The lice (Insecta: Phthiraptera) from Macquarie Island

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Abstract
Forty seven identified louse species from birds and mammals are listed from Macquarie Island. Five further records are given at the generic level only. Bibliographic references to Macquarie Island louse records are listed for each species and genus. A list of the host-louse associations is given.

Introduction
When one sees Macquarie Island for the first time, it is hard not to think of it as a spectre, an isolated island ghostly rising out of the sea, mostly capped with a shroud of cloud. Halfway between the southern end of Tasmania and the Antarctic continent, Macquarie is located between 54°28’ and 54°46’S, 148°50’E (Gressitt 1970). It is long and narrow, about 34 km by 2.5 to 5 km, situated in a nearly north - south direction and is 118 sq km in area. Most of the island consists of a plateau, with hills, tarns (small lake or large ponds), featherbeds (bryophyte-dominated quaking mire) and streams. The vegetation is low-growing and often sparse except along the coastlines and there are no trees on the island. The slopes rise steeply from beach terraces to the plateau. Their height ranges between 180 and 300 metres and their slope from 35 to 80° with an average slope of 43° (Horning 1978). It is a wild, isolated windswept island and thundered by predominantly westerly stormy seas. This isolation helps set the stage for a vast number of seabirds and marine mammals breeding and visiting Macquarie Island. There are 27 species of birds that breed or may breed on the island and 39 species have been recorded with some degree of vagrancy (common, occasional, rare, very rare) (Selkirk et al. 1990). There are three species of marine mammals breeding at Macquarie Island and four visiting species (Selkirk et al. 1990). All of these birds and marine mammals are potential hosts for lice.

The number of terrestrial invertebrate species is quite limited for an island of about 12,000 ha. Greenslade (1990) listed 78 species of terrestrial invertebrates (excluding parasites and mites) from Macquarie Island: 12 species of non-arthropods, 32 Collembola, 30 insects and 4 species of spiders. Greenslade and van Klinken (1994) listed 32 species of Collembola. In addition, recently, 25 species of Tardigrada (water bears) have been reported from the Island (Miller et al. 2001). This paper reports 47 species of lice, the largest, by far, of any insect group. The total of 150 recorded species of terrestrial invertebrates (excluding mites) is relatively low given the size of the island and its many habitats.
Female *Ancistrona vagelli* (*JC Fabricius, 1787*) Actual length: 5.8mm
Photo T Williams

Male *Ancistrona vagelli* (*JC Fabricius, 1787*) Actual length: 2.8mm
Photo T Williams
History of the Collections

The first lice known from Macquarie Island were collected by H. Hamilton, a biologist for the Australasian Antarctic Expedition, 1911-1914. He was on the island from 22 December 1911 to 28 November 1913. His main interests were collecting marine life, securing bird specimens and studying the plant life of the island. His collections of plants were the subject of a later study by S. Cheeseman (1919). He was also interested in the ecology of the flora (Hamilton 1926). Hamilton made a few collections of bird and mammal lice as opportunities afforded him. The only reference mentioning that he was looking for lice is found in Ainsworth (1996). Ainsworth was the leader of the Macquarie Island party and he stated in his narrative for 6 August 1912 “Hamilton secured some spiders, parasites on birds and many beetles under the moss and stones on the site of a penguin rookery, besides shooting a few terns”. We have found no lice that were collected by him on that date, but sufficient specimens were collected in 1912 and 1913 for Harrison (1937) to report on these collections.

The next record of lice from the British, Australia and New Zealand Antarctic Research Expedition (BANZARE) shows that specimens were collected at least on 23 October 1929 and 4 December 1930. There was a gap of collecting until the Macquarie Island station was established by the Australian Antarctic Division in 1948. Sporadic collections have been made by ANARE (Australian National Antarctic Research Expeditions) personnel, The Australian Museum Macquarie Island Expedition during the summer 1977 and 1978, the Tasmanian National Parks and Wildlife Service and short-term visitors to the island. The years and primary collectors are: 1949, A.M. Gwynn; 1950, A.M Gwynn, N.M. Haydon, E. Shipp; 1953, J.B. Sturrock; 1955, K. Keith; 1956 - 1957 (many collectors); 1957, M.P. Hines, M.D. Murray; 1960 - 1961, J. Warham, K.C. Watson; 1962, W.J.M. Vestjens; 1965, C. Robertson; 1977-1978, G. Copson, D.S. Horning, J.K. Lowry, T. Tierney; 1984, N. Brothers, G. Copson; 1985, T. Scarborough; 1988, P. Sullivan.

Watson (1967) gave an account of the 38 species of lice known to that time, based primarily on collections by Hamilton and collections of the 1950’s and early 1960’s. Clay and Moreby (1970) recorded 26 species of lice from 14 species of birds without indication of the source of their information. Gressitt (1970) listed 36 species of bird and mammal lice but his records were extracted from the literature. Wise (1977) listed 38 species of lice from Macquarie Island and these records also came from previous literature. The catalogue of Palma and Barker (1996) is the most up-to-date and was primarily based on collection and literature records. We report 47 species of lice from Macquarie Island. Five further records are given at the generic level only. Previous erroneous records from the literature have been corrected as far as is possible (see Notes below).

Two hosts (sheep and weka) previously introduced by humans had lice recorded from them on Macquarie Island and have now been eradicated from the island (Copson 1995; Selkirk et al. 1990). These species of lice (Bovicola (Bovicola) ovis and Rallicola harrisoni) are no longer part of the island fauna.
Female *Pseudonirmus gurlti* (Taschenberg 1882) Actual length: 3.1mm
Photo T Williams

Male *Pseudonirmus gurlti* (Taschenberg 1882) Actual length: 2.4mm
Photo T Williams
Remarks
The louse list includes all the genera and species recorded from Macquarie Island. Under each species we have listed all the bibliographic citations referring to that island, but giving first the original taxonomic combination which, in most cases, refers to other localities. Species marked with an asterisk are from non-breeding hosts. Species names given in quotations (“”) are misidentifications by the authors cited immediately after the closing quotations.

Location of specimens: Early collections of Macquarie Island lice are held in the British Museum (Natural History), London, England, and the Australian Museum, Sydney. More recently collected samples are kept in the Australian National Insect Collection, Canberra; the Museum of New Zealand Te Papa Tongarewa, Wellington; the Queen Victoria Museum and Art Gallery, Launceston, Tasmania and in the United States National Museum of Natural History, Washington.

