 . 2 a µ r³ « 1 ± r µ r ¼ " 3 f | « " S  
~ 2 " ° " 3 « 2 . 2 a µ r³ « " S . « " a a f | \* . " ±  
° " ± . 2 ± © µ « " µ © . ± S r | 2 . 3 " 2° © f r ± r³ " ~  
about 2 miles further on after a lot of beating  
. « " ¥ r f | « " f | " ± " ° r µ ¼ . ± a 2 ± " . « " ¼ r µ f |  
¥ r S ~ S a rµ f | « 2 . ¥ r 2° © " ° " µ r . µ r S  
« 2° " a " ± a ± r² .

Monday 7th Dec. ...we decided to turn back  
a 2 . 2 | . r µ r ° « " µ r " ° r ± S " S 3 . " S  
. « " ¥ r² r . 3 \* " . « " ± " f | r µ r S . 3 . « " ~  
2 2° S © µ " " f | µ r r r r ± 1 µ r² . f | ¥ r µ r² ° f | ¥ .  
2 ± ¼ © . ± S ° . 2 ± ¥ r S f | 2 ± . « " µ " a a f | \* " ~  
a 2 . 2 . « " 2 3 2° © " ¥ r f | ~ S a rµ ~ ¥ ¥ « r S  
a 2 ± " 2 ± r r r° S ° " ± f | S S " ¼ r µ f r ± r³ " " °  
. 3 r . ° ¼ © . " fi r° " f | « " r³ µ r ± a Q r° " r ± " f |  
with two eggs. These were not so dark as the  
µ f | . " a a f | fi © . ± S 2 µ r² 3 r° r µ f | . « " f | 2 ± S  
lot being rather intermediate...We went on  
© µ « " µ ~ S a rµ © . ± S r ± 2 . « " µ f r ± r³ " ± " f |  
° ~ « S r µ @ " a a f | . ~ r µ f | « " ± " f | fi  
found was partly incubated.

Wednesday 9th Dec. It rained for about an  
« 2 . µ r r² . . f | 1 " ± r° µ r r µ S f | © µ r ± 2 . « " µ  
« 2 . µ r r² . . « " ± | r µ r S . 3 " " | . 3 . © µ r  
f r³ « . f | « 2° " µ r " © µ r ± | « r² . . ° 2 2 | 2 | @  
we went over to South Cape Island taking  
| r° " µ r f | " ± . « " ° r µ ¼ . 3 fi r° r µ f r ± r³ " 2 ± . « "  
µ r | @ " ~ r ~ S a rµ f | « 2 .

Thursday 10th Dec. Today broke with a  
moderate W. wind which was favourable  
© µ z . r S " µ r f | " 2 1 " & 2° " f | . 2 r° µ  
breakfast after mending the boat which was  
f r 2 1 " ± ¼ f | r S r ¼ \* " µ r r | « " S . « " µ r r



±"µ¼«-±« .S" µ², . 2 |²|® 3, -S  
the boat up on the same spot as before. We  
¶. 2 ©µ.«. .²³ " ± µ¼«±ª .«" ¶µ ¼  
-±" ° ° ¼"µ µ², . ©µ¼±³" ~S a µ¶µ° ²±"  
but we did not get a chance at it...We walked  
over a good deal of scrub country but saw  
no more snipe.

A thorough search of the David Macmillan archive in Canterbury Museum located additional pages  
¶° &"µS ¶ S-µ¼±|, S±ª ±²."¶²± ¶±³"  
²¹"µ ²²©S ¼½ ¶|®-¼ S" Z±ª"

4<sup>th</sup> Dec...Took more side view of the Snipe  
a-±ª ¶| ~»³²¶ µ µ 1 ± µ±±  
' «" ³-µ" ²± ° &" ¶ |²¹"µS |«-¼  
by windswept Manuka, interspersed with  
*Dracophyllum longifolium*. It is all peat,  
with odd rocky outcrops; open places being  
covered with lichens or moss. The Snipe nest  
± ¶«²µ ž µ±, ®µ ²± .«" °Sª" ²©µ"µ¶,  
and the ones we have found were not in thick  
cover. There are a good many weka, robins  
[*Petroica australis* µ±S ž ²|®¶¶ ¼-¼¶S¶  
*Anthornis melanura* , ³ .«"µ ¶¶ ¶ ° - ¶¶ µ  
few Fernbirds [*Bowdleria punctata* ' «" µ.  
varies from about 600 to 1000 feet.

