

**A LIST OF THE CHEWING LICE
(INSECTA: MALLOPHAGA)
FROM BIRDS IN NEW ZEALAND**

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ABSTRACT

Authenticated records of chewing (feather) lice, largely from unpublished observations, are listed from birds in the New Zealand zoogeographic subregion, including the Ross Dependency in Antarctica. From a total of 388 host taxa (including 38 introductions), lice are reported from 250 hosts (including 27 introductions). These records comprise 267 lice species and subspecies; a further 138 records are listed at generic level only, but all these do not necessarily represent separate species. Although some bird groups have been collected from frequently, there are many gaps in our knowledge, even for these hosts. With some orders (e.g. Passeriformes) and families of birds, little or no attention has been paid to their ectoparasites. An appeal is made for assistance in building up collections.

INTRODUCTION

The New Zealand bird fauna is broadly characterised by the endemic order Apterygiformes and, in comparison with other faunas, the exceptionally high proportion of taxa in the orders Procellariiformes and Sphenisciformes and in the family Phalacrocoracidae (Pelecaniformes) (Pilgrim, 1980). Since the genera of chewing (feather) lice are, in general terms, associated with particular groups of hosts, the louse fauna shows correspondingly a disproportionate representation of lice on the foregoing host groups. The louse genus *Apterygon*, which is found on all members of the Apterygiformes, is the sole endemic genus.

Some endemic genera of host birds, such as *Notornis*, *Strigops*, *Nestor*, *Cyanoramphus*, *Hymenolaimus*, have lice peculiar to them; the latter constitute one of the major characteristics distinguishing the New Zealand louse fauna from those of other regions. Among some orders, e.g. Anseriformes and Charadriiformes, many host species have a wide distribution in one or both hemispheres and their lice are thus common to many countries. However, on endemic hosts within these orders the lice may also be endemic: Martens & Palma (1981) showed that *Quadraceps cedemajori*, *Q. novaeseelandiae* and *Q. dominella* are confined to New Zealand endemic plovers.

Lice from Passeriformes are inadequately known in New Zealand, even from introduced birds. Some native hosts in this order carry lice which are referable to widespread passerine louse genera such as *Menacanthus*, *Myrsidea*, *Brueelia*, *Philopterus*, but undescribed species are probably present.

The phylogenetic relations of lice often parallel those of their hosts and may help both to elucidate the relationships of the hosts and to distinguish closely related host taxa which are otherwise poorly defined. Only those lice which are positively established on a host can be considered in such interpretations. A louse taxon can be regarded as positively established on a certain host taxon when both taxa have been found associated on several occasions. Secondary infestations may result in well-established parasite species, but they often occur on hosts which are

clearly only distantly related and cannot then be used as evidence of host phylogeny. Outstanding examples of secondary infestations include a louse species belonging in a penguin-loose genus (*Austrogoniodes*) but parasitising a duck in Australia (Clay, 1971a), and a louse genus belonging in a marsupial-loose family (Boopidae) but established on the cassowary in Papua (Clay, 1971b). Less obvious and therefore more difficult to interpret is the genus *Rallicola*, which parasitises all species and subspecies of kiwis, as well as several other avian orders including the Gruiformes (Clay, 1953).

Wise (1977) compiled a list of the Mallophaga from the New Zealand subregion, including only those species which had been previously published. Lists of lice from limited areas within the subregion have been published by Clay, 1964 (Campbell Island); Clay & Moreby, 1970 (Macquarie Island); Horning, Palma & Pilgrim, 1980 (Snares Islands); Watson, 1967 (Macquarie Island); and Watt, 1971 (Kermadec Islands). Our aim is to provide a preliminary checklist of the lice known to occur on birds in the New Zealand subregion, incorporating numerous unpublished observations made on collections which have become available to us. The area defined in this survey is that shown in the 1970 *Checklist* of the Ornithological Society of New Zealand (maps 1-2, including Macquarie Island). The numbers in the list and the names of the hosts are those used in the *Checklist* as amended and added to in the Ornithological Society of New Zealand's *Amendments and Additions* (1980).

We include only those lice species of which we have seen specimens (except where noted). Unconfirmed literature reports, misidentifications, junior synonyms, stragglers and contaminants (see below) have been excluded. In all cases the list includes records only from hosts taken within the subregion. Explanatory notes, referred to in square brackets, have been added when more detailed explanations are necessary; the notes appear after the list.

Wherever lice are recorded in this paper as a generic name followed by "sp", it means either that we have had insufficient material or opportunity to compare our specimens with the types or other authenticated specimens, or that the genus requires revision (e.g. *Ancistrona*, *Longimenopon*). Sometimes, new species are almost certainly involved, and these will be the subject of future papers.

The abbreviation *s. l.* (= *sensu lato*) is used to denote populations with a range of measurement and morphological variation at present considered different from the named species but not sufficiently distinct to warrant the erection of separate taxa.

The two following categories of reports are deliberately excluded from the list:

1. *Stragglers*: Lice which are found occasionally on a bird but which appear not to be regular parasites of that host, even though the occurrence is from field collecting. For example, predatory birds may, at least temporarily, acquire lice from their prey, and birds breeding on the ground may become infested by lice from other species breeding nearby.
2. *Contaminants*: Lice which have transferred to a bird through careless handling and contact with another host species or even through placing the bird in a bag, on a museum tray, etc., previously occupied by another host species. We can vouch for a recent instance in which an Erect-crested Penguin yielded several lice of two species characteristic of the Pukeko — inquiries revealed that the penguin had in fact been caged overnight with a Pukeko! This is an accident arising from careless mishandling and is a situation to be rigorously avoided.

Many birds have been omitted from the list because they are not known to have had lice collected from them in the subregion; we expect that lice will be found on most when opportunities for examining them arise. As well, even for the hosts that are included, we do not suggest that the list of lice be regarded as complete since in many cases further lice species are known to occur on the hosts in other parts of the world.

In New Zealand, the major collections of bird lice are located in the Entomology Division, DSIR, Auckland; the National Museum of New Zealand, Wellington; and the "R.L.C. Pilgrim Collection" housed in the Department of Zoology, University of Canterbury, Christchurch (ultimately to be deposited in the National Museum of New Zealand). Smaller, less comprehensive collections are maintained at several other museums and by Government departments.

We hope that this paper will draw attention to our interest in this group and will encourage ornithologists to collaborate with us in obtaining specimens, leading to a fuller representation of the mallophagan fauna. Suggestions for collecting lice are given in Appendix 1.

This paper includes literature reports and hitherto unpublished identifications up to December 1981.

LIST OF BIRDS AND THEIR LICE

(*denotes a host introduced to New Zealand by human agency)

Order **APTERYGIFORMES**

Family **APTERYGIDAE**

- | | | |
|------|---|----------------------------------|
| 1.a. | <i>Apteryx australis mantelli</i> Bartlett, 1850
<i>Apterygon mirum</i> Clay, 1961 [Note 1]
<i>Rallicola (Aptericola)</i> sp. [Note 2] | North Island Brown Kiwi |
| 1.b. | <i>Apteryx australis australis</i> Shaw & Nodder, 1813
<i>Apterygon dumosum</i> Tandan, 1972 <i>s. l.</i>
<i>Apterygon</i> sp.
<i>Rallicola (Aptericola) gadowi</i> Harrison, 1915 | South Island Brown Kiwi |
| 1.c. | <i>Apteryx australis lawryi</i> Rothschild, 1893
<i>Apterygon dumosum</i> Tandan, 1972
<i>Rallicola (Aptericola) gadowi</i> Harrison, 1915 <i>s. l.</i> | Stewart Island Brown Kiwi |
| 2. | <i>Apteryx owenii</i> Gould, 1847
<i>Apterygon dumosum</i> Tandan, 1972 <i>s. l.</i>
<i>Rallicola (Aptericola) gadowi</i> Harrison, 1915 <i>s. l.</i>
<i>Rallicola (Aptericola) pilgrimi</i> Clay, 1972 | Little Spotted Kiwi |
| 3. | <i>Apteryx haastii</i> Potts, 1872
<i>Apterygon hintoni</i> Clay, 1966
<i>Rallicola (Aptericola) gracilentus</i> Clay, 1953 | Great Spotted Kiwi |

