A survey of historical Laughing Owl (Sceloglaux albifacies) specimens in museum collections

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ABSTRACT

A list of all historical specimens of the New Zealand Laughing Owl (*Sceloglaux albifacies* Gray, 1844) known from museums around the world is presented. There are 52 feathered specimens (24 mounts, 28 study skins), 2 alcohol specimens, 3 part skeletons, and 17 eggs. Of the recorded specimens, only two specimens are identified that could be the type of *S. rufifacies* Buller, 1904, but whether it is one of these is unknown. Two unlocalised specimens in the Cambridge University Museum are tentatively identified as coming from Buller's second bird collection.

KEYWORDS: Laughing Owl, *Sceloglaux*, location of historical specimens.

INTRODUCTION

Laughing Owl (Sceloglaux albifacies, STRIGIDAE) was a large (approximately 600 g) owl endemic to New Zealand. At the time of European exploration of New Zealand it was most common in eastern districts, particularly of the South Island (Williams & Harrison 1972). The species declined rapidly towards extinction in the late 1800s, and the last specimen was taken in 1914. Since then, there have been numerous reports of what could be the Laughing Owl, but none have been substantiated (Williams & Harrison 1972).

Two subspecies are currently recognised (Oliver 1955; Turbott 1990). The nominate race Sceloglaux albifacies albifacies was described by G. R. Gray from a specimen collected at Waikouaiti, North Otago, South Island. The second subspecies, S. a. rufifacies, was described by Buller (1904), on the basis of a single female from the Wairarapa in the southern North Island. It was sent to the Colonial Museum (now Museum of New Zealand Te Papa Tongarewa) in the summer of 1868-9 (Buller 1905:67), and so probably is the 'owl' listed as Accession No. 1869/282, given on 13 March 1869 by Mr P. Lucas. It, therefore, had been in the Colonial Museum collections for more than 30 years when Buller decided to name it as a distinct species. The history and associated events concerning this have been described in detail by Fuller (1987), so will be only briefly referred to here. Buller differentiated it by slightly smaller size, and more reddish brown coloration. Walter Rothschild, to whom the specimen was offered for sale whilst it was the property of the Colonial Museum, examined the specimen, when it was a mount and in Tring, and concluded it was not adult and that the tail of a Ninox had been substituted for the original. The specimen "is now in a private collection, having been obtained from the Museum

authorities in Wellington by exchange" (Buller 1905: 66). However, efforts by Ross O'Rouke, MNZ history curator, to find documentation of such an exchange were in vain, and the specimen is now lost. The only other North Island specimen ever collected, is lost, as is the rest of the collection it was in (Buller, 1905: 67).

The basis for distinction of this form is weak, as there is considerable colour variation in existing specimens of Laughing Owls from the South Island, with many quite pale ones and others that are much more rufous. Such variation is common in owls as related by Professor Newton in a letter to Buller (Buller 1905: 66), and by Fuller (1987), and probably is related in part to differences in sex. Captured pairs often comprised a pale bird and a more rufous one, for example, Rowley's pair (Fuller 1987: 161), or the last pair that Buller shipped to England (Buller 1893). As Buller's description is insufficient to substantiate specific differentiation of this form, I agree with Fuller's (1987) conclusion that *S. rufifacies* should be considered a synonym of *S. albifacies*.

Currently, North and South Island forms are treated as subspecies, as listed by Oliver (1955) without comment, and followed by the Checklist ever since. Whether or not this is justified, was recently considered by Gill (1996) using skeletal measurements. He found that North Island bones were significantly smaller than those from the South Island and, while there was some evidence that the variation may be clinal in nature, this could not be examined because of small sample sizes.

The purpose of this paper is to detail the whereabouts of surviving specimens, and such data as are associated with them. I examined the literature and communicated with curators and collection managers around the world to obtain the latest status of specimens in their care. All specimens in the following list are discussed in correspondence with the relevant institution, and this correspondence will be deposited in the archives of the Bird Department, MNZ.

