TEN

Phylum
MOLLUSCA
chitons, clams, tusk shells, snails, squids, and kin

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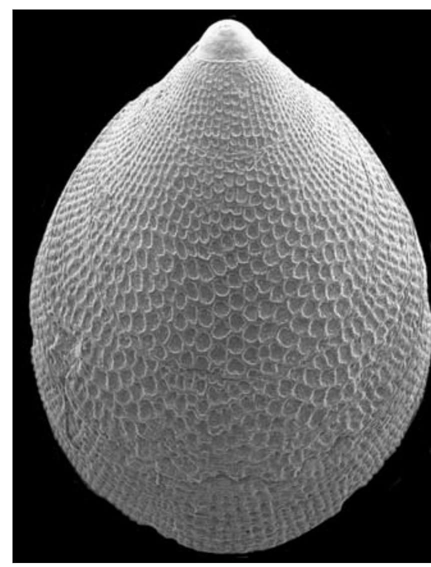
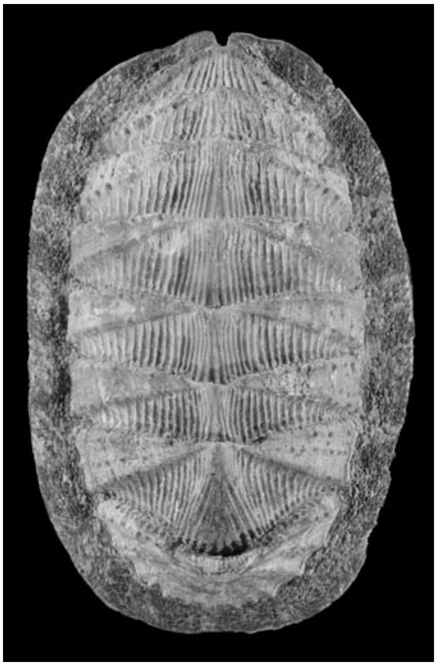
Molluscs are some of the most familiar animals in almost every habitat in almost every part of the world. Snails, limpets, sea slugs, terrestrial slugs, clams, mussels, oysters, and squids are all molluscs. They are economically and culturally important. Scientifically, they are considered one of the better-known invertebrate phyla, yet the species-level taxonomy of many groups is poorly understood and we know virtually nothing about the life-history characters of most living species. The phylum name (from Latin *molluscus*, soft) reflects the soft body of molluscs, protected by shell in a majority of species.

The evolutionary origin of the Mollusca is still unresolved (Taylor 1996; Ponder 1998), but recent molecular data (e.g. Boore & Brown 2000 and references therein) suggest they form an evolutionary branch (clade) with the Sipuncula, Echiura, and Annelida. Although it is generally agreed that all molluscs have a common ancestry (Taylor 1996), no unique characters are shared by all members. Nevertheless, all molluscs posses a coelom and are unsegmented, and the body mass is usually organised into three parts (Anderson 1998): the anterior head carries the sensory organs and mouth, and, in all classes except the Bivalvia, the uniquely molluscan set of teeth known as the radula; the muscular ventral foot is concerned with locomotion; and a dorsal visceral mass contains most of the internal organs and is covered by the mantle, the outer surface of which, in the vast majority of species, secretes a calcareous shell (hence the popular name for the phylum, 'shellfish'). The shell ensures that molluscs usually fossilise well, as reflected in this review chapter, and even some living species are known from the shell only.



Micropilina wareni, one of five monoplacophoran limpets known from the New Zealand region (holotype).
Museum of New Zealand Te Papa Tongarewa

The relationships among the seven living classes of the phylum are controversial (Taylor 1996; Ponder 1998). Most authors divide the Mollusca into two subphyla – the Aculifera, containing the classes Aplacophora and Polyplacophora; and the more familiar Conchifera, containing the Monoplacophora, Bivalvia, Scaphopoda, Gastropoda, and Cephalopoda. This classification is consistent with the prevailing idea that the molluscan shell has evolved at least twice (Ponder 1998). Uncertainty about evolutionary relationships presently affects almost every class. The Aplacophora are sometimes divided into two classes, the Chaetodermomorpha and Neomeniomorpha (e.g. Salvini-Plawen & Steiner 1996), and there is little agreement about the higher classification of the Gastropoda (see Barker 2001 for review) or the Bivalvia (e.g. Canapa et al. 2001). The end-chapter classification reflects a conservative approach.



Lorica haurakiensis, a chiton of the family Schizochitonidae (holotype).
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For the islands of New Zealand and in the marine Exclusive Economic Zone there are 4,588 living species (and 115 subspecies) of molluscs, of which 3,593 are marine, 89 freshwater, and 906 terrestrial. Of these, some 1,698 species (37%) currently await formal description, an extraordinary value given that the Mollusca are generally thought to be a well-studied group. The level of endemism is extremely high: 3,880 species and 122 subspecies, some 85%, are not found outside the EEZ. Endemism is especially high among the terrestrial gastropods: only four (0.4%) of the 944 native taxa occur naturally beyond New Zealand. The biogeographic relationships of the New Zealand molluscan fauna are varied. Marine species, especially those from the north of the EEZ, often occur or have congeners in southeastern Australia, Norfolk Island, Lord Howe Island, or further north, whereas the molluscs from the southern islands tend to have relatives from Macquarie Island and South America.

Diversity of New Zealand Mollusca

Estimates of the number of living molluscan species worldwide range from 50,000 to more than 200,000 (Boss 1971; Hammond 1995; Stork 1993, 1997, 1999; Bouchet et al. 2002), the vast majority of which are gastropods. The Recent New Zealand fauna has representatives in all seven living classes, the number of species apportioned as in the table below.

The undescribed taxa are those that are in recognised collections, and all are included, along with accession numbers, in the end-chapter checklist. (Those numbers prefixed by M. in the checklist are in the collection of the Museum of New Zealand Te Papa Tongarewa, Wellington; those with A. in the collection of the Auckland Institute and Museum, Auckland; those with NZOI or NIWA in the collection of the National Institute of Water and Atmospheric Research, Wellington.) The above species numbers are likely to be underestimates – almost certainly, the species that have yet to be collected will greatly outnumber those

Summary of New Zealand molluscan diversity

Taxon	Described living species + subspp.	Known undes./undet. species + subspp.	Estimated unknown species
Aplacophora	2	8	10
Polyplacophora	54+1	10	5
Monoplacophora	5	0	5
Bivalvia	455+9	223	62
Palaeotaxodonta	49	36	20
Pteriomorpha	130	58	2
Palaeoheterodonta	2+1	0	0
Heterodonta	211+8	95	20
Anomalodesmata	63	34	10
Scaphopoda	11	36	10
Gastropoda	2,263+104	1,397	330
Prosobranchia	1,471+72	814	300
Heterobranchia	135+1	71	20
Opisthobranchia	204	68	10
Pulmonata	454+31	444	30
Cephalopoda	100+1	23	10
Totals	**2,891+115**	**1,697**	**432**

Loricella profundior, a deep-sea chiton widely distributed off New Zealand, eastern Australia and New Caledonia (holotype).
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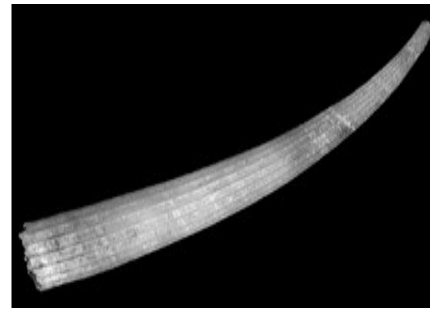
Diversity by environment

Taxon	Marine species + subspp.	Freshwater species + subspp.	Terrestrial species + subspp.
Aplacophora	10	0	0
Polyplacophora	64+1	0	0
Monoplacophora	5	0	0
Bivalvia	673+8	5+1	0
Palaeotaxodonta	85	0	0
Pteriomorpha	188	0	0
Palaeoheterodonta	0	2+1	0
Heterodonta	303+8	3	0
Anomalodesmata	97	0	0
Scaphopoda	47	0	0
Gastropoda	2,671+73	84	905+38
Prosobranchia	2,170+72	66	49
Heterobranchia	206+1	0	0
Opisthobranchia	272	0	0
Pulmonata	23	18	857+38
Cephalopoda	123+1	0	0
Totals	**3,593+83**	**89+1**	**906+38**



Antalis glaucarena, a scaphopod from the Chatham Rise (holotype).
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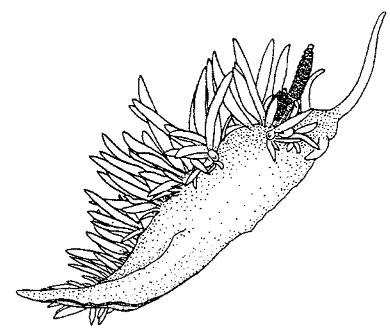
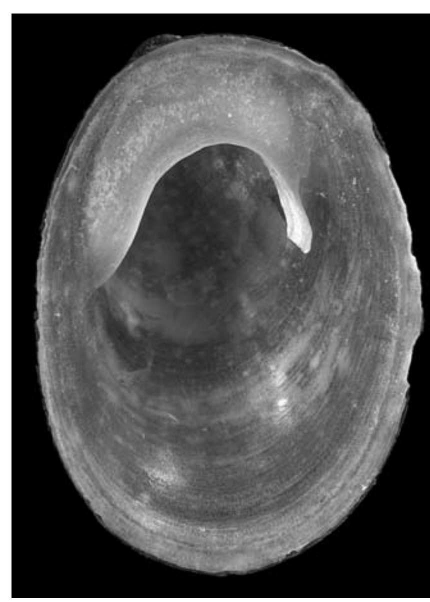


Jason mirabilis, New Zealand's largest aeolid seaslug.
From Willan & Morton 1984



Latia climoi, a bioluminescent freshwater limpet in the endemic family Latiidae (holotype).
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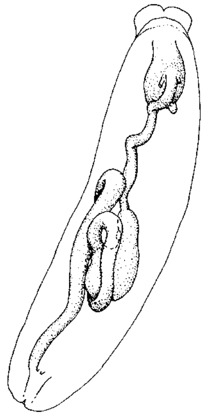
that, on further study, turn out not to be distinct. Clearly, a major proportion of the fauna within the EEZ remains to be described. This situation obtains for almost all classes and subclasses; it is particularly acute in the little-studied Aplacophora and Scaphopoda (though the absolute numbers there are fairly small). Of greatest conservation concern, however, are the number and proportion of undescribed pulmonate land snails. Habitat destruction and predation from introduced animals (rats and ants, especially) means that a significant number of species are likely to become extinct before they have been recognised.

The majority of taxa (3,676, 78.2%) are marine. There are 943 (20%) terrestrial molluscs and a mere 90 (1.9%) freshwater species and subspecies. The latter number is certainly an underestimate – preliminary work suggests that there are a number of undescribed freshwater gastropods of the family Hydrobiidae (W. F. Ponder, pers. comm.).