Order SPHENISCIFORMES
Family SPHENISCIDAE

- | | | |
|-------|--|-----------------------------|
| 4. | Aptenodytes forsteri Gray, 1844
<i>Austrogoniodes mawsoni</i> Harrison, 1937 | Emperor Penguin |
| 5. | Aptenodytes patagonicus Miller, 1778
<i>Nesiotinus demersus</i> Kellogg, 1903 | King Penguin |
| 6. | Megadyptes antipodes (Hombron & Jacquinot, 1841)
<i>Austrogoniodes concii</i> (Kéler, 1952) <i>s. l.</i>
<i>Austrogoniodes</i> sp. | Yellow-eyed Penguin |
| 7. | Pygoscelis adeliae (Hombron & Jacquinot, 1841)
<i>Austrogoniodes antarcticus</i> Harrison, 1937 | Adelie Penguin |
| 10.a. | Eudyptula minor iredalei Mathews, 1911
<i>Austrogoniodes waterstoni</i> (Cummings, 1914) | Northern Blue Penguin |
| 10.b. | Eudyptula minor variabilis Kinsky & Falla, 1976
<i>Austrogoniodes waterstoni</i> (Cummings, 1914) | Cook Strait Blue Penguin |
| 10.c. | Eudyptula minor albosignata Finsch, 1874
<i>Austrogoniodes waterstoni</i> (Cummings, 1914) | White-flipped Blue Penguin |
| 10.d. | Eudyptula minor minor (Forster, 1781)
<i>Austrogoniodes waterstoni</i> (Cummings, 1914) | Southern Blue Penguin |
| 10.e. | Eudyptula minor chathamensis Kinsky & Falla, 1976
<i>Austrogoniodes waterstoni</i> (Cummings, 1914) | Chatham Island Blue Penguin |
| 12.a. | Eudyptes chrysocome chrysocome (Forster, 1781) [Note 3]
<i>Austrogoniodes cristati</i> Kéler, 1952
<i>Austrogoniodes hamiltoni</i> Harrison, 1937
<i>Austrogoniodes macquariensis</i> Harrison, 1937 | Rockhopper Penguin |
| 13.a. | Eudyptes chrysolophus chrysolophus Brandt, 1837
<i>Austrogoniodes cristati</i> Kéler, 1952
<i>Austrogoniodes macquariensis</i> Harrison, 1937 <i>s. l.</i>
<i>Austrogoniodes</i> sp. | Macaroni Penguin |
| 13.b. | Eudyptes chrysolophus schlegeli Finsch, 1876
<i>Austrogoniodes cristati</i> Kéler, 1952
<i>Austrogoniodes hamiltoni</i> Harrison, 1937
<i>Austrogoniodes macquariensis</i> Harrison, 1937 | Royal Penguin |
| 14. | Eudyptes pachyrhynchus Gray, 1845 [Note 4]
<i>Austrogoniodes concii</i> (Kéler, 1952) <i>s. l.</i>
<i>Austrogoniodes cristati</i> Kéler, 1952 | Fiordland Crested Penguin |

- 14.1 **Eudyptes robustus** Oliver, 1953 [Note 5] **Snares Crested Penguin**
Austrogoniodes concii (Kéler, 1952) s. l.
Austrogoniodes cristati Kéler, 1952
- 14.2 **Eudyptes sclateri** Buller, 1888 [Note 6] **Erect-crested Penguin**
Austrogoniodes concii (Kéler, 1952) s. l.
Austrogoniodes cristati Kéler, 1952
Austrogoniodes hamiltoni Harrison, 1937 [Note 7]
Austrogoniodes strutheus Harrison, 1915 [Note 7]

Order **PODICIPEDIFORMES**
Family **PODICIPEDIDAE**

15. **Podiceps cristatus australis** Gould, 1844 **Southern Crested Grebe**
Aquanirmus sp.
16. **Podiceps rufopectus** Gray, 1843 **New Zealand Dabchick**
Aquanirmus australis Kettle, 1974

Order **PROCELLARIIFORMES**
Family **DIOMEDEIDAE**

- 18.a. **Diomedea exulans exulans** Linnaeus, 1758 **Wandering Albatross**
Austromenopon affine (Piaget, 1890)
Docophoroides brevis (Dufour, 1835)
Episbates pederiformis (Dufour, 1835)
Harrisoniella hopkinsi Eichler, 1952
Paraclisis hyalina (Neumann, 1911)
- 18.b. **Diomedea exulans chionoptera** Salvin, 1895 [Note 8] **Snowy Albatross**
Austromenopon affine (Piaget, 1890)
Docophoroides brevis (Dufour, 1835)
Harrisoniella hopkinsi Eichler, 1952
Paraclisis hyalina (Neumann, 1911)
Perineus concinnoides Kéler, 1957
- 19.a. **Diomedea epomophora sanfordi** (Murphy, 1917) **Northern Royal Albatross**
Austromenopon affine (Piaget, 1890)
Docophoroides brevis (Dufour, 1835)
Episbates pederiformis (Dufour, 1835)
Harrisoniella hopkinsi Eichler, 1952
Paraclisis hyalina (Neumann, 1911)
- 19.b. **Diomedea epomophora epomophora** Lesson, 1825 **Southern Royal Albatross**
Austromenopon affine (Piaget, 1890)
Docophoroides brevis (Dufour, 1835)
Episbates pederiformis (Dufour, 1835)
Harrisoniella hopkinsi Eichler, 1952
Paraclisis hyalina (Neumann, 1911)
Perineus concinnoides Kéler, 1957

- 20.a. **Diomedea melanophrys melanophrys** Temminck, 1828 **Black-browed Mollymawk**
Austromenopon navigans (Kellogg, 1896)
Docophoroides harrisoni Waterston, 1917
Docophoroides simplex (Waterston, 1914)
Harrisoniella ferox (Giebel, 1867)
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
- 20.b. **Diomedea melanophrys impavida** Mathews, 1912 **New Zealand Black-browed Mollymawk**
Austromenopon pinguis (Kellogg, 1896)
Docophoroides simplex (Waterston, 1914)
Harrisoniella ferox (Giebel, 1867)
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
Saemundssonina sp.
21. **Diomedea chrysostoma** Forster, 1785 **Grey-headed Mollymawk**
Austromenopon navigans (Kellogg, 1896)
Austromenopon pinguis (Kellogg, 1896)
Docophoroides simplex (Waterston, 1914) *s. l.*
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
Saemundssonina sp.
22. **Diomedea chlororhynchus** Gmelin, 1789 **Yellow-nosed Mollymawk**
Perineus circumfasciatus Kéler, 1957
23. **Diomedea bulleri** Rothschild, 1893 **Buller's Mollymawk**
Austromenopon bulleri Price & Clay, 1972
Austromenopon navigans (Kellogg, 1896)
Austromenopon pinguis (Kellogg, 1896)
Docophoroides harrisoni Waterston, 1917
Harrisoniella ferox (Giebel, 1867)
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
- 24.a. **Diomedea cauta cauta** Gould, 1841 **White-capped Mollymawk**
Austromenopon navigans (Kellogg, 1896)
Austromenopon pinguis (Kellogg, 1896)
Docophoroides harrisoni Waterston, 1917
Harrisoniella ferox (Giebel, 1867)
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
- 24.b. **Diomedea cauta salvini** (Rothschild, 1893) **Salvin's Mollymawk**
Austromenopon navigans (Kellogg, 1896)
Austromenopon pinguis (Kellogg, 1896)
Docophoroides harrisoni Waterston, 1917
Harrisoniella ferox (Giebel, 1867)
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957

- 24.c. **Diomedea cauta eremita** (Murphy, 1930) **Chatham Island Mollymawk**
Docophoroides harrisoni Waterston, 1917
Paraclisis diomedae (J. C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
26. **Phoebetria palpebrata** (Forster, 1785) **Light-mantled Sooty Albatross**
Austromenopon pinguis (Kellogg, 1896)
Docophoroides simplex (Waterston, 1914) *s. l.*
Paraclisis diomedae (J. C. Fabricius, 1775) *s. l.*
Perineus circumfasciatus Kéler, 1957 [Note 9]
Saemundssonina sp.

