

A N A R E R E S E A R C H N O T E S 1 4 8

The lice (*Insecta: Phthiraptera*) from Macquarie Island

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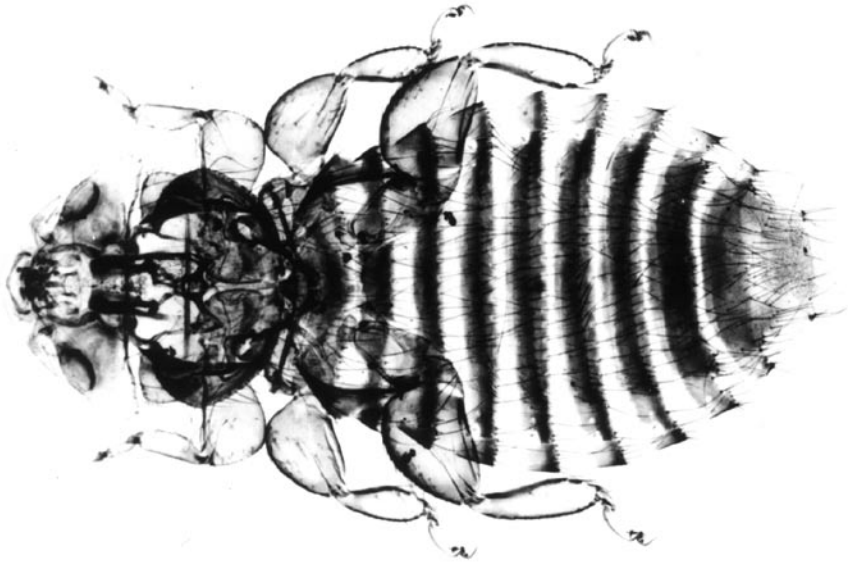
Abstract

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-lice associations is given.

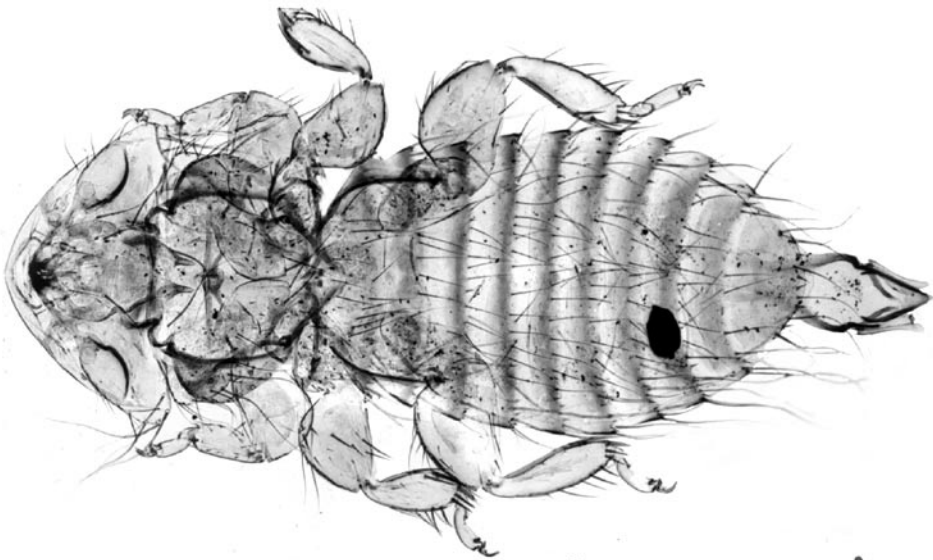
Introduction

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.

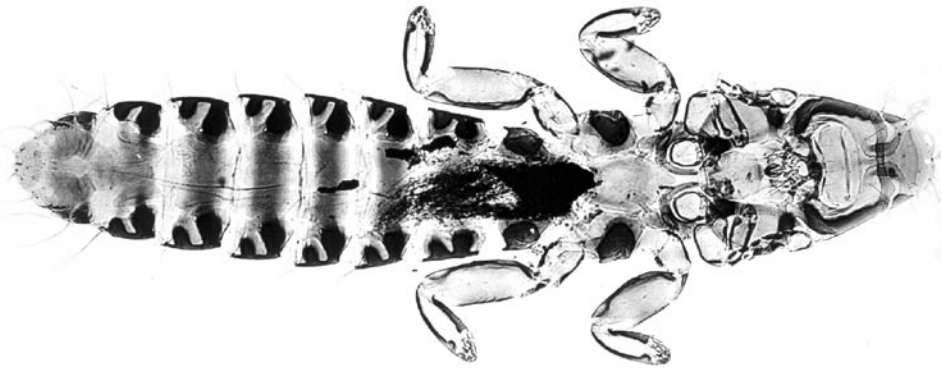
The next record of lice from the British, Australia and New Zealand Antarctic Research Expedition (BANZARE) shows that specimens were collected at least on 23 October 1929 and 4 December 1930. There was a gap of collecting until the Macquarie Island station was established by the Australian Antarctic 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 struthus*” 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 struthus: Watson, 1967: 71