Abbreviations: Frequently referred to institutions - AIM, Auckland Institute and Museum, Auckland, New Zealand; AMNH, American Museum of Natural History, New York, United States of America; CM, Canterbury Museum, Christchurch; CUM, Cambridge University Museum, Cambridge, United Kingdom; MNZ, Museum of New Zealand Te Papa Tongarewa, Wellington (formerly National Museum of New Zealand); NHM, Natural History Museum (formerly British Museum of Natural History), London, UK; OM, Otago Museum, Dunedin; NZ, New Zealand.

Walter Buller's role in the export of specimens was crucial. He made four large collections listed as 1-4 (Galbreath 1989):

- 1, a collection of 312 birds presented to Colonial Museum (MNZ) in 1871 most with no data (some of these were re-borrowed by Buller during the preparation of his Supplement, and lost at sea on their return to NZ);
- 2, a collection of 475 specimens of 159 species sold to Lord Rothschild in February 1889 (with the addition of other specimens subsequently sent by Buller, the whole Rothschild collection was sold to the AMNH in 1932) most with no data;



FIGURE 1 – Photograph of the male specimen of Laughing Owl, collected in the Oamaru area, 1878, and now in the Biologiezentrum Linz, Austria. The taxidermy is by Andreas Reischek. Note the very dark face, which belies its name, but which is common in this species.

Photograph by K.E. Westerskov.

- 3, a collection of 588 specimens of 168 species sold to the Carnegie Institute and Museum, Pittsburgh, USA, in 1905 most were dated 1891 1898;
- 4, a further collection (often referred to as his son's collection) of 285 specimens of 123 species was sold to the Canterbury Museum about 1922 most were dated 1891-1898.

The S. W. Silver collection - provided by Buller - was presented to Oxford University Museum after Silver's death in 1905, where it was on display until 1950, when severe insect damage was discovered, and only 109 of 252 specimens were saved. There are no data with the specimens.

Many of Buller's specimens of Laughing Owls were collected by W. W. Smith (Buller 1884). In Appendix 1, specimens are arranged by institution with such data as are known concerning date and place of capture, sex, collector, catalogue number, and acquisition date.

DISCUSSION

This search has revealed the whereabouts of 54 Laughing Owls (24 mounts, 28 study skins, and 2 alcohol specimens) and 17 eggs in collections around the world. Three part skeletons exist that probably come from one or other of the mounted specimens. Some specimens known to have been in collections are now unaccounted for. For example, G. D. Rowley, author of *Ornithological Miscellany*, exhibited 'several' before a meeting of the Zoological Society of London on 3 November 1874, and two of these were painted by J. G. Keulemans for a plate in that work (Fuller 1987: 161). Gurney (1894) recorded seeing two in Rowley's collection, but I have been unable to determine what happened to these.

Similarly, the whereabouts of the type of *Sceloglaux rufifacies* is a mystery. Although Buller (1905) recorded that it was exchanged by museum authorities into a private collection, no record of this transaction survives. If it still exists it must meet the following criteria. As it was offered for sale in 1904, the exchange Buller mentioned must have taken place later that year or early in 1905, therefore it was not in Buller's collections 1, 2, or 3, nor could it be among the birds sold to S. W. Silver who died in 1905. Nor is it among Rothschild's specimens, as he did not buy it (Fuller 1987), which rules out the Cambridge specimen 20/Str/22/a/1 being the type of *S. rufifacies*. To be among the specimens listed here, it would have to have no data, be a mount or ex-mount, and have been accessioned after 1905. The only specimens with these criteria are: 1, CM Av2549; 2, Naturhistorisches Museum, Wien, Austria. Inv. Nr. 50.809; 3, the South Canterbury Museum specimen; 4, the specimen in the University of Concepción.

Contemporary descriptions give the specimen brownish facial disk feathers and a distinct reddish coloration, and it had *Ninox* feathers in its tail. CM Av 2549 is a greyish white individual with none of the red brown tinge of other specimens, so can be discounted. The South Canterbury Museum specimen is small and coloured reddish brown, and as it came via a case of birds in a private collection, could possibly be the type. However, it has a distinct whitish edge laterally to the facial

disk which expands ventrally to form a distinct patch either side of the throat, and Buller (1905) specifically stated that *S. rufifacies* had no such white colouring. I have no details for the Naturhistorisches Museum or University of Concepción specimens.