Lice recorded from Macquarie Island
Order PHTHIRAPTERA Haeckel, 1896
Suborder AMBLYCERA Kellogg, 1896
Family MENOPONIDAE Mjöberg, 1910

Genus Actornithophilus Ferris, 1916

Actornithophilus piceus lari (Packard, 1870)
Colpocephalum lari Packard, 1870: 96
Actornithophilus piceus lari: Palma and Barker, 1996: 112
Host: Larus dominicanus.

Genus Ancistrona Westwood, 1874

Ancistrona vagelli (J.C. Fabricius, 1787)
Pediculus vagelli J.C. Fabricius, 1787: 369
Ancistrona vagelli: Harrison, 1937: 14
Ancistrona vagelli: Kéler, 1952: 209
Ancistrona sp.: Watson, 1967: 70
Ancistrona sp.: Clay and Moreby, 1970: 217, 218
Ancistrona sp.: Gressitt, 1970: 326
Ancistrona vagelli: Wise, 1977: 56
Ancistrona vagelli: Palma and Barker, 1996: 114
Hosts: Pachyptila desolata banksi; Halobaena caerulea.

Genus Austromenopon Bedford, 1939

*Austromenopon brevifimbriatum (Piaget, 1880)
Menopon brevifimbriatum Piaget, 1880: 499
Austromenopon brevifimbriatum: Palma and Barker, 1996: 115
Host: Fulmarus glacialisoides.

Austromenopon fuscofasciatum (Piaget, 1880)
Menopon fuscofasciatum Piaget, 1880: 492
Austromenopon fuscofasciatum: Palma and Barker, 1996: 11
Host: Catharacta skua lonnbergi.
**Austromenopon sp.**

*Menopon sp.:* Harrison, 1937: 13 [Note 25]
Hosts: *Diomedea exulans; Pachyptila desolata banksi.*

**Genus Longimenopon** Thompson, 1948

**Longimenopon galeatum** Timmermann, 1957

*Longimenopon galeatum* Timmermann, 1957: 9
*Longimenopon galeatum:* Watson, 1967: 72
*Longimenopon galeatum:* Clay and Moreby, 1970: 218
*Longimenopon galeatum:* Gressitt, 1970: 326
*Longimenopon galeatum:* Wise, 1977: 57
*Longimenopon galeatum:* Palma and Barker, 1996: 132
Host: *Pachyptila desolata banksi.*

Suborder ISCHNOCERA Kellogg, 1896
Family PHILOPTERIDAE Burmeister, 1838

**Genus Anatoecus** Cummings, 1916

**Anatoecus dentatus dentatus** (Scopoli, 1763)

*Pediculus dentatus* Scopoli, 1763: 383
*Anatoecus dentatus:* Gressitt, 1970: 326
*Anatoecus dentatus:* Wise, 1977: 5
Host: *Anas superciliosa*

**Anatoecus icterodes icterodes** (Nitzsch, 1818)

*Philopterus (Docophorus) icterodes* Nitzsch, 1818: 290
*Anatoecus icteroides [sic!]:* Gressitt, 1970: 326
*Anatoecus icterodes:* Wise, 1977: 5
Host: *Anas superciliosa*

**Genus Austrogoniodes** Harrison, 191

**Austrogoniodes cristati** Kéler, 1952

*Austrogoniodes cristati* Kéler, 1952: 230
“Austrogoniodes strutheus” Harrison, 1937: 15 [Note 1]
“Austrogoniodes waterstoni” Harrison, 1937: 15 [Note 2]
*Austrogoniodes cristati:* Kéler, 1954: 58
*Austrogoniodes cristati:* Clay, 1964: 230
*Austrogoniodes cristati:* Watson, 1967: 71
*Austrogoniodes strutheus:* Watson, 1967: 71
*Austrogoniodes waterstoni:* Watson, 1967: 71
*Austrogoniodes cristati:* Clay, 1967: 154
*Austrogoniodes cristati:* Clay and Moreby, 1970: 216
*Austrogoniodes strutheus:* Clay and Moreby, 1970: 216
*Austrogoniodes cristati:* Gressitt, 1970: 327
*Austrogoniodes ? strutheus:* Gressitt, 1970: 327
*Austrogoniodes waterstoni:* Gressitt, 1970: 327
*Austrogoniodes cristati:* Wise, 1977: 59
Austrogoniodes strutheus: Wise, 1977: 59
Austrogoniodes cristati: Palma and Barker, 1996: 15
Hosts: Eudyptes chrysolophus schlegeli; Eudyptes chrysocephalus filholi; Eudyptes selateri.

Austrogoniodes hamiltoni Harrison, 1937
Austrogoniodes hamiltoni: Harrison, 1937: 18
Cesareus hamiltoni: Kéler, 1954: 54
Austrogoniodes hamiltoni: Watson, 1967: 71
Austrogoniodes hamiltoni: Clay, 1967: 154
Austrogoniodes hamiltoni: Clay and Moreby, 1970: 216
Austrogoniodes hamiltoni: Gressitt, 1970: 327
Austrogoniodes hamiltoni: Wise, 1977: 59
Austrogoniodes hamiltoni: Pilgrim and Palma, 1982: 4, 5, 29
Austrogoniodes hamiltoni: Palma and Barker, 1996: 15
Hosts: Eudyptes chrysolophus schlegeli; Eudyptes chrysocephalus filholi; Eudyptes robustus [Note 3].

Austrogoniodes macquariensis Harrison, 1937
Austrogoniodes macquariensis: Harrison, 1937: 17
Austrogoniodes macquariensis: Watson, 1967: 71
Austrogoniodes macquariensis: Clay, 1967: 154
Austrogoniodes macquariensis: Clay and Moreby, 1970: 216
Austrogoniodes macquariensis: Gressitt, 1970: 326
Austrogoniodes macquariensis: Wise, 1977: 59
Austrogoniodes sp.: Lowry et al, 1978: 138
Austrogoniodes macquariensis: Pilgrim and Palma, 1982: 4, 5, 29
Austrogoniodes macquariensis: Palma and Barker, 1996: 159
Hosts: Eudyptes chrysolophus schlegeli; Eudyptes chrysocephalus filholi; Eudyptes robustus [Note 3].

Genus Docophoroides Giglioli, 1864

Docophoroides brevis (Dufour, 1835)
Philopterus brevis Dufour, 1835: 674
Docophoroides brevis: Watson, 1967: 71
Docophoroides brevis: Clay and Moreby, 1970: 217
Docophoroides brevis: Gressitt, 1970: 327
Docophoroides brevis: Wise, 1977: 60
Docophoroides brevis: Palma and Barker, 1996: 174
Host: Diomeda exulans.