Family PROCELLARIIDAE

27. **Macronectes halli** Mathews, 1912 **Northern Giant Petrel**
Austromenopon ossifragae (Eichler, 1949)
Docophoroides murphyi (Kellogg, 1914)
Paraclisis obscura (Rudow, 1869)
Perineus sp.
Saemundssonina gaini (Neumann, 1913)
- 27.1 **Macronectes giganteus** (Gmelin, 1789) **Southern Giant Petrel**
Austromenopon ossifragae (Eichler, 1949)
Docophoroides murphyi (Kellogg, 1914)
Paraclisis miriceps (Kellogg & Kuwana, 1902) *s. l.*
Paraclisis obscura (Rudow, 1869)
Perineus sp.
Saemundssonina gaini (Neumann, 1913)
28. **Fulmarus glacialisoides** (Smith, 1840) **Antarctic Fulmar**
Ancistrona sp.
Austromenopon brevifimbriatum (Piaget, 1880)
Perineus nigrolimbatus (Giebel, 1874)
Saemundssonina bicolor (Rudow, 1870)
29. **Thalassoica antarctica** (Gmelin, 1789) **Antarctic Petrel**
Ancistrona sp.
Austromenopon brevifimbriatum (Piaget, 1880)
Pseudonirmus lugubris (Taschenberg, 1882)
Saemundssonina antarctica (Wood, 1937)
- 30.a. **Daption capense australe** Mathews, 1913 **Snares Cape Pigeon**
Ancistrona sp.
Pseudonirmus gurtli (Taschenberg, 1882)
Saemundssonina stammeri Timmermann, 1959
- 30.b. **Daption capense capense** (Linnaeus, 1758) **Cape Pigeon**
Ancistrona sp.
Austromenopon brevifimbriatum (Piaget, 1880)
Pseudonirmus gurtli (Taschenberg, 1882)
Saemundssonina stammeri Timmerman, 1959

- 31.a. **Pagodroma nivea nivea** (Forster, 1777) **Lesser Snow Petrel**
Pseudonirmus charcoti (Neumann, 1907)
Saemundssonina antarctica (Wood, 1937)
- 31.b. **Pagodroma nivea major** Bonaparte, 1856 **Greater Snow Petrel**
Pseudonirmus charcoti (Neumann, 1907)
32. **Pterodroma macroptera gouldi** (Hutton, 1869) **Grey-faced Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) procellariae (J. C. Fabricius, 1775)
Naubates heteroproctus Harrison, 1937 [Note 10]
Trabeculus schillingi Rudow, 1866 *s. l.*
33. **Pterodroma lessonii** (Garnot, 1826) **White-headed Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) procellariae (J. C. Fabricius, 1775)
Naubates sp. [Note 11]
Saemundssonina sp.
Trabeculus schillingi Rudow, 1866 *s. l.*
- 34.a. **Pterodroma externa cervicalis** (Salvin, 1891) **White-naped Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) noctivagus Timmermann, 1960
Trabeculus sp.
- 34.b. **Pterodroma externa externa** (Salvin, 1875) **Juan Fernandez Petrel**
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) kermadecensis (Johnston & Harrison, 1912) *s. l.*
Trabeculus hexakon (Waterston, 1914) *s. l.*
37. **Pterodroma inexpectata** (Forster, 1844) **Mottled Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Austromenopon sp.
Halipeurus (Halipeurus) consimilis Timmermann, 1960
Longimenopon sp.
Naubates pterodromi Bedford, 1930 [Note 12]
Trabeculus schillingi Rudow, 1866 *s. l.*
- 37.1 **Pterodroma mollis mollis** (Gould, 1844) **Soft-plumaged Petrel**
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) procellariae (J. C. Fabricius, 1775) *s. l.*
Trabeculus schillingi Rudow, 1866
38. **Pterodroma brevirostris** (Lesson, 1831) **Kerguelen Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890) *s. l.*
Bedfordiella unica Thompson, 1937
Saemundssonina pterodromae Timmermann, 1959

39. **Pterodroma neglecta** (Schlegel, 1863) **Kermadec Petrel**
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) kermadecensis (Johnston & Harrison, 1912)
Longimenopon sp.
Trabeculus fusco-clypeatus (Johnston & Harrison, 1912)
40. **Pterodroma magentae** (Giglioli & Salvadori, 1868) **Chatham Island Taiko**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890) *s. l.*
Halipeurus (Halipeurus) procellariae (J. C. Fabricius, 1775)
41. **Pterodroma longirostris** (Stejneger, 1888) **Stejneger's Petrel**
Ancistrona sp.
Halipeurus (Halipeurus) leucophryna Timmermann, 1960
Longimenopon sp.
Trabeculus hexakon (Waterston, 1914) *s. l.*
42. **Pterodroma pycrofti** Falla, 1933 **Pycroft's Petrel**
Austromenopon popellus (Piaget, 1890)
Halipeurus (Halipeurus) leucophryna Timmermann, 1960
Longimenopon sp.
Trabeculus hexakon (Waterston, 1914) *s. l.*
- 43.b. **Pterodroma leucoptera** subspecies
Halipeurus (Halipeurus) sp.
Naubates damma Timmermann, 1961
Trabeculus hexakon (Waterston, 1914) *s. l.*
44. **Pterodroma cookii cookii** (Gray, 1843) **Cook's Petrel**
Ancistrona sp.
Halipeurus (Halipeurus) turtur Edwards, 1961
Naubates damma Timmermann, 1961
Trabeculus hexakon (Waterston, 1914) *s. l.*
45. **Pterodroma nigripennis** (Rothschild, 1893)[Note 13] **Black-winged Petrel**
Ancistrona sp.
Austromenopon sp.
Halipeurus (Halipeurus) sp. [Note 14]
Longimenopon sp.
Trabeculus hexakon (Waterston, 1914) *s. l.*
- 45.1 **Pterodroma axillaris** (Salvin, 1893) **Chatham Island Petrel**
Halipeurus (Halipeurus) theresae Timmermann, 1969
Trabeculus hexakon (Waterston, 1914) *s. l.*
46. **Halobaena caerulea** (Gmelin, 1789) **Blue Petrel**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates clypeatus (Giebel, 1874)
Saemundsonia pterodromae Timmermann, 1959

47. **Pachyptila vittata vittata** (Forster, 1777) **Broad-billed Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
48. **Pachyptila salvini salvini** (Mathews, 1912) **Lesser Broad-billed Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
- 49.a. **Pachyptila desolata desolata** (Gmelin, 1789) [Note 15] **Antarctic Prion**
Ancistrona sp.
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
- 49.b. **Pachyptila desolata banksi** (Smith, 1840) **South Georgian Prion**
Austromenopon stammeri Timmermann, 1963
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
- 49.c. **Pachyptila desolata alter** (Mathews, 1912) **Auckland Island Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
50. **Pachyptila belcheri** (Mathews, 1912) **Narrow-billed Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
51. **Pachyptila turtur** (Kuhl, 1820) **Fairy Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
- 52.a. **Pachyptila crassirostris crassirostris** (Mathews, 1912) **Fulmar Prion**
Ancistrona sp.
Austromenopon stammeri Timmermann, 1963
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959

- 52.c. **Pachyptila crassirostris pyramidalis** Fleming, 1939 **Chatham Fulmar Prion**
Austromenopon stammeri Timmermann, 1963
Longimenopon sp.
Naubates prioni (Enderlein, 1908)
Saemundssonina desolata Timmermann, 1959
53. **Procellaria cinerea** Gmelin, 1789 [Note 16] **Grey Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Naubates fuliginosus (Taschenberg, 1882)
Trabeculus hexakon (Waterston, 1914)
54. **Procellaria parkinsoni** Gray, 1862 **Black Petrel**
Austromenopon popellus (Piaget, 1890)
Naubates fuliginosus (Taschenberg, 1882)
Trabeculus hexakon (Waterston, 1914)
55. **Procellaria westlandica** Falla, 1946 **Westland Black Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Naubates fuliginosus (Taschenberg, 1882)
Trabeculus hexakon (Waterston, 1914)
56. **Procellaria aequinoctialis steadi** Mathews, 1912 **White-chinned Petrel**
Ancistrona sp.
Austromenopon popellus (Piaget, 1890)
Naubates fuliginosus (Taschenberg, 1882)
Trabeculus hexakon (Waterston, 1914)
58. **Puffinus carneipes hullianus** Mathews, 1912 **Flesh-footed Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) gravis priapulius Timmermann, 1961
Naubates harrisoni Bedford, 1930
Saemundssonina sp.
Trabeculus hexakon (Waterston, 1914) *s. l.*
- 59.a. **Puffinus pacificus pacificus** (Gmelin, 1789) **Wedge-tailed Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) mirabilis Thompson, 1940
Naubates harrisoni Bedford, 1930
Saemundssonina puellula Timmermann, 1965
Trabeculus hexakon (Waterston, 1914) *s. l.*
- 59.b. **Puffinus pacificus cuneatus** Salvin, 1888
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) mirabilis Thompson, 1940
Trabeculus hexakon (Waterston, 1914) *s. l.*