The uniqueness of the New Zealand Mollusca is exemplified by certain taxa that are outstanding from a biological and ecological perspective. Two species of large chitons from the New Zealand mainland stand out – *Cryptoconchus porosus* for its wholly internal shell plates, a character displayed by only one other species of chiton in the world; and *Pseudotonicia cuneata* for its life permanently within soft sediments. New Zealand's largest mesodesmatid, *Paphies ventricosa* (toheroa), is one of the largest in its family worldwide. The patellid limpet *Patella* (*Scutellastra*) *kermadecensis*, which can reach 150 millimetres or more in length and is endemic to the Kermadec Islands, is the only living representative of its family in the EEZ. Among the Trochoidea one can single out the calliostomatids, several of which are larger than any others in the world, and the trochid *Diloma nigerrima*, which feeds on drift giant kelp amongst the breaking surf. The ostrich-foot snails, family Struthiolariidae, represent an infaunal, filter-feeding lineage of the superfamily Stromboidea. The nudibranch *Jason mirabilis* has an extremely large body size for an aeolid, yet its radula is so microscopic as to be nearly vestigial. The tiny, white, maggot-like slugs of the genus *Smeagol* live deeply buried in gravel above high-water mark. In unpolluted North Island streams live members of the endemic family Latiidae, primitive pulmonate snails with a limpet-like shell



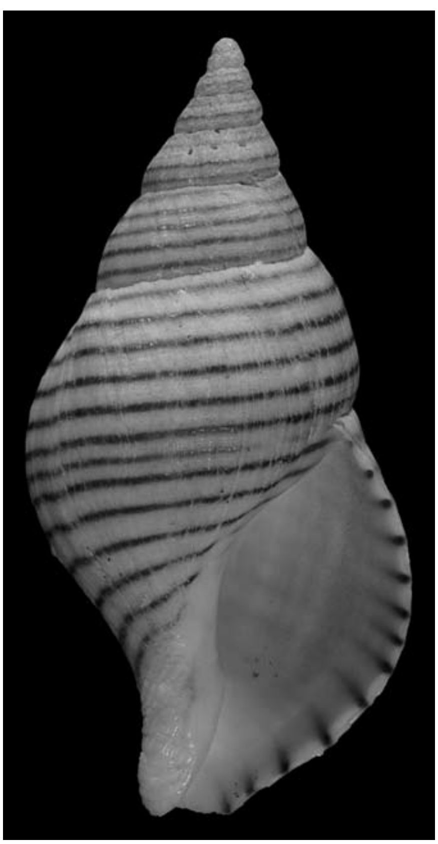
Smeagol climoi, a slug-like pulmonate gastropod.
From Tillier & Ponder 1992

and the unique ability to produce luminous mucous. *Amphibola crenata*, another primitive pulmonate snail, with an operculum, is common in estuaries. But the most spectacular of all New Zealand's endemic molluscs must be the giant carnivorous land snails of the genus *Powelliphanta*, reaching 90 millimetres in diameter and living in (sometimes snowbound) montane forests.

Some groups are notably diverse. For instance, there are far more living bivalves of the family Spheniopsidae (eight species) (Marshall 20002) and glass-sponge-eating gastropods of the family Trochaclididae (13 species) (Marshall 1995) than elsewhere in the world. New Zealand is also the world centre for speciation in gastropods of the genera *Pisinna* (60 species and subspecies) and *Eatoniella* (42 species). Unusually high diversities are also shown in other Gastropoda – *Micrelenchus* (10 species), Calliostomatidae (39 species), Buccinidae (87 species and subspecies), and terrestrial pulmonates. The closely related land-snail taxa Charopidae and Punctidae have, respectively, 372 and 349 species and subspecies (and these are likely to be underestimates). Not only is the overall species-level diversity of some species-rich families impressive, but also the co-existence of so many species in sympatry is truly remarkable on a global scale. For example, Barker and Mayhill (1999) recorded up to 36 charopid species and 19 punctid species from single localities near East Cape, with, respectively, 56 and 31 species in the general area. More than 8.5% of the world's estimated 750 chitons (Kaas et al. 1998) occur within the EEZ.

Reflecting New Zealand's long geological isolation and great geographical separation from other landmasses, the composition of the Mollusca is widely discordant with that anywhere else on earth. One family (Latiidae), many genera, and 85.1% of the Recent species-level taxa are endemic to the New Zealand EEZ, as the table below shows.

The high level of endemism is concentrated in relatively few families in which almost all of the species are endemic, a pattern characteristic of faunas of remote island groups. These speciose groups comprise the marine gastropods



Buccinulum linea, a carnivorous gastropod widely distributed in the New Zealand region (neotype).
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Degree of endemism and proportion of adventive Recent Mollusca in New Zealand

Taxon	Adventive species + subspp.	Endemic species + subspp.	Endemic genera + subgen.	Percentage of endemic species/ subspp.
Aplacophora	0	10	0	100
Polyplacophora	0	54+1	1	84.6
Monoplacophora	0	5	0	100
Bivalvia	4	574+9	29+10	84.9
Palaeotaxodonta	0	81	2	95.3
Pteriomorpha	3	133	2+1	70.7
Palaeoheterodonta	0	2+1	1	100
Heterodonta	1	271+8	13+9	88.9
Anomalodesmata	0	87	2	89.7
Scaphopoda	0	45	0	95.7
Gastropoda	46	3,164+111	203+26	87.0
Prosobranchia	1	2,006+72	127+23	81.9
Heterobranchia	0	170+1	6+1	82.6
Opisthobranchia	6	135	5	49.6
Pulmonata	39	854+38	65+2	96.0
Cephalopoda	0	27+1	0	22.6
Totals	**50**	**3,880+122**	**233+36**	**85.1**

Nacellidae, Trochoidea, Eatoniellidae, Rissoidae, Buccinidae, Columbellidae, Muricidae, Marginellidae, Volutidae and Conoidea; the land snails Athoracophoridae, Rhytididae, Charopidae and Punctidae; and the Octopodidae. This endemism can be explained by the fact that the species in these families have relatively limited dispersal ability. Similarly, foreign taxa in these groups do not occur in New Zealand (except with human assistance) either because they have planktonic periods of insufficient duration or, for the vast number of tropical species, water temperatures are too low for their larvae to metamorphose. Again, the Pulmonata stand out, with just four native species failing to be endemic, reinforcing the conservation concern mentioned above (see also p. 167).

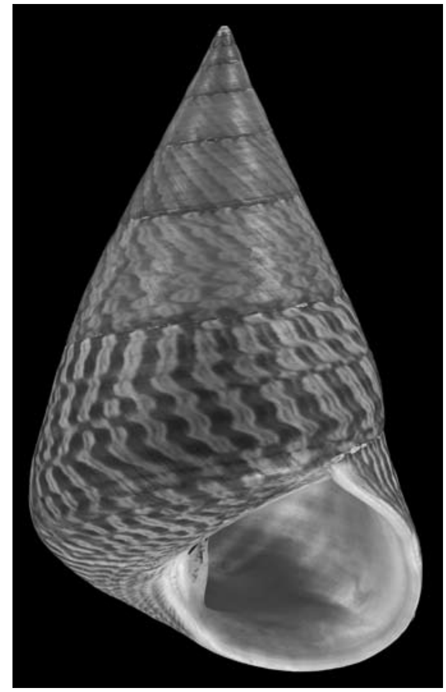
In contrast, if one inspects the marine families with multiple species that have distributions extending beyond the New Zealand EEZ, even those with long-lived planktonic larvae, one notices a biogeographic pattern of low endemism and/or low diversity within the EEZ. Examples are the Patellidae, Neritidae, Ovulidae, Cypraeidae, Strombidae, Ranellidae, Cassidae, Tonnidae, Ficidae, Bursidae, Conidae, Harpidae, Terebridae, Epitoniidae, Architectonicidae, Aplysiidae, Polyceridae, Goniodorididae, Chromodorididae, Glycymerididae, Ostreidae, Spondylidae, Cardiidae, Solenidae, Pharidae, Semelidae, and Solecurtidae. The end point of this pattern is the complete absence from the Recent native fauna of some important (both numerically and ecologically) overseas marine and terrestrial families – Thiaridae, Pupinidae, Gymnodorididae, Phyllidiidae, Megaspiridae, Caryodidae, Helicidae, Arionidae, Agrolimacidae, Camaenidae, Enidae, Helicarionidae (present only on the Kermadec Islands), Pupillidae, Subulinidae, Gryphaeidae, Tridacnidae, Solenidae, and Donacidae. Some of these families, however, such as helicid land snails and arionid land slugs, are now present in New Zealand through accidental human introduction. At class and subclass level, the groups with low levels of endemism are typically those with good dispersal powers, notably the opisthobranchs and the cephalopods. Many opisthobranchs are also found in temperate eastern Australia, whereas a number of cephalopods have global distributions.

Perhaps as a consequence of the absence or poor representation of certain families, and certainly of major significance for the New Zealand Mollusca, is the evolutionary shift into, and radiation of endemic taxa within, ecological niches dominated by other families elsewhere in the world. For example, species of *Cominella* (Buccinidae) are the predominant scavengers in New Zealand, whereas almost everywhere else this niche is filled by species of *Nassarius* (Nassariidae). Similarly, species of *Paphies* (Mesodesmatidae) are the dominant intertidal filter-feeding bivalves on open coasts in New Zealand, whereas elsewhere this niche is filled by species of *Donax* (Donacidae).

Most adventive species comprise terrestrial and freshwater pulmonates (39 of 50, 78%), although this figure is likely to be biased upwards because of the difficulty of knowing whether some marine taxa have arrived by natural means or not.

Historical overview of studies on Recent diversity

A number of shelled molluscs important as food to the Maori were distinguished individually by name. Nevertheless, although several species occurring in New Zealand and elsewhere had been previously described by Carl Linnaeus (1758), scientific studies of molluscan diversity did not start until Captain James Cook's voyages to New Zealand beginning in 1769. Interestingly, a mollusc – the endemic trochid *Cantharidus opalus* (Martyn) – was probably the first New Zealand animal species to be illustrated in a published work, just five years later (Walch 1774). Linnean nomenclature was not universally adopted in Europe at this time, however, and it was not until 1782 that the Austrian Johann Hermann gave the first valid description of a mollusc collected in New Zealand – *Modiolarca impacta* (which he placed in the genus *Mytilus*) (Hermann 1782).



Cantharidus opalus, a species taken to Europe by Cook, and the first New Zealand animal to be illustrated in a publication, by Walch, in 1774 (neotype).
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Suteria raricostata, a small snail living under logs and in leaf litter in native forests (holotype).
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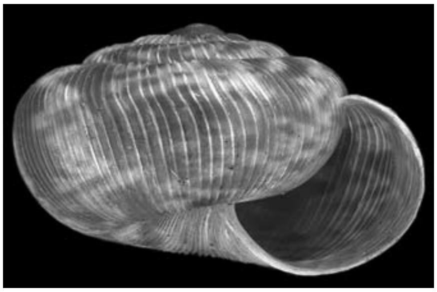

Phenacohelix giveni, a small snail living under nikau fronds and among stones and leaf litter in native forests (holotype).
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Placostylus bollonsi, a large land snail endemic to the Three Kings Islands (holotype).
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Several others of Cook's specimens were named in Thomas Martyn's sumptuous *The Universal Conchologist* (Martyn 1784–87), but many of these names were not binominal. Several that were binominal, however, were later validated by the International Commission on Zoological Nomenclature and are still in use today. The non-binominal names of Martyn and several other authors were properly republished by Johann F. Gmelin in the twelfth edition of *Systema Naturae* (1791), and many New Zealand species bear his authorship today.

The early part of the nineteenth century saw a number of collections made (often by missionaries) and a dramatic increase in the number of species recognised. Jean R. Quoy and Joseph P. Gaimard described dozens of New Zealand molluscs in 1832–35, a result of Dumont d'Urville's voyages around the world on board the *Astrolabe.* Significant additions were made by John E. Gray of the British Museum in two important appendices of books on New Zealand – William Yate's *An Account of New Zealand* (Gray 1835) and Ernst Dieffenbach's *Travels in New Zealand* (Gray 1843a). The latter contains the first checklist of New Zealand species – some 222 molluscan species (and three Brachiopoda) are listed.

The first descriptions of living New Zealand molluscs to be published by a resident New Zealand scientist were of two chitons by the prolific Frederick W. Hutton in the *Transactions of the New Zealand Institute* in 1872. Early land-snail records were enumerated by James Hector (1873). In the same year, Hutton (1873) issued a catalogue of the marine molluscs in which he described scores of new species. By the time of his 1880 manual he listed 595 species, although many were subsequently recognised as not being from New Zealand (Suter 1913). By then, many of the common species had been named by such workers as Jean Baptiste P. A. de M. de Lamarck, René P. Lesson, Lovel Reeve, Henry and Arthur Adams, Jacques B. Hombron and Charles H. Jacquinot, Gilbert Deshayes, Louis Pfeiffer, Edgar A. Smith, and Eduard von Martens (Hutton 1880).