Docophoroides murphyi (Kellogg, 1914)
Eurymetopus murphyi Kellogg, 1914: 87
Docophoroides hunteri Harrison, 1937: 42
Docophoroides murphyi: Watson, 1967: 71
Docophoroides murphyi: Clay and Moreby, 1970: 217
Docophoroides murphyi: Gressitt, 1970: 327
Docophoroides murphyi: Wise, 1977: 60
Docophoroides murphyi: Palma and Barker, 1996: 174
Hosts: Macronectes giganteus; Macronectes halli.
Docophoroides simplex (Waterston, 1914)
   Eurymetopus simplex Waterston, 1914: 302
   Docophoroides simplex: Palma and Barker, 1996: 175
Host: Diomedea chrysostoma.

Genus Haffneria Timmermann, 1966
   Haffneria grandis (Piaget, 1880)
   Lipeurus grandis Piaget, 1880: 323
   Harrisoniella grandis: Watson, 1967: 72
   Haffneria grandis: Clay and Moreby, 1970: 220
   "Harrisoniella" grandis: Gressitt, 1970: 327
   Haffneria grandis: Wise, 1977: 60
   Haffneria grandis: Palma and Barker, 1996: 18
Host: Catharacta skua lonnbergi.

Genus Halipeurus Thompson, 1936
*Halipeurus (Halipeurus) diversus (Kellogg, 1896)
   Lipeurus diversus Kellogg, 1896: 123
   Halipeurus diversus: Watson, 1967: 72
   "Halipeurus turtur" Watson, 1967: 72 [Note 4]
   Halipeurus turtur: Clay and Moreby, 1970: 218
   Halipeurus diversus: Clay and Moreby, 1970: 218
   Halipeurus turtur: Gressitt, 1970: 327
   Halipeurus diversus: Gressitt, 1970: 327
   Halipeurus (Halipeurus) diversus: Palma and Barker, 1996: 184
Hosts: Puffinus griseus; Puffinus tenuirostris; Pachyptila desolata banksi [Note 5].

Halipeurus (Halipeurus) procellariae (J.C. Fabricius, 1775)
   Pediculus procellariae J.C. Fabricius, 1775: 808
   "Halipeurus angusticeps" Harrison, 1937: 31 [Note 6]
   Halipeurus procellariae: Watson, 1967: 72
   Halipeurus sp.: Watson, 1967: 72
   Halipeurus procellariae: Clay and Moreby, 1970: 218
   Halipeurus procellariae: Gressitt, 1970: 327
   Halipeurus (Halipeurus) angusticeps: Wise, 1977: 60
   Halipeurus (Halipeurus) procellariae: Wise, 1977: 61
   Halipeurus sp.: Lowry et al, 1978: 138
   Halipeurus (Halipeurus) procellariae: Pilgrim and Palma, 1982: 8, 30
   Halipeurus (Halipeurus) procellariae: Palma and Barker, 1996: 186
Host: Pterodroma lessonii; Procellaria cinerea [Note 7].

Genus Harrisoniella Bedford, 1929

Harrisoniella hopkinsi Eichler, 1952
   Harrisoniella hopkinsi Eichler, 1952: 41
   Harrisoniella sp.: Watson, 1967: 72
   Harrisoniella hopkinsi: Palma and Pilgrim, 1984: 156
   Harrisoniella hopkinsi: Palma and Barker, 1996: 187
Host: Diomedea exulans.
Genus **Naubates** Bedford, 1930

**Naubates clypeatus** (Giebel, 1874)
- *Lipeurus clypeatus* Giebel, 1874: 236
- **Naubates clypeatus**: Wise, 1977: 62
- **Naubates sp.**: Lowry et al, 1978: 138
- **Naubates clypeatus**: Palma and Barker, 1996: 191

Hosts: *Halobaena caerulea; Pachyptila desolata banksi* [Note 8].

**Naubates fuliginosus** (Taschenberg, 1882)
- *Lipeurus fuliginosus* Taschenberg, 1882: 156
- **Naubates fuliginosus**: Palma and Barker, 1996: 192

Host: *Procellaria cinerea.*

**Naubates heteroproctus** Harrison, 1937
- **Naubates heteroproctus** Harrison, 1937: 30
- **Naubates heteroproctus** (in part): Watson, 1967: 72
- **Naubates heteroproctus** (in part): Gressitt, 1970: 328

Host: *Pterodroma lessonii* [Note 9].

**Naubates prioni** (Enderlein, 1908)
- *Lipeurus prioni* Enderlein, 1908: 454
- “**Naubates clypeatus**” Harrison, 1937: 31 [Note 10]
- **Naubates prioni**: Watson, 1967: 72
- **Naubates sp.**: Watson, 1967: 72 [Note 11]
- **Naubates prioni**: Clay and Moreby, 1970: 218
- **Naubates prioni**: Gressitt, 1970: 328
- **Naubates prioni**: Wise, 1977: 62
- **Naubates prioni**: Palma and Barker, 1996: 193

Hosts: *Pachyptila desolata banksi; Pygoscelis papua papua* [Note 11];
*Puffinus griseus* [Note 12]; *Larus dominicanus* [Note 12].

**Naubates pterodromi** Bedford, 1930 *sensu lato*
- **Naubates pterodromi** Bedford, 1930: 170
- “**Naubates fuliginosus**” Clay and Moreby, 1970: 217 [Note 14]
- **Naubates heteroproctus**: Clay and Moreby, 1970: 218 [Note 13]
- **Naubates fuliginosus**: Gressitt, 1970: 327
- **Naubates fuliginosus**: Wise, 1977: 62
- **Naubates pterodromi**: Palma and Barker, 1996: 193

Hosts: *Pterodroma lessonii; Diomedea exulans* [Note 14].

Genus **Nesiotinus** Kellogg, 1903

**Nesiotinus demersus** Kellogg, 1903
- **Nesiotinus demersus** Kellogg, 1903: 89
- **Nesiotinus demersus**: Watson, 1967: 72
- **Nesiotinus demersus**: Gressitt, 1970: 328
- **Nesiotinus demersus**: Wise, 1977: 62
Nesiotinus demersus: Pilgrim and Palma, 1982: 4
Nesiotinus demersus: Palma and Barker, 1996: 195

Host: Aptenodytes patagonicus.

