

Lice (Insecta: Phthiraptera) from some Australian birds

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Abstract – Published and unpublished records of feather lice collected from 104 species and subspecies of Australian birds are listed. They comprise 141 species and subspecies of lice; a further 59 louse records are listed at the generic level only, but the latter do not necessarily represent different species. A host-parasite list follows the list of lice.

INTRODUCTION

The Australian bird lice are partially known, with only about 400 species recorded and possibly that many again to be discovered (Murray *et al.*, 1990, 1993; Palma and Barker, 1996). Regionally, only the lice of Tasmania are better known than those from other Australian states (Green and Palma, 1991). Here we record the species of lice collected by the senior author from many Australian birds in several States but mostly in Western Australia, during the years 1967 to 1980. A host-parasite list is also included.

MATERIAL AND METHODS

Collecting lice from live birds can be a complicated venture, due to the legal aspect of obtaining permits to handle protected species and to the natural reluctance of many people to traumatise the bird by handling it and applying an insecticide to its plumage. However, the many thousands of birds which die annually on Australian roads and beaches are a very convenient source of lice for potential collectors.

Freshly killed birds, due to road collisions or to storms and other natural causes, were ideal for louse collecting. Ruffling their feathers over a large container or plastic sheet easily dislodged the lice which were picked up with a small brush previously wet with alcohol 70%. Birds which had been dead for some time, even mummified, still harboured lice which were collected in reasonably good condition and were suitable for systematic study. In all cases, a thorough wash of the bird remains further increased the size of the resulting louse sample. All samples were placed in small vials and preserved in alcohol 70% (ethanol or methanol). A label with the scientific name of the bird and field details such as locality, date and name of collector, all written with pencil or Indian

ink, was included in the same vial before sending it to a louse expert.

All samples were sent to the Department of Entomology of the British Museum (Natural History), where most of the lice were slide-mounted and identified by T. Clay, C. Lyal and C. Moreby. Subsequently, the junior author identified several specimens which had been left at the generic level by the BM(NH) staff. Lice clearly recognised either as natural stragglers or as contaminants by human agency (see Pilgrim and Palma, 1982: 2) have been excluded from this list. All the louse samples have been deposited in the BM(NH), with a few species which are also kept in the Museum of New Zealand Te Papa Tongarewa (indicated in the list by the acronym MONZ).

The avian classification, ordinal and family sequence and the nomenclature to the species level follow those of Christidis and Boles (1994), while the nomenclature of subspecies follows Condon (1975).

LIST OF LICE

Order PHTHIRAPTERA Haeckel, 1896

Suborder AMBLYCERA Kellogg, 1896

Family LAEMOBOTHRIIDAE Mjöberg, 1910

Genus *Laemobothrion* Nitzsch, 1818

Laemobothrion (Eulaemobothrion) atrum (Nitzsch, 1818)

ex *Fulica atra australis*. Western Australia: Lake Coolungup, 11 July 1972; Jolimont Lake, 4 January 1973.

Laemobothrion (Eulaemobothrion) sp.

ex *Porphyrio porphyrio bellus*. Western Australia: Perth, 4 October 1969, 5 October 1970, 4 July 1973.

Family MENOPONIDAE Mjöberg, 1910

Genus *Actornithophilus* Ferris, 1916*Actornithophilus ceruleus* (Timmermann, 1954)

ex *Anous tenuirostris*. Western Australia: Perth, 28 July 1973.

Actornithophilus hoplopteri (Mjöberg, 1910)

ex *Vanellus tricolor*. Western Australia: Perth, 11 August 1968. South Australia: Streaky Bay, 7 August 1977.

ex *Vanellus miles novaehollandiae*. South Australia: Streaky Bay, 23 October 1977.

Actornithophilus piceus lari (Packard, 1870)

ex *Larus novaehollandiae novaehollandiae*. Western Australia: Pelican Point, 18 November 1967; Perth, 30 July 1968; Mandurah, 6 September 1968.

Actornithophilus piceus piceus (Denny, 1842)

ex *Sterna bergii*. Western Australia: Perth, 1 June 1968; Mandurah, 13 April 1968.

Actornithophilus sp.

ex *Calidris tenuirostris*. Western Australia: Mandurah, 7 February 1970.

ex *Calidris ruficollis*. Western Australia: Perth, 10 August 1967; Quairading, 18 November 1967.

Genus *Ancistrona* Westwood, 1874*Ancistrona vagelli* (J.C. Fabricius, 1787)

ex *Daption capense*. Western Australia: Perth, 4 August 1972; Warnboro Sound, 27 August 1972.

ex *Pachyptila desolata*. Western Australia: Mullaloo Beach, 29 June 1968; Mandurah, 3 August 1968; Swanbourne Beach, 30 July 1973.

ex *Pachyptila belcheri*. Western Australia: Mandurah, 28 July 1968; Perth, 30 July 1968.

Genus *Austromenopon* Bedford, 1939*Austromenopon negialitidis* (Durrant, 1906)

ex *Vanellus miles novaehollandiae*. South Australia: Streaky Bay, 23 October 1977.

Austromenopon utrofulvum (Piaget, 1880)

ex *Sterna bergii*. Western Australia: Perth, 1 June 1968; Mandurah, 13 April 1968.

ex *Sterna anaethetus*. Western Australia: Perth, 4 October 1970.

Austromenopon brevifimbriatum (Piaget, 1880)

ex *Fulmarus glacialisoides*. Western Australia: Perth, 1968 (MONZ); Scarborough Beach, 25 August 1968.

ex *Daption capense*. Western Australia: Perth, 4 August 1972; Warnboro Sound, 27 August 1972.

Austromenopon micrandum (Nitzsch (in Giebel), 1866)

ex *Recurvirostra novaehollandiae*. Western Australia: Perth, 26 September 1969; 7 March 1970.

Austromenopon navigans (Kellogg, 1896)

ex *Diomedea melanophris*. Western Australia: Perth, 4 October 1970.

Austromenopon paululum (Kellogg and Chapman, 1899)

ex *Puffinus pacificus*. Western Australia: Perth, 14 May 1969; Becher Point, 4 October 1970.

Austromenopon pinguis (Kellogg, 1896)

ex *Diomedea chrysostoma*. Western Australia: Perth, June 1970, August 1972.

ex *Diomedea chlororhynchos*. Western Australia: Perth, June 1970, 9 September 1972.

Austromenopon popellus (Piaget, 1890)

ex *Pterodroma macroptera*. Western Australia: Perth, 14 December 1969.

ex *Procellaria aequinoctialis*. Western Australia: Perth, 2 May 1973.

Austromenopon stammeri Timmermann, 1963

ex *Pachyptila desolata*. Western Australia: Mullaloo Beach, 29 June 1968; Mandurah, 3 August 1968; Swanbourne Beach, 30 July 1973.

ex *Pachyptila belcheri*. Western Australia: Mandurah, 28 July 1968; Perth, 30 July 1968.

Austromenopon transversum (Denny, 1842)

ex *Larus novaehollandiae novaehollandiae*. Western Australia: Perth, 30 July 1968; Coogee, 15 September 1968; Pelican Point, 25 October 1968; Perth, 15 December, 1968.

Austromenopon sp.

ex *Charadrius australis*. Western Australia: Cue, 23 August 1974.

Genus *Colpocephalum* Nitzsch, 1818*Colpocephalum aethiopicae* Price and Beer, 1965

ex *Threskiornis molucca*. Western Australia, northern region.

Colpocephalum eucarenum Burmeister, 1838

ex *Pelecanus conspicillatus*. Western Australia: Perth, 6 January 1968; Pelican Point, 17 November 1968.

Colpocephalum fragili Denny, 1842

ex *Corvus coronoides*. Western Australia: Perth, 29 September 1967; Bannister, 1967 (MONZ); Safety Bay, 27 October 1969.

ex *Corvus bennetti*. Western Australia: Latham, March 1967 (MONZ); Geraldton, 28 November 1969.

Genus *Cuculiphilus* Uchida, 1926*Cuculiphilus (Cuculiphilus) fasciatus* (Scopoli, 1763)

ex *Cuculus pallidus*. Western Australia: Perth, 15 November 1969; Wubin, 24 August 1974.

Genus *Eidmanniella* Kéler, 1938*Eidmanniella pellucida* (Rudow, 1869)

ex *Phalacrocorax varius*. Western Australia: Perth, 27 October 1968; Mandurah, 2 September 1968; Warnboro Sound, 28 June 1970.

Genus *Franciscoloa* Conci, 1942*Franciscoloa (Franciscoloa) fumerei* Price and Beer, 1966

ex *Calyptorhynchus latirostris*. Western Australia: Perth, 16 July 1968; Helena Valley, 16 August 1968.

Franciscoloa (Franciscoloa) magnifici Price, 1969

ex *Calyptorhynchus banksii naso*. Western Australia: North Bannister, 14 April 1968.

Franciscoloa (Franciscoloa) roseicapillae Price and Beer, 1966

ex *Cacatua roseicapilla*. Western Australia: Latham, March 1967; Three Springs, 28 November 1969; Minilya River, 21 July 1975.

ex *Cacatua sanguinea*. Western Australia: Exmouth, June 1969; Roebourne, 22 July 1975.