The end of the nineteenth century saw the arrival in New Zealand of the Swiss Henry Suter, who single-handedly transformed knowledge of the land-snail fauna, as well as working on numerous minute and deep-water marine species. In 1913 he summarised the work to date in what has probably been the most influential monograph on New Zealand malacology, the *Manual of New Zealand Mollusca*. This watershed work described and illustrated 1,187 species and subspecies and, more importantly for the rest of the world, designated the type species of numerous genera. The preface to this manual is a major source of information relating to the history of research on New Zealand molluscs up to that time.

The realisation that many of these new species deserved to be placed in novel genera was much slower. For instance, Hutton (1880) placed almost all of the smaller land snails in the European genus *Helix,* and even Suter (1913) listed the majority of the known members of the Charopidae in *Endodonta*, now considered separable at the family level. The Australian malacologist Tom Iredale was perhaps the first to recognise the degree of distinctiveness of the New Zealand malacofauna and, in a critical commentary on Suter's manual, he introduced many genera still used today (Iredale 1915). A similar view was taken by Harold J. Finlay (1926) in a wide-ranging and fundamentally important paper that discussed many components of the New Zealand fauna.

The record of the next 50 years was summarised in the latest faunal monograph, that of A. W. Baden Powell (1979). In the period 1921–79, Powell named hundreds of new species in most molluscan groups, although he was most prolific in the Rissoidae and related families. These taxa, along with those described by other workers, especially H. J. Finlay, Richard (Dick) K. Dell, and Winston F. Ponder, brought the number of named New Zealand species and subspecies to 2,256 (Powell 1979), almost double that of Suter (1913). By 1993, the number of known forms had blossomed to 2,510 (Spencer & Willan 1996), mostly as a result of studies of deep-water marine faunas by Bruce A. Marshall and land snails by Frank M. Climo.

The end-chapter checklist records some 3,003 named species and subspecies. This number is rather larger than that in Spencer and Willan (1996), chiefly because of the inclusion for the first time of the fauna of the Kermadec Islands. Current work by Australasian malacologists will continue to expand this number by several dozen every year. One feature of current changes in knowledge of the New Zealand malacofauna is the increasingly international nature of taxonomic work. Almost all of Powell's papers concerned solely local species and appeared in New Zealand journals, whereas modern workers may well review a particular taxon worldwide and publish in an international journal. One consequence of this shift in emphasis is that taxonomic decisions are often made in papers having no obvious connection to New Zealand. Hence, the number of publications dealing with the New Zealand fauna is likely to continue to grow.

Wainuia edwardi, a carnivorous land snail endemic to the north-eastern South Island (holotype).
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Ecological issues and economic aspects of the living malacofauna

A number of threats to New Zealand's molluscan fauna can readily be identified. Certainly, the terrestrial pulmonates are the group of greatest concern. Neither the giant land snails such as *Powelliphanta* species nor the hordes of their microscopic relatives have withstood human impact well. Introduced mammals have decimated all taxa of *Powelliphanta* (of which there are over 50 named forms) and the other large land snails (e.g. *Placostylus* species), some to the point of extinction. Moreover, fragmentation and alteration of the composition of indigenous forests must be having incalculable impacts on the microscopic snails, hundreds of which remain undescribed. The effect of adventive invertebrates, especially ants, on the highly diverse land-snail fauna is also likely to be immense. Loss of dune habitat through coastal development has significantly reduced the already patchily distributed annual pulmonate snail *Succinea archeyi* to the point where it must now be considered as endangered. Recent recovery plans such as those by Parrish et al. (1995) for the giant land snails have highlighted the urgent need to conserve these vulnerable and sometimes critically endangered 'charismatic' species of molluscs.

Marine molluscs have fared better over the last 200 years in terms of population reductions, but loss of habitat, pollution, and introduction of alien species must also be acknowledged as threatening processes in the sea. For example, *Lepsiella scobina* (kaikai tio) and *Amalda australis* (pupu piataata) have disappeared from many localities in Auckland Harbour as a consequence of 'imposex' induced by the synthetic compound tributyltin (Jones 1992; Morley 2002), and the once-common volute *Alcithoe arabica* (pupu rore) has disappeared from the inner Auckland Harbour, presumably because of habitat degradation.

When they reached New Zealand shores, humans were quick to exploit molluscs for food, and many species now constitute major commercial fisheries such as *Haliotis iris* (New Zealand abalone, or blackfoot paua), *Perna canaliculus* (green-lipped mussel or kuku), *Pecten novaezelandiae* (scallop, tipa), *Paphies ventricosa* (toheroa), *Ostrea chilensis* (Bluff oyster, tio para), and members of the Cranchiidae and Histioteuthididae (squid). Other coastal molluscs are subject to heavy recreational collecting for food, such as *Austrovenus stutchburyi* (cockle, tuangi), *Paphies australis* (pipi), *Paphies subtriangulata* (tuatua), and *Mytilus galloprovincialis* (blue mussel or toretore). Over-exploitation of toheroa has led to severe regulation of the remnant populations, and some of these show little sign of recovery even after decades of complete legal protection.

Seafood is currently the fourth-largest export earner in New Zealand, behind dairy, meat, and forestry, achieving NZ$1.49 billion in 2001. Almost 20% of this value is export molluscs, of which the top performer is the green-lipped (Greenshell™) mussel, with an export value of NZ$157.5 million, second only to the fish hoki (*Macruronus novaezelandiae*). Other important mollusc exports

Alcithoe flemingi, a deep-sea carnivorous gastropod from off the eastern South Island (holotype).
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Potamopyrgus oppidanus, a minute freshwater snail known only from a stream in Wadestown, Wellington (holotype).
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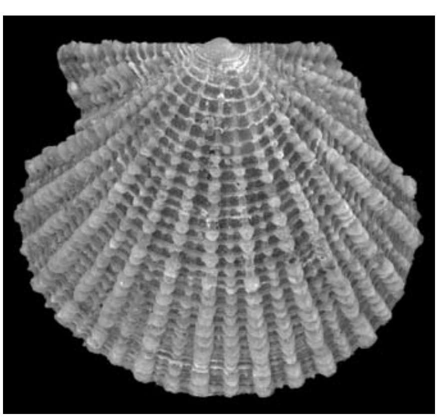


Cyclopecten secundus, a carnivorous bivalve from off Three Kings Islands and East Cape (holotype).
Museum of New Zealand Te Papa Tongarewa

comprise abalone (paua) and squid, earning $67.7 million and $61.2 million, respectively, in 2001. A new non-food product is iridescent mabé (hemispherical) pearls produced from seeded abalone (paua), anticipated to earn between $10 million and $100 million in 10 years' time.

Because New Zealand is so distant from the rest of the world, one might have expected it to be relatively immune from accidental introductions of molluscs, but already some 50 species have become naturalised (i.e. they have established breeding populations for at least 30 years in this country). Over half of these (31 species) are land snails and slugs, and some of them are now serious economic pests. Even though most of these introduced species presently appear to be obligates of humans and their industries, we know that at least one land snail, the carnivorous *Oxychilus cellarius*, lives in native forests adjacent to previous or existing human settlements (Barker 1999). Ironically, an originally endemic freshwater snail, *Potamopyrgus antipodarum*, has become one of the world's most successful invasive species and is now abundant and spreading in North America, Europe, and Australia (Ponder 1988). This species is an intermediate host for 14 species of Trematoda (flukes) whose adults live in fish, birds, and mammals, and two species also infect the estuarine species *P. estuarinus* and *P. pupoides* (Winterbourn 1973). The flukes' larval stages are found in the snails' digestive gland and gonads and probably render them infertile. Where the adult flukes have been identified, they include *Microphallus* sp., *Coitocaecum anaspidis*, *Stegadexamine anguillae*, and *Telogaster opisthorchis*. *Deretrema minutum* may also infect *P. antipodarum* as first intermediate host.

The total number of molluscan species introduced into New Zealand is swelled by an ever-increasing number of marine species that have been accidentally introduced over the last 50 years on fouled vessels and in ballast water. Notable among these introductions is the Asian bag mussel, *Musculista senhousia*, which is a serious ecological 'pest' in many parts of the world (Willan 1985). This source of introductions is a major economic and environmental concern, so it is crucial that a quarantine inspection regime be maintained at ports to prevent the introduction of further alien species. Nevertheless, attempts to eradicate such pest species or the diseases they transmit could well have unintended consequences for the indigenous molluscan fauna, especially in the non-marine environment

One freshwater species and six marine species that were endemic to the New Zealand mainland at the time Europeans arrived have been accidentally exported overseas, where they have become naturalised. Generally, these species have not spread greatly from the initial site of introduction, nor have they had a significant environmental impact (to date), but there are two exceptions. One is *Potamopyrgus antipodarum*, mentioned above. The other is the marine screwshell *Maoricolpus roseus*, which has spread rapidly from the Derwent Estuary, all round Tasmania, and up the eastern Australian coast (presently to Sydney Harbour), with consequences for indigenous benthic communities and commercial fisheries (Bax & Gowlett-Holmes 2000). Technically, species that have become naturalised beyond the EEZ can no longer be considered as endemic to New Zealand. They are, however, indicated as such in the checklist, with an annotation covering their original place of introduction and spread (if it has occurred).

Paleozoic Mollusca

Paleozoic Mollusca are relatively poorly represented in Cambrian and Ordovician rocks in New Zealand. Poorly dated Silurian rocks contain rare molluscs. None has been recorded from very restricted exposures of Carboniferous rocks but they form a modest component of Permian faunas. The most diverse and important molluscan faunas come from Devonian rocks.

Summary of New Zealand fossil molluscan diversity

Period	Described species/subspp.	Known undescribed/unrecorded species/subspp.	Totals*
Cambrian	6	4	10
Ordovician	0	6	6
Silurian	0	1	1
Devonian	28	45	73
Carboniferous	0	0	0
Permian	93	80	173
Triassic*	94	177	271
Jurassic*	184	308	492
Cretaceous	169	281	450
Cenozoic†	3,397	2,086	5,483
Totals*	**3,970**	**2,989**	**6,959**

* Some species straddle the Triassic–Jurassic boundary.
† Ranges for some species extend to the present day (Recent).

Cambrian

The earliest molluscs evolved under marine conditions from a probable worm-like organism sometime during the Late Precambrian. The first definite bivalves, comprising two shells, a ligament, and adductor scars, had evolved by the start of the Cambrian, but their precise origin remains uncertain.

The published record of New Zealand Cambrian molluscs is sparse. Several small species of bivalves occur in Early Cambrian sediments and rocks and their morphology suggests that both deposit-feeding and suspension-feeding ways of life had become established by this time. MacKinnon (1982, 1985) described Middle Cambrian micromolluscs from a limestone lens in the Tasman Formation, northwestern South Island. One species is a bivalve; the rest are univalves that he treated as monoplacophorans of the orders Cyrtonellida, Bellerophontida, and Pelagiellida. MacKinnon (1982) interpreted the bivalve to be a pteriomorph, which he named *Tuarangia paparua*. The genus *Tuarangia* has subsequently been found in Cambrian rocks in Poland and Bornholm, Denmark. The taxonomic placement of *Tuarangia* is much debated, including whether or not it is truly a member of the class Bivalvia or, instead, of the Rostroconchia. Pojeta (2000) summarised the debate.