Genus *Paraclisis* Timmermann, 1965

*Paraclisis diomedeae* (J.C. Fabricius, 1775)
- Pediculus diomedeae J.C. Fabricius, 1775: 808
- Perineus diomedeae: Watson, 1967: 73
- Paraclisis diomedeae: Clay and Moreby, 1970: 217
- Paraclisis diomedeae: Gressitt, 1970: 328
- Paraclisis diomedeae: Wise, 1977: 62
- Paraclisis diomedeae: Palma and Barker, 1996: 197

Hosts: *Diomedea melanophrys; Diomedea chrysostoma; Phoebetria palpebrata.*

*Paraclisis hyalina* (Neumann, 1911)
- Lipeurus hyalinus Neumann, 1911: 21
- Perineus hyalinus: Watson, 1967: 73
- Paraclisis hyalina: Clay and Moreby, 1970: 217
- Paraclisis hyalina: Gressitt, 1970: 328
- Paraclisis hyalina: Wise, 1977: 62
- Paraclisis hyalina: Palma and Barker, 1996: 197

Host: *Diomedea exulans.*

*Paraclisis obscura* (Rudow, 1869)
- Lipeurus obscurus Rudow, 1869: 30
- Perineus obscurus: Watson, 1967: 73
- Paraclisis obscura: Clay and Moreby, 1970: 217
- Paraclisis obscura: Gressitt, 1970: 328
- Paraclisis obscura: Wise, 1977: 62
- Paraclisis obscura: Lowry et al, 1978: 138
- Paraclisis obscura: Palma and Barker, 1996: 197

Hosts: *Macronectes giganteus; Macronectes halli.*

Genus *Pectinopygus* Mjöberg, 1910

*Pectinopygus turbinatus* (Piaget, 1890)
- Oncophorus turbinatus Piaget, 1890: 233
- Pectinopygus (Philichthyophaga) macquariensis Harrison, 1937: 34
- Pectinopygus macquariensis: Hopkins and Clay, 1952: 269
- Pectinopygus turbinatus: Timmermann, 1964: 280
- Pectinopygus turbinatus: Watson, 1967: 73
- Pectinopygus turbinatus: Gressitt, 1970: 328
- Pectinopygus turbinatus: Wise, 1977: 62
- Pectinopygus turbinatus: Pilgrim and Palma, 1982: 15
- Pectinopygus turbinatus: Palma and Barker, 1996: 20

Host: *Leucocarbo atriceps purpurascens.*
Genus *Pelmatocerandra* Enderlein, 1908

*Pelmatocerandra setosa* (Giebel, 1876)

- Nirmus setosus Giebel, 1876: 253
- *Pelmatocerandra setosa*: Watson, 1967: 73
- *Pelmatocerandra setosa*: Clay and Moreby, 1970: 219
- *Pelmatocerandra setosa*: Gressitt, 1970: 328
- *Pelmatocerandra setosa*: Wise, 1977: 63
- *Pelmatocerandra setosa*: Palma and Barker, 1996: 201

Host: *Pelecanoides urinatrix exsul*.

Genus *Perineus* Thompson, 1936

*Perineus circumfasciatus* Kéler, 1957

- “Perineus concinnus” Harrison, 1937: 29
- *Perineus circumfasciatus* Kéler, 1957: 525
- *Perineus sp.*: Watson, 1967: 73
- *Perineus circumfasciatus*: Pilgrim and Palma, 1979: 177
- *Perineus circumfasciatus*: Palma and Pilgrim, 1988: 580
- *Perineus circumfasciatus*: Palma and Barker, 1996: 201

Hosts: *Diomedea melanophrys*; *Phoebetria palpebrata*.

*Perineus macronecti* Palma and Pilgrim, 1988

- *Perineus sp. nov.*: Watson, 1967: 73
- “*Perineus circumfasciatus*” Clay and Moreby, 1970: 217
- *Perineus macronecti*: Palma and Pilgrim, 1988: 584
- *Perineus macronecti*: Palma and Barker, 1996: 202

Hosts: *Macronectes giganteus*; *Macronectes halli*.

*Perineus nigrolimbatus* (Giebel, 1874)

- Lipeurus nigrolimbatus Giebel, 1874: 233
- *Perineus nigrolimbatus*: Palma and Barker, 1996: 202

Host: *Fulmarus glacialisoides*.

Genus *Pseudonirmus* Mjöberg, 1910

*Pseudonirmus gurlti* (Taschenberg, 1882)

- Lipeurus gurlti Taschenberg, 1882: 151
- *Pseudonirmus gurlti*: Gressitt, 1970: 328
- *Pseudonirmus gurlti*: Palma and Barker, 1996: 206

Host: *Daption capense*.
*Pseudonirmus sp.*
  
  _Pseudonirmus sp.:_ Lowry et al, 1978: 139 [Note 15]
  
  **Host:** *Thalassoica antarctica.*

Genus *Quadraceps* Clay and Meinertzhagen, 1939

**Quadraceps houri** Hopkins, 1949
  
  *Quadraceps houri* Hopkins, 1949: 52
  
  *Quadraceps houri:* Palma and Barker, 1996: 212
  
  **Host:** *Sternia vittata bethunei.*

**Quadraceps ornatus fuscolaminulatus** (Enderlein, 1908)
  
  *Ricinus fuscolaminulatus* Enderlein, 1908: 447
  
  *Quadraceps ornatus fuscolaminulatus:* Clay and Moreby, 1970: 220
  
  *Quadraceps ornatus fuscolaminulatus:* Gressitt, 1970: 328
  
  *Quadraceps ornatus fuscolaminulatus:* Wise, 1977: 64
  
  *Quadraceps ornatus fuscolaminulatus:* Palma and Barker, 1996: 213
  
  **Host:** *Larus dominicanus.*

Genus *Rallicola* Johnston and Harrison, 1911

**Rallicola harrisoni** Emerson, 1955
  
  *Rallicola harrisoni* Emerson, 1955: 288
  
  *Rallicola sp.:* Lowry et al, 1978: 139
  
  *Rallicola harrisoni:* Palma and Barker, 1996: 21
  
  **Host:** *Gallirallus australis scotti.*

Genus *Saemundssonia* Timmermann, 1936

*Saemundssonia (Saemundssonia) antarctica* (Wood, 1937)
  
  _Philopterus antarcticus_ Wood, 1937: 22
  
  *Saemundssonia (Saemundssonia) antarctica:* Pilgrim and Palma, 1994: 242
  
  *Saemundssonia (Saemundssonia) antarctica:* Palma and Barker, 1996: 219
  
  **Hosts:** *Thalassoica antarctica; Fulmarus glacialoides* [Note 16].

*Saemundssonia (Saemundssonia) bicolor* (Rudow, 1870)
  
  _Docophorus bicolor_ Rudow, 1870: 459
  
  *Saemundssonia sp.:* Lowry et al, 1978: 139
  
  *Saemundssonia (Saemundssonia) bicolor:* Palma and Barker, 1996: 219
  
  **Hosts:** *Fulmarus glacialoides; Thalassoica antarctica* [Note 17].

**Saemundssonia (Saemundssonia) euryrhyncha** (Giebel, 1874)
  
  _Docophorus euryrhynchus_ Giebel, 1874: 112
  
  *Saemundssonia stresemanni:* Watson, 1967: 74
  
  *Saemundssonia sp. (ex Catharacta skua lonnbergi):* Watson, 1967: 74 [Note 21]
  