Genus *Heteromenopon* Carriker, 1954*Heteromenopon (Keamenopon) kalamundae* Price, 1969

ex *Purpureicephalus spurius*. Western Australia: Kalamunda, 26 January 1968.

Heteromenopon (Keamenopon) psittacum (Le Souëf and Bullen, 1902)

ex *Platycercus elegans*. Victoria: Dunkeld, 1 April 1980.

ex *Barnardius zonarius semitorquatus*. Western Australia: Southwest region, 1967 – 1971.

Genus *Holomenopon* Eichler, 1941*Holomenopon leucoxanthum* (Burmeister, 1838)

ex *Anas superciliosa*. Western Australia: Perth, April 1968.

ex *Aythya australis*. Western Australia: Perth, 17 March 1968.

Genus *Kelerimenopon* Conci, 1942*Kelerimenopon (Lorimenopon) galeritae* Price and Emerson, 1966

ex *Cacatua roseicapilla*. Western Australia: Latham, March 1967; Three Springs, 28 November 1969; Minilya River, 21 July 1975. South Australia: southern Eyre Peninsula, August 1977.

Kelerimenopon (Lorimenopon) sp.

ex *Calyptorhynchus latirostris*. Western Australia: Perth, 16 July 1968; Kalamunda, 1968.

Genus *Kurodaia* Uchida, 1926*Kurodaia cryptostigmatia* (Nitzsch, 1861)

ex *Ninox novaeseelandiae*. Western Australia: Northcliffe, 13 September 1967; Rockingham, 22 November 1976.

Kurodaia subpachygaster (Piaget, 1880)

ex *Tyto alba delicatula*. Western Australia: Serpentine, 31 May 1969. South Australia: 30 March 1980.

Genus *Menacanthus* Neumann, 1912*Menacanthus eurysternus* (Burmeister, 1838)

ex *Anthochaera carunculata*. Western Australia: Perth, 26 October 1969, 22 December 1969.

ex *Zosterops lateralis gouldi*. Western Australia: Perth, 1967 – 1969.

Menacanthus gonophaeus (Burmeister, 1838)

ex *Corvus bennetti*. Western Australia: Latham, March 1967.

Menacanthus pusillus (Nitzsch, 1866)

ex *Anthus novaeseelandiae*. Western Australia: Eucla, 27 March 1980 (MONZ).

Menacanthus sp.

ex *Corcorax melanorhamphos*. New South Wales: Wagga, 5 April 1980.

Genus *Meromenopon* Clay and Meinertzhausen, 1941*Meromenopon meropis* Clay and Meinertzhausen, 1941

ex *Merops ornatus*. Western Australia: Lesmurdie, 8 November 1967; Armadale, 29 January 1968.

Genus *Myrsidea* Waterston, 1915*Myrsidea australiensis australiensis* Klockenhoff, 1971

ex *Corvus coronoides*. Western Australia: Perth, 29 September 1967, 1 October 1967; Safety Bay, 27 October 1969; Bindoon, 23 August 1970, 11 October 1970; Mandurah, 23 August 1970, 11 October 1970.

Myrsidea australiensis bennetti Klockenhoff, 1971

ex *Corvus bennetti*. Western Australia: Latham, March 1967 (MONZ); Geraldton, 28 November 1970.

Myrsidea rustica (Giebel, 1874)

ex *Hirundo neoxena*. South Australia: Elliston, 29 October 1977.

Myrsidea strangeri Clay, 1970

ex *Malurus splendens splendens*. Western Australia: Dwellingup, 14 April 1968.

Myrsidea sp.

ex *Anthochaera carunculata*. Western Australia:

Perth, 11 September 1968, 3 October 1970, 18 December 1970; Mandurah, 17 July 1971.

ex *Grallina cyanoleuca*. Western Australia: North Dandalup, 31 May 1969.

ex *Rhipidura leucophrys*. Western Australia: Lake Jandakot, 13 April 1969.

ex *Gymnorhina tibicen dorsalis*. Western Australia: Guildford, 1 November 1967; Bushmead, 17 September 1968; Perth, 27 September 1968; Helena Valley, 17 October 1968; Safety Bay, 27 October 1968; Mandurah, 1 December 1968; Pinjarra, 7 December 1968.

ex *Strepera versicolor*. Western Australia: North Bannister, 25 April 1968.

ex *Corcorax melanorhamphos*. New South Wales: Wagga, 5 April 1980.

Genus *Piagetiella* Neumann, 1906

Piagetiella africana (Bedford, 1931)

ex *Pelecanus conspicillatus*. Western Australia: Perth, 6 January 1968; Pelican Point, 17 November 1968.

Genus *Plegadiphilus* Bedford, 1939

Plegadiphilus threskiornis Bedford, 1939

ex *Threskiornis molucca*. Western Australia: northern region.

Genus *Pseudomenopon* Mjöberg, 1910

Pseudomenopon australis Price and Emerson, 1986

ex *Gallinula ventralis*. Western Australia: Carnavon, 20 July 1975. South Australia: Mount Hope, 29 October 1977.

Pseudomenopon concretum (Piaget, 1880)

ex *Porphyrio porphyrio bellus*. Western Australia: Perth, 4 October 1969, 5 October 1970, 4 July 1973.

Pseudomenopon pilosum (Scopoli, 1763)

ex *Fulica atra australis*. Western Australia: Spearwood, 12 April 1969; Perth, June 1970; Lake Coolungup, 11 July 1972; Jolimont Lake, 4 January 1973.

Genus *Trinoton* Nitzsch, 1818

Trinoton querquedulae (Linnaeus, 1758)

ex *Anas superciliosa*. Western Australia: Perth, April 1968, 1 May 1973.

ex *Anas rhynchotis*. Western Australia: Perth, 1968.

ex *Anas gracilis*. Western Australia: Perth, 23 March 1968; Wanneroo, 1 December 1968.

ex *Malacorhynchos membranaceus*. Western Australia: Lake Yangebup, 29 June 1972.

Family RICINIDAE Neumann, 1890

Genus *Ricinus* De Geer, 1778

Ricinus sp.

ex *Gerygone fusca*. Western Australia: Perth, 28 April 1971.

Suborder ISCHNOCERA Kellogg, 1896

Family PHILOPTERIDAE Burmeister, 1838

Genus *Alcedoecus* Clay and Meinertzhagen, 1939

Alcedoecus alatoclypeatus (Piaget, 1885)

ex *Todiranoplus sanctus*. Western Australia: Perth, 26 January 1973.

Alcedoecus delphax (Nitzsch (in Giebel), 1866)

ex *Dacelo novaeguineae*. Western Australia: Gleneagle, 25 April 1968; Serpentine River, 7 April 1969, 12 April 1969.

Genus *Anaticola* Clay, 1935

Anaticola crassicornis crassicornis (Scopoli, 1763)

ex *Anas superciliosa*. Western Australia: Perth, April 1968, 1 May 1973.

ex *Anas rhynchotis*. Western Australia: Perth, 1968.

ex *Anas gracilis*. Western Australia: Perth, 23 March 1968; Wanneroo, 21 January 1968.

ex *Malacorhynchos membranaceus*. Western Australia: Lake Yangebup, 29 June 1972.

Anaticola crassicornis nyrocae (Rudow, 1870)

ex *Aythya australis*. Western Australia: Perth, 17 March 1968.

Anaticola sp.

ex *Oxyura australis*. Western Australia: Perth, 8 June 1973; Lake Bibra, 23 August 1971.

ex *Biziura lobata*. Western Australia: Perth, 10 February 1968; Mandurah, 4 April 1969.

Genus *Anatoecus* Cummings, 1916

Anatoecus dentatus dentatus (Scopoli, 1763)

ex *Malacorhynchos membranaceus*. Western Australia: Lake Yangebup, 29 June 1972.

ex *Aythya australis*. Western Australia: Perth, 17 March 1968.

Anatoecus icterodes icterodes (Nitzsch, 1818)

ex *Oxyura australis*. Western Australia: Perth, 8 June 1973.

ex *Anas superciliosa*. Western Australia: Perth, April 1968.

ex *Anas rhynchotis*. Western Australia: Perth, 1968.

ex *Malacorhynchos membranaceus*. Western Australia: Lake Yangebup, 29 June 1972.

ex *Aythya australis*. Western Australia: Perth, 17 March 1968.

Anatoecus sp.

ex *Oxyura australis*. Western Australia: Perth, 8 June 1973; Lake Bibra, 23 August 1971.

ex *Biziura lobata*. Western Australia: Mandurah, 4 April 1969.

Genus *Aquanirmus* Clay and Meinertzhagen, 1939

Aquanirmus sp.

ex *Poliiocephalus poliocephalus*. Western Australia: Perth, January 1971.

Genus *Ardeicola* Clay, 1935

Ardeicola pilgrimi Tandan, 1972

ex *Egretta novaehollandiae*. Western Australia: Perth, 1970.

Genus *Austrogoniodes* Harrison, 1915

Austrogoniodes concii (Kéler, 1952)

ex *Eudypetes chrysocome*. Western Australia: Perth, 7 July 1968.