The Rostroconchia is a group of Paleozoic molluscs that were originally considered bivalves but were then recognised to constitute a separate molluscan class. Unlike true bivalves, the fundamentally taco-shaped shell had no hinge, so that the shell layers are continuous across the fold of the shell. Rostroconchs apparently began life as a planktonic limpet-like larva that eventually grew the shell down on both sides as a pair of valves. They had a gape at the anterior end, giving evidence of an extensible foot. The posterior end is usually elongated into a flattened tube. Runnegar and Pojeta (1974) suggested that rostroconchs gave rise both to the bivalves (by separation of the valves and development of the hinge) and the class Scaphopoda (with the valves forming into a long tube). Molecular and embryological studies of bivalves, scaphopods, and cephalopods suggest different relationships. Gene sequencing indicates that bivalves are only distantly related to scaphopods, which are closer to cephalopods (Steiner & Dreyer 2002). The latter class is morphologically closely related to and descended from laterally compressed helcionellids (Monoplacophora) (Pojeta 1980), which also gave rise to the Rostroconchia. Hence, helcionellids are interpreted to be the ancestors of cephalopods, gastropods, and rostroconchs, but not bivalves, and a rostroconch lineage gave rise to the Scaphopoda (Engeser & Riedel 1996). The precise origin of the bivalves remains uncertain – one analysis suggests that they arose from protorostroconchs, but this calls into question the putative molecular distance from scaphopods (Wagner 2004).

Some organ systems of monoplacophorans are arranged in series and are segmented or pseudosegmented, leaving paired muscle scars on the shell interior. Some fossils classed as bellerophons have an untorted body plan (as evidenced by the muscle scars) and are classified as monoplacophorans. Most other bellerophons, however, do exhibit torsion and should rightly be classified as true gastropods. This dual approach is evidenced in the classification of Cambrian/Ordovician and Devonian Mollusca in the checklist accompanying this chapter.

Applying Australian stage nomenclature (Cooper et al. 1996), all the fossils in the New Zealand Cambrian checklist are assigned to the Boomerangian Stage of the Middle Cambrian.

Ordovician

Several species of micromolluscs occur in the Summit Limestone and Arthur Marble 1 of latest Cambrian to Early Ordovician in age (491–472 Ma) in northwestern South Island. These micromolluscs have not been studied in detail; John Pojeta (Smithsonian Institution, Washington, DC) has examined the specimens and photographed them. The faunas are dominated by univalves such as bellerophont and cyrtonellid monoplacophorans, open-spire bellerophontiform shells, and *Matherella*-type gastropods. There is at least one palaeotaxodont bivalve and one eopteriiform rostroconch.

Eagle (1999) described a bivalve species from a float boulder that he regarded as coming from the Arthur Marble, northwestern South Island (Late Ordovician, Ashgillian). He named the species *Ambonychia hailesensis*. Based on the unwhitened specimens he figured, it is difficult to tell if the specimens belong to *Ambonychia*. *Ambonychia* has simplicicostate ribs, and Eagle's figure 7 shows multicostate ribs. Matrix from the boulder has subsequently yielded Paleogene foraminifers, so the find is apparently considerably younger than thought and not Ordovician.

Cocks and Cooper (2004) noted the occurrence of an orthoconic cephalopod and the gastropod genus *Holopea* in the Wangapeka Formation (Late Ordovician, Hirnantian) of northwestern South Island.

Silurian

A Silurian age for the Hailes Quartzite in its type area (Hailes Knob) is based on poorly preserved brachiopods at the top of the sequence. No molluscs have been recorded from this locality, but sediments further south (Ellis Formation), which are thought to be equivalent to the Hailes Quartzite, have yielded sparse as-yet-undescribed, bivalves (*Nuculites*). Faunal studies on the Ellis Formation may show the formation to span the Devonian–Silurian boundary.

Devonian

In New Zealand, Devonian molluscs are restricted to two poorly dated sequences exposed in separate parts of northern South Island – the Reefton Group and the Baton Formation. The Reefton Group, to the south, is an inner- to middle-shelf sequence of fossiliferous limestones and mudstones sandwiched between two thick shoreface quartz-sandstone formations in which fossils are limited to a few bands. The Baton Formation, to the north, is a thicker, predominantly mudstone and siltstone sequence deposited in an outer continental shelf setting. Sandstone becomes more significant higher in the formation.

The age of the two sequences is imprecise, but it is agreed that they are both of Early Devonian age. The Baton Formation is considered to be slightly older than the Reefton Group. Conodonts (see phylum Chordata) from the base of the formation provide a reliable basal Lochkovian age (Bradshaw 1988; Simes in Rattenbury et al. 1998). The age of the Reefton Group is less well constrained. A shelly fauna of brachiopods and corals suggests a Pragian to early Emsian age (Bradshaw 1999). Despite the slight difference in age, there are no clear similarities in faunas between the two areas considering that in each the best faunas occur in muddy lithologies.

The Baton Formation has strong affinities to eastern Australia and shows no endemism, while the Reefton Group has a high proportion of endemic forms, especially among the bivalves, including one genus and 28 species, and to a lesser extent among Brachiopoda. The Reefton Group shows some affinities with southeastern Australia (Victoria), Antarctica, and South America (Bradshaw & McCartan 1991; Bradshaw 1999). A New Zealand subprovince has been suggested for the Reefton Group (Bradshaw 1999).

A limited molluscan fauna was recorded by Shirley (1938) and Willis (1965) from mudstones of the Baton Formation, but current research suggests that the fauna is much richer. Although brachiopods dominate most fossil bands, a variety of undescribed bivalves also occur, including pteriomorphs, *Notonucula,* and *Praectenodonta*. Orthoconic nautiloids, first noted by Willis (1965), are also well represented in new collections.

Cornellites mackayi.
Margaret Bradshaw

Some of the original identifications by Shirley and Willis have been updated. Shirley's *Nuculites* lacks the characteristic anterior plate and is probably some form of nuculid, and his *Actinopteria* is a spinose species of *Cornellites*. Willis's *Tancrediopsis* is almost certainly *Praectenodonta.* Willis's collection of a monospecific death assemblage of *Modiomorpha* sp. is the first record of this genus at Baton River and has not been relocated.

Willis (1965) noted that gastropods were quite common in the Baton Formation, in one case forming a rich band of diverse taxa that could be traced for several hundred metres. Elsewhere, new collections show that small siphonate turbiniform gastropods are found scattered through massive calcareous siltstones, sometimes accompanied by bivalves, trilobite fragments, and disarticulated hyolithids. Hyolithids are conical calcareous shells that have an aperture covered by an operculum. In the Baton Formation the opercula are frequently preserved separate from the shell. Hyolithids are here placed in Mollusca as a subclass of the Gastropoda, although some taxonomists would place them in their own phylum – Hyolithia. The gastropods *Platyceras* and *Cyrtolites* also occur here.

The Molluscan fauna of the Reefton Group is much more diverse than in the Baton Formation and has been better studied (Bradshaw 1999). It includes at least five distinct assemblages of bivalves, as well as gastropods, nautiloids, hyolithids, and possibly small scaphopods. It contains the first record of *Paleyoldia* in Devonian rocks, and one of the earliest records of a deeply sinuate burrowing palaeotaxodontid (*Ctenodontella*).

The bivalves are found most commonly in the shelf mudstones and shoreface sandstones, and are not so noticeable in the limestone lithologies. The bivalve fauna contains numerous deposit feeders (in genera such as *Notonucula*, *Nuculites*, *Paleyoldia*, and *Phestia*), burrowers (*Ctenodontella*, *Eoschizodus*, *Glossites*, *Grammysioidea*, *Leptodesma*, *Orthonota*, *Paleodora*, *Paleosolen*, *Pholadella*, and *Prothyris*), semi-infaunal forms (*Obrimia*), endobyssate forms (*Cimitaria*, *Cypricardinia*, *Goniophora*, *Modiomorpha*, and *Nargunella*), epifaunal taxa (*Cornellites*, *Cyrtodonta*, *Glyptodesma*, *Lyriopecten*, and *Ptychopteria*), and a possible free-swimming form (*Pterinopecten*).

Small bellerophontid gastropods are common in some mudstone death assemblages, accompanied by much rarer occurrences of *Platyceras* and a reticulate turbiniform gastropod similar to *Ruedemannia.* A different but sparse fauna of gastropods, including *Straparollus* and *Loxonema,* occurs in the sandstone lithogies. The bellerophontid *Tropidodiscus* occurs sporadically in some limestones.

A variety of orthoconic nautiloids and occasional hyolithids have been collected from the mudstone lithologies.

Glossites cf. *lingualis*.
Margaret Bradshaw

Permian

Formal taxonomy of Permian molluscs of New Zealand started in 1958 with J. B. Waterhouse and his initial description of atomodesmid bivalves (Waterhouse 1958). Since then, Bruce Waterhouse has described almost all the known Permian molluscan faunas of New Zealand, which includes predominant gastropods and bivalves, less common scaphopods and rostroconchs, and very rare nautiloids (H. J. Campbell, unpublished data) and ammonoids (Hada & Landis 1995).

The principal publications relevant to this review and the compilation of the species checklist are those of Waterhouse (1963a–e, 1965, 1966, 1969, 1976, 1979a, 1980a,b, 1982, 1986, 2001, 2002), Waterhouse & Vella (1965), Waterhouse et al. (1983), Begg & Ballard (1991), Hada & Landis (1995), and Campbell et al. (1998, 2001). The number of bivalves described and/or recorded from the New Zealand Permian comprises 46 genera and 121 species, of which 30 species are endemic. Gastropods comprise 22 genera and 42 species (22 endemic), scaphopods two genera and four species, rostroconchs one genus and three species, nautiloids one indeterminate form, and ammonoids one genus.

Shelly Permian faunas of New Zealand are dominated by benthic brachiopods, bivalves, and gastropods. The lack of fossil groups that had a pelagic lifestyle (cephalopods, fusuline foraminiferans, radiolarians, and conodonts) precludes easy age determination. There is, however, strong correlation with faunas in eastern Australia. This similarity in faunas and faunal succession provides confidence in attributed ages.

The Permian Period has an age range of 299–251 Ma. In New Zealand, Permian faunas are mostly of Middle and Late Permian age; few Early Permian faunas are known, and these are of late Early Permian age (Waterhouse et al. 1983; Begg & Ballard 1991). The richest and most diverse molluscan faunas of Permian age in New Zealand are from the Middle Permian Mangarewa Formation (Productus Creek Group) in Southland. In general, however, molluscan shellbeds other than atomodesmid bivalves are not common. Notably, in New Zealand there are limestone formations that are almost entirely composed of the comminuted remains of prismatic calcite shell debris derived from atomodesmid bivalves. These extraordinary sedimentary accumulations are difficult to comprehend because they are so devoid of other fossil remains, let alone identifiable shells from which the prismatic calcite debris is derived. One formation, the Wooded Peak Limestone, is up to 1,000 metres thick in places. This is truly remarkable given that it appears to be almost entirely derived from a single group (family) of gregarious benthic bivalve.

Mesozoic Mollusca

Triassic

Study of New Zealand's Triassic Mollusca began with Ferdinand von Hochstetter, who collected fossils in the Nelson area in 1858–59. He must have been amazed to recognise fossils – *Halobia* and *Monotis* – that were familiar to him from the European Alps. The fossils collected by Hochstetter were subsequently described by Zittel (1864), and these are housed in the Naturhistorisches Museum, Vienna. Trechmann (1918) reviewed the Triassic molluscs and brachiopods more extensively, and a general monographic account of the Triassic macrofauna was made by Marwick (1953), who recorded nine species of Gastropoda, 39 of Bivalvia, one scaphopod, four nautiloids, 13 ammonoids, and two belemnite species. A number of these were left in open nomenclature.

Since Marwick (1953), some components of the molluscan fauna have received detailed attention – for instance, gastropods (Waterhouse 1960a, 1961; Begg & Grant-Mackie 2003), the bivalve genus *Monotis* (Grant-Mackie 1976, 1978a), trigonioid bivalves (Fleming 1987), halobiid bivalves (Campbell 1994), permophorid bivalves (Grant-Mackie 1960; Waterhouse 1979b; Campbell 1984), limid (Braithwaite 1983) and other bivalves (Waterhouse 1960b, 1979c, 1980c;

Begg & Campbell 1985), and ammonoids (Kummel 1959a,b, 1960, 1965; Begg 1981; Waterhouse 1973, 2001; Campbell 1983; Oliver & Keene 1990; Owen 1992; Campbell 1994) – and this work continues.