  *Saemundssonia stresemanni:* Gressitt, 1970: 329
  
  *Saemundssonia stresemanni:* Wise, 1977: 65
  
  *Saemundssonia (Saemundssonia) stresemanni:* Palma and Barker, 1996:225
  
  *Saemundssonia (Saemundssonia) euryrhyncha:* Palma, 2000: 124
  
  **Host:** *Catharacta skua lonnbergi*
Saemundssonia (Saemundssonia) lari (O. Fabricius, 1780)

Pediculus lari O. Fabricius, 1780: 219

Philopterus gonothorax (Giebel, 1874): Harrison, 1937: 21 [Note 18]

Saemundssonia lari: Watson, 1967: 74

Saemundssonia sp. (ex Larus dominicanus): Watson, 1967: 74 [Note 19]

Saemundssonia lari: Gressitt, 1970: 329

Saemundssonia lari gonothorax: Wise, 1977: 65

Saemundssonia (Saemundssonia) lari: Palma and Barker, 1996: 222

Host: Larus dominicanus.

Saemundssonia (Saemundssonia) lockleyi Clay, 1949

Saemundssonia lockleyi Clay, 1949: 11

“Philopterus melanocephalus” Harrison, 1937: 22 [Note 20]


Saemundssonia melanocephalus: Wise, 1977: 65

Saemundssonia lockleyi: Pilgrim and Palma, 1982: 23, 31

Saemundssonia (Saemundssonia) lockleyi: Palma and Barker, 1996: 223

Host: Sterna vittata bethunei.

Saemundssonia (Saemundssonia) pterodromae Timmermann, 1959

Saemundssonia pterodromae Timmermann, 1959: 153

Saemundssonia pterodromae: Clay and Moreby, 1970: 217

Saemundssonia pterodromae: Gressitt, 1970: 328

Saemundssonia pterodromae: Wise, 1977: 65

Saemundssonia (Saemundssonia) pterodromae: Palma and Barker, 1996: 225

Host: Halobaena caerulea.

Saemundssonia (Saemundssonia) sp.

Philopterus limosae Harrison, 1937: 21 [Note 22]

Saemundssonia sp. (ex Calidris canutus rogersi): Watson, 1967: 74


Host: Calidris canutus canutus.

Saemundssonia (Puffinoecus) sp.

Saemundssonia sp. (ex Pterodroma lessonii): Watson, 1967: 74 [Note 23]

Saemundssonia sp.: Clay and Moreby, 1970: 218

Saemundssonia sp.: Gressitt, 1970: 329

Host: Pterodroma lessonii.

Genus Trabeculus Rudow, 1866

Trabeculus hexakon (Waterston, 1914) sensu lato

Giebelia hexakon Waterston, 1914: 291

Trabeculus hexacon [sic!]: Clay and Moreby, 1970: 218

Trabeculus hexacon [sic!]: Gressitt, 1970: 329

Trabeculus hexacon [sic!]: Wise, 1977: 65

Trabeculus hexakon: Palma and Barker, 1996: 229

Hosts: Puffinus griseus; Procellaria cinerea.

Trabeculus schillingi Rudow, 1866

Trabeculus schillingi Rudow, 1866: 467

Trabeculus schillingi: Harrison, 1937: 37
Trabeculus schillingi: Clay and Moreby, 1970: 218
Trabeculus schillingi: Gressitt, 1970: 329
Trabeculus schillingi: Wise, 1977: 66
Trabeculus schillingi: Palma and Barker, 1996: 229
Host: Pterodroma lessonii.

Trabeculus sp.
Giebelia hexakon: Harrison, 1937: 37
Giebelia hexakon: Kéler, 1952: 205
Trabeculus sp.: Watson, 1967: 74
Host: Pachyptila desolata banksi [Note 24].

Family TRICHODECTIDAE Kellogg, 1896
Genus Bovicola Ewing, 1929
Bovicola (Bovicola) ovis (Schrank, 1781)
   Pediculus ovis Schrank, 1781: 502
   Damalinia ovis: Watson, 1967: 71
   Bovicola (Bovicola) ovis: Palma and Barker, 1996: 232
Host: Ovis aries.

Suborder ANOPLURA Leach, 1815
Family POLYPLACIDAE Fahrenholz, 1912
Genus Polyplax Enderlein, 1904
Polyplax spinulosa (Burmeister, 1839)
   Pediculus spinulosa Burmeister, 1839: species 8
   Polyplax spinulosa: Watson, 1967: 7
Host: Rattus rattus.

Family ECHINOPHTHIRIIDAE Enderlein, 1904
Genus Antartochthirus Enderlein, 1906
Antarctophthirus ogmorhini Enderlein, 1906: 662
   Antarctophthirus ogmorhini Enderlein, 1906: 11
   Antarctophthirus ogmorhini: Harrison, 1937: 11
   Antarctophthirus ogmorhini: Watson, 1967: 74
   Antarctophthirus ogmorhini: Gressitt, 1970: 329
   Antarctophthirus ogmorhini: Wise, 1977: 67
Host: Hydrurga leptonyx.

Genus Lepidophthirus Enderlein, 1904
Lepidophthirus macrorhini Enderlein, 1904: 46
   Lepidophthirus macrorhini Enderlein, 1904: 46
   Lepidophthirus macrorhini: Harrison, 1937: 13
   Lepidophthirus macrorhini: Murray, 1958: 404
   Lepidophthirus macrorhini: Murray and Nicholls, 1965: 438
   Lepidophthirus macrorhini: Watson, 1967: 74
   Lepidophthirus macrorhini: Clay and Moreby, 1970: 220
Lepidophthirus macrorhini: Gressitt, 1970: 329
Lepidophthirus macrorhini: Wise, 1977: 68
Lepidophthirus macrorhini: Lowry et al, 1978: 137
Lepidophthirus macrorhini: Palma and Barker, 1996: 237
Host: Mirounga leonina.

Macquarie Island Host – Lice Associations
Most of the hosts listed below are known to be parasitised by further louse species in other localities (see Pilgrim and Palma 1982; Palma and Barker 1996). More intensive collecting will no doubt reveal the true number of louse species living on Macquarie Island hosts. Louse entries qualified as “stragglers” are the result of natural or human contamination, and we do not regard them as regular host-louse associations. *Denotes louse species recorded from hosts which do not breed on Macquarie Island.