Austrogoniodes cristati Kéler, 1952

ex *Eudypetes chrysocome*. Western Australia: Perth, 7 July 1968.

Austrogoniodes metoecus Clay, 1971

ex *Biziura lobata*. Western Australia: Perth, 10 February 1968; Mandurah, 4 April 1969.

Austrogoniodes waterstoni (Cummings, 1914)

ex *Eudypetula minor novaehollandiae*. Western Australia: Perth, 10 February 1968.

Genus *Brueelia* Kéler, 1936

Brueelia semianmulata (Piaget, 1883)

ex *Gymnorhina tibicen dorsalis*. Western Australia: Floreat, 28 December 1967; Bushmead, 17 September 1968; Perth, 27 September 1968, June 1970; Pinjarra, 7 October 1968; Helena Valley, 17 October 1968; Safety Bay, 27 October 1968; Mandurah, 1 December 1968, April 1975.

ex *Gymnorhina tibicen hypoleuca*. South Australia: Tod River, 28 October 1977.

Brueelia tennis (Burmeister, 1838)

ex *Hirundo neoxena*. South Australia: Elliston, 29 October 1977.

Brueelia sp.

ex *Merops ornatus*. Western Australia: Lesmurdie, 8 November 1967; Kalamunda, January 1968.

ex *Anthochaera carunculata*. South Australia: Port Lincoln, 9 October 1977.

ex *Manorina flavigula*. South Australia: Streaky Bay, 23 October 1977.

ex *Lichenostomus ornatus*. South Australia: Yaninee, 18 September 1977; Kyancutta, 1 October 1977.

ex *Pomatostomus superciliosus*. South Australia: southern Eyre Peninsula, August 1977.

ex *Grallina cyanoleuca*. Western Australia: Perth, 1968 - 1969; Rockingham, 1973.

ex *Coracina novaehollandiae*. Western Australia: Perth, 2 May 1973.

ex *Strepera versicolor*. Western Australia: North Bannister, 25 April 1968; Gleneagle, 18 May 1968; Bannister, 18 May 1968.

ex *Corvus coronoides*. Western Australia: Perth, 29 September 1967; Bindoon, 23 August 1970; Mandurah, 11 October 1970.

ex *Corvus bennetti*. Western Australia: Latham, March 1967 (MONZ).

ex *Corcorax melanorhaphos*. New South Wales: Wagga, 5 April 1980 (MONZ).

ex *Cincloramphus cruralis*. Western Australia: Karratha, 22 July 1975; Tammin, 9 December 1976.

Genus *Campanulotes* Kéler, 1939

Campanulotes flavus flavus (Rudow, 1869)

ex *Phaps chalcoptera*. Western Australia: Binnu, 20 July 1975.

Campanulotes flavus elegans (Tendeiro, 1978)

ex *Phaps elegans*. South Australia: Tod River, 28 October 1977.

Campanulotes sp.

ex *Ocyphaps lophotes*. Western Australia: Roebourne, 9 August 1974. South Australia: Warreembo, 9 October 1977; Elliston, 30 October 1977.

Genus *Carduiceps* Clay and Meinertzhagen, 1939

Carduiceps zonarius (Nitzsch (in Giebel), 1866)

ex *Calidris ruficollis*. Western Australia: Perth, 10 August 1967; Quairading, 18 November 1967.

Genus *Cirroptlirius* Timmermann, 1953

Cirroptlirius recurvirostrae (Linnaeus, 1758)

ex *Recurvirostra novaehollandiae*. Western Australia: Perth, 26 September 1969; 7 March 1970.

Genus *Coloceras* Taschenberg, 1882

Coloceras grande Tendeiro, 1973

ex *Phaps chalcoptera*. Western Australia: Mandurah, 26 December 1967.

Coloceras sp.

ex *Phaps elegans*. South Australia: Port Lincoln, 10 October 1977.

ex *Ocyphaps lophotes*. Western Australia:

Roebourne, 9 August 1974. South Australia: Warreembo, 9 October 1977; Elliston, 30 October 1977 (MONZ).

ex *Geophaps plumifera*. Western Australia: Mount Goldsworthy, 17 August 1974.

Genus *Columbicola* Ewing, 1929

Columbicola angustus (Rudow, 1869)

ex *Phaps chalcoptera*. Western Australia: Mandurah, 26 December 1967; Binnu, 20 July 1975. South Australia: Port Lincoln, 27 October 1977.

Columbicola mckeani Tendeiro, 1973

ex *Ocyphaps lophotes*. South Australia: Warreembo, 9 October 1977; Elliston, 30 October 1977 (MONZ).

Columbicola tasmaniensis Tendeiro, 1967

ex *Phaps elegans*. South Australia: Port Lincoln, 10 October 1977 (MONZ).

Columbicola sp.

ex *Geophaps plumifera*. Western Australia: Mount Goldsworthy, 17 August 1974.

Genus *Craspedorrhynchus* Kéler, 1938

Craspedorrhynchus sp.

ex *Aquila audax*. Western Australia: Highbury, 5 February 1970.

Genus *Cuculoecus* Ewing, 1926

Cuculoecus laticlypeatus (Piaget, 1871)

ex *Cacomantis flabelliformis*. Western Australia: Perth, June 1970.

Cuculoecus sp.

ex *Cuculus pallidus*. Western Australia: Perth, 15 November 1969; Wubin, 24 August 1974.

Genus *Degeeriella* Neumann, 1906

Degeeriella elauii Tendeiro, 1955

ex *Elanus axillaris*. Western Australia: Perth, September 1967.

Degeeriella fulva (Giebel, 1874)

ex *Hieraetus morphnoides*. Western Australia: Pithara, 29 June 1969.

Degeeriella fusca (Denny, 1842)

ex *Circus approximans*. South Australia: Adelaide, 5 January 1977.

Degeeriella rufa rufa (Burmeister, 1838)

ex *Falco berigora*. Western Australia: Perth, 10 February 1968.

ex *Falco longipennis*. Western Australia: Perth, 13 April 1968.

ex *Falco cenchroides*. Western Australia: Perth, 17 November 1968; Mandurah, 26 February 1971.

Genus *Docophoroides* Giglioli, 1864

Docophoroides simplex (Waterston, 1914)

ex *Diomedea melanophris*. Western Australia: Mandurah, 3 August 1968; Perth, 4 October 1970 (MONZ).

ex *Diomedea chlororhynchos*. Western Australia: Perth, June 1970, 4 October 1970, 9 September 1972.

Genus *Echinophilopterus* Ewing, 1927

Echinophilopterus angustoclypeatus (Piaget, 1880)

ex *Polytelis anthoephus*. Victoria: 31 March 1980.

Genus *Emersoniella* Tendeiro, 1965

Emersoniella bracteata (Nitzsch (in Giebel), 1866)

ex *Dacelo novaeguineae*. Western Australia: Gleneagle, 25 April 1968; Serpentine River, 7 April 1969, 12 April 1969.

Genus *Forficuloecus* Conci, 1941

Forficuloecus forficula (Piaget, 1871)

ex *Psephotus haematonotus*. Victoria: Hopeville, 1 April 1980 (MONZ).

Forficuloecus palmai Guimaraes, 1985

ex *Barnardius zonarius semitorquatus*. Western Australia: Perth, 26 January 1973, 4 April 1973.

ex *Purpureicephalus spurius*. Western Australia: Perth, 30 August 1974.

Genus *Fulicoffula* Clay and Meinertzhagen, 1938

Fulicoffula lurida (Nitzsch, 1818)

ex *Fulica atra australis*. Western Australia: Lake Karrinyup, 21 January 1968; Spearwood, 12 April 1969; Perth, June 1970; Lake Coolungup, 11 July 1972; Jolimont Lake, 4 January 1973.

Fulicoffula sp.

ex *Gallinula ventralis*. Western Australia: Carnavon, 20 July 1975. South Australia: Mount Hope, 29 October 1977.

Genus *Goniodes* Nitzsch, 1818

Goniodes fissus (Rudow, 1869)

ex *Alectura lathamii*. Queensland: Northeast region, 12 April 1980.

Goniodes sp.

ex *Alectura lathamii*. Queensland: Northeast region, 12 April 1980.

Genus *Halipeurus* Thompson, 1936

Halipeurus (Halipeurus) mirabilis Thompson, 1940

ex *Puffinus pacificus*. Western Australia: Perth, 14 May 1969.

Halipeurus (Synnautes) pelagicus (Denny, 1842)
ex *Pelagodroma marina*. Western Australia: Perth,
29 December 1968.

Halipeurus (Halipeurus) placodus Edwards, 1961
ex *Puffinus assimilis tunneyi*. Western Australia:
Becher Point, 4 October 1970.

Halipeurus (Halipeurus) procellariae (J.C.
Fabricius, 1775)
ex *Pterodroma macroptera*. Western Australia:
Perth, 14 December 1969.
ex *Pterodroma lessonii*. Western Australia: Perth,
June 1970.
ex *Pterodroma mollis*. Western Australia: Sorrento
Beach, 7 August 1968.