The most extensive collections of New Zealand Triassic (and Jurassic) molluscan fossils, including types, are held by GNS Science, Lower Hutt, and the Geology Departments of Auckland and Otago Universities, with smaller collections in other New Zealand public museums and universities. Small but historically important collections are present in the Vienna and London Natural History Museums.

Diversity and stratigraphic representation

The Triassic molluscan faunas of New Zealand are surprisingly diverse. All are marine; no freshwater Triassic molluscs have been recorded. The checklist herein numbers about 165 species within 75 genera, 30 families, and eight orders.

Biostratigraphic age correlation (see Campbell & Grant-Mackie 2000) has established that the fossil record for Triassic time in New Zealand successions is very incomplete; there are major gaps in the record and there is a very poor record for Early Triassic time. The only certain Early Triassic faunas are ammonoids, including the *Durvilleoceras* fauna, within the Nelsonian Stage (Campbell & Owen 2003). The record for Middle Triassic time is better, with relatively rich and diverse early Anisian faunas (Etalian Stage – Begg 1981; van Duschotten 2000). Much of Ladinian time appears to be unrepresented, with only latest Ladinian faunas known from the Kaihikuan Stage (Campbell 1994; Campbell & Grant-Mackie 2000). Late Triassic time is much better represented but even so, almost all of Carnian time appears to be unrepresented. Thus the Late Triassic succession in New Zealand is dominated by Norian and Rhaetian faunas (Oretian, Otamitan, Warepan, and Otapirian Stages).

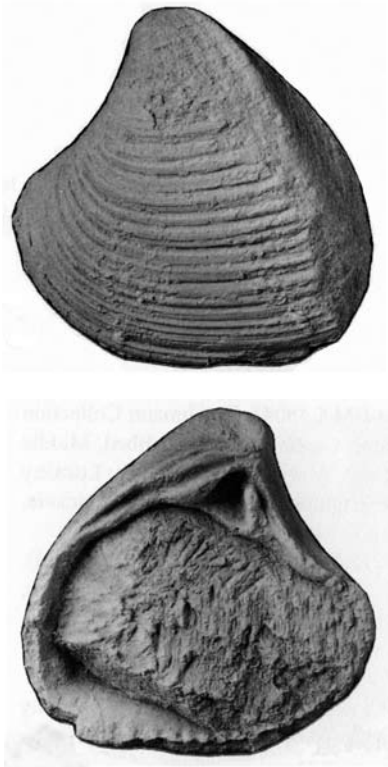
Terranes

Triassic molluscan faunas have been collected from five terranes within New Zealand: the Murihiku, Dun Mountain–Maitai, Rakaia, Pahau and Waipapa. Of these, the most richly fossiliferous, most diverse, and most complete Triassic molluscan successions are from the Murihiku Supergroup, Murihiku Terrane (Campbell & Grant-Mackie 2000). This is the most coherent succession of shallow-water (continental shelf setting) sedimentary rocks of Triassic age within New Zealand. The Murihiku Supergroup is in excess of 7,000 metres thick and is entirely volcanioclastic; there are no limestones or cherts.

Significance and major characteristics of the New Zealand Triassic

The New Zealand Triassic record is of particular significance because marine Triassic molluscan faunas occur almost nowhere else on land in the southern hemisphere. The exception is New Caledonia, and the successions there are essentially the same as those in New Zealand (Campbell & Grant-Mackie 2000).

The most distinctive feature of the New Zealand Triassic succession, and the Murihiku Supergroup sequence in particular, is undoubtedly the predominance of a series of shellbeds that are regional in extent, occurring within the same narrow stratigraphic range throughout the sedimentary basin involved. Most of these shellbeds are dominated by molluscs, and inevitably they are of gregarious opportunistic bivalves. Most notable are the shellbeds of *Manticula* (Otamitan Stage) and *Monotis* (Warepan Stage). Less conspicuous but also shellbed-forming are the following genera: *Etalia* (Etalian), *Oretia* (Oretian), *Daonella* (Etalian and Kaihikuan Stages), *Halobia* (Oretian and Otamitan Stages), and *Otapiria* (Otapirian Stage). Other molluscs form shellbeds locally, especially trigoniids and *Palaeocardita*. Distinctive Early Triassic bivalve faunas such as *Claraia* have not been found (as yet) in New Zealand. Significant thicknesses of marine sedimentary rocks of Early Triassic age are known (Maitai Group, Dun Mountain–Maitai Terrane; Campbell & Owen 2003), but they are of deeper-water



Trigonopsis morgani.
From Gardner & Campbell 2002

character, mainly redeposited sediments of continental slope setting, and are also moderately metamorphosed.

New Zealand molluscan faunas are not especially rich in cephalopods. Accordingly, ammonoids have played a major role in establishing biostratigraphic age control (as do many of the bivalves), particularly so because of the general absence within Murihiku Supergroup of other biostratigraphically utilitarian pelagic groups such as conodonts, radiolarians, and foraminifera.

Jurassic

As with the Triassic Mollusca, study of New Zealand's Jurassic taxa began as the product of the earliest regional survey by Ferdinand von Hochstetter in Auckland and Nelson, and the molluscs and echinoderms from that survey were described by Zittel (1864). Trechmann (1923) reviewed the Jurassic molluscs and brachiopods more extensively, and the most recent general monographic account of the Jurassic macrofauna was by Marwick (1953), who recorded five species of Gastropoda, 48 of Bivalvia, 32 ammonoids, and six belemnite species. Of those, two gastropods, eight bivalves, 22 ammonites, and two belemnites were left in open nomenclature.

In more recent years, components of the molluscan fauna have received detailed attention – for instance, trigonioid bivalves (Fleming 1987), Jurassic ammonites (Stevens 1997, 2004; Westermann et al. 2000, 2002), and belemnites (Stevens 1965; Challinor 1974–99) – and this work continues (Gardner 2005). Astartid, buchiid, and retroceramid bivalves have been recently studied (Hudson 1999; Gardner & Campbell 1997, 2002a, b; Boyd 2003). A rich Early or Middle Jurassic gastropod fauna from a North Canterbury mélange has recently been documented (Bandel et al. 2000). The Limidae has been the subject of an unpublished student thesis (Braithwaite 1984).

Diversity, as presently known

The end-chapter checklist shows a total molluscan diversity for the New Zealand Jurassic of 492 species in 227 genus-level taxa and 105 families. Bivalves constitute almost half the species (242), with 123 ammonoids, 77 gastropods, 41 coleoids, and only six scaphopod and three nautiloid species. Only 183 taxa (37%) are formally described, all the remainder appearing in the checklist in open nomenclature. Coleoids, mainly belemnites, are the only group in which half the known taxa are described, while a third of bivalve and ammonoid species (31% and 36%, respectively) have been described. No scaphopod or nautiloid species has been named. Given the 65% of unnamed taxa, the above totals cannot be accepted as precise, but still-to-be-discovered species are likely to outnumber those that will be removed from the checklist because of duplication, and the total is therefore likely to grow, although probably not substantially.

The vast majority of the taxa listed have been found in marine sequences and are therefore confidently assumed to have lived in marine environments, although one or two bivalves may possibly have occupied waters of lowered salinity. Only one species, an undescribed unionid bivalve, is confidently regarded as of non-marine origin. The most diverse groups present, those with more than 20 species, are the belemnite family Belemnopseidae (28 species), Limidae (Bivalvia) (26 species), Sphaeroceratidae (Ammonoidea) (26 species), and the bivalve family Astartidae (21 species).

The end of the preceding Triassic Period is marked by a significant extinction event, one of five global mass extinctions that have occurred over the last half-billion years, with global marine diversity, for instance, dropping from about 1,400 genera late in the Triassic to below 500 at the beginning of the Jurassic. In New Zealand, 46 molluscan genera, mostly of speciose cosmopolitan bivalves, survived from the Triassic. At the species level, there are three bivalves and two coleoids that appear to have done so. This moderate survivorship was possible, perhaps, because there appears to have been continuous deposition in the New

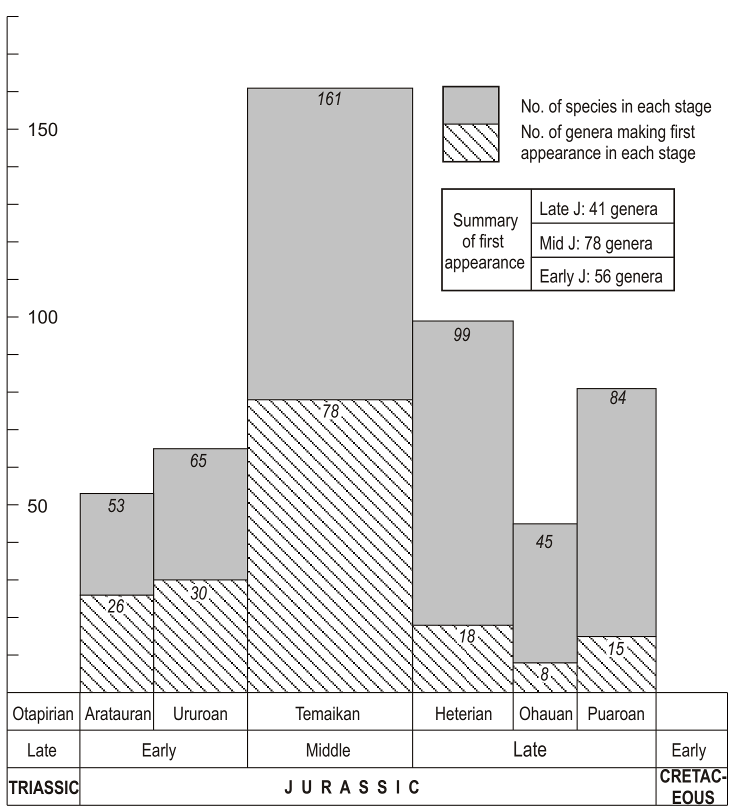
Zealand region across the Triassic–Jurassic boundary, implying relatively stable conditions, unlike the situation in most parts of the globe. Some doubt about the degree of species survival will remain until (a) all species are described, and (b) the Triassic–Jurassic boundary is more precisely identified in New Zealand sequences. Radiolarian and stable-isotope studies (Akikuni et al. in press) are providing this evidence, but for the present survey the Otapirian–Aratauran stage boundary (see graph below) is used, as has been traditional practice among New Zealand stratigraphers.

Globally, there was a less severe extinction event at the end of the Jurassic, but we know of no New Zealand Jurassic mollusc species that survived into the Cretaceous Period, probably because this time was one of extremely unstable tectonic conditions in our region, which, with consequent drastic facies changes, were not conducive to species survival. In addition, there are very few marine basal Cretaceous rocks known in the area, and none with macrofaunas. Despite any imprecision, the figure below shows the dramatic increase in species diversity through the Early Jurassic, to reach a maximum in the Middle Jurassic and diminish thereafter. In parallel, there was a marked maximum of generic first appearances in the mid-Jurassic.

The level of endemism among the described species is very high (more than 90%), and this is most likely to be reflected also among those forms in open nomenclature. New Caledonia, with a smaller area of Jurassic strata, has been included with New Zealand in a Triassic–Early Jurassic Maorian paleobiogeographic province (e.g. Grant-Mackie 1985), so the above proportion includes at least 16 species that are confined to New Zealand–New Caledonia. The latter figure will also rise as more taxa are formalised.