Class Aves
The sequence and nomenclature of species and subspecies of birds follow the Ornithological Society of New Zealand (1990) Checklist.

Order Procellariiformes

Diomedea exulans Linnaeus, 1758  
 *wandering albatross*
  Docophoroides brevis (Dufour, 1835)
  Harrisoniella hopkinsi Eichler, 1952
  Paraclisis hyalina (Neumann, 1911)
  Naubates pterodromi Bedford, 1930 sensu lato [straggler]

Diomedea melanophrys melanophrys Temminck, 1828  
 *black-browed mollymawk*
  Paraclisis diomedae (J.C. Fabricius, 1775)
  Perineus circumfasciatus Kéler, 1957

Diomedea chrysostoma Forster, 1785  
 *grey-headed mollymawk*
  Docophoroides simplex (Waterston, 1914)
  Paraclisis diomedae (J.C. Fabricius, 1775)

Phoebetria palpebrata (Forster, 1785)  
 *light-mantled sooty mollymawk*
  Paraclisis diomedae (J.C. Fabricius, 1775)
  Perineus circumfasciatus Kéler, 1957

Puffinus griseus (Gmelin, 1789)  
 *sooty shearwater*
  Halipeurus (Halipeurus) diversus (Kellogg, 1896)
  Trabeculus hexakon (Waterston, 1914) sensu lato
  Naubates prioni (Enderlein, 1908) [straggler]

Puffinus tenuirostris (Temminck, 1835)  
 *short-tailed shearwater*
  * Halipeurus (Halipeurus) diversus (Kellogg, 1896)

Pelecanoides urinatrix exsul Salvin, 1896  
 *Subantarctic diving petrel*
  Pelmatocerandra setosa (Giebel, 1876)
**Procellaria cinerea** Gmelin, 1789  
*Naubates fuliginosus* (Taschenberg, 1882)  
*Trabeculus hexakon* (Waterston, 1914) sensu lato  
*Halipeurus (Halipeurus) procellariae* (J.C. Fabricius, 1775) [straggler]

**Daption capense** (Linnaeus, 1758)  
*Cape pigeon*

*Pseudonirmus gurtli* (Taschenberg, 1882)

**Thalassoica antarctica** (Gmelin, 1789)  
*Antarctic petrel*

*Pseudonirmus sp.*  
*Saemundssonia (Saemundssonia) antarctica* (Wood, 1937)  
*Saemundssonia (Saemundssonia) bicolor* (Rudow, 1870) [straggler]

**Fulmarus glacialis** (Smith, 1840)  
*Antarctic fulmar*

*Austromenopon brevifimbriatum* (Piaget, 1880)  
*Perineus nigrolimbatus* (Giebel, 1874)  
*Saemundssonia (Saemundssonia) bicolor* (Rudow, 1870)  
*Saemundssonia (Saemundssonia) antarctica* (Wood, 1937) [straggler]

**Macronectes giganteus** (Gmelin, 1789)  
*southern giant-petrel*

*Docophoroides murphyi* (Kellogg, 1914)  
*Paraclisis obscura* (Rudow, 1869)  
*Perineus macronecti* Palma and Pilgrim, 1988

**Macronectes halli** Mathews, 1912  
*northern giant-petrel*

*Docophoroides murphyi* (Kellogg, 1914)  
*Paraclisis obscura* (Rudow, 1869)  
*Perineus macronecti* Palma and Pilgrim, 1988

**Pachyptila desolata banksi** Smith, 1840  
*Antarctic prion*

*Ancistrona vagelli* (J.C. Fabricius, 1787)  
*Longimenopon galeatum* Timmermann, 1957  
*Naubates prioni* (Enderlein, 1908)  
*Halipeurus (Halipeurus) diversus* (Kellogg, 1896) [straggler]  
*Naubates clypeatus* (Giebel, 1874) [straggler]  
*Trabeculus sp.* [straggler]

**Halobaena caerulea** (Gmelin, 1789)  
*blue petrel*

*Ancistrona vagelli* (J.C. Fabricius, 1787)  
*Naubates clypeatus* (Giebel, 1874)  
*Saemundssonia (Saemundssonia) pterodromae* Timmermann, 1959

**Pterodroma lessonii** (Garnot, 1826)  
*white-headed petrel*

*Halipeurus (Halipeurus) procellariae* (J.C. Fabricius, 1775)  
*Naubates pterodromi* Bedford, 1930 sensu lato  
*Saemundssonia* (Puffinoecus) sp.  
*Trabeculus schillingi* Rudow, 1866  
*Naubates heteroproctus* Harrison, 1937 [straggler]
Order Sphenisciformes

Aptenodytes patagonicus Miller, 1778  
Nesiotinus demersus Kellogg, 1903  
king penguin

Pygoscelis papua papua (Forster, 1781)  
Naubates prioni (Enderlein, 1908) [straggler]  
northern gentoo penguin

Eudyptes chrysocome filholi Hutton, 1879  
Austrogoniodes cristati Kéler, 1952  
Austrogoniodes hamiltoni Harrison, 1937  
Austrogoniodes macquariensis Harrison, 1937  
eastern rockhopper penguin

Eudyptes chrysolophus schlegeli Finsch, 1876  
Austrogoniodes cristati Kéler, 1952  
Austrogoniodes hamiltoni Harrison, 1937  
Austrogoniodes macquariensis Harrison, 1937  
royal penguin

Eudyptes robustus Oliver, 1953  
*S. Austrogoniodes macquariensis Harrison, 1937 [straggler]  
*S. Austrogoniodes hamiltoni Harrison, 1937 [straggler]  
Snares crested penguin

Eudyptes sclateri Buller, 1888  
*S. Austrogoniodes cristati Kéler, 1952  
erect-crested penguin

Order Pelecaniformes

Leucocarbo atriceps purpurascens (Brandt, 1837)  
Macquarie Island shag

Order Anseriformes

Anas superciliosa superciliosa Gmelin, 1789  
grey duck

Anaticola crassicornis (Scopoli, 1763)
Anatoecus dentatus (Scopoli, 1763)

Order Gruiformes

Gallirallus australis scotti (Ogilvie-Grant, 1905)  
Stewart Island weka

Rallicola harrisoni Emerson, 1955

Order Charadriiformes

Calidris canutus canutus (Linnaeus, 1758)  
lesser knot

*S. Saemundssonia (Saemundssonia) sp.