Genus *Incidifrons* Ewing, 1929

Incidifrons fulicae (Linnaeus, 1758)
ex *Fulica atra australis*. Western Australia:
Spearwood, 12 April 1969; Lake Coolungup, 11
July 1972; Jolimont Lake, 4 January 1973.

Genus *Lipeurus* Nitzsch, 1818

Lipeurus crassus Rudow, 1869
ex *Alectura lathamii*. Queensland: Northeast region,
12 April 1980.

Genus *Lunaceps* Clay and Meinertzhagen, 1939
Lunaceps drosti Timmermann, 1954
ex *Calidris tenuirostris*. Western Australia:
Mandurah, 7 February 1970.

Lunaceps sp.
ex *Calidris ruficollis*. Western Australia: Perth, 10
August 1967; Quairading, 18 November 1967.

Genus *Meropoeus* Eichler, 1940

Meropoeus sp.
ex *Merops ornatus*. Western Australia: Lesmurdie,
8 November 1967; Kalamunda, January 1968.

Genus *Multicola* Clay and Meinertzhagen, 1938
Multicola sp.
ex *Eurostopus argus*. Western Australia: Mount
Goldsworthy, 23 July 1975.

Genus *Naubates* Bedford, 1930

Naubates fuliginosus (Taschenberg, 1882)
ex *Procellaria aequinoctialis*. Western Australia:
Perth, 2 May 1973.

Naubates harrisoni Bedford, 1930
ex *Puffinus pacificus*. Western Australia: Perth, 14
May 1969.
ex *Puffinus assimilis tunneyi*. Western Australia:
Becher Point, 4 October 1970.

Naubates heteroproctus Harrison, 1937
ex *Pterodroma macroptera*. Western Australia:
Perth, 14 December 1969.

Naubates prioni (Enderlein, 1908)
ex *Pachyptila salvini*. Western Australia:
Mandurah, 25 July 1970.
ex *Pachyptila desolata*. Western Australia: Mullaloo
Beach, 29 June 1968; Mandurah, 3 August 1968;
Warnboro Sound, 28 June 1970; Perth, 29 August
1972; Swanbourne Beach, 30 July 1973.
ex *Pachyptila belcheri*. Western Australia:
Mandurah, 28 July 1968; Perth, 30 July 1968.
ex *Pachyptila turtur*. Western Australia: Perth, 30
July 1973.

Naubates pterodromi Bedford, 1930 subspecies
ex *Pterodroma lessonii*. Western Australia: Perth,
June 1970.

Genus *Neopsittaconirmus* Conci, 1942

Neopsittaconirmus borgioli Conci, 1942
ex *Calyptorhynchus banksii naso*. Western Australia:
North Bannister, 14 April 1968.
ex *Calyptorhynchus latirostris*. Western Australia:
Perth, 16 July 1968; Helena Valley, 16 August 1968.

Neopsittaconirmus circumfasciatus (Piaget, 1880)
ex *Polytelis anthopeplus*. Victoria: 31 March 1980.
ex *Platycercus elegans*. Victoria: Dunkeld, 1 April
1980 (MONZ).
ex *Barnardius zonarius semitorquatus*. Western
Australia: Mandurah, 8 January 1971.

Neopsittaconirmus eos (Giebel, 1874)
ex *Cacatua roseicapilla*. Western Australia: Latham,
March 1967; Byford, 12 January 1969; Three
Springs, 28 November 1969; Minilya River, 21 July
1975. South Australia: southern Eyre Peninsula, 30
October 1977 (MONZ).
ex *Cacatua sanguinea*. Western Australia:
Exmouth, June 1969.

Neopsittaconirmus sp.
ex *Nymphicus hollandicus*. Western Australia:
Perth, 11 August 1968.
ex *Purpureicephalus spurius*. Western Australia:
Perth, 30 August 1974.

Genus *Oxylipeurus* Mjöberg, 1910

Oxylipeurus ischnocephalus (Taschenberg, 1882)
ex *Alectura lathamii*. Queensland: Northeast region,
12 April 1980.

Genus *Paraclisis* Timmermann, 1965

Paraclisis diomedea (J.C. Fabricius, 1775)
ex *Diomedea melanophris*. Western Australia: Perth,

4 October 1970 (MONZ); Mandurah, 3 August 1968.

ex *Diomedea chrysostoma*. Western Australia: Perth, June 1970, 4 October 1970, August 1972.

ex *Diomedea chlororhynchus*. Western Australia: Perth, June 1970.

ex *Phoebastria fusca*. Western Australia: Rockingham, 2 August 1968.

Paraclisis obscura (Rudow, 1869)

ex *Macronectes giganteus*. Western Australia: Perth, 7 July 1968.

Genus *Pectinopygus* Mjöberg, 1910

Pectinopygus australis Thompson, 1948

ex *Pelecanus conspicillatus*. Western Australia: Perth, 6 January 1968; Pelican Point, 17 November 1968.

Pectinopygus dispar (Piaget, 1880)

ex *Phalacrocorax melanoleucos*. Western Australia: Mandurah, 2 January 1970; Perth, 10 May 1973. Tasmania: Fisher Island, 26 February 1970.

Pectinopygus setosus (Piaget, 1880)

ex *Phalacrocorax sulcirostris*. Western Australia: Perth, 13 November 1969.

Pectinopygus varius Timmermann, 1964

ex *Phalacrocorax varius*. Western Australia: Perth, 27 October 1968; Mandurah, 2 September 1968, 26 January 1970, 3 April 1970; Warnboro Sound, 28 June 1970.

Genus *Penenirmus* Clay and Meinertzhagen, 1938

Penenirmus sp.

ex *Anthus novaeseelandiae*. Western Australia: Northam, 4 September 1976.

Genus *Perineus* Thompson, 1936

Perineus circumfasciatus Kéler, 1957

ex *Diomedea melanophris*. Western Australia: Perth, 4 October 1970; Mandurah, 3 August 1968.

Perineus nigrolimbatus (Giebel, 1874)

ex *Fulmarus glacialisoides*. Western Australia: Perth, 1968 (MONZ); Scarborough Beach, 25 August 1968.

Genus *Philopterus* Nitzsch, 1818

Philopterus excisus microsomaticus Tandan, 1955

ex *Hirundo neoxena*. South Australia: Elliston, 29 October 1977.

Philopterus sp.

ex *Acanthiza chrysorrhoa*. Western Australia: Perth, 1 October 1967.

ex *Anthochaera carunculata*. Western Australia: Perth, 3 October 1970, 18 December 1970;

Mandurah, 17 July 1971; Rockingham, 9 October 1977. South Australia: Port Lincoln, 9 October 1977.

ex *Manorina flavigula*. South Australia: Streaky Bay, 23 October 1977.

ex *Lichenostomus ornatus*. South Australia: 28 March 1980.

ex *Grallina cyanoleuca*. Western Australia: Rockingham, 3 August 1968.

ex *Gymnorhina tibicen dorsalis*. Western Australia: Bushmead, 17 September 1968; Perth, 27 September 1968, June 1970; Helena Valley, 17 October 1968; Safety Bay, 27 October 1968; Mandurah, 1 December 1968, April 1975; Rockingham, 27 July 1969, 26 August 1972; Cardup, 10 August 1969; Wilson, 25 October 1969; Perth, 7 November 1969; Mandurah, 8 December 1969, 31 December 1969; Clontarf, July 1970.

ex *Strepera versicolor*. Western Australia: North Bannister, 25 April 1968; Gleneagle, 18 May 1968; Bannister, 18 May 1968.

ex *Corvus coronoides*. Western Australia: Perth, 29 September 1967, 1 October 1967; Bindoon, 23 August 1970, 11 October 1970; Mandurah, 23 August 1970, 11 October 1970.

ex *Corvus bennetti*. Western Australia: Latham, March 1967; Geraldton, 28 November 1969.

ex *Anthus novaeseelandiae*. Western Australia: Perth, 17 September 1968; Perth, 1969 (MONZ).

Genus *Physcouelloides* Ewing, 1927

Physcouelloides australiensis Tendeiro, 1969

ex *Phaps chalcoptera*. Western Australia: Binnu, 20 July 1975.

ex *Phaps elegans*. South Australia: Port Lincoln, 10 October 1977.

Physcouelloides straugeri Tendeiro, 1980

ex *Phaps chalcoptera*. Western Australia: Perth, 1967; Mandurah, 26 December 1967; Binnu, 20 July 1975. South Australia: Port Lincoln, 27 October 1977.

Genus *Podargoecus* Emerson and Price, 1966

Podargoecus strigoides Emerson and Price, 1966

ex *Podargus strigoides*. Western Australia: Perth, 13 January 1968, 29 May 1971; Gnangara, 27 October 1968; Hamilton Hill, 12 April 1969; Mandurah, 6 September 1969, 24 January 1970.

Podargoecus tasmaniensis Price, 1976

ex *Aegothales cristatus*. South Australia: Wirrula, 9 April 1977.

Genus *Pseudonirmus* Mjöberg, 1910

Pseudonirmus gurlti (Taschenberg, 1882)

ex *Daption capense*. Western Australia: Warnboro Sound, 27 August 1972.