Austrogoniodes waterstoni: Watson, 1967: 71

Austrogoniodes cristati: Clay, 1967: 154

Austrogoniodes ? *struthus*: Clay, 1967: 154

Austrogoniodes cristati: Clay and Moreby, 1970: 216

Austrogoniodes struthus: Clay and Moreby, 1970: 216

Austrogoniodes cristati: Gressitt, 1970: 327

Austrogoniodes ? *struthus*: Gressitt, 1970: 327

Austrogoniodes waterstoni: Gressitt, 1970: 327

Austrogoniodes cristati: Wise, 1977: 59

Austrogoniodes struthus: Wise, 1977: 59

Austrogoniodes waterstoni (in part): Wise, 1977: 59

Austrogoniodes cristati: Palma and Barker, 1996: 15

Hosts: *Eudypetes chrysolophus schlegeli*; *Eudypetes chrysocome filholi*; *Eudypetes sclateri*.

***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: *Eudypetes chrysolophus schlegeli*; *Eudypetes chrysocome filholi*; *Eudypetes 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: *Eudypetes chrysolophus schlegeli*; *Eudypetes chrysocome filholi*; *Eudypetes 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: *Diomedea 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 turtur (in part): Wise, 1977: 61

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

Naubates heteroproctus (in part): Wise, 1977: 62

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 heteroproctus (in part): Watson, 1967: 72 [Note 13]

“*Naubates fuliginosus*” Clay and Moreby, 1970: 217 [Note 14]

Naubates heteroproctus: Clay and Moreby, 1970: 218 [Note 13]

Naubates fuliginosus: Gressitt, 1970: 327

Naubates heteroproctus (in part): Gressitt, 1970: 328 [Note 13]

Naubates fuliginosus: Wise, 1977: 62

Naubates heteroproctus (in part): Wise, 1977: 62 [Note 13]

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 sp.: Lowry et al, 1978: 137, 138
Nesiotinus demersus: Pilgrim and Palma, 1982: 4
Nesiotinus demersus: Palma and Barker, 1996: 195
Host: *Aptenodytes patagonicus*.

Genus ***Paraclisis*** Timmermann, 1965

***Paraclisis diomedae* (J.C. Fabricius, 1775)**

Pediculus diomedae J.C. Fabricius, 1775: 808
Perineus diomedae: Watson, 1967: 73
Paraclisis diomedae: Clay and Moreby, 1970: 217
Paraclisis diomedae: Gressitt, 1970: 328
Paraclisis diomedae: Wise, 1977: 62
Paraclisis diomedae: 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: *Pelecanooides urinatrix exsul*.

Genus ***Perineus*** Thompson, 1936

***Perineus circumfasciatus* Kéler, 1957**

"*Perineus concinnus*" Harrison, 1937: 29

Perineus circumfasciatus Kéler, 1957: 525

Perineus circumfasciatus: Watson, 1967: 73

Perineus sp.: Watson, 1967: 73

Perineus circumfasciatus (in part): Gressitt, 1970: 328

Perineus circumfasciatus (in part): Wise, 1977: 63

Perineus concinnus: Wise, 1977: 63

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 sp. (Nymph): Watson, 1967: 73

"*Perineus circumfasciatus*" Clay and Moreby, 1970: 217

Perineus circumfasciatus (in part): Gressitt, 1970: 328

Perineus circumfasciatus (in part): Wise, 1977: 63

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: Watson, 1967: 73

Pseudonirmus gurlti: Gressitt, 1970: 328

Pseudonirmus gurlti: Wise, 1977: 63

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 **Quadriceps** Clay and Meinertzhagen, 1939

Quadriceps houri Hopkins, 1949

Quadriceps houri Hopkins, 1949: 52

Quadriceps houri: Palma and Barker, 1996: 212

Host: *Sterna vittata bethunei*.