Thirteen endemic genus-rank taxa (5%) are so far recognised: the gastropods *Canterburyella, Kaiwarella,* and *Maoraxis,* the bivalves *Austrocyprina, Haastina, Moewakamya, Notoastarte,* and *Pseudaucella,* and the ammonites *Murihikuites*,

The giant New Zealand ammonite *Lytoceras taharoaense.*
From Stevens 1997



Changes in species diversity and generic first appearances through the Jurassic, shown as totals per local stage (Otapirian, Aratauran, etc.), with the relative widths of each bar reflecting the duration (i.e. number of ammonite zones) of each stage.

Murihikuites mackellari.
From Stevens 2004

Kawhiasphinctes, Opuatia and *Waikatoceras,* with one unnamed genus in the ammonite family Sphaeroceratidae. Other new genera are certainly to be expected, especially among the gastropods, but these are not yet included in the count because there has been no investigation that establishes their validity. They are readily accepted as separate taxa but are not well enough known by testable published descriptions to warrant inclusion at this stage in our list of endemic genera. Thus this list can be expected to expand significantly as further detailed taxonomic studies are published. Two of the gastropods are placed in monotypic endemic families, and two of the new genera of ammonites are put by Westermann et al. (2000) in an endemic subfamily, Waikatoceratinae.

Stratigraphic distribution

The Jurassic Period lasted from 200 to 145.5 million years ago, a duration of 65 million years. It is divided internationally into 11 stages (four each in the Early and Middle, three in the Late Jurassic) and 64 zones based on ammonites, so each ammonite zone is accepted as representing about one million years. So long as this zonation is identifiable, the turnover of faunas in any one area can be determined on a linear scale.

The New Zealand Jurassic does not have a rich ammonite fauna and it has been difficult to apply the international stage scheme to local sequences so as to correlate them. New Zealand stratigraphers therefore developed a scheme of local stages (Marwick 1953), which continues in use even as paleontological knowledge improves. Overseas correlations are now much more precise than in past years, but uncertainties remain, so dropping the local scheme in favour of the international one will not happen in the immediate future. Notwithstanding, it is possible to equate the New Zealand stages with the international ones sufficiently precisely to have a moderately clear understanding of the duration of each local Jurassic stage relative to the international ammonite zones.

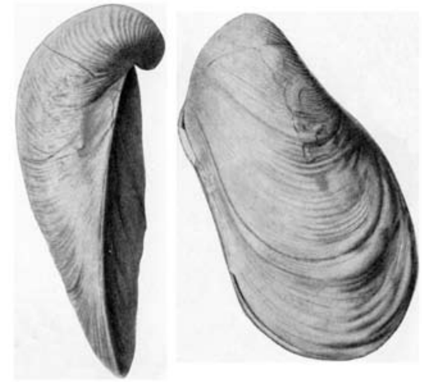
The table below, which covers some of the same data as in the figure, shows species totals per stage and zone and the numbers of genera arriving in the New Zealand region during each stage and zone. Readers should note that zonal numbers are merely averages derived from dividing taxa per stage by the numbers of zones in each stage, since correlation is not precise enough to allow recognition of each zone within any stage. Genera that are local Triassic survivors are not included in the Aratauran generic first appearances. Many species survived across stage boundaries and are thus recorded in more than one stage. The table is ordered stratigraphically, with the oldest stage at the bottom.

It can be seen that immigration was initially moderately high, at nearly three genera per million years, but increased in the Middle Jurassic (Temaikan). Species diversity also tripled from Ururoan to Temaikan. Causes for this are discussed below. Species diversity, as demonstrated by zonal numbers, increased slowly up to the middle of the Late Jurassic (Ohauan) and then more than doubled in the Puaroan, perhaps reflecting ecological diversity rather than greater ease

Molluscan genus- and species-level diversity per zone in the New Zealand Jurassic

Local stage	First appearance of genera	Generic arrivals per zone	No. of ammonite zones	Species per zone	Species per stage
Puaroan	16	3.8	4	20	84
Ohauan	8	1.6	5	9	45
Heterian	18	1.4	13	7.6	99
Temaikan	78	3.5	22	7.3	161
Ururoan	30	2.7	11	5.9	65
Aratauran	26	2.9	9	5.9	53

of migration or spurts of rapid evolution. Although most of the Late Jurassic sequence consists of very fine sand to silt lithologies – the belemnite-byssate bivalve lutite facies (Meesook & Grant-Mackie 1995) – Puaroan strata include thin coarser units with richer faunas of higher diversity and the sequence also includes the drastic shallowing, culminating in non-marine conditions, that presaged the end of the Murihiku basin of deposition. The low diversity of Ohauan times, on the other hand, probably reflects the more general absence of these coarser units and dominance of the low-diversity belemnite-byssate bivalve siltstone facies at that time.



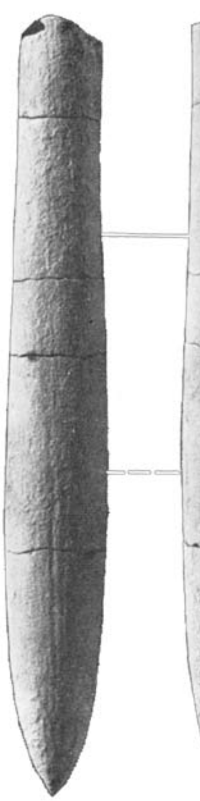
Australobuchia plicata.
From Fleming 1959

Evolutionary lineages

Very few statements concerning evolutionary relations among New Zealand Jurassic molluscs have been published, and no detailed accounts exist. Westermann et al. (2000, p. 49) briefly discussed the derivation of the endemic ammonite subfamily Waikatoceratinae from the sphaeroceratine '*Chondroceras* probably in the south-polar or austral/antiboreal area', with *Opuatia* appearing slightly before, and thus presumably giving rise to, *Waikatoceras* in the Late Temaikan (Late Bajocian). Local evolution produced at least four species of *Opuatia* and two species of *Waikatoceras,* all confined to the approximately three million years of late Bajocian time.

Explicit references have been made to a *Retroceramus galoi-subhaasti-haasti* lineage, but this has still to be well established, and other species of this genus need also to be taken into account (especially *R.marwicki*, *R. stehni*, and some of the undescribed *R. galoi*-like forms), and the picture is evidently rather more complex than a simple linear ancestor-dependent sequence. Among buchiid bivalves there is a frequently assumed lineage of *Australobuchia wherowhero-hochstetteri-plicata*, with *A. partimlirata* perhaps as an offshoot, and the derivation of *Australobuchia* from *Malayomaorica*.

Studies of paralellodontid, trigonioid, and astartid bivalves and the belemnites *Belemnopsis* and *Hibolithes,* all species-rich groups in which demonstrable evolutionary lineages could have been anticipated, have included few suggestions of linkages. Fleming (1987) emphasised repeated invasion rather than local evolution for trigonioid diversity. Ancestor-descendant relations between pairs of belemnite taxa were implied by the subspecific associations earlier used by Stevens (1965) and Challinor (1974–99) but now abandoned (Challinor 1999). Challinor (1991, 1999) also favoured multiple immigrations rather than *in situ* evolution to explain local diversity in the two belemnite genera.

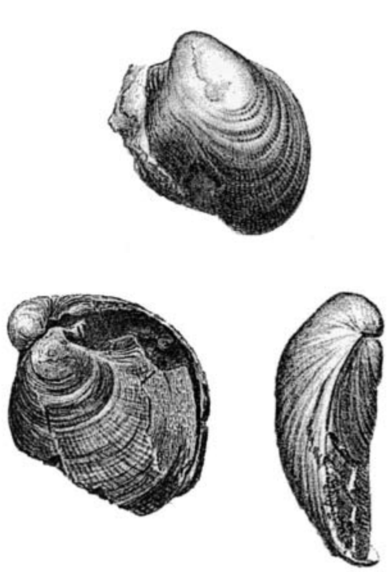


Hibolithes arkelli.
From Challinor 1975

Terrane faunas

At the beginning of the Jurassic, the Murihiku sedimentary basin lay off the Australian–Antarctic margin of Gondwana in the New Zealand–New Caledonia region, with ready links to the Andean–Antarctic Peninsula area and with very limited marine interchange northwards to the eastern Tethys. The Murihiku Terrane today includes strata mainly of shelf and slope origin and contains the bulk of the 455 Jurassic Mollusca listed. Its isolation in Triassic–Early Jurassic times, indicated by faunas of high generic endemism, produced the concept mentioned above of a Maorian Province.

To the east–northeast lay the Rakaia Terrane, being carried towards the Murihiku region by oblique subduction and translational faulting. One bivalve, *Pseudaucella marshalli,* otherwise confined to Murihiku strata, has been recorded from this terrane, demonstrating the close proximity of the two by the beginning of the Ururoan. The Middle Jurassic in New Zealand is marked by metamorphic/tectonic events, an absence of fossils of that age outside the Murihiku Terrane (which suggests absence of contemporary strata), the end of Maorian endemism, and the huge jump highlighted above in the appearance of genera new to the fauna of the Murihiku seas. All of this indicates a major crustal event in the region, believed to be at least in part the collision of the Rakaia



Malayomaorica malayomaorica.
From Boehm 1911

Retroceramus haasti.
From Crame 1982

Terrane with the Murihiku margin of Gondwana. This amalgamation changed the marine configuration so as to provide a much easier access route between the eastern Tethys and the Murihiku Sea. In flooded many benthic molluscs with both cosmopolitan and (east)-Tethyan affinities, for example gastropods *Scurriopsis* and Procerithiidae; bivalves *Dacryomya*, *Eonavicula*, *Grammatodon* (*Cosmetodon*), *G.* (*Indogrammatodon*), *Camptonectes*, retroceramids, trigonioids (completely absent from our Early Jurassic, despite a diverse Late Triassic fauna), *Neocrassina*, *Tancredia*, *Homomya*, and *Thracia*; as well as the more mobile cephalopods (*Calliphylloceras*, *Chondroceras*, hildoceratids, *Brevibelus*, *Belemnopsis*, *Hibolithes*). Other Temaikan ammonites show an increased Andean relationship (e.g. Eurycephalitinae), as is also seen in a few bivalves (e.g. *Kalentera*, *Plicatula*, some *Retroceramus*).

Further offshore to the northeast, and of unknown extent, were the Pahau and Waipapa Basins, the remnants of which today, as the Pahau and Waipapa Terranes, were incorporated into the New Zealand continental area in the Early Cretaceous by continued subduction and fault movement. They lie east of the Murihiku Terrane in both the North and South Islands. The Waipapa Terrane has yielded a few Jurassic molluscs (*Malayomaorica*, *Retroceramus*, and two belemnite species), also present in the Murihiku Terrane, and a small number have been found in the Pahau Terrane. These (e.g. bivalves *Anopaea*, *Australobuchia* aff. *subpallasi*, and the gastropods listed as of Early–Middle and Middle–Late Jurassic ages) are not present in the Murihiku fauna. They come from North Canterbury localities and cannot be dated precisely. The two bivalves, however, clearly indicate a Late Jurassic age, probably Tithonian (the youngest stage in the international scheme, equivalent to Ohauan plus Puaroan). An ammonite from the same area, *Idoceras speighti,* occurs also in Heterian (Late Jurassic) strata of the Murihiku Terrane.

Kear and Mortimer (2003) have reinterpreted the terrane association of the North Island, proposing the existence of a Late Jurassic Waipa Supergroup unconformably overlying the older terrane rocks (Murihiku, Maitai, Waipapa, etc.). The above-mentioned *Malayomaorica, Retroceramus,* and belemnites occur in strata included by Kear and Mortimer (2003) in the Waipa Supergroup.

Species numbers in these terranes are: 439 in the Murihiku only; 46 confined to the Pahau Terrane; one species in Rakaia and Murihiku; two species in Murihiku and Pahau; and six shared by Waipapa and Murihiku Terranes.