Genus *Psittoecus* Conci, 1942*Psittoecus eos* (Rudow, 1869)

ex *Cacatua roseicapilla*. Western Australia: Latham, March 1967 (MONZ); Byford, 12 January 1969; Three Springs, 28 November 1969; Minilya River, 21 July 1975. South Australia: southern Eyre Peninsula, 30 October 1977.

ex *Cacatua sanguinea*. Western Australia: Exmouth, June 1969; Roebourne, 22 July 1975.

Psittoecus sp.

ex *Calyptorhynchus banksii naso*. Western Australia: North Bannister, 14 April 1968.

ex *Calyptorhynchus latirostris*. Western Australia: Perth, 16 July 1968; Helena Valley, 16 August 1968.

Genus *Quadriceps* Clay and Meinertzhagen, 1939*Quadriceps australis* Emerson and Price, 1986

ex *Vanellus tricolor*. Western Australia: Perth, 11 August 1968. South Australia: Streaky Bay, 7 August 1977.

Quadriceps bicuspis dressleri Timmermann, 1971

ex *Elsyornis melanops*. Western Australia: Perth, 7 April 1968.

Quadriceps charadrii hospes (Nitzsch (in Giebel), 1866)

ex *Pluvialis squatarola*. Western Australia: Rottnest Island, 4 January 1973.

Quadriceps decipiens (Denny, 1842)

ex *Recurvirostra novaehollandiae*. Western Australia: Perth, 26 September 1969, 7 March 1970.

Quadriceps hopkinsi hopkinsi Timmermann, 1952

ex *Anous tenuirostris*. Western Australia: Perth, 28 July 1973.

Quadriceps legutus Timmermann, 1952

ex *Sterna anaethetus*. Western Australia: Perth, 4 October 1970.

Quadriceps neoaustralis Emerson and Price, 1986

ex *Charadrius australis*. Western Australia: Cue, 23 August 1974.

Quadriceps nychthemerus (Burmeister, 1838)

ex *Sterna nereis*. Western Australia: Pelican Point, January 1967.

Quadriceps punctatus lingulatus (Waterston, 1914)

ex *Larus novaehollandiae novaehollandiae*. Western Australia: Perth, 30 July 1968; Coogee, 15 September 1968; Pelican Point, 25 October 1968; Perth, 15 December, 1968, 13 November 1969. Tasmania: Fisher Island, 23 February 1970.

Quadriceps renschi Timmermann, 1954

ex *Vanellus miles novaehollandiae*. South Australia:

Streaky Bay, 23 October 1977. Tasmania: Fisher Island, 25 February 1970.

Quadriceps sellatus (Burmeister, 1838)

ex *Sterna bergii*. Western Australia: Perth, 1 June 1968; Mandurah, 18 August 1968.

Quadriceps signatus (Piaget, 1880)

ex *Recurvirostra novaehollandiae*. Western Australia: Perth, 26 September 1969, 7 March 1970.

Genus *Rallicola* Johnston and Harrison, 1911*Rallicola bournei* Price and Emerson, 1986

ex *Gallinula ventralis*. Western Australia: Carnarvon, 20 July 1975. South Australia: Mount Hope, 29 October 1977.

Rallicola fulicae (Denny, 1842)

ex *Fulica atra australis*. Western Australia: Lake Karrinyup, 21 January 1968; Spearwood, 12 April 1969; Perth, June 1970; Lake Coolungup, 11 July 1972; Jolimont Lake, 4 January 1973.

Rallicola lugens (Giebel, 1874)

ex *Porphyrio porphyrio bellus*. Western Australia: Perth, 4 October 1969, 5 October 1970, 4 July 1973.

Rallicola ortygometrae philippensis Emerson, 1966

ex *Gallirallus philippensis australis*. Western Australia: Spearwood, 24 April 1969.

Genus *Saemundssonina* Timmermann, 1936*Saemundssonina (Saemundssonina) africana sycophanta* Timmermann, 1962

ex *Vanellus miles novaehollandiae*. Tasmania: Fisher Island, 25 February 1970.

Saemundssonina (Saemundssonina) bicolor (Rudow, 1870)

ex *Fulmarus glacialisoides*. Western Australia: Perth, 25 August 1968 (MONZ).

Saemundssonina (Saemundssonina) conica naumanni (Giebel, 1874)

ex *Pluvialis squatarola*. Western Australia: Rottnest Island, 4 January 1973.

Saemundssonina (Saemundssonina) desolata Timmermann, 1959

ex *Pachyptila salvini*. Western Australia: Mandurah, 25 July 1970.

ex *Pachyptila desolata*. Western Australia: Mullaloo Beach, 29 June 1968; Mandurah, 3 August 1968; Warnboro Sound, 28 June 1970; Perth, 29 August 1972; Swanbourne Beach, 30 July 1973.

ex *Pachyptila belcheri*. Western Australia: Mandurah, 28 July 1968; Perth, 30 July 1968.

ex *Pachyptila turtur*. Western Australia: Perth, 30 July 1973.

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

ex *Larus novaehollandiae novaehollandiae*. Western Australia: Pelican Point, 18 November 1967; Perth, 30 July 1968, 15 December, 1968, 13 November 1969; Lake Coolungup, 17 July 1971. Tasmania: Fisher Island, 23 February 1970.

***Saemundssonina (Saemundssonina) laticaudata* (Rudow, 1869)**

ex *Sterna bergii*. Western Australia: Perth, 1 June 1968; Mandurah, 18 August 1968.

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

ex *Sterna anaethetus*. Western Australia: Perth, 4 October 1970.

***Saemundssonina (Saemundssonina) melanocephalus* (Burmeister, 1838)**

ex *Sterna nereis*. Western Australia: Pelican Point, January 1967.

***Saemundssonina (Saemundssonina) meridiana* Timmermann, 1950**

ex *Sterna anaethetus*. Western Australia: Perth, 4 October 1970.

***Saemundssonina (Saemundssonina) minitrans* Timmermann, 1977**

ex *Malacorhynchos membranaceus*. Western Australia: Lake Yangebup, 29 June 1972.

***Saemundssonina (Saemundssonina) stammeri* Timmermann, 1959**

ex *Daption capense*. Western Australia: Perth, 4 August 1972; Warnboro Sound, 27 August 1972.

***Saemundssonina (Saemundssonina) tringae sibiriae* Martens, 1974**

ex *Calidris tenuirostris*. Western Australia: Mandurah, 7 February 1970.

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

ex *Calidris ruficollis*. Western Australia: Perth, 10 August 1967; Quairading, 18 November 1967.

***Saemundssonina* sp.**

ex *Vanellus tricolor*. South Australia: Streaky Bay, 7 August 1977.

Genus *Strigiphilus* Mjöberg, 1910***Strigiphilus aitkeni* Clay, 1966**

ex *Tyto alba delicatula*. Western Australia: Perth, 6 March 1968, 23 March 1968; Mandurah, 11 October 1969; Welshpool, 10 September 1972. South Australia: 30 March 1980.

***Strigiphilus vapidus* Clay, 1977**

ex *Ninox novaeselandiae*. Western Australia:

Northcliffe, 13 September 1967; Perth, 6 March 1968, 9 February 1973; Rockingham, 22 November 1976.

Genus *Trabeculus* Rudow, 1866***Trabeculus hexakon* (Waterston, 1914)**

ex *Procellaria aequinoctialis*. Western Australia: Perth, 2 May 1973.

ex *Puffinus pacificus*. Western Australia: Perth, 14 May 1969.

***Trabeculus schillingi* Rudow, 1866**

ex *Pterodroma macroptera*. Western Australia: Perth, 14 December 1969.

ex *Pterodroma lessonii*. Western Australia: Perth, June 1970.

Genus *Turnicola* Clay and Meinertzhausen, 1938***Turnicola* sp.**

ex *Turnix varia*. Western Australia: Perth, 31 October 1970.

HOST – PARASITE LIST**Class AVES****Order GALLIFORMES****Family MEGAPODIIDAE****Genus *Alectura* Latham, 1824**

Alectura lathamii Gray, 1831 Brush-turkey

Goniodes fissus (Rudow, 1869)

Goniodes sp.

Lipeurus crassus Rudow, 1869

Oxylipeurus ischnocephalus (Taschenberg, 1882)

Order ANSERIFORMES**Family ANATIDAE****Genus *Oxyura* Bonaparte, 1827**

Oxyura australis Gould, 1836 Blue-billed Duck

Anaticola sp.

Anatoecus icterodes icterodes (Nitzsch, 1818)

Anatoecus sp.