Identifying the Cambridge University Museum specimens

The Cambridge University Museum specimens are listed as from the Rothschild collection and have no locality data. During the present survey of specimens, information was compiled that allows these birds to be identified with two of Buller's specimens, as described below.

After Buller returned to New Zealand from Europe in 1890, he discussed the Laughing Owl before the Wellington Philosophical Society on January 18 1893 (Buller 1893). In the section for *Sceloglaux* he commenced by saying "This owl is now on the verge of extinction", and that in the last three years he had only managed to procure a single live pair. Of these, the bird Buller assumed to be the male when taken from its cage to be photographed by Mr Henry Wright, 'manifested so persistent a desire to get away from the light, and to hide itself in the shade of the ferns among which I had placed it, that it was very difficult to obtain a momentary shot in focus, although in the end the result was a highly satisfactory one.' This photograph was published by Galbreath (1989: 189). In this same address Buller stated that they had been sent alive to Rothschild where they 'will be kept in an aviary specially prepared for them'. Buller (1893: 72) described the birds as follows, thus providing some of the means to identify them:

"The female (always the finer bird among this class) had the face almost perfectly white, the feathers composing the disc having black hair like shafts and filaments, and those along the outer edges, composing the fringe, having black centres; wing-coverts presenting numerous large rounded spots of yellowish white, their markings increasing in size and becoming lozenge-shaped on the scapulars, there being one on each vane, that on the outer vane being very white and conspicuous; transverse bars on upper surface of tail broad but obscurely marked. Bill bluish-grey, yellowish towards tip and along the cutting edge; claws grey, with darker points.

The other bird (which I assume to be the male) is scarcely inferior in size, but has the plumage generally duller, the white markings less conspicuous, with the bill and feet paler coloured.'

Buller's commentary shows that the pair sent alive to Rothschild were collected by W. W. Smith at Albury in South Canterbury, some time between 1890 and 1893, and so probably were not accessioned in any collection before late 1892 or 1893. The Cambridge pair (Appendix 1), certainly the one accessioned in March 1889, cannot have been these. However, Buller's 2nd collection was sold to Rothschild between November 1888 and February 1889. All specimens in this had no recorded locality data, unlike later collections, and as the Cambridge birds have no locality data, it is likely that they came from this lot. In 1932, the AMNH purchased Buller's 2nd collection and other specimens Buller had sold to Lord Rothschild. Buller sent an inventory of the collection to Tring, which was an interleaved copy of Buller's

1882 Manual of the Birds of New Zealand, with annotations by Buller in black ink. (The Manual is preserved in the archives of the Department of Birds, AMNH). The interleaf facing the page for '4. Athene albifacies' lists seven specimens labelled 4a - 4g. Galbreath (1989) noted that several specimens listed on the inventory were not present 'including the Laughing Owl chick' and Rothschild refused to pay. Entry 'g', that for the chick, is crossed out, as is entry 'b', which suggests that 'b' was not received. However, AMNH 630245 is labelled as '4b', so was received. Why it should be crossed out is unknown. The chick is probably the one Smith collected at Albury in September 1881, and sent to Buller, and is not now identifiable in any collection, but could be that in the Museum of Victoria.

The following is a transcript of an excerpt from Buller's catalogue to Rothschild, and shows there should have been six adult Laughing owls:

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'No 4 a. adult male, fig. B. of NZ 2 ed.

b. adult female

c. adult male (lighter var.)

d.e. Adult male and female coll<sup>d</sup> G. W.W. Smith (mounted)

f. ad. male "

g. Chick (in spirits)

'memo 4d male has a very white face

4e female is beautifully marked
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4f male is younger than 4d and with darker plumage'