7<sup>th</sup> " | ' «" ¶±³" µ¶ ¶±S ¼µ², . ° ° ± ¼  
yards, if pursued, but, for the most part run  
among the heavy scrub and stand watching  
¼, ' «"µ -±« .¶"µ¼-® .«µ ²©µ ²²S |²|®  
[*Scolopax rusticola* ²±¼±². ¶ ¶µ±ª ° ².«  
sexes take their turn at incubating the eggs.

&"µS ¶ ²¶¶µ µ µ-±² ²©¶±³" ¼±ª ° «"± ³, ¶¶, "S  
° ¶¶ ³ µ² ¼µ¼¼. «" ¼¶¶¶ ©µ/ , «µ- & -± ¶¶  
p.186) footnote, referring to the South Island snipe:  
"That *Gallinago aucklandica* |±± ¼ ¶¶ ¶¶-¹"  
the experience of a friend whose ornithological  
abilities cannot be gainsaid. What, however, each  
"S ±µ, µ-¶¶ «-¶ ¶"©²¶¶µ ¶¶¶ .«µ «" ¶¶ ¼S  
to declare. My particular cronies did not use their  
wings and I leave it at that."

&"µS µ±S / , «µ- & -± ©±° "¶¶ ².«"µ  
well, and were regarded as "old colleagues" even  
before they travelled together to the Auckland Is  
on the government steamship *Tutanekai* in 1929  
fi"µS µ±S ¶±± %¶¶¶, ±³, ¼-¶¶"S ° ¶³ µ³"µ¶  
1500, folder 22, Alexander Turnbull Library). They  
° µµ ¶¶, ± |²µµ¶³²S ±¶¶, ³, ±- / , «µ-  
& -± ¶¶ S"µ« ± , µ¹-S ž µ¹- ±± µ¶«-¹"  
Canterbury Museum, and note the photograph of  
.«" ²©µ"µ ° .²ª" .«"µ ± &"µS ¶ a µ¶S ± ±  
published in *Notornis* vol. 20, p.89, 1973).

**Lance Richdale on Big South Cape Island, 1945**  
The depredations of Stead, Wilson and weka  
notwithstanding, snipe persisted in low numbers  
on Big South Cape I for another 33 years. Lance

Richdale and William Denham visited Big South  
" µ³" fl ¶¶° ¶± %¶¶S µ" ' «"¼  
observed 4 snipe, including 1 pair (probably an adult  
µ±S © ¼¼µ²° ± |«-|® a±"± .«" .-° ²©¼µ

We saw only four individuals. After  
spending a day on the tops we were  
«²° ° ° µ¶S ³ ²SS ±ª ², µ° "µ¼¼° µ¼±². µ  
great distance above the bush, we observed  
two birds feeding together in soft mud under  
some Manuka about six feet high. Four days  
later we found another on top of one of the  
peaks. Returning that afternoon, and when  
in the bush, Mr. Denham nearly trod on one,  
|µ, ¶±ª - .² ¼¶²° ° ©"± ©" .«µ, a «"  
trees and about two feet above the ground.

Richdale expressed concern at the presence of  
weka on the island, stating "The gravest danger to  
its existence is the Weka, which eats the eggs and  
young...In 1945, we found few Wekas and few  
Snipe; we also saw one Weka well above the bush  
-±" ' «" ¶¶-|¶¶ ¶±³" ¶¶-¶¶¶¶²± .«¶¶µ±S  
but obviously all the elements for the loss of the  
valuable bird are present. Because the Wekas are  
not plentiful and are largely in the bush, the Snipe  
are experiencing a temporary respite only."

\* -S-© & µ¶-¶ ¶¶µ ²± ° -ª & , «" µ³" ¶¶µS  
.«" ±µ |«µ³"µ  
° µ±± ° - µ±S ° ²± ž "µ² ± ²©µ" ! ° ° - "µ±S  
Wildlife Service saw a single snipe only during  
µ° ²± .«" ²±ª ¹ ¶¶ ± ³ µ ¼, S-S «"µµ .«"  
hawaii (*Weekly news* 8 Aug 1962; Miskelly 1987).  
Three years later they were shocked into action  
¼¼µ³² µ¶ ¶¶° ° , ²±¼¶S ¶¶ .«µ .«" ¶¶µ±S ° ¶¶  
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' «"  
devastation caused by recently colonised ship rats  
on the South Cape islands (Big South Cape, Solomon  
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Although South Island saddlebacks (*Philesturnus  
carunculatus*) were saved, the last remaining  
populations of 3 vertebrate species were wiped out:  
a µµ"µ ¶¶²µ µ-¶S ¼µ *Mysticina robusta*), bush  
wren (*Xenicus longipes*), and South Island snipe.