Genus *Biziura* Stephens, 1824

Biziura lobata (Shaw, 1796) Musk Duck

Anaticola sp. (nymphs only)

Anatoecus sp. (females only)

Austrogoniodes metoecus Clay, 1971

Genus *Anas* Linnaeus, 1758*Anas superciliosa* Gmelin, 1789

Pacific Black Duck

Anaticola crassicornis crassicornis (Scopoli, 1763)*Anatocercus icterodes icterodes* (Nitzsch, 1818)*Holomenopon leucoxanthum* (Burmeister, 1838)*Trinoton querquedulae* (Linnaeus, 1758)*Anas rhynchotis* Latham, 1801

Australasian Shoveler

Anaticola crassicornis crassicornis (Scopoli, 1763)*Anatocercus icterodes icterodes* (Nitzsch, 1818)*Triuotou querquedulae* (Linnaeus, 1758)*Anas gracilis* Buller, 1869

Grey Teal

Anaticola crassicornis crassicornis (Scopoli, 1763)*Trinoton querquedulae* (Linnaeus, 1758)Genus *Malacorhynchus* Swainson, 1831*Malacorhynchus membranaceus* (Latham, 1801)

Pink-eared Duck

Anaticola crassicornis crassicornis (Scopoli, 1763)*Anatocercus dentatus dentatus* (Scopoli, 1763)*Anatocercus icterodes icterodes* (Nitzsch, 1818)*Saemundssonina (Saemundssonina) minuitraus* Timmermann, 1977*Trinoton querquedulae* (Linnaeus, 1758)Genus *Aythya* Boie, 1822*Aythya australis* (Eyton, 1838) White-eyed Duck*Anaticola crassicornis uyrocae* (Rudow, 1870)*Anatocercus dentatus dentatus* (Scopoli, 1763)*Anatocercus icterodes icterodes* (Nitzsch, 1818)*Holomenopon leucoxanthum* (Burmeister, 1838)

Order PODICIPEDIFORMES

Family PODICIPEDIDAE

Genus *Poliiocephalus* Selby, 1840*Poliiocephalus poliiocephalus* (Jardine and Selby, 1827) Hoary-headed Grebe*Aquanirmus* sp.

Order SPHENISCIFORMES

Family SPHENISCIDAE

Genus *Eudyptes* Vieillot, 1816*Eudyptes chrysocome* (Forster, 1781)

Rockhopper Penguin

Austrogoniodes concii (Kéler, 1952)*Austrogoniodes cristati* Kéler, 1952Genus *Eudyptula* Bonaparte, 1856*Eudyptula minor novaehollandiae* (Stephens, 1826) Little Penguin*Austrogoniodes waterstouii* (Cummings, 1914)

Order PROCELLARIIFORMES

Family PROCELLARIIDAE

Genus *Macronectes* Richmond, 1905*Macronectes giganteus* (Gmelin, 1789)

Southern Giant-petrel

Paraclisis obscura (Rudow, 1869)Genus *Fulmarus* Stephens, 1826*Fulmarus glacialis* (Smith, 1840)

Southern Fulmar

Austroneuopou brevifimbriatum (Piaget, 1880)*Periueus uigroliuabatus* (Giebel, 1874)*Saemundssonina (Saemundssonina) bicolor* (Rudow, 1870)Genus *Daption* Stephens, 1826*Daption capense* (Linnaeus, 1758) Cape Petrel*Aucistroua vagelli* (J.C. Fabricius, 1787)*Austroneuopou brevifimbriatum* (Piaget, 1880)*Pseudonirmus gurlti* (Taschenberg, 1882)*Saemundssonina (Saemundssonina) stammeri* Timmermann, 1959Genus *Pterodroma* Bonaparte, 1856*Pterodroma macroptera* (Smith, 1840)

Great-winged Petrel

Austronemopou popellus (Piaget, 1890)*Halipeurus (Halipeurus) procellariae* (J.C. Fabricius, 1775)*Naubates heteroproctus* Harrison, 1937*Trabeculus schilliugi* Rudow, 1866*Pterodroma lessonii* (Garnot, 1826)

White-headed Petrel

Halipeurus (Halipeurus) procellariae (J.C. Fabricius, 1775)*Naubates pterodromi* Bedford, 1930 subspecies*Trabeculus schilliugi* Rudow, 1866*Pterodroma mollis* (Gould, 1844)

Soft-plumaged Petrel

Halipeurus (Halipeurus) procellariae (J.C. Fabricius, 1775)Genus *Pachyptila* Illiger, 1811*Pachyptila salvini* (Mathews, 1912) Salvin's Prion*Naubates prioui* (Enderlein, 1908)

Saemundssonina (*Saemundssonina*) *desolata*
Timmermann, 1959

Pachyptila desolata (Gmelin, 1789) Antarctic Prion
Ancistrona vagelli (J.C. Fabricius, 1787)
Austromenopon stammeri Timmermann, 1963
Naubates prioni (Enderlein, 1908)
Saemundssonina (*Saemundssonina*) *desolata*
Timmermann, 1959

Pachyptila belcheri (Mathews, 1912) Slender-billed Prion
Ancistrona vagelli (J.C. Fabricius, 1787)
Austromenopon stammeri Timmermann, 1963
Naubates prioni (Enderlein, 1908)
Saemundssonina (*Saemundssonina*) *desolata*
Timmermann, 1959

Pachyptila turtur (Kuhl, 1820) Fairy Prion
Naubates prioni (Enderlein, 1908)
Saemundssonina (*Saemundssonina*) *desolata*
Timmermann, 1959

Genus *Procellaria* Linnaeus, 1758

Procellaria aequinoctialis Linnaeus, 1758 White-chinned Petrel
Austromenopon popellus (Piaget, 1890)
Naubates fuliginosus (Taschenberg, 1882)
Trabeculus lexakon (Waterston, 1914)

Genus *Puffinus* Brisson, 1760

Puffinus pacificus (Gmelin, 1789) Wedge-tailed Shearwater
Austromenopon paululum (Kellogg and Chapman, 1899)
Halipeurus (*Halipeurus*) *mirabilis* Thompson, 1940
Naubates harrisoni Bedford, 1930
Trabeculus lexakon (Waterston, 1914)

Puffinus assimilis tinneyi Mathews, 1912 Little Shearwater
Halipeurus (*Halipeurus*) *placodus* Edwards, 1961
Naubates harrisoni Bedford, 1930

Family DIOMEDEIDAE

Genus *Diomedea* Linnaeus, 1758

Diomedea melanophris Temminck, 1828 Black-browed Albatross
Austromenopon navigans (Kellogg, 1896)
Docophoroides simplex (Waterston, 1914)
Paraclisis diomedea (J.C. Fabricius, 1775)
Perineus circumfasciatus Kéler, 1957
Diomedea chrysostris Forster, 1785 Grey-headed Albatross
Austromenopon pinguis (Kellogg, 1896)

Paraclisis diomedea (J.C. Fabricius, 1775)

Diomedea chlororhynchus Gmelin, 1789 Yellow-nosed Albatross
Austromenopon pinguis (Kellogg, 1896)
Docophoroides simplex (Waterston, 1914)
Paraclisis diomedea (J.C. Fabricius, 1775)

Genus *Phoebetria* Reichenbach, 1853

Phoebetria fusca (Hilsenbergh, 1822) Sooty Albatross
Paraclisis diomedea (J.C. Fabricius, 1775)

Family HYDROBATIDAE

Genus *Pelagodroma* Reichenbach, 1853

Pelagodroma marina (Latham, 1790) White-faced Storm-petrel
Halipeurus (*Symmantes*) *pelagicus* (Denny, 1842)

Order PELECANIFORMES

Family PHALACROCORACIDAE

Genus *Phalacrocorax* Brisson, 1760
Phalacrocorax melanoleucos (Vieillot, 1817) Little Pied Cormorant
Pectinopygus dispar (Piaget, 1880)
Phalacrocorax varius (Gmelin, 1789) Pied Cormorant
Eidmanniella pellucida (Rudow, 1869)
Pectinopygus varius Timmermann, 1964
Phalacrocorax sulcirostris (Brandt, 1837) Little Black Cormorant
Pectinopygus setosus (Piaget, 1880)

Family PELECANIDAE

Genus *Pelecanus* Linnaeus, 1758

Pelecanus conspicillatus Temminck, 1824 Australian Pelican
Colpocephalum eucarenum Burmeister, 1838
Pectinopygus australis Thompson, 1948
Piagetiella africana (Bedford, 1931)

Order CICONIIFORMES

Family ARDEIDAE

Genus *Egretta* Forster, 1817
Egretta novaehollandiae (Latham, 1790) White-faced Heron
Ardeicola pilgrimi Tandan, 1972

Family THRESKIORNITHIDAE

Genus *Threskiornis* Gray, 1842

- Threskiornis molucca* (Cuvier, 1829)
 Australian White Ibis
Colpocephalum aethiopicae Price and Beer, 1965
Plegadipylus threskiornis Bedford, 1939

Order FALCONIFORMES

Family ACCIPITRIDAE

Genus *Elanus* Savigny, 1809

- Elanus axillaris* (Latham, 1801)
 Black-shouldered Kite
Degeeriella elani Tendeiro, 1955

Genus *Circus* Lacépède, 1799

- Circus approximans* Peale, 1848 Swamp Harrier
Degeeriella fusca (Denny, 1842)

Genus *Aquila* Brisson, 1760

- Aquila audax* (Latham, 1801) Wedge-tailed Eagle
Craspedorrhynchus sp.