The AMNH specimens are listed in Appendix 3, and only six (630244-9) could have been in Buller's second collection - three (4a-c) are recorded as so. In Buller's catalogue only d & e are recorded as mounted, and none of the AMNH specimens were/are. Only two mounts from the Rothschild collection have been located: NHM 1939.12.9.539 and CUM 20/Str/22/a/2. These then, are probably the specimens 4d and 4e - the Cambridge specimen would be the female 4e since, from the above quote, we see Buller considered the birds with white facial discs to be female. 4f came from Smith, which makes it probable that it was collected at Albury, South Canterbury where Smith obtained all his specimens. This leaves 4f unaccounted for, which Buller's catalogue describes as a skin of a male with 'darker plumage'. It is likely that the Cambridge specimen #1 is this bird.

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APPENDIX 1 - List of historical collected specimens of Laughing Owls in museum collections.

Collection, Cat. No.	Specimen	Data
NEW ZEALAND		
MNZ NM10143	1 mount, male	Stewart Is 1881. (ex Amsterdam Zoo where captive 1882-86; Zoologisch Museum, No 1493, University of Amsterdam).
MNZ NM1778	1 skin, unsexed	Coll. Between Lake Manapouri and West Coast by W. H. Mitchell, Pres 1927 C.C. Holmes.
CM Av2155	1 skin, male	Otago, 1880 (Buller's 4th colln)
CM Av2156	1 mount, female	Otago, ?1888 (Buller's 4th colln)
CM Av2157	1 skin, female	Invercargill area (Buller's 4th colln)
CM Av2158	1 mount, unsexed	Otago (O'Connor colln)
CM Av2342	1 mount, male	Kurow, Waitaki Valley, Coll. 4/6/1895, mounted by Smyth of Dunedin, presented in
		1937 by Mrs W. E. Stevens.
CM Av2548 (loaned	1 skin (ex mount),	South 1s, loc.? date? 2
to Mt Bruce)	male	
CM Av2549	1 mount, unsexed	South Is, loc.? date?
CM Av2834	1 skin, female	'Christchurch' - this is presumably the Acclimatisation Gardens specimen from Cass
		River, captive 1869-87.
CM Av2835	1 skin, female	Timaru, August 1910, coll A. I. Wigley
CM Av3340	1 skin, male	Otago, 1892 (Buller's 4th colln)
CM Av5504	1 stern, LR coracoid,	No data, but recent, so probably derived from one of the birds made into skins.
	LR scapula, pt furcula	
CM Av5547	2 sets sclerotic rings	"Acclimatisation Gardens specimen"
CM Av5600	1 stern, LR coracoid,	No data, but recent, so probably derived from one of the birds made into skins.
	LR scapula, furcula, 7	
	sternal ribs	
Bluecliffs Station, South	1 mount, unsexed	Bluecliffs Station, found dead 5 July 1914
Canterbury		
South Canterbury Museum	1 mount, unsexed	South Is, loc.? date?
	1	

¹ The specimens MNZ 10143 (Ex Zoologisch Museum 1493) and Zoologisch Museum 1492 originated from Stewart Island about 1881, and were bought from A.H. Jamrach (London) for £15. The birds came alive to the Amsterdam Zoo "Natura Artis Magistra". Both died there: No 1492 on 16 January 1882; No 1493 on 18 January 1886. Both were males.

² This or the following specimen was likely procured at The Levels Station near Timaru by Mr W. Newton and was presented to the Canterbury Museum by Mr Donald MacLean before 1870 (Potts 1871:65).

³ Loaned to the museum in the 1970s by a Mrs Gunn. Before that, the bird belonged to her father, a Mr A. Lewis.

Whanganui Museum

UNITED KINGDOM NHM, Tring, 1845.1.13.5

NHM 1846.7.16.14

NHM 1852.1.17.13

NHM 1939.12.9.539

Nelson Museum

POM

AIM B748

1 mount, unsexed 1 mount, male 1 mount, male 1 mount male 1 artic. sternum, coracoids, scapulae, furcula

"a complete skeleton" 1 mount, unsexed 1 mount, unsexed

1 skin (ex mount), unsexed 1 skin (ex mount), unsexed 1 skin (ex mount), unsexed 1 mount, unsexed

1 mount, unsexed

1 skin, female

NHM 1955.6.N.20.4771 NHM 1955.6.N.20.4772

NHM 2 males: alcohol specimens CUM 20/Str/22/a/1 1 skin. (ex mount). unsexed, (brown face)

Tadmor, Nelson (late 1880s)

Lake Ohau Dunedin Riverton

no data, but as recent, probably from one of the birds now mounted in OM.