Catharacta skua lonnbergi Mathews, 1912  
Subantarctic skua

Austromenopon fuscofasciatum (Piaget, 1880)
Haffneria grandis (Piaget, 1880)
Saemundssonia (Saemundssonia) euryrhyncha (Giebel, 1874)

Larus dominicanus Lichtenstein, 1823  
southern black-backed gull

Actornithophilus piceus lari (Packard, 1870)
Quadraceps ornatus fuscolaminulatus (Enderlein, 1908)
**Potential Host Species with no records of Lice**

There are breeding species which are potential hosts for lice, but they have not been searched for or found to have lice on Macquarie Island as yet. Three bird species (+) are listed in Selkirk et al. (1990) as “rare, may breed” and these should be examined for lice as opportunities occur. The potential hosts are:

- *Pachyptila turtur* (Kuhl, 1820)
  - fairy prion
- *+Pachyptila belcheri* (Mathews, 1912)
  - thin-billed prion
- *+Pterodroma mollis* (Gould, 1841)
  - soft-plumaged petrel
- *+Oceanites nereis* (Gould, 1840)
  - grey-backed storm petrel
- *Pygoscelis papua papua* (Forster, 1781)*
  - northern gentoo penguin
- *Anas platyrhynchos* Linnaeus, 1758
  - mallard
- *Sturnus vulgaris* Linnaeus, 1758
  - starling
- *Carduelis flammea* (Linnaeus, 1758)
  - redpoll
- *Arctocephalus gazella* (Peters, 1875)
  - Antarctic fur seal
- *Arctocephalus tropicalis* (Gray, 1872)
  - Subantarctic fur seal
- *Oryctolagus cuniculus* (Linnaeus, 1758)
  - rabbit
- *Mus musculus* Linnaeus, 1758
  - house mouse
- *Felis catus* Linnaeus, 1758
  - feral cat

* The single louse collected from this host is a straggler or contaminant.
**Discussion**

We list and document 47 species of lice – plus five records at the generic level only – from Macquarie Island. They were collected from 24 species of breeding (some not confirmed) hosts and from eight species of vagrant hosts. These data are comparable to those from a very small cool temperate island group, The Snares (usually regarded as a New Zealand subantarctic island), where 53 species of lice were recorded from 18 species of breeding hosts and 11 species of vagrants (Horning et al. 1980).

There were significant differences in the collecting techniques between the two islands. At Macquarie, lice collections were primarily adventitious when opportunities arose. It also appears that almost all collections resulted from hand-searching of live or dead birds. Hand-searching is an unintentionally selective technique and consequently some lice species will have been overlooked, especially in less common hosts (see Horning et al. 1980: 14). At The Snares, there was a concerted effort to collect lice by hand-searching alive and dead birds but also by dusting live hosts with the insecticide ‘Dri-Die’ over a white tray or sheet, or by dissolving feathers of recent or long-dead birds in hot 15% potassium hydroxide (Horning et al. 1980). Furthermore, collectors between 1961 and 1971, the period in which the lice were collected, were well trained in the recognition of the breeding bird species.

There is a large number of straggler louse species from Macquarie Island (see Notes 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 16, 17 and 24). We believe that, in fact, some of these records are not stragglers but stem from misidentification of the hosts. Sometimes lice were collected from parts of a bird (mainly wings) lying on the ground or from skua middens. To the untrained eye, it is difficult to identify parts of birds, especially petrels and prions. On the other hand, it is possible that some of these lice were stragglers. For instance, white-headed petrels are occasionally found with sooty shearwaters; fairy prions may compete with blue petrels for nesting burrows; blue petrels occupy diving petrel burrows (Selkirk et al. 1990). These ‘close encounters’ between individuals of different host species are ideal opportunities for lice to straggle. However, since breeding colonies of birds, with the exception of penguins, are scattered over the island and are not crowded with several species, we believe most of the host-louse associations we regard here as the result of natural straggling or human contamination (mixing samples during collecting, mislabelling vials or misidentifications of hosts) belong most likely to the latter category. The situation at The Snares is very different, where there are enormous populations of breeding sea birds and two or three species may use a common burrow entrance. We believe that opportunities for lice to straggle at The Snares, where Horning et al. (1980) recorded 14 stragging louse species, are greater than at Macquarie. Also the likelihood of human contamination was far lower at The Snares than at Macquarie Island.
Notes

1. In the Australian Museum collection there are a male and a female Austrogoniodes from Eudyptes chrysolophus schlegeli which Harrison (1937: 15) recorded as A. strutheus. We have examined and identified them as Austrogoniodes cristati. The dubious taxonomic status of Austrogoniodes strutheus was discussed by Clay (1967: 153), and there has not been further change since that publication.

2. The single female Austrogoniodes from Eudyptes sclateri recorded by Harrison (1937: 15) as A. waterstoni is kept in the Australian Museum collection. Pilgrim and Palma (1982: 5, 29) regarded Harrison’s record as a straggler because they had not examined the specimen. We have examined the single female and identified it as Austrogoniodes cristati. Therefore, it is not a straggler on E. sclateri.

3. As noted by Pilgrim and Palma (1982: 5, 29), the records of Austrogoniodes hamiltoni and A. macquariensis from Eudyptes robustus in Watson (1967: 71, as Eudyptes pachyrhynchus atratus) are the result of natural or human contamination from either E. c. schlegeli or E. chrysocome filholi.

4. Watson (1967: 72) recorded Halipeurus turtur from Pachyptila desolata collected by ANARE, 1949, but without specifying the number or sex of the specimens. In the British Museum (Natural History) there is a male bearing identical data which we have examined and identified as Halipeurus (H.) diversus. The only regular host known for H. (H.) turtur is Pterodroma cookii (see Pilgrim and Palma 1982: 9).

5. No species of Pachyptila is known to be a regular host to any species of Halipeurus (see Pilgrim and Palma 1982: 10, 11; Palma and Barker 1996: 343). We regard the record of H. (H.) diversus on P. desolata as the result of natural or human contamination from Puffinus griseus or P. tenuirostris.

6. Pilgrim and Palma (1982: 30) examined and corrected the identification of the single female Halipeurus recorded as Halipeurus angusticeps by Harrison (1937: 31) and kept in the Australian Museum collection. It is Halipeurus (H.) procellariae.

7. No species of Procellaria is known to be a regular host to any species of Halipeurus (see Pilgrim and Palma 1982: 11; Palma and Barker 1996: 344). We regard the record of H. (H.) procellariae on P. cinerea as the result of natural or human contamination from Pterodroma lessonii.

8. Among the lice collected during the summer 1977-1978 by the Australian Museum Macquarie Island Expedition, there is a female Naubates clypeatus from Pachyptila desolata banksi. We regard this record as a straggler or contaminant from Halobaena caerulea, the only regular host known for N. clypeatus (see Pilgrim and Palma 1982: 9, 10).