A Wildlife Service team spent 5 weeks on Big  
& , «" µ³" fl ± : , a & ³ µ ° ° ³. ±ª .² ¶¶"  
saddlebacks, snipe and wrens. Three snipe were  
caught by the team beating in a line through scrubby  
¹ª .µ-±, ±-¶ µ¶±³" , ¶¶S .«"± ¶¶, µ¶, ±S ±ª -  
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escaped after capture; the 2 others (both male) were  
placed in an aviary on 30 Aug (Fig. 3), but the team  
was unable to supply them with enough live food  
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° µ-±|"  
' «"µ µ¹" ¼"± ±² |²± µ S  
sightings of South Island snipe since.



Fig. 3. A snipe bird with mottled brown and black feathers, a long straight bill, and a dark eye, standing in a field of green grass.

**DISCUSSION**

**Who collected snipe on Jacky Lee Island?**

It is assumed that all specimens bearing his name were personally collected by him. Based on Jacky Lee Island snipe specimens, it appears to have visited the Stewart I region at least 14 times between 1895 and 1905, with Jacky Lee I visited on at least 7 of these trips. This is unlikely, as Travers was based in Wellington and was a man of insubstantial means: he was declared bankrupt in 1888 (*Evening Post* \* 1888) and he often (and unsuccessfully) sought to visit the island (see Miskelly 2011).

Travers signalled his intention to travel to Stewart I in 1895 and 13 May 1896 (Tring archive), however, other than bird specimen labels, there is no evidence of Travers in the *Southland Times* (viewed 27 May 2011), but this absence of evidence

is not surprising as Stewart I at least 6 times between 1910 and 1923 (see Miskelly 2011).

There is some evidence that Travers already had a collector active around Stewart I before he told him to proceed to Stewart's island, for the purpose of collecting snipe on Jacky Lee Island shag *Leucocarbo chalconotus* (the only locality where there is a chance of obtaining specimens) (Travers 1895) Travers referred to "a man who is collecting for me on the Southern west coast", and there is a mention in the *Southland Times* (op. cit.).

It is likely that this collector was Stewart I, as he did not know (or did not mention) that snipe was abundant on Stewart I (Miskelly 2011). McLean was convinced that they had made a new discovery. Stewart I then as now had a small community, and it seems unlikely that anyone



**Table 3.** *Coenocorypha* snipe specimens with incorrect locality data on their original labels. This list does not include 15 *C. iredalei* specimens with incorrect locality data listed in Table 2. Taxa listed are Snares Island snipe *C. huegeli*, Auckland Island snipe *C. aucklandica aucklandica*, and Antipodes Island snipe *C. aucklandica antipodensis*. Date, locality and collector are based on the original labels; supplier is either stated or inferred from handwriting. Museum acronyms as per Table 2 caption. It is likely that most of these specimens were collected by crew members of government steamships (especially the *Hinemoa*)

Registration no.	Taxon	Date	Locality	Collector	Supplier	Comments on true collection locality
1181	<i>C. huegeli</i>		Antipodes I		Dannefærd	Snares Is
1182	<i>C. huegeli</i>	1895	Auckland Is		Travers	Antipodes I
1183	<i>C. huegeli</i>		Auckland Is		Dannefærd	Antipodes I
1184	<i>C. huegeli</i>	1895	Auckland Is		Travers	Antipodes I
1185	<i>C.a. aucklandica</i>	1894	Snares Is	Travers		Auckland Is
1186	<i>C.a. aucklandica</i>	May 1894	Snares Is		Travers	Antipodes I
1187	<i>C.a. aucklandica</i>		Antipodes I		Dannefærd	Antipodes I
1188	<i>C.a. aucklandica</i>		Antipodes I		Dannefærd	Antipodes I
1189	<i>C.a. aucklandica</i>		Snares Is		Dannefærd	Antipodes I
1190	<i>C.a. aucklandica</i>		Auckland Is		Dannefærd	Antipodes I
1191	<i>C.a. aucklandica</i>		Auckland Is		Dannefærd	Antipodes I

<sup>1</sup> *Gallinago tristrami* Rothschild, 1894. The error in locality on the label led Rothschild to use this specimen to describe it as *G. aucklandica*. The error was corrected by Travers in 1895. The error was corrected by Travers in 1895. The error was corrected by Travers in 1895. The error was corrected by Travers in 1895.

was by no means the only one. As early as Jan 1894, Rothschild (1894b) had noted:

... of *Gallinago tristrami* I have received seven more specimens of *G. huegeli*, Tristr., and *G. aucklandica* ... *G. huegeli* are labelled, one as coming from Auckland Island and the other from Antipodes Island. ... *G. huegeli* ... the Snares, the two only known specimens ... who sent my specimens, gets most of his ... and I have more than once noticed in collections made by them for Sir Walter Buller that the labelling was most careless ... came from Antipodes Island and the other six from Auckland Island, and specially mentions that he sent examples of two ... I am more inclined to doubt the accuracy of the labelling than the possibility of two isolated islands (Auckland and Antipodes Is.), more than 500 miles apart, presenting

the very unusual fact of two quite distinct species of Snipe (*G. huegeli* and *G. aucklandica*) on the one, and one of them only (*G. huegeli*) on the other, while on a neighbouring group (Chatham Is.) we have a third distinct and somewhat intermediate form. Lastly, we should have the still more incredible fact that *G. huegeli* occurs in company with *G. aucklandica* on Auckland Island and with *G. tristrami* on Antipodes Island, while on the Snares it is the sole species of Snipe, and on the Chatham Islands *G. pusilla* alone is found. The rather unfortunate doubt as regards the locality of some of my specimens, however, does not, in my opinion, interfere with the fact that there are four distinct species of Antarctic Snipe, as the series laid before you

*Gallinago tristrami* Rothschild 1894 was the name proposed for the Antipodes Island snipe, until Bowdler Sharpe (1896) pointed out to Rothschild that it was inseparable from "*G. aucklandica*". After true (correctly labelled) Antipodes Island snipe were received by Rothschild, he realised that the *G. tristrami* type was an incorrectly labelled Auckland Island snipe, and he named the Antipodes Island snipe



... author, unpubl.) and has a more yellow tone than the Don Merton photograph of possibly the same bird reproduced here (Fig. 3), where the legs appear grey.

The bird in Fig. 3 is an adult, based on the deeply grooved upper mandible (see Barker et al. 2005). It is very unlikely that snipe could have bred ... arrived on Big South Cape I in Mar 1964 (Bell 1978), supporting the supposition that the 2 birds captured 4 months later were adult. The leg colour in other *Coenocorypha* snipe varies with locality (taxon), sex and individual, ranging from rich yellow in some adult males of Chatham Island snipe and Snares Island snipe (though typically paler yellow), through pale yellow (female Chatham Island snipe, both sexes of Auckland Island snipe and Campbell Island snipe *C. aucklandica perseverance* ... yellow (female Snares Island snipe), olive green (immature Snares Island and Chatham Island snipes) to grey (Antipodes Island snipe, immature Auckland Island and Campbell Island snipes) ... description of leg colour from Jacky Lee I does not conform with the leg colour of the adult bird photographed 53 years later on Big South Cape I.

... Lee and Big South Cape Is, as he presented a paper entitled "A new race of island snipe" to the Canterbury Branch of the Royal Society on 5 Jun 1940 (Anon. 1942); unfortunately the paper was never published, and no such text has been found among the Stead papers in the David Macmillan archive in Canterbury Museum. Stead in the 1930s had no way of knowing that most of the Jacky Lee I snipe ... were the bulk of them labelled as from the Snares Is (Table 2), but due to the Dominion Museum shifting premises and the intervention of World War II, the 546 bird skins (including 25 snipe) purchased from ... the 1950s (Sandy Bartle, pers. comm.).

... between snipe from Jacky Lee I and those from Big ... window for the introduction of weka to Jacky Lee I. They were not there in 1911, and are likely to ... c.1929. These same dates tragically bookend the extinction of snipe on Jacky Lee I.

**Scarcity of snipe on Jacky Lee and Big South Cape Islands**

Snipe were apparently uncommon on both Jacky ...

evident both from the multiple visits (at least 8) needed to collect 15 specimens between 1897 and ... only during 3 visits in 1911, despite looking for ... encounter rate was apparent on Big South Cape ... 1987). The obvious explanation for low encounter rates on Big South Cape I was the presence of ... Richdale 1945; Miskelly 1987; this paper). Weka kept in check by regular harvest for consumption, meaning that weka on Big South Cape were never likely to reach the densities considered responsible for eradicating snipe on Jacky Lee I (Wilson 1959). The low encounter rate for snipe on Jacky Lee I is likely to have been largely due to the notoriously impenetrable vegetation of supplejack (*Ripogonum scandens*) and *Muehlenbeckia* ... another factor in the apparently low density of snipe on Jacky Lee I may have been the presence of banded rails (McLean diary 1911), as the rails ... islands (Wilson 1959). As for the snipe, banded rails have not been recorded from Jacky Lee I since weka were introduced.