- 59.c. **Puffinus pacificus chlororhynchus** Lesson, 1831
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) mirabilis Thompson, 1940
Trabeculus hexakon (Waterston, 1914) *s. l.*
60. **Puffinus bulleri** Salvin, 1888 **Buller's Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) thompsoni Edwards, 1961
Naubates harrisoni Bedford, 1930
61. **Puffinus griseus** (Gmelin, 1789) **Sooty Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) diversus (Kellogg, 1896)
Trabeculus hexakon (Waterston, 1914) *s. l.*
62. **Puffinus tenuirostris** (Temminck, 1835) **Short-tailed Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) diversus (Kellogg, 1896)
Trabeculus hexakon (Waterston, 1914) *s. l.*
- 62.2 **Puffinus puffinus puffinus** (Brunnich, 1764) **Manx Shearwater**
Halipeurus (Halipeurus) diversus (Kellogg, 1896)
Trabeculus aviator (Evans, 1912)
63. **Puffinus gavia gavia** (Forster, 1844) **Fluttering Shearwater**
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) spadix Timmermann, 1961
Saemundssonina sp.
64. **Puffinus huttoni** Mathews, 1912 **Hutton's Shearwater**
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) spadix Timmermann, 1961
Naubates harrisoni Bedford, 1930 *s. l.*
Trabeculus flemingi Timmermann, 1959
- 65.b. **Puffinus assimilis kermadecensis** Murphy, 1927 **Kermadec Little Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) placodus Edwards, 1961
Trabeculus mirabilis (Kellogg, 1896) *s. l.*
- 65.c. **Puffinus assimilis haurakiensis** Fleming & Serventy, 1943 **North Island Little Shearwater**
Ancistrona sp.
Austromenopon paululum (Kellogg & Chapman, 1899)
Halipeurus (Halipeurus) mundaе Edwards, 1961
Trabeculus mirabilis (Kellogg, 1896) *s. l.*

- 65.d. **Puffinus assimilis elegans** Giglioli & Salvadori, 1869
Subantarctic Little Shearwater
Halipeurus (Halipeurus) munda Edwards, 1961
Trabeculus mirabilis (Kellogg, 1896) *s. l.*

Family HYDROBATIDAE

67. **Oceanites oceanicus oceanicus** (Kuhl, 1820) **Wilson's Storm Petrel**
Philoceanus robertsi (Clay, 1940)
68. **Garrodia nereis** (Gould, 1841) **Grey-backed Storm Petrel**
Philoceanus garrodiae (Clay, 1940)
Saemundssonina nereis Timmermann, 1956
- 69.a. **Pelagodroma marina maoriana** Mathews, 1912 [Note 17]
White-faced Storm Petrel
Austromenopon enigki Timmermann, 1963
Halipeurus (Synnautes) pelagicus (Denny, 1842) *s. l.*
Longimenopon sp.
Saemundssonina marina Timmermann, 1956
- 69.b. **Pelagodroma marina albiclunis** Murphy & Irwing, 1951
Kermadec Storm Petrel
Ancistrona sp. [Note 18]
Halipeurus (Synnautes) pelagicus (Denny, 1842) *s. l.*
70. **Fregetta tropica** (Gould, 1844) **Black-bellied Storm Petrel**
Austromenopon sp.
Halipeurus (Synnautes) pelagicus (Denny, 1842) *s. l.*
Philoceanus fasciatus (Carriker, 1958)
Saemundssonina sp.
71. **Fregetta grallaria** (Vieillot, 1818) **White-bellied Storm Petrel**
Halipeurus (Synnautes) pelagicus (Denny, 1842) *s. l.*

Family PELECANOIDIDAE

- 72.a. **Pelecanoides urinatrix urinatrix** (Gmelin, 1789) **Northern Diving Petrel**
Austromenopon elliotti Timmermann, 1954
Halipeurus (Halipeurus) falsus pacificus Edwards, 1961
Pelmatocerandra setosa (Giebel, 1876)
- 72.b. **Pelecanoides urinatrix exsul** Salvin, 1896 **Subantarctic Diving Petrel**
Austromenopon elliotti Timmerman, 1954
Halipeurus (Halipeurus) falsus pacificus Edwards, 1961
Pelmatocerandra setosa (Giebel, 1876)
- 72.c. **Pelecanoides urinatrix chathamensis** Murphy & Harper, 1916
Southern Diving Petrel
Austromenopon elliotti Timmermann, 1954
Halipeurus (Halipeurus) falsus pacificus Edwards, 1961
Pelmatocerandra setosa (Giebel, 1876)

Order PELECANIFORMES
Family PHAETHONTIDAE

74. **Phaethon rubricauda roseotincta** Mathews, 1926 **Red-tailed Tropic Bird**
Austromenopon becki (Kellogg, 1906) *s. l.*
Saemundssonina hexagona (Giebel, 1874)
- 74.1 **Phaethon lepturus dorotheae** Mathews, 1913 **White-tailed Tropic Bird**
Saemundssonina upoluensis (Rudow, 1870)

Family PELECANIDAE

75. **Pelecanus conspicillatus conspicillatus** Temminck, 1824 **Australian Pelican**
Colpocephalum eucarenum Burmeister, 1838
Pectinopygus australis Thompson, 1948

Family SULIDAE

76. **Sula bassana serrator** Gray, 1843 **Australasian Gannet**
Eidmanniella pustulosa (Nitzsch, 1866)
Pectinopygus bassani (O. Fabricius, 1780)
77. **Sula leucogaster plotus** (Forster, 1844) **Brown Booby**
Eidmanniella albescens (Piaget, 1880)
Pectinopygus garbei (Pessôa & Guimarães, 1935)
78. **Sula dactylatra personata** Gould, 1846 **Masked Booby**
Pectinopygus annulatus (Piaget, 1880)

Family PHALACROCORACIDAE

79. **Phalacrocorax carbo novaehollandiae** Stephens, 1826 **Black Shag**
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus gyricornis (Denny, 1842)
80. **Phalacrocorax varius varius** (Gmelin, 1789) **Pied Shag**
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus varius Timmermann, 1964
81. **Phalacrocorax sulcirostris** (Brandt, 1837) **Little Black Shag**
Eidmanniella subrotunda (Piaget, 1880)
Pectinopygus setosus (Piaget, 1880)
82. **Phalacrocorax melanoleucos brevisrostris** Gould, 1837 **Little Shag**
Eidmanniella subrotunda (Piaget, 1880)
Pectinopygus dispar (Piaget, 1880)
- 83.a. **Leucocarbo carunculatus carunculatus** (Gmelin, 1789) **King Shag**
Pectinopygus sp.
- 83.b. **Leucocarbo carunculatus chalconotus** (Gray, 1845) **Stewart Island Shag**
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus sp.

- 83.c. **Leucocarbo carunculatus onslowi** Forbes, 1893 **Chatham Island Shag**
Pectinopygus sp.
- 84.a. **Leucocarbo campbelli ranfurlyi** Ogilvie-Grant, 1901 **Bounty Island Shag**
Pectinopygus sp.
- 84.b. **Leucocarbo campbelli colensoi** Buller, 1888 **Auckland Island Shag**
Pectinopygus carunculatus Timmermann, 1964
- 84.c. **Leucocarbo campbelli campbelli** (Filhol, 1878) **Campbell Island Shag**
Pectinopygus carunculatus Timmermann, 1964 *s. l.*
85. **Leucocarbo albiventer purpurascens** (Brandt, 1837) **Macquarie Island Shag**
Pectinopygus turbinatus (Piaget, 1890)
- 86.a. **Stictocarbo punctatus punctatus** (Sparrman, 1786) **Spotted Shag**
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus punctatus Timmermann, 1964
- 86.b. **Stictocarbo punctatus steadi** (Oliver, 1930) **Blue Shag**
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus punctatus Timmermann, 1964 *s. l.*
- 86.c. **Stictocarbo punctatus featherstoni** Buller, 1873 **Pitt Island Shag**
Pectinopygus sp.

Order **CICONIIFORMES**
Family **ARDEIDAE**

90. **Ardea novaehollandiae novaehollandiae** Latham, 1790 **White-faced Heron**
Ardeicola pilgrimi Tandan, 1972
Ciconiophilus decimfasciatus (Boisduval & Lacordaire, 1835)
92. **Egretta alba modesta** (Gray, 1831) **White Heron**
Ardeicola expallidus Blagoveshtchensky, 1940
Ciconiophilus decimfasciatus (Boisduval & Lacordaire, 1835)
93. **Egretta garzetta immaculata** Gould, 1846 **Little Egret**
Ardeicola expallidus Blagoveshtchensky, 1940
Ciconiophilus decimfasciatus (Boisduval & Lacordaire, 1835)
95. **Bubulcus ibis coromandus** (Boddaert, 1783) **Cattle Egret**
Ciconiophilus decimfasciatus (Boisduval & Lacordaire, 1835)
97. **Botaurus stellaris poiciloptilus** (Wagler, 1827) **Australasian Bittern**
Ardeicola stellaris (Denny, 1842) *s. l.*
Ciconiophilus decimfasciatus (Boisduval & Lacordaire, 1835)