Labelled "Otago 1883", Williams & Harrison (1972:13), specimen not relocated. Accession No. 1916.64.1, Cat No. 1183. South Island, ?Dunedin4

Old no. AV49.1, Collected by "Mr Potts", limestone cliffs near Pleasant Point, Canterbury.

Exchanged with CM, received 1903.

Waikouaiti about 1843, coll P. Earl 5 NZ. Massena colln. E. Wilson. South Is. coll Stokes. NZ. (Rothschild colln.)

NZ, (J.H. Gurney colln.)6, coll prior to 1894.

South Is, Bought from Mr Coles, Christchurch March 1895, Sir F.G.M. Boileau, (Gurney

colln.)7

No data, ex Prof Alfred Newton loc?, ex Rothschild colln. listed by Benson (1972)

† Purchased as a skin in June or July 1917 from a Mr Beils from Dunedin with 11 other skins for £12.11.9 using the H. Sarjeant bequest.

The holotype of Albene albifacies Gray, 1844. This and succeeding NHM specimens are listed in Knox and Walters (1994).

⁶ The Gurney collection was purchased from the Norwich Castle Museum in 1954. In Gurney, J. H. 1894 Catalogue of the birds of prey (Accipitres and Striges) with the number of specimens in Norwich Museum (London: R. H. Porter) page 42, there is an entry "New Z. Sceloglaux albifacies (Gray) - 1" with a footnote "our Sceloglaux is paler than the late Mr Rowley's two which I saw last March, perhaps faded." In addition the Natural History Department's copy (Norwich Castle Museum) has a pencilled annotation "+1 and eggs" (Tony Irwin pers. Comm. 26 October 1996).

Buller (1905:64) mentions this bird. Coles was a Christchurch taxidermist who sold this bird alive to Sir Francis Boileau who took it alive to England where it was kept in captivity at Ketteringham but it died on 9 November 1895. J. H. Gurney wrote about this bird in the Transactions of the Norfolk and Norwich Naturalists' Society (Vol vi, pp 154-8). Buller states that the bird was a male, not female as listed above.

^{*} The specimen card associated with CUM 20/Str/22/a/1 has had subspecific epithet ?rufifacies added, and several notes that show this was because of the rufous facial disc of the specimen. However it is not the type of S. a. rufifacies, and is probably one of Buller's S. a. albifacies from his second collection (see p.246).

9 Mr F. Doggett, a Cambridge collector and enthusiast kept living animals and passed them on when they died (Adrian Friday, Dept. of Zool. University of Cambridge, pers. comm. 19 June 1996). Therefore, AMNH 230260 must have been exported to England alive, kept by Doggett until it died, and then obtained by Rothschild. It is therefore probably one of the pair Buller exported alive to Rothschild in the 1890s.

This is probably the specimen that Buller (1905:64) refers to as "a particularly fine male bird in my collection, obtained through Mr W. Smyth, of Caversham.

It was purchased from a settler, who procured it in the Blue Skin District, Otago, in May, 1874."