9. As noted by Pilgrim and Palma (1982: 8, 30), Pterodroma lessonii is an erroneous host for Naubates heteroproctus, despite being its type host. The regular host for N. heteroproctus is Pterodroma macroptera. Our inclusion of N. heteroproctus in the Macquarie Island fauna is therefore based on Harrison’s type material only. Subsequent authors have listed N. heteroproctus following Harrison (1937: 30).

10. Harrison (1937: 31) recorded Naubates clypeatus from Pachyptila desolata banksi (as Prion desolatus) based on two specimens collected from a skin in the Australian Museum. Those specimens have not been located despite intensive search by the
Australian Museum staff, but we are confident that they were *Naubates prioni*, the species of *Naubates* widespread on all species and subspecies of *Pachyptila* (see Pilgrim and Palma 1982: 10, 11). Harrison (1916: 132, 140) had already synonymised *N. prioni* under *N. clypeatus*, and therefore it is logical to assume that he identified further *Naubates* material accordingly.

11. Watson (1967: 72) recorded a single female *Naubates* sp. from *Pygoscelis papua* as a probable straggler from one of the petrels. In the Australian National Insect Collection there is a female bearing identical data which we have examined and identified as *Naubates prioni*. We regard it as a straggler or contaminant from a *Pachyptila* host.

12. Further to the record of *Naubates prioni* discussed above, the Australian National Insect Collection has nine specimens of *Naubates prioni*, one from *Puffinus griseus* and eight from *Larus dominicanus*, which we also regard as stragglers or contaminants from a *Pachyptila* host.

13. Several records of *Naubates heteroproctus* from *Pterodroma lessonii* are either misidentifications of *N. pterodromi sensu lato*, or a combination of *N. pterodromi sensu lato* and Harrison's type material of *N. heteroproctus* (see also Note 9, above).

14. Clay and Moreby (1970: 217) listed *Naubates fuliginosus* under *Diomedea exulans*. In the Australian National Insect Collection there is a male and female pair *Naubates* from that host which we have examined and identified as *Naubates pterodromi sensu lato*. No species of *Diomedea* is known as a regular host of any *Naubates* lice (see Pilgrim and Palma 1982: 5-7), therefore we regard this record as the result of natural or human contamination from *Pterodroma lessonii*. Subsequent authors have listed *N. fuliginosus* following Clay and Moreby's misidentification.

15. Among the lice collected during the summer 1977-1978 by the Australian Museum Macquarie Island Expedition, there is a single nymph of *Pseudonirmus* from *Thalassoica antarctica* which, at present, we can not identify to species.

16. We agree with Pilgrim and Palma (1994: 242) in regarding *Fulmarus glacialoides* as a non-regular host for *Saemundssonia (S.) antarctica*.

17. We regard the single male *Saemundssonia (S.) bicolo* collected from *Thalassoica antarctica* by the Australian Museum Macquarie Island Expedition as a straggler or contaminant from a *Fulmarus glacialoides* host (see Pilgrim and Palma 1982: 7; 1994: 242).

18. In the Australian Museum collection there are a male and a female *Saemundssonia* from *Larus dominicanus* which Harrison (1937: 21) recorded as *Philopterus gonothorax*. We have examined and identified them as *Saemundssonia (S.) lari*, a name we regard as a senior synonym of *Philopterus gonothorax*, as published by Ledger (1980: 139).

19. Watson (1967: 74) recorded *Saemundssonia* sp. from *Larus dominicanus* collected by W.J.M. Vestjens in 1962. In the Australian National Insect Collection there is a slide bearing identical data which we have examined and identified as *Saemundssonia (S.) lari*.

20. Harrison (1937: 22) recorded *Philopterus melanocephalus* from *Sterna vittata bethunei* (as *Sterna* sp.) based on a series collected by H. Hamilton in 1912. No specimen of that series has been located despite intensive search by the Australian
Museum staff, but we are confident that they were *Saemundssonia (S.) lockleyi*, the species of *Saemundssonia* regularly found on *Sterna vittata bethunei* (see Pilgrim and Palma 1982: 23; Palma and Barker 1996: 223). Watson (1967: 74) listed the same material as *Saemundssonia* sp. Further collections have confirmed the presence of *Saemundssonia (S.) lockleyi* on *Sterna vittata bethunei* from Macquarie Island.

21. Watson (1967: 74) recorded *Saemundssonia* sp. from *Catharacta skua lonnbergi* collected by W.J.M. Vestjens in 1962. In the Australian National Insect Collection there are specimens with identical data which we have examined and identified as *Saemundssonia (S.) euryrhyncha*.

22. Harrison (1937: 21) recorded *Philopterus limosae* from *Calidris canutus* (as “an undetermined Limicoline”) based on a single male collected by H. Hamilton in 1913. That male has not been located despite intensive search by the Australian Museum staff. Watson (1967: 74) listed the same record as *Saemundssonia* sp. Considering our poor knowledge on *Saemundssonia* from *Calidris canutus*, we prefer to leave this record at the generic level only (see also Pilgrim and Palma 1982: 21, 31).

23. Watson (1967: 74) recorded *Saemundssonia* sp. from *Pterodroma lessonii* collected by ANARE in 1949. Although we have not been able to examine that sample or any other from Macquarie Island, numerous further collections of *Saemundssonia* from *Pterodroma lessonii* in many localities, belong to the species *Saemundssonia (Puffinoecus) enderleini* (Eichler, 1949).

24. Harrison (1937: 37) recorded *Giebelia hexakon* from *Pachyptila desolata banksi* (as “Prion sp., ?vittatus”) based on a female and a nymph collected by H. Hamilton in 1912. Those specimens have not been located despite intensive search by the Australian Museum staff. Kéler (1952: 205) mentioned Harrison’s record without further comment, and Watson (1967: 74) listed the same record as *Trabeculus* sp. No species of *Pachyptila* is known to be a regular host to any species of *Trabeculus* (see Pilgrim and Palma 1982: 10, 11; Palma and Barker 1996: 343). Hence, we consider this record as the result of natural or human contamination, as well as an unidentifiable species.

25. Harrison (1937: 13) recorded *Menopon* sp. from *Diomedea exulans* and from *Pachyptila desolata banksi* (as “Prion vittatus”) based on 2 immature specimens collected in 1913 and 1912 respectively. Those specimens have not been located despite intensive search by the Australian Museum staff. Based on the louse species known from these 2 hosts (see Pilgrim and Palma 1982: 5, 10), we can assume that they were nymphs of *Austromenopon* but, in the absence of the actual material, we prefer to leave these records at the generic level only.

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