Genus *Hieraetus* Kaup, 1844

- Hieraetus morphnoides* (Gould, 1841) Little Eagle
Degeeriella fulva (Giebel, 1874)

Family FALCONIDAE

Genus *Falco* Linnaeus, 1758

- Falco berigora* Vigors and Horsfield, 1827
 Brown Falcon
Degeeriella rufa rufa (Burmeister, 1838)
Falco longipennis Swainson, 1837
 Australian Hobby
Degeeriella rufa rufa (Burmeister, 1838)
Falco cenchroides Vigors and Horsfield, 1827
 Nankeen Kestrel
Degeeriella rufa rufa (Burmeister, 1838)

Order GRUIFORMES

Family RALLIDAE

Genus *Gallirallus* Lafresnaye, 1841

- Gallirallus philippensis australis* (von Pelzeln, 1873)
 Buff-banded Rail
Rallicola ortyometrae philippensis Emerson, 1966

Genus *Porphyrio* Brisson, 1760

- Porphyrio porphyrio bellus* Gould, 1840
 Purple Swamphen
Laemobothrion (Eulaemobothrion) sp. (nymphs only)

- Pseudomenopon concretum* (Piaget, 1880)
Rallicola lugens (Giebel, 1874)

Genus *Gallinula* Brisson, 1760

- Gallinula ventralis* Gould, 1837
 Black-tailed Native-hen
Fulicoffula sp.
Pseudomenopon australis Price and Emerson, 1986
Rallicola bourniei Price and Emerson, 1986

Genus *Fulica* Linnaeus, 1758

- Fulica atra australis* Gould, 1845
 Australasian Coot
Fulicoffula lurida (Nitzsch, 1818)
Incidifrons fulicae (Linnaeus, 1758)
Laemobothrion (Eulaemobothrion) atrum (Nitzsch, 1818)
Pseudomenopon pilosum (Scopoli, 1763)
Rallicola fulicae (Denny, 1842)

Order TURNICIFORMES

Family TURNICIDAE

Genus *Turnix* Bonnaterre, 1791

- Turnix varia* (Latham, 1801) Painted Button-quail
Turnicola sp.

Order CHARADRIIFORMES

Family SCOLOPACIDAE

Genus *Calidris* Merrem, 1804

- Calidris tenuirostris* (Horsfield, 1821) Great Knot
Actornithophilus sp. (nymphs only)
Limaceps drosti Timmermann, 1954
Saemundssonina (Saemundssonina) tringae sibiriae
 Martens, 1974
Calidris ruficollis (Pallas, 1776) Red-necked Stint
Actornithophilus sp. (nymphs only)
Carduiceps zonarius (Nitzsch (in Giebel), 1866)
Limaceps sp.
Saemundssonina (Saemundssonina) tringae tringae (O.
 Fabricius, 1780)

Family RECURVIROSTRIDAE

Genus *Recurvirostra* Linnaeus, 1758

- Recurvirostra novaehollandiae* Vieillot, 1816
 Red-necked Avocet
Austromenopon micrandum (Nitzsch (in Giebel), 1866)

Cirroptorius recurvirostrae (Linnaeus, 1758)

Quadriceps decipiens (Denny, 1842)

Quadriceps signatus (Piaget, 1880)

Family CHARADRIIDAE

Genus *Pluvialis* Brisson, 1760

Pluvialis squatarola (Linnaeus, 1758) Grey Plover

Quadriceps charadrii hospes (Nitzsch (in Giebel), 1866)

Saemundssonina (*Saemundssonina*) *conica naumannii* (Giebel, 1874)

Genus *Charadrius* Linnaeus, 1758

Charadrius australis (Gould, 1841) Inland Dotterel

Austromenopon sp.

Quadriceps neoaustralis Emerson and Price, 1986

Genus *Elseiyornis* Mathews, 1914

Elseiyornis melanops (Vieillot, 1818) Black-fronted Dotterel

Quadriceps bicuspis dressleri Timmermann, 1971

Genus *Vanellus* Brisson, 1760

Vanellus tricolor (Vieillot, 1818) Banded Lapwing

Actornithophilus hoplopteri (Mjöberg, 1910)

Quadriceps australis Emerson and Price, 1986

Saemundssonina sp.

Vanellus miles novaehollandiae Stephens, 1819

Masked Lapwing

Actornithophilus hoplopteri (Mjöberg, 1910)

Austromenopon aegialitidis (Durrant, 1906)

Quadriceps renschi Timmermann, 1954

Saemundssonina (*Saemundssonina*) *africana sycophanta* Timmermann, 1962

Family LARIDAE

Genus *Larus* Linnaeus, 1758

Larus novaehollandiae novaehollandiae Stephens, 1826 Silver Gull

Actornithophilus piceus lari (Packard, 1870)

Austromenopon transversum (Denny, 1842)

Quadriceps punctatus lingulatus (Waterston, 1914)

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

Genus *Sterna* Linnaeus, 1758

Sterna bergii Lichtenstein, 1823 Crested Tern

Actornithophilus piceus piceus (Denny, 1842)

Austromenopon atrofulvum (Piaget, 1880)

Quadriceps sellatus (Burmeister, 1838)

Saemundssonina (*Saemundssonina*) *laticaudata* (Rudow, 1869)

Sterna nereis (Gould, 1843)

Fairy Tern

Quadriceps nychthemerus (Burmeister, 1838)

Saemundssonina (*Saemundssonina*) *melanocephalus* (Burmeister, 1838)

Sterna anaethetus Scopoli, 1786

Bridled Tern

Austromenopon atrofulvum (Piaget, 1880)

Quadriceps legatus Timmermann, 1952

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

Saemundssonina (*Saemundssonina*) *meridiana* Timmermann, 1950

Genus *Anous* Stephens, 1826

Anous tenuirostris (Temminck, 1823)

Lesser Noddy

Actornithophilus ceruleus (Timmermann, 1954)

Quadriceps hopkinsi hopkinsi Timmermann, 1952

Order COLUMBIFORMES

Family COLUMBIDAE

Genus *Phaps* Selby, 1835

Phaps chalcoptera (Latham, 1790)

Common Bronzewing

Campanulotes flavus flavus (Rudow, 1869)

Coloceras grande Tendeiro, 1973

Columbicola angustus (Rudow, 1869)

Physconelloides australiensis Tendeiro, 1969

Physconelloides strangeri Tendeiro, 1980

Phaps elegans (Temminck, 1810)

Brush Bronzewing

Campanulotes flavus elegans (Tendeiro, 1978)

Coloceras sp.

Columbicola tasmaniensis Tendeiro, 1967

Physconelloides australiensis Tendeiro, 1969

Genus *Ocyphaps* Gray, 1842

Ocyphaps lophotes (Temminck and Laugier, 1822)

Crested Pigeon

Campanulotes sp.

Coloceras sp.

Columbicola mckeani Tendeiro, 1973

Genus *Geophaps* Gray, 1842

Geophaps plumifera Gould, 1842 Spinifex Pigeon

Coloceras sp.

Columbicola sp.

Order PSITTACIFORMES

Family CACATUIDAE

Genus *Calyptorhynchus* Desmarest, 1826

- Calyptorhynchus banksii naso* (Gould, 1837)
 Red-tailed Black Cockatoo
Franciscoloa (Franciscoloa) magnifici Price, 1969
Neopsittaconirmus borgioli Conci, 1942
Psittoecus sp.

Calyptorhynchus latirostris Carnaby, 1948
 Short-billed Black Cockatoo

- Franciscoloa (Franciscoloa) funerei* Price and Beer, 1966
Kelerimenopon (Lorimenopon) sp. (females only)
Neopsittaconirmus borgioli Conci, 1942
Psittoecus sp.

Genus *Cacatua* Vieillot, 1817

- Cacatua roseicapilla* Vieillot, 1817 Galah
Franciscoloa (Franciscoloa) roseicapillae Price and Beer, 1966
Kelerimenopon (Lorimenopon) galeritae Price and Emerson, 1966
Neopsittaconirmus eos (Giebel, 1874)
Psittoecus eos (Rudow, 1869)

- Cacatua sanguinea* Gould, 1843 Little Corella
Franciscoloa (Franciscoloa) roseicapillae Price and Beer, 1966
Neopsittaconirmus eos (Giebel, 1874)
Psittoecus eos (Rudow, 1869)

Genus *Nymphicus* Wagler, 1832

- Nymphicus hollandicus* (Kerr, 1792) Cockatiel
Neopsittaconirmus sp.

Family PSITTACIDAE

Genus *Polytelis* Wagler, 1832

- Polytelis anthopeplus* (Lear, 1831) Regent Parrot
Echinophlopterus angustoclypeatus (Piaget, 1880)
Neopsittaconirmus circumfasciatus (Piaget, 1880)

Genus *Platycercus* Vigors, 1826

- Platycercus elegans* (Gmelin, 1788)
 Crimson Rosella
Heteromenopon (Keamenopon) psittacum (Le Souëf and Bullen, 1902)
Neopsittaconirmus circumfasciatus (Piaget, 1880)

Genus *Barnardius* Bonaparte, 1854

- Barnardius zonarius semitorquatus* (Quoy and Gaimard, 1830) Australian Ringneck
Forficuloecus palmai Guimarães, 1985

Heteromenopon (Keamenopon) psittacum (Le Souëf and Bullen, 1902)

Neopsittaconirmus circumfasciatus (Piaget, 1880)

Genus *Purpureicephalus* Bonaparte, 1854

- Purpureicephalus spurius* (Kuhl, 1820) Red-capped Parrot
Forficuloecus palmai Guimarães, 1985
Heteromenopon (Keamenopon) kalamundae Price, 1969
Neopsittaconirmus sp.