Naturhistorisches Museum,	1 skin, female	Silver Stream, Otago 1884
Wien, Austria. Inv. Nr. 50.767		(A. Reischek colln)
Naturhistorisches Museum,	1 mount, unsexed	No data
Wien, Austria. Inv. Nr. 50.809		
Biologiezentrum Linz,	1 mount, male	Oamaru, South Island 1878, coll A. Reischek (Sent to collector Th. Angele) Fig 1.
Austria. Inv. Nr.		
1941/433 OÖLM		
Zoölogisch Museum,	1 mount , male	Stewart Island, Bought live from A. H. Jamrach, London, lived in Amsterdam Zoo
Universiteit Van		until 16 Jan 1882 11
Amsterdam No 1492		
Nationaal Natuurhistorisch	1 mount, male	South Island, coll. March 1876. Leg. O. Finsch, received 1877.
Museum, Leiden,		
The Netherlands		
Nationaal Natuurhistorisch	1 mount, unsexed	Lake Wanaka, South Island, coll. ?. Leg. O. Finsch, received October 1886.
Museum, Leiden,		
The Netherlands		
Übersee-Museum, Bremen,	1 mount, unsexed	Albury Rocks, South Canterbury, collector, date, sex, all unknown. Purchased in 1909
Germany	,	from H. Suter, Auckland 12.
•		
SOUTH AMERICA		
University of Concepción,	1 mount	Seen in 1985 by Mr Hank Heinekamp, Nelson, but in 1988 the small museum it was
Chile		in had moved. (not verified by curator)

¹¹ See footnote 1, above.
12 This specimen is discussed and figured in Duncker (1953). Hans Duncker recorded that Schauinsland bought the specimen from Mr H. Suter in Auckland, and Suter had told him that the specimen had been caught at Albury Rocks. However, Duncker noted that the specimen had a much more rufous barring and more brown face so considered the specimen may belong to the subspecies *S. a. rufifacies*. However, many South Island specimens have similar coloration so Suter's stated locality cannot be doubted on this basis. Duncker's discussion and suggestion that this specimen is *S. a. rufifacies* may be the source that led Greenway (1958) to list this subspecies from Bremen. While Greenway listed both subspecies as being present, only one specimen is present (per. comm. Dr H. Hohmann (Head of Nat. Hist. Dept.), 30 October, 1996.)

APPENDIX 2 - List of Laughing Owl eggs in museum collections.

Collection, catalogue no.	No.	Origin
NEW ZEALAND		
CM Av3359	1	Opuha, 1 August 1894, Moorehouse colln
CM Av3360	1	?,?, Moorehouse colin
CM Av3723	1	Acclimatisation Gardens 21/8/1886
CM Av4498A,B	2	Southern down, Geraldine, September 1898, coll E. P. Sealey (Stead colln)
CM Av4499	1	Opihi River, October 1895, coll. E. P. Sealey, (Stead colln)
CM Av4500	1	Mt Peel, coll Tripp, (Stead colln)
CM Av4501A,B	2	Southern down, Geraldine, 10 October 1897, coll E. P. Sealey, (Stead colln)
CM Av4502	1	Dunedin, coll W. Smyth 13 September 1903, (Stead colln)
CM Av4503	1	Dunedin, coll W. Smyth 3 October 1903, (Stead colln)
OM, Av7674	1	Donated by Dr Fulton in ?1905, old reg. no. A.05.68, no locality.
EUROPE		
NHM, E1955.5.148	1	South Is, 1 August 1894, via Coles, Sir F.G.M. Boileau, (J. H. Gurney colln)
NHM E1988.4.26	1	South Is, Sir W. Buller, (Rothschild colln)
NHM E1955.5.149	2	NZ, via F. Stalchsmith, (J. H. Gurney colln, bought July 1897)
Naturhistorisches Museum Wien, Austria	1	Rewritten label "Amaru September 1876 collection A.
Inv. Nr. 13.536/E		Reischek". A misspelling of Timaru or Oamaru - Reischek arrived NZ April, 1877.

APPENDIX 3 - A list of Laughing Owls sent to Rothschild by Buller.

Original ID	Description	Present locality
Buller 4a	skin, male	AMNH 630244
Buller 4b	skin, female	AMNH 630245
Buller 4c	skin, male	AMNH 630246
Buller 4d	mount male	Probably NHM 1939.12.9.539
Buller 4e	mount female	Probably CUM 20/Str/22/a/2
Buller 4f	skin male	Probably CUM 20/Str/22/a/1
Buller 1892	live female	Probably AMNH 630249
Buller 1892	live male	Possibly AMNH 630247, or 630248