Quadriceps ornatus fuscolaminulatus (Enderlein, 1908)

Ricinus fuscolaminulatus Enderlein, 1908: 447

Quadriceps ornatus fuscolaminulatus: Clay and Moreby, 1970: 220

Quadriceps ornatus fuscolaminulatus: Gressitt, 1970: 328

Quadriceps ornatus fuscolaminulatus: Wise, 1977: 64

Quadriceps 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 **Saemundssonina** Timmermann, 1936

***Saemundssonina (Saemundssonina) antarctica (Wood, 1937)**

Philopterus antarcticus Wood, 1937: 22

Saemundssonina (Saemundssonina) antarctica: Pilgrim and Palma, 1994: 242

Saemundssonina (Saemundssonina) antarctica: Palma and Barker, 1996: 219

Hosts: *Thalassoica antarctica*; *Fulmarus glacialis* [Note 16].

***Saemundssonina (Saemundssonina) bicolor (Rudow, 1870)**

Docophorus bicolor Rudow, 1870: 459

Saemundssonina sp.: Lowry et al, 1978: 139

Saemundssonina (Saemundssonina) bicolor: Palma and Barker, 1996: 219

Hosts: *Fulmarus glacialis*; *Thalassoica antarctica* [Note 17].

Saemundssonina (Saemundssonina) euryrhyncha (Giebel, 1874)

Docophorus euryrhynchus Giebel, 1874: 112

Saemundssonina stresemanni: Watson, 1967: 74

Saemundssonina sp. (ex Catharacta skua lonnbergi): Watson, 1967: 74 [Note 21]

Saemundssonina stresemanni: Gressitt, 1970: 329

Saemundssonina stresemanni: Wise, 1977: 65

Saemundssonina (Saemundssonina) stresemanni: Palma and Barker, 1996: 225

Saemundssonina (Saemundssonina) euryrhyncha: Palma, 2000: 124

Host: *Catharacta skua lonnbergi*

***Saemundssonina (Saemundssonina) lari* (O. Fabricius, 1780)**

Pediculus lari O. Fabricius, 1780: 219

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

Saemundssonina lari: Watson, 1967: 74

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

Saemundssonina lari: Gressitt, 1970: 329

Saemundssonina lari gonothorax: Wise, 1977: 65

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

Host: *Larus dominicanus*.

***Saemundssonina (Saemundssonina) lockleyi* Clay, 1949**

Saemundssonina lockleyi Clay, 1949: 11

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

Saemundssonina sp. (ex Sterna vittata bethunei): Watson, 1967: 74 [Note 20]

Saemundssonina melanocephalus: Wise, 1977: 65

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

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

Host: *Sterna vittata bethunei*.

***Saemundssonina (Saemundssonina) pterodromae* Timmermann, 1959**

Saemundssonina pterodromae Timmermann, 1959: 153

Saemundssonina pterodromae: Clay and Moreby, 1970: 217

Saemundssonina pterodromae: Gressitt, 1970: 328

Saemundssonina pterodromae: Wise, 1977: 65

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

Host: *Halobaena caerulea*.

Saemundssonina (Saemundssonina) sp.

Philopterus limosae Harrison, 1937: 21 [Note 22]

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

Saemundssonina limosae (in part): Wise, 1977: 65

Host: *Calidris canutus canutus*.

Saemundssonina (Puffinoecus) sp.

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

Saemundssonina sp.: Clay and Moreby, 1970: 218

Saemundssonina sp.: Gressitt, 1970: 329

Host: *Pterodroma lessonii*.

Genus ***Trabeculus*** Rudow, 1866

Trabeculus hexakon (Waterston, 1914) sensu lato

Giebelia hexakon Waterston, 1914: 291

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

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

Trabeculus hexakon [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 ***Antarctophthirus*** Enderlein, 1906

Antarctophthirus ogmorhini Enderlein, 1906

Antarctophthirus ogmorhini Enderlein, 1906: 662
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

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-lice 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** **grey petrel**
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 gurlti* (Taschenberg, 1882)
- Thalassoica antarctica* (Gmelin, 1789)** **Antarctic petrel**
* *Pseudonirmus* sp.
* *Saemundssonina (Saemundssonina) antarctica* (Wood, 1937)
* *Saemundssonina (Saemundssonina) bicolor* (Rudow, 1870) [straggler]
- Fulmarus glacialisoides* (Smith, 1840)** **Antarctic fulmar**
* *Austromenopon brevifimbriatum* (Piaget, 1880)
* *Perineus nigrolimbatus* (Giebel, 1874)
* *Saemundssonina (Saemundssonina) bicolor* (Rudow, 1870)
* *Saemundssonina (Saemundssonina) 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)
Saemundssonina (Saemundssonina) pterodromae Timmermann, 1959
- Pterodroma lessonii* (Garnot, 1826)** **white-headed petrel**
Halipeurus (Halipeurus) procellariae (J.C. Fabricius, 1775)
Naubates pterodromi Bedford, 1930 *sensu lato*
Saemundssonina (Puffinoecus) sp.
Trabeculus schillingi Rudow, 1866
Naubates heteroproctus Harrison, 1937 [straggler]