Genus *Psephotus* Gould, 1845

- Psephotus haematonotus* (Gould, 1838) Red-rumped Parrot
Forficuloecus forficula (Piaget, 1871)

Order CUCULIFORMES

Family CUCULIDAE

Genus *Cuculus* Linnaeus, 1758

- Cuculus pallidus* (Latham, 1801) Pallid Cuckoo
Cuculiphilus (Cuculiphilus) fasciatus (Scopoli, 1763)
Cuculoecus sp.

Genus *Cacomantis* Müller, 1843

- Cacomantis flabelliformis* Latham, 1801 Fan-tailed Cuckoo
Cuculoecus laticlypeatus (Piaget, 1871)

Order STRIGIFORMES

Family STRIGIDAE

Genus *Ninox* Hodgson, 1837

- Ninox novaeseelandiae* (Gmelin, 1788) Southern Boobook
Kurodaia cryptostigmatia (Nitzsch, 1861)
Strigiphilus vapidus Clay, 1977

Family TYTONIDAE

Genus *Tyto* Billberg, 1828

- Tyto alba delicatula* (Gould, 1837) Barn Owl
Kurodaia subpachygaster (Piaget, 1880)
Strigiphilus aitkeni Clay, 1966

Order CAPRIMULGIFORMES

Family PODARGIDAE

Genus *Podargus* Vieillot, 1818

- Podargus strigoides* (Latham, 1801) Tawny Frogmouth
Podargoecus strigoides Emerson and Price, 1966

Family CAPRIMULGIDAE

Genus *Eurostodus* Gould, 1838*Eurostodus argus* Hartert, 1892 Spotted Nightjar
Multicola sp.

Family AEGOTHELIDAE

Genus *Aegotheles* Vigors and Horsfield, 1826*Aegotheles cristatus* (Shaw, 1790)
Australian Owlet-nightjar
Podargoecus tasmaniensis Price, 1976

Order CORACIIFORMES

Family HALCYONIDAE

Genus *Dacelo* Leach, 1815*Dacelo novaeguineae* (Hermann, 1783)
Laughing Kookaburra
Alcedoecus delphax (Nitzsch (in Giebel), 1866)
Emersoniella bracteata (Nitzsch (in Giebel), 1866)Genus *Todiramplius* Lesson, 1827*Todiramplius sanctus* (Vigors and Horsfield, 1827)
Sacred Kingfisher
Alcedoecus alatotrypeatus (Piaget, 1885)

Family MEROPIDAE

Genus *Merops* Linnaeus, 1758*Merops ornatus* Latham, 1801 Rainbow Bee-eater
Brueelia sp.
Meromenopon meropis Clay and Meinertzhagen,
1941
Meropoecus sp.

Order PASSERIFORMES

Family MALURIDAE

Genus *Malurus* Vieillot, 1816*Malurus splendens splendens* (Quoy and Gaimard,
1830) Splendid Fairy-wren
Myrsidea strangeri Clay, 1970

Family PARDALOTIDAE

Genus *Gerygone* Gould, 1841*Gerygone fusca* (Gould, 1838) Western Gerygone
Ricinus sp.Genus *Acanthiza* Vigors and Horsfield, 1827*Acanthiza chrysorrhoa* (Quoy and Gaimard, 1830)
Yellow-rumped Thornbill*Philopterus* sp.

Family MELIPHAGIDAE

Genus *Anthochaera* Vigors and Horsfield, 1827*Anthochaera carunculata* (Shaw, 1790)
Red Wattlebird*Brueelia* sp.*Menacanthus eurysternus* (Burmeister, 1838)*Myrsidea* sp.*Philopterus* sp.Genus *Manorina* Vieillot, 1818*Manorina flavigula* (Gould, 1840)
Yellow-throated Miner*Brueelia* sp.*Philopterus* sp.Genus *Lichenostomus* Cabanis, 1851*Lichenostomus ornatus* (Gould, 1838)
Yellow-plumed Honeyeater*Brueelia* sp.*Philopterus* sp.

Family POMATOSTOMIDAE

Genus *Pomatostomus* Cabanis, 1851*Pomatostomus superciliosus* (Vigors and
Horsfield, 1827) White-browed Babbler
Brueelia sp.

Family DICRURIDAE

Genus *Grallina* Vieillot, 1816*Grallina cyanoleuca* (Latham, 1801) Magpie-lark
Brueelia sp.
Myrsidea sp.
Philopterus sp.Genus *Rhipidura* Vigors and Horsfield, 1827*Rhipidura leucophrys* (Latham, 1801)
Willie Wagtail*Myrsidea* sp.

Family CAMPEPHAGIDAE

Genus *Coracina* Vieillot, 1816*Coracina novaehollandiae* (Gmelin, 1789)
Black-faced Cuckoo-shrike*Brueelia* sp.

Family ARTAMIDAE

Genus *Gymnorhina* Gray, 1840*Gymnorhina tibicen dorsalis* (Campbell, 1895)
Australian Magpie*Brueelia semiannulata* (Piaget, 1883)*Myrsidea* sp.*Philopterus* sp.*Gymnorhina tibicen hypoleuca* (Gould, 1837)
White-backed Magpie*Brueelia semiannulata* (Piaget, 1883)Genus *Strepera* Lesson, 1830*Strepera versicolor* (Latham, 1801)
Grey Currawong*Brueelia* sp.*Myrsidea* sp.*Philopterus* sp.

Family CORVIDAE

Genus *Corvus* Linnaeus, 1758*Corvus coronoides* Vigors and Horsfield, 1827
Australian Raven*Brueelia* sp.*Colpocephalum fragili* Denny, 1842*Myrsidea australiensis australiensis* Klockenhoff, 1971*Philopterus* sp.*Corvus bennetti* North, 1901
Little Crow*Brueelia* sp.*Colpocephalum fragili* Denny, 1842*Menacanthus gonophaeus* (Burmeister, 1838)*Myrsidea australiensis bennetti* Klockenhoff, 1971*Philopterus* sp.

Family CORCORACIDAE

Genus *Corcorax* Lesson, 1830*Corcorax melanorhamphos* (Vieillot, 1817)
White-winged Chough*Brueelia* sp.*Menacanthus* sp.*Myrsidea* sp.

Family MOTACILLIDAE

Genus *Anthus* Bechstein, 1807*Anthus novaeseelandiae* (Gmelin, 1789)
Richard's Pipit*Menacanthus pusillus* (Nitzsch, 1866)*Penenirmus* sp.*Philopterus* sp.

Family HIRUNDINIDAE

Genus *Hirundo* Linnaeus, 1758*Hirundo neoxena* Gould, 1843 Welcome Swallow*Brueelia tenuis* (Burmeister, 1838)*Myrsidea rustica* (Giebel, 1874)*Philopterus excisus microsomaticus* Tandan, 1955

Family SYLVIIDAE

Genus *Cincloramphus* Gould, 1838*Cincloramphus cruralis* (Vigors and Horsfield, 1827)
Brown Songlark*Brueelia* sp.

Family ZOSTEROPIDAE

Genus *Zosterops* Vigors and Horsfield, 1827*Zosterops lateralis gouldi* (Latham, 1801) Silvereye
Menacanthus eurysternus (Burmeister, 1838)

DISCUSSION

While discussing the imbalance between the recorded louse fauna of New Zealand and that of Australia, Murray *et al.* (1990: 1365) stated that "the apparent cleanliness of Aust. birds simply indicates an appalling lack of data". The relative large number of louse records given here at the generic level is yet another indication of the need to further collect and study the Australian bird lice. Although some bird groups such as the Procellariiformes and the Pelecaniformes have been more extensively searched for lice, other large orders (e.g. Passeriformes and Columbiformes) have barely been investigated. The large number of Australian birds missing in the list of 'Host-lice associations' given by Palma and Barker (1996: 338) ensures that anyone who sets about collecting lice will no doubt add to the present knowledge.

This paper records 141 species and subspecies of bird lice and a further 59 records which are listed at the generic level only, but the latter do not necessarily represent different species. Among them, several species and subspecies were described based on the material collected by the senior author. They are: *Austrogoniodes metoecus*, *Franciscoloa magnifici*, *Heteromenopon kalamundae*, *Myrsidea australiensis bennetti*, *Myrsidea strangeri*, *Physconelloides strangeri*, *Quadriceps bicuspis dressleri*, *Saemundssonina minitrans* and *S. tringae sibiriae*. Also, several records represent new host-lice associations.

Two of the lice mentioned above are good examples of secondary infestations or host-switching (see Palma and Barker, 1996: 82).

Austrogoniodes metoecus is a regular parasite of the Musk Duck, but all the remaining species of the genus *Austrogoniodes* are parasitic on penguins. Similarly, *Saemundssonina minitrans* is the only species of the genus *Saemundssonina* known to live on a duck, the Pink-eared Duck, while most of the many other *Saemundssonina* species are parasitic on members of the avian orders Charadriiformes and Procellariiformes.

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