**Collection of specimens of the South Island snipe in 1931**

... makes it clear that all 5 clutches of eggs found on ... although only 4 of these are known to exist (all ... 2006). The clutch not accounted for was the 2nd clutch found on 2 Dec, which was "just hatching" ... (2006) presumed (or hoped) that these 2 eggs were left to hatch; their whereabouts is unknown, and it is plausible that they were unable to be blown ... diary is abhorrent to modern conservationist ... private collectors of bird eggs and skins in the ... (and publicly) concerned by increasing restrictions on their activities imposed by the Department of ... *Dominion* ... *The Press*, 14

Jun 1938; *New Zealand Herald*, 15 Jun 1938). It is unlikely that Wilson intended the quoted sections of his diary to be published; his 1959 book (p.49) made no reference to collection of snipe or their ... to bird preservation. Stead, in contrast, apparently expected or intended his unedited diary to be read by others; he chose to make no reference to the 7 snipe specimens collected, and his references to collection of their eggs were concealed by the use ... (2006).

& ... a period when most native birds were protected ...

22. Stead was issued 40 bird collecting permits by ... Act, including one to collect "Jacques Island snipe" (author, *unpubl.*). Technically this permit was ultra vires, as by a quirk of legislation, the South Island ... species to be protected, including Antipodes Island snipe, Auckland Island snipe, Chatham Island snipe and Snares Island snipe. As the "Jacques Island snipe" was not described until 1921, it was missed by the legislation, and so it was not given ... Wildlife Act, 1953, was passed.

& ... from the likes of Travers, Danneførd, John Bollons, ... 1890s. All these men were seeking to make a living, or at least supplement their income, in an era when few native bird species were protected. In contrast, Stead did not sell specimens, and his collecting in the 1930s was typically targeted at addressing particular taxonomic questions (author, *unpubl.*). The snipe specimens that he collected on Big South Cape I. in 1931 were evidently intended to be used as the basis for describing a new taxon (Anon. 1942), although the paper was never published.

The real villains in the extinction of the South Island snipe were the introduced weka and rats, or, more precisely, the people who chose or allowed them to be introduced. Were it not for the specimens collected by (or for) Travers, Stead and Wilson, the only physical evidence that would remain of ... de Lange 2006; Ballance 2007; this paper) and 2 sad ...

**Consequences of snipe extinction, and restorative actions**

... restoration tragedy, but some losses are felt more

... struggle to name more than 3 (author, *pers. obs.*). The ecological role of snipe is poorly known (Miskelly *et al.* 2012), but their alter ego, the hakawai, remains ... community (Miskelly 1987). The extinction of tutukiwi (snipe) and hakawai (nocturnal aerial displaying by snipe) from islands around Stewart ... culture, but perhaps not irreversibly. Thirty Snares ... alongside Big South Cape I, in Apr 2005 (Miskelly *et al.* 2012). Two of the birds released had the broken tail feathers characteristic of birds that had been performing hakawai aerial displaying (Miskelly 2005), thereby restoring the potential for hakawai to ... west of Stewart I.

**CONCLUSIONS**

The South Island snipe was discovered on Jacky Lee ... three study skins, 1 mounted skin and 1 alcohol specimen (24 birds), and 4 clutches of this species ... Travers ever visited Stewart I or Jacky Lee I (the type locality for the species). The person who collected at least 15 snipe specimens from Jacky Lee I between 1897 and 1905 (including the type series for what is now known as *Coenocorypha iredalei*) is unknown, although it is now known that he also probably collected birds on Rangatira I in the Chatham Is in 1899 and 1900. The specimens were apparently all ... Rothschild (5 specimens), the Dominion Museum (9 specimens), and Dr Benjamin Moorhouse (1 specimen, now in Canterbury Museum). The long time period that elapsed between collection and the ... low likelihood that Travers collected the specimens himself, are the likely explanation for why only a third of these specimens were correctly labelled to locality.

... here, is the only known account of a South Island snipe being observed at the type locality. They were extirpated there by introduced weka between 1911 and 1929.

Snipe were 1st recorded on Big South Cape I in 1913. Seven specimens were collected there in 1931.

The taxon became extinct in, or soon after, 1964 due to predation by accidentally introduced ship rats

ACKNOWLEDGEMENTS

fi m s Y S .2 fi r q l4 f d q l @ m . « a n p f l 2 d d 2 c « m @ « m l z m m % y m \* r p f l s m r f l d s correspondence, to the Alexander Turnbull Library for

Stone for discussions and suggestions on the history of Trish James, Senior

I acknowledge with respect and sadness the passing of Don Merton on 10 Apr 2011. Don provided much assistance when I started research on snipe in the early 1980s, and remained passionately interested in progress with their conservation. I am grateful to Margaret Merton

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