Gaps in knowledge

The most glaring gap in understanding the New Zealand Jurassic molluscan fauna is taxonomic – 63% of species are undescribed. Considerable effort will be required to document fully the other 300 taxa. Future collecting will produce additional new species, but the numbers can be expected to be relatively few following 150 years of collecting and the total is unlikely to reach 500.

The gastropods are the least-known major group, but few species are common and most are represented by only one or two specimens. Furthermore, gastropods are sufficiently rare not to have any demonstrated stratigraphic correlative value, although they will have relevance in paleobiogeography. From recent work the ammonites are very well documented but the bivalves will take much longer to describe. These two groups, in addition to the belemnites, do have internal and international utility in correlation, the ammonites being of prime significance for fine zonations, and the bivalves occurring often abundantly and widely dispersed.

Other gaps include lack of detailed studies of evolutionary relations and lineages, paleobiogeographic links, and paleoecological analyses. All of these are contingent upon the requisite taxonomic work. While a high proportion of species remains undescribed, conclusions in these fields can only be interim and probably biased. Evolutionary and biogeographic studies require also that the molluscs of adjacent areas are well known, and this too is less than ideal.

Facilities exist in New Zealand for all of these gaps to be addressed, and half a dozen workers are currently involved in doing so. But they lack the time and the funding to pursue the problems actively, and universities are not attracting new workers into these studies because of funding constraints and the lack of clear employment opportunities.

Inoceramus tawhanus.
James Crampton

Cretaceous

Cretaceous molluscs were first recognised in New Zealand late in the nineteenth century (e.g. Hector 1877, 1886; Hutton 1877) and described in the early works of Trechmann (1917), Woods (1917), and Wilckens (1920, 1922, 1924). To date, 68 species and subspecies of bivalves, 27 gastropods, and a single scaphopod have been described from the Cretaceous of New Zealand including the Chatham Islands. The bulk of the known fauna, however, remains undescribed, and, in addition to those noted above, more than 190 bivalves, 60 gastropods, and two scaphopods have been recognised in the national reference collections of GNS Science and in the collections of the Geology Department, University of Otago. These fossils are derived from Late Cretaceous rocks of Northland (Isaac et al. 1994), from Albian and Late Cretaceous strata of the East Coast Region between Raukumara Peninsula and Marlborough (Field, Uruski et al. 1997), from Late Cretaceous rocks exposed in Canterbury and Otago (Field, Browne et al. 1989), and from Albian and Late Cretaceous formations on the Chatham Islands (Campbell et al. 1993). Older Cretaceous strata (Berriasian to Aptian) are present in New Zealand but comprise the youngest part of the highly deformed and virtually unfossiliferous Pahau Terrane.

The numbers of taxa given above are very conservative and, for two main reasons, do not reflect true diversities. First, there has been virtually no systematic effort on taxa that do not have proven biostratigraphic utility. With the exception of inoceramid and trigoniid bivalves (Fleming 1987; Crampton 1996), no major groups have been monographed. Second, knowledge of Cretaceous Mollusca is strongly biased towards the relatively abundant, conspicuous, highly diverse and well-collected shallow marine faunas that occur within transgressive sandstone facies of Santonian to earliest Campanian age (e.g. Warren & Speden 1978; Moore et al. 1988; Crampton & Moore 1990; Stilwell 1998). Approximately 70% of species recognised to date are from these facies. Recently, as part of a larger study of biodiversity and biogeographic changes across the Cretaceous–Cenozoic boundary, these shallow marine faunas and many new taxa have been described by Stilwell (1994a), although much of this work has yet to be published (but see Aitchison et al. 1993; Stilwell 1994b, 1997, 1998). In contrast, Albian–Coniacian faunas are composed largely of low-diversity midshelf to bathyal assemblages that are dominated by inoceramid bivalves. More diverse inner-shelf assemblages of this age are uncommon and, even where known, remain undescribed (but see faunal lists in Speden 1975). There is little doubt that careful study of these older assemblages would greatly increase the number of known species of Cretaceous molluscs in New Zealand.

New Zealand Cretaceous cephalopod faunas are dominated by ammonites, comprising 93 species that have relatively short ranges, which is typical of the group (Henderson 1970, 1973). Belemnites are represented by just five short-ranging species of the austral genus *Dimitobelus* but are relatively common (Stevens 1965). The family Dimitobelidae was exclusively southern in its distribution, and its Late Cretaceous (post-Cenomanian) representatives were restricted to New Zealand and Antarctica (Doyle 1992). Nautiloids, known from just three taxa (Johnson 1970; Stilwell & Grebneff 1996; Consoli & Stilwell 2005), are rare. Cephalopods of Neocomian and Aptian ages are unknown from New Zealand. The earliest local Cretaceous records are from Mid-Cretaceous (Motuan) sequences, representing the Albian transgression developed at the base of the Eastern Basin in Marlborough and eastern North Island. Albian ammonite diversity was low by global standards, with most taxa

Kossmaticeras sulcatum.
From Henderson 1970

having cosmopolitan affinities. Cenomanian ammonites, known mainly from Marlborough, are more diverse and show striking affinities with European and Japanese assemblages of this age. Turonian–Santonian ammonites are very poorly represented in New Zealand. A small Santonian fauna was described from Marlborough by Woods (1917). In sharp contrast, the Campanian–Maastrichtian (Mata Series) faunas are widely distributed in the North and Eastern Basins. The Kaipara assemblage from the North Basin, originally described by Marshall (1926), is especially noteworthy. With 50 species, most of them endemic, it represents one of the most diverse assemblages of this age known worldwide. It is dominated by members of the austral family Kossmaticeratidae but also includes cosmopolitan genera.

Cenozoic Mollusca

New Zealand has by far the best on-land representation of marine Cenozoic rocks in the southern hemisphere and, as a consequence, also has a good record of marine Mollusca for most of the last 65 million years. Cenozoic molluscs are often conspicuous and well preserved, and were among the first fossils to be collected from New Zealand. Their record is incomplete in geographic, stratigraphic, and ecological coverage, but enough is known of the history of the molluscan fauna to identify major trends in composition and link them to changes in geography, climate and sea level. Two recent studies that used different methods and data compilations calculated that the overall completeness of the New Zealand Neogene fossil record of shelly shelf-mollusc species may be at least 40% (Cooper et al. 2006; Crampton et al. 2006a). In other words, 40% of the species that lived during the Neogene are inferred to have been sampled at least once in the fossil record. For individual stages, the average probability that a species ranging through an entire stage has been sampled varies between about 30% and over 80% for the Neogene. This per-stage sampling probability decreases as one goes back in time and is substantially lower for the Paleogene stages (Crampton et al. 2006a).

Importance of Cenozoic Mollusca

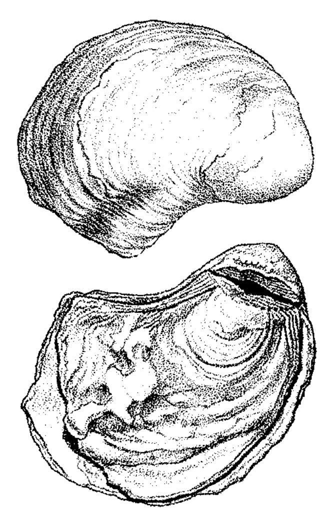
Fossil molluscs provide the only direct evidence for the history of the Cenozoic fauna, and hence for the origin of the modern molluscan fauna. Because New Zealand has a very good Neogene record, particularly in the Pliocene and Pleistocene, it is possible to document many of the most important changes in the marine fauna in some detail. As a consequence, there has never been a hard-and-fast boundary between molluscan paleontology and neontology in New Zealand; in a tradition going back to F. W. Hutton, paleontologists have described extant taxa, and neontologists fossils.

At a practical level, molluscs are very useful for dating sedimentary rocks and have contributed to geological mapping and petroleum exploration, particularly in late Cenozoic sedimentary basins. Biostratigraphic utility has long been one of the main reasons for studying fossil molluscs, and although this is not as important as it was prior to the rise of micropaleontology in the 1930s, molluscs have a distinct advantage because they are the most obvious fossils at many localities and it is often possible to give on-site identifications, at least of the larger species. Molluscs are also important indicators of depositional depth, salinity, and temperature, and contribute to paleobiogeographic reconstructions. In addition, some groups are sufficiently well represented in the fossil record to allow phylogenetic reconstruction and test evolutionary models. New Zealand Cenozoic molluscs have provided evidence for both phyletic gradualism and punctuated equilibrium.

The account that follows is based on more detailed reviews by Fleming (1965) and Beu & Maxwell (1990).

Mid-nineteenth century

Ernst Dieffenbach made the first documented collection of New Zealand Cenozoic molluscs in 1840, from Tioriori, northern Chatham Island. His specimens were examined by J. E. Gray (1843b), who briefly described, but did not name, two oysters now known as *Pycnodonte* (*Notostrea*) *tarda* (Hutton, 1873) and *Crenostrea cannoni* (Marwick, 1928) (Maxwell in Campbell et al. 1993). Another 21 years elapsed before Karl von Zittel formally described the first fossil molluscs from New Zealand (Zittel 1864); 27 of these were Cenozoic species, most of which were collected by Hochstetter.



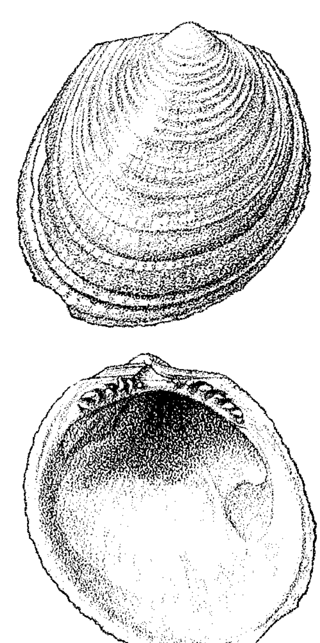
Pycnodonte tarda
From Beu et al. 1990

The Hutton era (1873–1905)

The establishment of the Geological Survey in 1865 provided a major impetus to New Zealand paleontology, and in 1870 the director, Sir James Hector, employed F. W. Hutton to review the Cenozoic Mollusca. Hutton's *Catalogue of the Tertiary Mollusca and Echinodermata* appeared in July 1873, only two months after his similar *Catalogue of the Marine Mollusca*, which dealt with the modern fauna. Hutton's fossil descriptions were bedevilled by their brevity, the lack of illustrations, and the large number of junior homonyms he inadvertently proposed (38 of a total of 125 new species), but his catalogue was the most significant nineteenth-century contribution to the knowledge of the Cenozoic molluscan fauna, not least because he endeavoured to place the faunas in a stratigraphic context. In 1873 he left the survey to become curator of the Otago Museum and, later, of the Canterbury Museum, but he continued to publish important papers on Cenozoic Mollusca until his death in 1905. During this period, the British paleontologist G. F. Harris described and illustrated several New Zealand species in the British Museum catalogue of *Australasian Tertiary Mollusca*, published in 1897. New Zealand-based workers, namely E. de C. Clarke, J. Hector, T. W. Kirk, and R. Murdoch, made smaller contributions to the study of the Cenozoic fauna.

Suter and Marshall (1907–1923)

The leading New Zealand malacologist in the last decade of the nineteenth century and the first two decades of the twentieth was Henry Suter, whose monumental monograph, the *Manual of the New Zealand Mollusca*, was published in 1913. Suter also developed an interest in fossil molluscs and was commissioned by the Geological Survey palaeontologist J. A. Thomson to revise the Cenozoic fauna. His first two *Palaeontological Bulletin*s, which appeared in 1914 and 1915, were critical reviews of previous work, but the third *Bulletin*, published in 1917, was largely devoted to descriptions of new taxa. Of the 167 species-group taxa described in this work, 24 were from the newly discovered Target Gully Shellbed in Oamaru, an exceptionally rich site that provided a major impetus to the study of mid-Cenozoic Mollusca in the first half of the twentieth century (Maxwell 1999). The other important contributor in this period was the versatile geologist Patrick Marshall, whose main innovation was to describe individual faunules, namely those from Wangaloa, Hampden, and Pakaurangi Point. Later he collaborated with Robert Murdoch on a series of papers describing molluscs from a wide variety of localities and ages. Minor contributions to the description of fossil molluscs were made by J. A. Bartrum, H. von Ihering, M. K. Mestayer, and J. A. Thomson.