Family THRESKIORNITHIDAE

99. **Plegadis falcinellus** (Linnaeus, 1758) **Glossy Ibis**
Ardeicola raphidius (Nitzsch, 1866)
Colpocephalum leptopygos Nitzsch, 1874
Ibidoecus bisignatus (Nitzsch, 1866)
Plegadiphilus plegadis (Dubinin, 1938)
100. **Threskiornis molucca** (Cuvier, 1829) **Australian White Ibis**
Ibidoecus diana Tandan, 1958
Plegadiphilus threskiornis Bedford, 1939
101. **Platalea leucorodia regia** Gould, 1838 **Royal Spoonbill**
Ardeicola plataleae (Linnaeus, 1758)
Eucolpocephalum femorale (Piaget, 1880)
Ibidoecus plataleae (Denny, 1842)

Order ANSERIFORMES

Family ANATIDAE

- *103. **Cygnus olor** (Gmelin, 1789) **Mute Swan**
Anatoecus icterodes oloris Zlotorzycza, 1970
Ornithobius bucephalus (Giebel, 1874)
- *104 **Cygnus atratus** (Latham, 1790) **Black Swan**
Anatoecus dentatus magnicornutus Zlotorzycza, 1970
Anatoecus icterodes oloris Zlotorzycza, 1970
Anatoecus sp.
Ciconiphilus pectiniventris (Harrison, 1916)
Holomenopon leucoxanthum (Burmeister, 1838)
Ornithobius fuscus Le Souëf, 1902
Trinoton nigrum Le Souëf, 1902
- *105 **Branta canadensis** (Linnaeus, 1758) **Canada Goose**
Ciconiphilus pectiniventris (Harrison, 1916)
Holomenopon leucoxanthum (Burmeister, 1838)
Ornithobius goniopleurus Denny, 1842
Trinoton querquedulae (Linnaeus, 1758) *s. l.*
107. **Tadorna variegata** (Gmelin, 1789) **Paradise Shelduck**
Anaticola magnificus Ansari, 1955
Anatoecus dentatus (Scopoli, 1763) *s. l.*
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Holomenopon tadornae (Gervais, 1844)
Trinoton querquedulae (Linnaeus, 1758) *s. l.*
- *108. **Anas platyrhynchos platyrhynchos** Linnaeus, 1758 **Mallard**
Anaticola crassicornis (Scopoli, 1763)
Anatoecus dentatus (Scopoli, 1763)
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Holomenopon leucoxanthum (Burmeister, 1838)
Trinoton querquedulae (Linnaeus, 1758) *s. l.*

109. **Anas superciliosa superciliosa** Gmelin, 1789 **Grey Duck**
Anaticola crassicornis (Scopoli, 1763) *s. l.*
Anatoecus dentatus (Scopoli, 1763) *s. l.*
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Trinoton querquedulae (Linnaeus, 1758) *s. l.*
110. **Anas gibberifrons gracilis** Buller, 1869 **Grey Teal**
Anaticola crassicornis (Scopoli, 1763) *s. l.*
Anatoecus dentatus (Scopoli, 1763) *s. l.*
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Trinoton querquedulae (Linnaeus, 1758) *s. l.*
- 111.a. **Anas aucklandica chlorotis** Gray, 1845 **Brown Teal**
Anaticola sp.
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
- 111.b. **Anas aucklandica aucklandica** (Gray, 1844) **Auckland Island Teal**
Holomenopon leucoxanthum (Burmeister, 1838)
113. **Anas rhynchotis variegata** (Gould, 1856) **New Zealand Shoveler**
Anaticola crassicornis (Scopoli, 1763) *s. l.*
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Holomenopon sp.
Trinoton querquedulae (Linnaeus, 1758) *s. l.*
114. **Hymenolaimus malacorhynchos** (Gmelin, 1789) **Blue Duck**
Acidoproctus gottwaldhirschi Eichler, 1958
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
116. **Aythya novaeseelandiae** (Gmelin, 1789) **New Zealand Scaup**
Anaticola crassicornis (Scopoli, 1763) *s. l.*
Anatoecus icterodes (Nitzsch, 1818) *s. l.*
Holomenopon sp. [Note 19]
Trinoton querquedulae (Linnaeus, 1758) *s. l.*

Order **FALCONIFORMES**
Family **ACCIPITRIDAE**

- 119.a. **Circus approximans gouldi** Bonaparte, 1850 **Australasian Harrier**
Colpocephalum turbinatum Denny, 1842
Degeeriella fusca (Denny, 1842)
Nosopon lucidum (Rudow, 1869)

Family **FALCONIDAE**

120. **Falco novaeseelandiae** Gmelin, 1788 **New Zealand Falcon**
Degeeriella rufa rufa (Burmeister, 1838)
Nosopon sp.
121. **Falco cenchroides cenchroides** Vigors & Horsfield, 1827 **Nankeen Kestrel**
Colpocephalum zerfae Ansari, 1955
Degeeriella rufa rufa (Burmeister, 1838)
Laemobothrion (Laemobothrion) tinnunculi (Linnaeus, 1758)

- 134.b. **Gallirallus australis australis** (Sparrrman, 1786) **Western Weka**
Pseudomenopon pilgrimi Price, 1974
Rallicola harrisoni Emerson, 1955
- 134.c. **Gallirallus australis hectori** (Hutton, 1873) **Buff Weka**
Pseudomenopon pilgrimi Price, 1974
Rallicola harrisoni Emerson, 1955
- 134.d. **Gallirallus australis scotti** (Ogilvie-Grant, 1905) **Stewart Island Weka**
Rallicola harrisoni Emerson, 1955 *s. l.*
135. **Porzana pusilla affinis** (Gray, 1846) **Marsh Crake**
Fulicoffula sp.
Incidifrons sp.
Rallicola sp.
136. **Porzana tabuensis plumbea** (Gray, 1829) **Spotless Crake**
Fulicoffula sp.
Rallicola tabuensis Emerson, 1966
137. **Porphyrio porphyrio melanotus** Temminck, 1820 **Pukeko**
Pseudomenopon concretum (Piaget, 1880)
Rallicola lugens (Giebel, 1874)
138. **Notornis mantelli** Owen, 1848 **Takahe**
Rallicola takahe Holloway, 1956
141. **Fulica atra australis** Gould, 1845 **Australasian Coot**
Fulicoffula lurida (Nitzsch, 1818)
Incidifrons fulicae (Linnaeus, 1758)
Pseudomenopon pilosum (Scopoli, 1763)
Rallicola fulicae (Denny, 1842)

Order **CHARADRIIFORMES**
Family **HAEMATOPODIDAE**

142. **Haematopus ostralegus finschi** Martens, 1897 **South Island Pied Oystercatcher**
Actornithophilus grandiceps (Piaget, 1880)
Quadriceps auratus (Haan, 1829)
Saemundssonina haematopi (Linnaeus, 1758)
143. **Haematopus unicolor** Forster, 1844 **Variable Oystercatcher**
Actornithophilus grandiceps (Piaget, 1880)
Quadriceps auratus (Haan, 1829)
Quadriceps ridgwayi (Kellogg, 1906)
Saemundssonina haematopi (Linnaeus, 1758)
144. **Haematopus chathamensis** Hartert, 1927 **Chatham Island Oystercatcher**
Actornithophilus grandiceps (Piaget, 1880)
Quadriceps auratus (Haan, 1829)

Family CHARADRIIDAE

145. **Vanellus miles novaehollandiae** Stephens, 1819 **Spur-winged Plover**
Actornithophilus hoplopteri (Mjöberg, 1910) *s. l.*
Austromenopon aegialitidis (Durrant, 1906) *s. l.*
Quadriceps renschi Timmermann, 1954
147. **Pluvialis fulva** (Gmelin, 1789) **Least Golden Plover**
Actornithophilus ochraceus (Nitzsch, 1818) *s. l.* [Note 20]
Quadriceps charadrii (Linnaeus, 1758) [Note 21]
Saemundssonina conica conica (Denny, 1842)
148. **Charadrius obscurus** (Gmelin, 1789) **New Zealand Dotterel**
Actornithophilus ochraceus (Nitzsch, 1818) *s. l.*
Quadriceps dominella Timmermann, 1953
- 150.a. **Charadrius bicinctus bicinctus** Jardine & Selby, 1827 **Banded Dotterel**
Quadriceps cedemajori Timmermann, 1969
Saemundssonina platygaster (Denny, 1842) *s. l.*
- 150.b. **Charadrius bicinctus exilis** Falla, 1978 **Auckland Island Banded Dotterel**
Quadriceps cedemajori Timmermann, 1969
Quadriceps novaeseelandiae Timmermann, 1953
155. **Thinornis novaeseelandiae** (Gmelin, 1789) **New Zealand Shore Plover**
Quadriceps novaeseelandiae Timmermann, 1953
Saemundssonina chathamensis Timmermann, 1977
156. **Anarhynchus frontalis** Quoy & Gaimard, 1830 **Wrybill**
Quadriceps cedemajori Timmermann, 1969