Order Sphenisciformes

- Aptenodytes patagonicus* Miller, 1778** king penguin
Nesiotinus demersus Kellogg, 1903
- Pygoscelis papua papua* (Forster, 1781)** northern gentoo penguin
Naubates prioni (Enderlein, 1908) [straggler]
- Eudyptes chrysocome filholi* Hutton, 1879** eastern rockhopper penguin
Austrogoniodes cristati Kéler, 1952
Austrogoniodes hamiltoni Harrison, 1937
Austrogoniodes macquariensis Harrison, 1937
- Eudyptes chrysolophus schlegeli* Finsch, 1876** royal penguin
Austrogoniodes cristati Kéler, 1952
Austrogoniodes hamiltoni Harrison, 1937
Austrogoniodes macquariensis Harrison, 1937
- Eudyptes robustus* Oliver, 1953** Snares crested penguin
* *Austrogoniodes macquariensis* Harrison, 1937 [straggler]
* *Austrogoniodes hamiltoni* Harrison, 1937 [straggler]
- Eudyptes sclateri* Buller, 1888** erect-crested penguin
* *Austrogoniodes cristati* Kéler, 1952

Order Pelecaniformes

- Leucocarbo atriceps purpurascens* (Brandt, 1837)** Macquarie Island shag
Pectinopygus turbinatus (Piaget, 1890)

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
* *Saemundssonina* (*Saemundssonina*) sp.
- Catharacta skua lonnbergi* Mathews, 1912** Subantarctic skua
Austromenopon fuscofasciatum (Piaget, 1880)
Haffneria grandis (Piaget, 1880)
Saemundssonina (*Saemundssonina*) *euryrhyncha* (Giebel, 1874)
- Larus dominicanus* Lichtenstein, 1823** southern black-backed gull
Actornithophilus piceus lari (Packard, 1870)
Quadraceps ornatus fuscolaminulatus (Enderlein, 1908)

Saemundssonina (Saemundssonina) lari (O. Fabricius, 1780)

Naubates prioni (Enderlein, 1908) [straggler]

***Sterna vittata bethunei* Buller, 1896** New Zealand Antarctic tern

Quadriceps houri Hopkins, 1949

Saemundssonina (Saemundssonina) lockleyi Clay, 1949

Class Mammalia

Order Pinnipedia

***Hydrurga leptonyx* (de Blainville, 1820)** leopard seal

Antarctophthirus ogmorhini Enderlein, 1906

***Mirounga leonina* (Linnaeus, 1758)** southern elephant seal

Lepidophthirus macrorhini Enderlein, 1904

Order Artiodactyla

***Ovis aries* Linnaeus, 1758** sheep

Bovicola (Bovicola) ovis (Schrank, 1781)

Order Rodentia

***Rattus rattus* (Linnaeus, 1758)** black rat

Polyplax spinulosa (Burmeister, 1839)

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-lice 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 straggling 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 *Eudypetes 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 *Eudypetes 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 *Eudypetes robustus* in Watson (1967: 71, as *Eudypetes 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 *Saemundssonina (S.) antarctica*.
17. We regard the single male *Saemundssonina (S.) bicolor* 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 *Saemundssonina* from *Larus dominicanus* which Harrison (1937: 21) recorded as *Philoaterus gonothorax*. We have examined and identified them as *Saemundssonina (S.) lari*, a name we regard as a senior synonym of *Philoaterus gonothorax*, as published by Ledger (1980: 139).
19. Watson (1967: 74) recorded *Saemundssonina* 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 *Saemundssonina (S.) lari*.
20. Harrison (1937: 22) recorded *Philoaterus 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 *Saemundssonina* (*S.*) *lockleyi*, the species of *Saemundssonina* 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 *Saemundssonina* sp. Further collections have confirmed the presence of *Saemundssonina* (*S.*) *lockleyi* on *Sterna vittata bethunei* from Macquarie Island.

21. Watson (1967: 74) recorded *Saemundssonina* 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 *Saemundssonina* (*S.*) *euryrhyncha*.
22. Harrison (1937: 21) recorded *Philoaterus limosae* from *Calidris canutus* (as “an undetermined *Limicolina*”) 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 *Saemundssonina* sp. Considering our poor knowledge on *Saemundssonina* 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 *Saemundssonina* 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 *Saemundssonina* from *Pterodroma lessonii* in many localities, belong to the species *Saemundssonina* (*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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