Family SCOLOPACIDAE

157. **Numenius madagascariensis** (Linnaeus, 1766) **Far-eastern Curlew**
Lunaceps numenii numenii (Denny, 1842)
- 158.a. **Numenius phaeopus variegatus** (Scopoli, 1786) **Asiatic Whimbrel**
Austromenopon phaeopodis (Schränk, 1802)
Lunaceps numenii oliveri (Johnston & Harrison, 1912) [Note 22]
Saemundssonina scolopacisphaeopodis scolopacisphaeopodis
(Schränk, 1803)
161. **Limosa limosa melanuroides** Gould, 1846 **Asiatic Black-tailed Godwit**
Actornithophilus spinulosus (Piaget, 1880)
Austromenopon limosae Timmermann, 1954
Carduiceps cingulatus (Denny, 1842)
Lunaceps limosella Timmermann, 1954
Saemundssonina thompsoni Timmermann, 1951

163. **Limosa lapponica baueri** Naumann, 1836 **Eastern Bar-tailed Godwit**
Actornithophilus limosae (Kellogg, 1908)
Austromenopon meyeri (Giebel, 1874)
Carduiceps cingulatus (Denny, 1842) *s. l.*
Lunaceps limosella Timmermann, 1954
Saemundssonina limosae (Denny, 1842)
171. **Arenaria interpres interpres** (Linnaeus, 1758) **Turnstone**
Actornithophilus bicolor (Piaget, 1880)
Actornithophilus pediculoides (Mjöberg, 1910)
Austromenopon lutescens (Burmeister, 1838) *s. l.*
Quadriceps strepsilaris (Denny, 1842)
- 172.b. **Coenocorypha aucklandica pusilla** (Buller, 1869) **Chatham Island Snipe**
Quadriceps coenocoryphae Timmermann, 1955
- 172.c. **Coenocorypha aucklandica huegeli** (Tristram, 1893) **Snares Island Snipe**
Quadriceps coenocoryphae Timmermann, 1955
- 172.d. **Coenocorypha aucklandica meinertzhagenae** Rothschild, 1927
Antipodes Island Snipe
Austromenopon sp.
- 172.e. **Coenocorypha aucklandica aucklandica** (Gray, 1845)
Auckland Island Snipe
Austromenopon sp.
Quadriceps coenocoryphae Timmermann, 1955
174. **Calidris canutus canutus** (Linnaeus, 1758) [Note 23] **Knot**
Actornithophilus umbrinus (Burmeister, 1838) *s. l.*
Austromenopon lutescens (Burmeister, 1838) *s. l.*
Carduiceps zonarius (Nitzsch, 1866) *s. l.*
Lunaceps drosti Timmermann, 1954
Saemundssonina tringae (O. Fabricius, 1780) *s. l.*
178. **Calidris ferruginea** (Pontoppidan, 1763) **Curlew Sandpiper**
Lunaceps incoenis (Kellogg & Chapman, 1899) *s. l.*
181. **Calidris alba** (Pallas, 1764) **Sanderling**
Lunaceps actophilus (Kellogg & Chapman, 1899)

Family RECURVIROS FRIDAE

183. **Himantopus himantopus leucocephalus** Gould, 1837 **Pied Stilt**
Austromenopon himantopi Timmermann, 1954
Quadriceps hemichrous (Nitzsch, 1866)
Quadriceps semifissus (Nitzsch, 1866)
Saemundssonina platygaster (Denny, 1842) *s. l.*
184. **Himantopus novaezealandiae** Gould, 1841 **Black Stilt**
Quadriceps hemichrous (Nitzsch, 1866)

Family GLAREOLIDAE

188. **Glareola maldivarum** J. R. Forster, 1795 **Oriental Pratincole**
Actornithophilus sp.
Austromenopon sp.
Quadriceps ellipticus (Nitzsch, 1866) *s. l.*

Family STERCORARIIDAE

189. **Stercorarius skua lonnbergi** (Mathews, 1912) **Southern Great Skua**
Austromenopon fuscofasciatum (Piaget, 1880)
Haffneria grandis (Piaget, 1880) *s. l.*
Saemundssonina stresemanni Timmermann, 1949
- 189.1 **Stercorarius maccormicki** Saunders, 1893 **Antarctic Skua**
Austromenopon fuscofasciatum (Piaget, 1880)
Haffneria grandis (Piaget, 1880) *s. l.*
Quadriceps alpha (Kellogg, 1914)
Saemundssonina stresemanni Timmermann, 1949
191. **Stercorarius parasiticus** (Linnaeus, 1758) **Arctic Skua**
Austromenopon fuscofasciatum (Piaget, 1880)
Haffneria grandis (Piaget, 1880) *s. l.*
Quadriceps normifer (Grube, 1851)
Saemundssonina cephalus (Denny, 1842)

Family LARIDAE

193. **Larus dominicanus** Lichtenstein, 1823 **Southern Black-backed Gull**
Actornithophilus piceus (Denny, 1842) *s. l.*
Austromenopon transversum (Denny, 1842)
Quadriceps ornatus fuscolaminulatus (Enderlein, 1908)
Quadriceps punctatus (Burmeister, 1838) *s. l.*
Saemundssonina lari (O. Fabricius, 1780) *s. l.*
194. **Larus novaehollandiae scopulinus** Forster, 1844 **Red-billed Gull**
Actornithophilus piceus (Denny, 1842) *s. l.*
Austromenopon transversum (Denny, 1842)
Quadriceps punctatus (Burmeister, 1838) *s. l.*
Saemundssonina lari (O. Fabricius, 1780) *s. l.*
195. **Larus bulleri** Hutton, 1871 **Black-billed Gull**
Austromenopon transversum (Denny, 1842)
Quadriceps punctatus (Burmeister, 1838) *s. l.*
Saemundssonina lari (O. Fabricius, 1780) *s. l.*

Family STERNIDAE

199. **Hydroprogne caspia** (Pallas, 1770) **Caspian Tern**
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps caspius (Giebel, 1874)
- 199.1 **Sterna albobriata** (Gray, 1845) **Black-fronted Tern**
Quadriceps sp.

201. **Sterna vittata bethunei** Buller, 1896 [Note 24] **Antarctic Tern**
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps sellatus (Burmeister, 1838) *s. l.*
Saemundssonina lockleyi Clay, 1949 *s. l.*
202. **Sterna paradisaea** Pontoppidan, 1763 **Arctic Tern**
Quadriceps houri Hopkins, 1949
Saemundssonina lockleyi Clay, 1949 *s. l.*
204. **Sterna albifrons sinensis** Gmelin, 1789 **Eastern Little Tern**
Quadriceps nychthemerus (Burmeister, 1838)
Saemundssonina melanocephalus (Burmeister, 1838)
205. **Sterna striata** (Gmelin, 1789) **White-fronted Tern**
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps sellatus (Burmeister, 1838) *s. l.*
Saemundssonina sterna (Linnaeus, 1758)
206. **Sterna fuscata** (Linnaeus, 1766) **Sooty Tern**
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps birostris (Giebel, 1874)
Saemundssonina albemarlensis (Kellogg & Kuwana, 1902)
208. **Anous minutus minutus** Boie, 1844 **White-capped Noddy**
Actornithophilus ceruleus (Timmermann, 1954) *s. l.*
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps hopkinsi hopkinsi Timmermann, 1952
Saemundssonina lobaticeps remota Timmermann, 1951
210. **Procelsterna cerulea albivitta** Bonaparte, 1856 **Grey Ternlet**
Actornithophilus ceruleus (Timmermann, 1954)
Austromenopon atrofulvum (Piaget, 1880) *s. l.*
Quadriceps hopkinsi apophoretus Timmermann, 1969

Order COLUMBIFORMES

Family COLUMBIDAE

- 211.a. **Hemiphaga novaeseelandiae novaeseelandiae** (Gmelin, 1789) **New Zealand Pigeon**
Hohorstiella sp.
Patellinirmus novaeseelandiae Tendeiro, 1972
- 211.b. **Hemiphaga novaeseelandiae chathamensis** (Rothschild, 1891) **Chatham Island Pigeon**
Patellinirmus harrisoni Tendeiro, 1972
- *212. **Columba livia** Gmelin, 1789 **Rock Pigeon**
Bonomiella columbae Emerson, 1957
Campanulotes bidentatus compar (Burmeister, 1838)
Colpocephalum turbinatum Denny, 1842
Columbicola columbae columbae (Linnaeus, 1758)
Hohorstiella lata (Piaget, 1880)

Order PSITTACIFORMES
Family CACATUIDAE

214. **Strigops habroptilus** Gray, 1845 **Kakapo**
Heteromenopon (Keamenopon) kea (Kellogg, 1907)

Family NESTORIDAE

- 216.a. **Nestor meridionalis septentrionalis** Lorenz, 1896 **North Island Kaka**
Forficuloecus meinertzhageni Guimarães, 1974
Heteromenopon (Keamenopon) kea (Kellogg, 1907)
Neopsittaconirmus kea (Kellogg, 1907)
- 216.b. **Nestor meridionalis meridionalis** (Gmelin, 1788) **South Island Kaka**
Forficuloecus meinertzhageni Guimarães, 1974
Heteromenopon (Keamenopon) kea (Kellogg, 1907)
Neopsittaconirmus kea (Kellogg, 1907)
- 217 **Nestor notabilis** Gould, 1856 **Kea**
Colpocephalum pilgrimi Price, 1967
Forficuloecus meinertzhageni Guimarães, 1974 s. l.
Heteromenopon (Keamenopon) kea (Kellogg, 1907)
Neopsittaconirmus kea (Kellogg, 1907)

Family PLATYCERCIDAE

220. **Cyanoramphus unicolor** (Lear, 1831) **Antipodes Island Parakeet**
Forficuloecus sp.
Heteromenopon (Keamenopon) sp.
- 221.b. **Cyanoramphus novaezelandiae novaezelandiae** Sparrman, 1787 **Red-crowned Parakeet**
Forficuloecus sp.
- 221.c. **Cyanoramphus novaezelandiae chathamensis** Oliver, 1930 **Chatham Island Red-crowned Parakeet**
Forficuloecus sp.
- 221.d. **Cyanoramphus novaezelandiae hochstetteri** (Reischek, 1889) **Reischek's Parakeet**
Forficuloecus sp.
- 222.a. **Cyanoramphus auriceps auriceps** (Kuhl, 1820) **Yellow-crowned Parakeet**
Forficuloecus sp.
- 222.b. **Cyanoramphus auriceps forbesi** Rothschild, 1893 **Chatham Island Yellow-crowned Parakeet**
Forficuloecus sp.
223. **Cyanoramphus malherbi** (Souance, 1857) **Orange-fronted Parakeet**
Forficuloecus sp.

Order **CUCULIFORMES**

Family CUCULIDAE

227. **Chrysococcyx lucidus lucidus** (Gmelin, 1788) **Shining Cuckoo**
Cuculicola kui Kettle, 1980

Order **STRIGIFORMES**

Family STRIGIDAE

230. **Tyto alba delicatula** (Gould, 1837) **Australian Barn Owl**
Strigiphilus aitkeni Clay, 1966
231. **Ninox novaeseelandiae novaeseelandiae** (Gmelin, 1788) **Morepork**
Kurodaia cryptostigmatia (Nitzsch, 1861)
Strigiphilus vapidus Clay, 1977
- 232.b. **Sceloglaux albifacies albifacies** (Gray, 1844) **Laughing Owl**
Strigiphilus sp.
- *233. **Athene noctua** (Scopoli, 1769) **Little Owl**
Strigiphilus cursitans (Nitzsch, 1861)

Order **CORACIIFORMES**

Family ALCEDINIDAE

236. **Halcyon sancta vagans** (Lesson, 1830) **New Zealand Kingfisher**
Alcedoecus alato-clypeatus (Piaget, 1885) *s. l.*

Family CORACIIDAE

238. **Eurystomus orientalis pacificus** (Latham, 1801) **Broad-billed Roller**
Capraiella sp.

Order **PASSERIFORMES**

Family XENICIDAE

- 239.b. **Acanthisitta chloris chloris** (Sparrman, 1787) **South Island Rifleman**
Menacanthus sp.

Family ALAUDIDAE

- *243. **Alauda arvensis arvensis** Linnaeus, 1758 **Skylark**
Brueelia sp.
Philopterus sp.

Family MOTACILLIDAE

- 246.a. **Anthus novaeseelandiae novaeseelandiae** (Gmelin, 1789) **New Zealand Pipit**
Philopterus sp.
- 246.c. **Anthus novaeseelandiae steindachneri** Reischek, 1889 **Antipodes Pipit**
Philopterus sp.

Family PRUNELLIDAE

- *249. **Prunella modularis occidentalis** (Hartert, 1910) **Hedgesparrow**
Philopterus sp.

Family MUSCICAPIDAE

252. **Mohoua albicilla** (Lesson, 1830) **Whitehead**
Myrsidea sp.
Philopterus sp.
254. **Gerygone igata** (Quoy & Gaimard, 1830) **Grey Warbler**
Myrsidea sp.
Philopterus sp.
Ricinus sp.
- 256.a. **Rhipidura fuliginosa placabilis** Bangs, 1921 **North Island Fantail**
Philopterus sp.
- 256.b. **Rhipidura fuliginosa fuliginosa** (Sparman, 1787) **South Island Fantail**
Menacanthus sp.
Philopterus sp.
- 257.a. **Petroica macrocephala toitoi** (Lesson, 1828) **Pied Tit**
Philopterus sp.
- 257.b. **Petroica macrocephala macrocephala** (Gmelin, 1789) **Yellow-breasted Tit**
Philopterus sp.
- 257.d. **Petroica macrocephala dannefaerdi** (Rothschild, 1894) **Black Tit**
Philopterus sp.
- 258.b. **Petroica (Miro) australis australis** (Sparman, 1788) **South Island Robin**
Menacanthus eurysternus (Burmeister, 1838)
- *261. **Turdus philomelos clarkei** Hartert, 1909 **Song Thrush**
Brueelia sp.
Menacanthus eurysternus (Burmeister, 1838)
Philopterus turdi (Denny, 1842)
- *262. **Turdus merula merula** Linnaeus, 1758 **Blackbird**
Brueelia merulensis (Denny, 1842)
Brueelia sp.
Menacanthus eurysternus (Burmeister, 1838)
Myrsidea thoracica (Giebel, 1874)
Philopterus turdi (Denny, 1842)

Family ZOSTEROPIDAE

263. **Zosterops lateralis lateralis** (Latham, 1801) **Silvereye**
Menacanthus eurysternus (Burmeister, 1838)

Family MELIPHAGIDAE

264. **Notiomystis cincta** (Du Bus, 1839) **Stitchbird**
Myrsidea sp.
- 265.a. **Anthornis melanura obscura** Falla, 1948 **Three Kings Bellbird**
Brueelia sp.
Myrsidea sp.
- 265.b. **Anthornis melanura melanura** (Sparrman, 1786) **Bellbird**
Brueelia sp.
Menacanthus eurysternus (Burmeister, 1838)
Myrsidea sp.
266. **Prothemadera novaeseelandiae novaeseelandiae** (Gmelin, 1788) [Note 25] **Tui**
Brueelia sp.
Menacanthus eurysternus (Burmeister, 1838)
Myrsidea sp.

Family EMBERIZIDAE

- *268. **Emberiza citrinella caliginosa** Clancey, 1940 **Yellowhammer**
Brueelia delicata (Nitzsch, 1866)
Myrsidea sp.

Family FRINGILLIDAE

- *271. **Carduelis chloris chloris** (Linnaeus, 1758) **Greenfinch**
Brueelia sp.
Myrsidea sp.
- *272. **Carduelis carduelis britannica** (Hartert, 1903) **Goldfinch**
Brueelia sp.

Family PLOCEIDAE

- *274. **Passer domesticus domesticus** (Linnaeus, 1758) **House Sparrow**
Brueelia cyclothorax (Burmeister, 1838)
Menacanthus eurysternus (Burmeister, 1838)

Family STURNIDAE

- *275. **Sturnus vulgaris vulgaris** Linnaeus, 1758 **Starling**
Brueelia nebulosa (Burmeister, 1838)
Menacanthus eurysternus (Burmeister, 1838)
Sturnidoecus sturni (Schrank, 1776)
- *276. **Acridotheres tristis** (Linnaeus, 1766) **Indian Myna**
Menacanthus eurysternus (Burmeister, 1838)
Sturnidoecus sp.

Family CALLAEIDAE

- 277.a. **Philesturnus carunculatus rufusater** (Lesson, 1828) **North Island Saddleback**
Brueelia sp.
- 277.b. **Philesturnus carunculatus carunculatus** (Gmelin, 1789) **South Island Saddleback**
Brueelia sp.
278. **Heteralocha acutirostris** (Gould, 1837) **Huia**
Rallicola sp.
- 279.a. **Callaeas cinerea wilsoni** (Bonaparte, 1851) **North Island Kokako**
Brueelia sp.
Philopterus sp.
- 279.b. **Callaeas cinerea cinerea** (Gmelin, 1788) **South Island Kokako**
Brueelia sp.
Philopterus sp.

Family CRACTICIDAE

- *280.a. **Gymnorhina tibicen tibicen** (Latham, 1801) **Black-backed Magpie**
Brueelia semiannulata (Piaget, 1883)
Myrsidea sp.
Philopterus sp.
- *280.b. **Gymnorhina tibicen hypoleuca** (Gould, 1837) **White-backed Magpie**
Brueelia semiannulata (Piaget, 1883)
Myrsidea sp.

Family CORVIDAE

- *282. **Corvus frugilegus frugilegus** Linnaeus, 1758 **Rook**
Colpocephalum fregili Denny, 1842

EXPLANATORY NOTES

1. Tandan (1972:68) recorded several specimens of *Apterygon mirum* Clay, 1961 and two males as *Apterygon* sp. *incertae sedis* from his host, suggesting a wrong host record as one of the possible explanations for an apparently abnormal situation. Evidence now available confirms Tandan's suggestion that the host for the above two males was misidentified. It is *Apteryx australis australis*.
2. Clay (1972:73) recorded 42 specimens of *Rallicola gadowi* Harrison, 1915 from this host. Re-examination of the skins from which those lice were collected shows that the hosts were misidentified; they are *Apteryx australis australis*. Further samples of *Rallicola* (*Aptericola*) from *Apteryx australis mantelli* do not include *R. (A.) gadowi*.
3. Clay (1967:154) recorded *Austrogoniodes concii* from this host in "New Zealand — Christchurch", but this record appears to be based on specimens taken from a yearling female, New Brighton, March 1941. The type host of *A. concii* is *Eudyptes chrysocome moseleyi*, type locality Tristan da Cunha. Lice from nine specimens of *Eudyptes chrysocome chrysocome* from the New Zealand subregion have been examined without finding any *A. concii*. Hence, we hold Clay's record in suspense pending confirmation.
4. Clay (1967:154) recorded *Austrogoniodes hamiltoni* Harrison, 1937 and *Austrogoniodes macquariensis* Harrison, 1937 from this host. Our many subsequent samples of *Austrogoniodes* from *E. pachyrhynchus* do not include these two species. We have reason to believe that there is a misinterpretation of the host identity in Clay (1967).
5. Watson (1967:71) recorded *Austrogoniodes hamiltoni* Harrison, 1937 and *Austrogoniodes macquariensis* Harrison, 1937 from this host (then named *Eudyptes pachyrhynchus atratus*). However, we have been unable to find these lice species from this bird again, despite the large number of *Austrogoniodes* collected from The Snares (Horning, Palma & Pilgrim, 1980:8). We regard Watson's records as stragglers on this host.
6. Harrison (1937:15) recorded one female *Austrogoniodes waterstoni* (Cummings, 1914) from this host. We regard this record as a straggler on this host as, in our experience, *A. waterstoni* is confined to *Eudyptula minor* subspecies.
7. We have not seen specimens of this louse species from this host, but we include the record following Clay (1967:154).
8. Wise (1977:62) recorded *Naubates fuliginosus* (Taschenberg, 1882) following Clay & Moreby (1970:217), who listed it from this host (as *Diomedea exulans*) at Macquarie I. As species of the genus *Naubates* are not regular parasites on members of the family Diomedidae, we regard the above record as straggler.
9. Wise (1977:63) recorded *Perineus concinnus* (Kellogg & Chapman, 1899) following Harrison (1937:29). Pilgrim & Palma (1979:177) showed that it was a misidentification of *Perineus circumfasciatus* Kéler, 1957.
10. Bedford (1930:170) described *Naubates pterodromi* from three females taken from *Pterodroma macroptera*. As *Naubates* females from several species of *Pterodroma* are indistinguishable, males are needed for a correct identification.

We have found that males from this host fit Harrison's description of *N. heteroproctus* [see Notes 11 and 12].

11. Harrison (1937:30) described *Naubates heteroproctus* from this host, but we have reason to believe that this is an erroneous host record. Subsequent material from *Pterodroma lessonii* is not *N. heteroproctus* [see Notes 10 and 12].
12. *Naubates* males from this host agree with the male described as *N. pterodromi* in Kéler (1952:213) from *Pterodroma incerta*. It is possible that Kéler's specimens were not conspecific with *N. pterodromi* Bedford, 1930 because males from *Pt. macroptera* (the type host of *N. pterodromi*) are different from males taken from *Pt. incerta*. However, males from *Pt. macroptera* agree with the description of *N. heteroproctus* Harrison, 1937 [see Note 10], and Kéler's use of the name *N. pterodromi* has been followed by several authors. Therefore, considering that females of these *Naubates* species are not diagnostic and that a stable nomenclature is desirable, we use *N. pterodromi* Bedford, 1930 in the sense of Kéler, 1952.
13. Watt (1971:238, 242) recorded four nymphs of *Saemundssonina* sp. from this host. Re-examination of the material shows that it is a misidentification of *Trabeculus* sp.
14. Watt (1971:236, 242) recorded many specimens of *Halipeurus leucophryna* Timmermann, 1960 from this host. Re-examination of the material shows that it is not *H. leucophryna*.
15. We have not seen specimens from this host collected in the New Zealand subregion, but we include three lice species following Watson (1967:70, 72). However, we do not accept two further records of Watson (1967:72, 74) which we regard as stragglers, i.e. *Halipeurus turtur* Edwards, 1961 and *Trabeculus* sp. The latter was published in Harrison (1937: 37) as *Giebelia hexakon* Waterston, 1914.
16. Wise (1977:60) recorded *Halipeurus (Halipeurus) angusticeps* (Piaget, 1880) following Harrison (1937:31), who examined one female from this host. Re-examination of Harrison's original material shows that it is a misidentification of *Halipeurus (Halipeurus) procellariae* (J. C. Fabricius, 1775) which we regard as a straggler on this host.
17. Kéler (1952:209) listed this bird as one of the recorded hosts for *Ancistrona vagelli* (J. C. Fabricius, 1787) from the Kermadec Is. He presumably meant the closely related Kermadec Storm Petrel, which was formerly numerous on the Kermadec Is (OSNZ, 1970:29). See also entry 69b and Note 18.
18. We have not seen specimens of this louse genus from this host. We include this record following Johnston & Harrison (1912:364) and Watt (1971:233, 243).
19. Wise (1977:57) recorded *Holomenopon clypeilargum* Eichler, 1943 following Price (1971:643), who examined one female from this host. Examination of more specimens, including males, shows that they are not *H. clypeilargum*.
20. Wise (1977:56) recorded *Actornithophilus timidus* (Kellogg, 1896) following Watt (1971:233, 243). We regard this species as a junior synonym of *A. ochraceus*, following Clay (1962:243).

21. Wise (1977:64) recorded *Quadriceps orarius* (Kellogg, 1896) following Johnston & Harrison (1912:368) and Hopkins & Clay (1952:314). We regard this species as a junior synonym of *Q. charadrii*, following J. M. Martens (pers. comm.).
22. Wise (1977:61) recorded this subspecies as *Luniceps numenii phaeopi* (Denny, 1842) following Emerson (1972:95).
23. Wise (1977:65) recorded *Saemundssonina limosae* (Denny, 1842) following Harrison (1937:21-22, 46), who examined one male from this host. Watson (1967:74) referred to apparently the same material as *Saemundssonina* sp. We have not been able to examine the specimen reported by Harrison.
24. Wise (1977:65) recorded *S. melanocephalus* (Burmeister, 1838) following Harrison (1937:22, 46), who examined males and females from this host (*Sterna vittata macquariensis* = *S. v. bethunei*). Watson (1967:74) referred to apparently the same material as *Saemundssonina* sp. We have not been able to examine any of the specimens reported by Harrison.
25. Watt (1971:238, 244) recorded four nymphs of *Sturnidoecus* sp. from this host. Re-examination of the material shows that it is a misidentification of *Saemundssonina* sp. and probably a contaminant.

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APPENDIX 1

Suggestions for collecting bird lice

With dead birds, it is preferable to send whole carcasses, each enclosed in a separate plastic bag, together with adequate collecting data, to National Museum, Wellington. If this is inconvenient, or if the carcass is unsuitable for postal or freight transport, feathers sent in a plastic bag are a good substitute.

With live birds, spray a pet insecticide (e. g. "Nuvan" aerosol) among the bird's feathers, and hold the bird in a plastic bag for a few minutes. Send the sample so obtained, as it is, in the bag, together with all the dust and insecticide that have come off the bird. Inside each bag, put a label with the name of the bird, date, locality, and name of the collector. Seal the bag with adhesive tape.