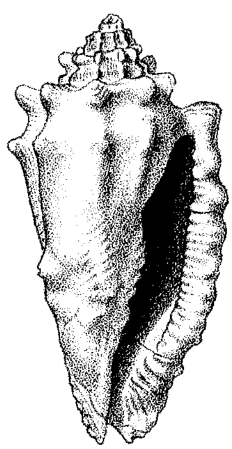
Limopsis waihaoensis.
From Beu et al. 1990

'The Golden Age' (1923–1942)

This is the name given by Fleming (1965) to a period in which four particularly prolific workers were most active in describing Cenozoic molluscs – Harold Finlay, John Marwick, Arthur Baden Powell (who co-authored two papers with Bartrum), and Charles Laws, who between them named 1547 Cenozoic species-group taxa in a space of 20 years. Their publications include descriptions of faunules (notably the Wangaloan (Early Paleocene) of East Otago), revisions of families (e.g. Naticidae, Struthiolariidae, Turridae, Pyramidellidae), and more eclectic accounts with descriptions of molluscs from a range of localities. Much of the new material came from the Target Gully Shellbed and other North Otago sites, or from the newly discovered Clifden Section in Southland, but most came from North Island localities, including Kaawa Creek and Pakaurangi, and a host of deep-water faunules from the Gisborne district. Finlay's last molluscan publication appeared in 1937, and Powell described only a few fossil species after 1942, but Laws continued publishing until 1950, and Marwick until 1971. Whereas Hutton, Suter and Marshall had been content to assign most New Zealand molluscs to genera proposed for species from the northern hemisphere, these four workers created a large number of new and allegedly endemic genus-group taxa to accommodate them. Other workers who described Cenozoic molluscs in this period were R. S. Allan, E. Ashby, C. R. Bucknill, R. A. Cumber, L. C. King, M. K. Mestayer, W. R. B. Oliver, and R. J. Waghorn.

C. A. Fleming and his influence (1943–present)

Charles Fleming brought a much-needed biological perspective to New Zealand molluscan paleontology. His first paper, which appeared in 1943, was devoted to 'traditional' descriptions of molluscs from Dannevirke district, but most of his later publications had an evolutionary, biogeographic, or ecological emphasis. Nonetheless, he also wrote papers describing individual faunules (Pahi, Te Waewae Bay) as well as a revision of the bivalve genus *Limatula*. Fleming (1965) concluded that the tailing-off in the rate of new species descriptions after the mid-1940s resulted from the influence of the so-called 'New Systematics', which placed great importance on intraspecific variation. The last 50 years or so has certainly been a period of consolidation and reassessment of what had already been achieved; nevertheless, a total of 356 Cenozoic species-group taxa have been named since 1964 in a variety of publications including taxonomic revisions (e.g. *Zeacolpus*, *Athleta*, *Xymene*, Anomiidae), faunal monographs (McCullochs Bridge, Palliser Bay), and more eclectic papers. Many of the genus-group taxa proposed during the 'Golden Age' have disappeared as the result of this body of work, but others survive and have been joined by a considerable number of additional taxa. Besides Fleming, the following authors have contributed to the study of Cenozoic molluscs since 1943: A. G. Beu, A. U. E. Boreham, R. M. Carter, W. O. Cernohorsky, M. Chapman-Smith, R. K. Dell, M. K. Eagle, A. Grebneff, J. A. Grant-Mackie, B. W. Hayward, C. R. Laws, B. A. Marshall, J. Marwick, P. A. Maxwell, G. Neef, O. P. Olsson, W. F. Ponder, A. W. B. Powell, J. E. Stilwell, P. Vella, and P. E. Wells.



Athleta necopinata.
From Beu et al. 1990

Nature of the Cenozoic record

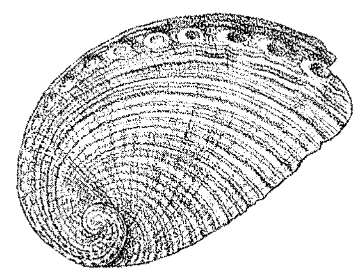
A total of 2,966 nominal species-group taxa (species, subspecies, and 'varieties') have been proposed for New Zealand Cenozoic fossil molluscs in 182 publications, ranging in size from short papers naming a single species to monographs naming dozens. (See Beu & Maxwell (1990) for a comprehensive bibliography of New Zealand Cenozoic Mollusca up to 1989.) The most efficient method of describing Cenozoic Mollusca has been the faunal monograph; this differentiates paleontology, in which there is a focus on individual sites and faunules, from neontology, which emphasises revisions of supraspecific taxa. Taxonomic revisions have also played a very important part in the description of the Cenozoic fauna, but far more species have been described in eclectic papers.

Many of the 2,966 nominal taxa have disappeared through synonymy, but this loss is more than offset by the large number of Mollusca described from the Recent fauna (604 species) that are currently known to have a fossil record, and the list compiled for this review includes 3,396 named species (see page 182). Of these, between 30 and 40 nominal species (mostly in Turritellidae, Naticidae and Volutidae) are probably superfluous and will disappear when the relevant groups are revised.

The varied sources of information on Cenozoic molluscan diversity

Category	Example	No. of publications (P)	No. of taxa (T)	T/P
Revisions of, or 'notes on' supraspecific taxa	Naticidae (Marwick)	58	584	10.1
Papers describing a single species	*Haliotis powelli* (Fleming)	18	18	1
Descriptions of individual faunules/faunas	'Wangaloan' (Finlay & Marwick)	37	1,298	35.1
Descriptions of species of a particular age	Eocene (Laws)	6	74	12.3
Descriptions of species from a particular locality or geographic area	Wairarapa (Vella)	24	233	9.7
Eclectic papers, i.e. species from a wide range of ages and localities	'New shells from New Zealand Tertiary beds' (Finlay)	39	759	19.5
Totals		**182**	**2,966**	**16.3**

In addition, 2,086 undescribed species have been recorded to mid 2003, giving a total recorded fauna of at least 5,482 species. (This list is based on published identifications, particularly in checklists; on Dr Alan Beu's unpublished compilation of late Nukumaruan-Holocene taxa; on P. A. Maxwell's unpublished lists of molluscs from important early to mid-Cenozoic sites, based largely on Maxwell's collections; and on material in the Charles Fleming Reference Collection at GNS Science and to a lesser extent in collections in the Geology Departments of Auckland and Otago Universities and Canterbury Museum.) The figures are to be taken as 'ball park' estimates only, and are certainly conservative; many could probably be doubled. For example, there are numerous, but currently indeterminate, eulimids, cerithiopsids, and triphorids that have not been included in this census. These small gastropods are common and varied in some faunules but are very difficult to identify confidently unless they are reasonably complete. Their inclusion would undoubtedly bring the total recorded fauna to well over 5,500 species. There is also little doubt that this figure would be significantly increased by critical reviews of some relatively little-studied groups (notably Polyplacophora and Scaphopoda) and by assessment of collections not examined during this survey, and would probably reach 6,000 species. This compares with 4,691 Recent species-group

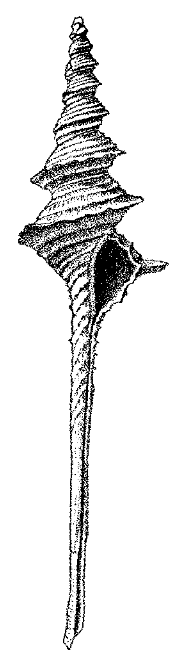


Haliotis powelli.
From Beu et al. 1990

Numbers of described molluscan species-group taxa in checklists

Class	Cenozoic			Recent
	Fleming 1966	Beu & Maxwell 1990	This volume	This volume*
Monoplacophora	0	0	0	2 (2)
Polyplacophora	19	28	30	55 (5)
Aplacophora	0	0	0	2 (0)
Bivalvia	779	828	895	461 (461)
Scaphopoda	17	18	26	11 (11)
Gastropoda	2,165	2,253	2,437	2,311 (2,140)
Cephalopoda	5	8	8	102 (4)
Totals	**2,985**	**3135**	**3,396**	**2,944 (2,764)**

*Numbers in brackets are of taxa with a readily preservable shell.



Coluzea kiosk.
From Beu et al. 1990

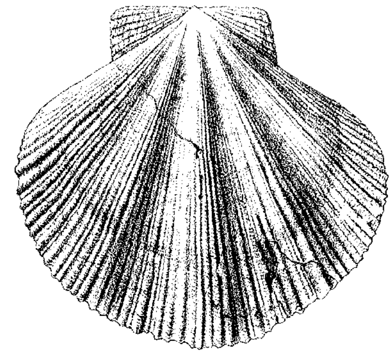
Estimates of undescribed New Zealand Cenozoic molluscan species-group taxa in collections

Taxon	No. of species
Polyplacophora	**18**
Acanthochitonidae	9
Chitonidae	4
Leptochitonidae	4
Schizochitonidae	1
Bivalvia	**506**
Arcidae	15
Astartidae*	4
Bakevelliidae	2
Cardiidae	6
Carditidae	17
Chamidae	5
Condylocardiidae	11
Corbulidae	8
Crassatellidae	6
Cucullaeidae	3
Cunidae	6
Cuspidariidae	15
Cyamiidae	5
Dimyidae	3
Erycinidae	29
Euciroidae	2
Galeommatidae	1
Gastrochaenidae*	4
Glossidae*	1
Gryphaeidae	1
Glycymerididae	4
Hiatellidae	1
Isognomonidae	1
Kelliellidae*	2
Lasaeidae	1
Limidae	16
Limopsidae	9
Lucinidae	12
Lyonsiellidae	1
Mactridae	21
Malletiidae	8
Mesodesmatidae	3
Montacutidae	13
Myochamidae	11
Mytilidae	22
Neilonellidae	4
Neoleptonidae	4
Noetiidae	1
Nucinellidae*	1
Nuculanidae	18
Nuculidae	46
Ostreidae	3
Parilimyidae	3
Pectinidae	23
Philobryidae	20
Pholadidae	7
Pholadomyidae	3
Plicatulidae*	1
Poromyidae*	1
Propeamussidae	10
Psammobiidae	5
Pteriidae	2
Sareptidae	6
Semelidae	2
Solemyidae*	3
Spheniopsidae	2
Spondylidae	6
Sportellidae	3
Tellinidae	12
Thraciidae	10
Bivalvia (continued)	
Thyasiridae	10
Ungulinidae	4
Veneridae	31
Verticordiidae	6
Scaphopoda	**26**
Dentaliidae	15
Entalinidae	1
Gadilidae	7
Gadilinidae	2
Rhabdidae*	1
Gastropoda	**1,536**
Aclididae	15
Acmaeidae	1
Acteonidae	19
Addisoniidae*	1
Aglagidae*	1
Amathinidae	11
Amphibolidae*	2
Amphitomariidae	4
Anabathridae	20
Aporrhaidae	1
Architonicidae	22
Atlantidae*	1
Batillariidae	2
Barleeidae	3
Buccinidae	39
Caecidae	5
Calliostomatidae	24
Calytraeidae	9
Campanilidae*	1
Capulidae	10
Cancellariidae	60
Cassidae	11
Cavoliniidae	6
Cerithiellidae	2
Cerithiidae	5
Cerithiopsidae	55
Charopidae	1
Cocculinidae	2
Columbellidae	34
Conidae	128
Coralliophilidae	1
Costellariidae	6
Cylichnidae	18
Cypraeidae	4
Cystiscidae*	2
Diaphanidae*	6
Diastomatidae	3
Drilliidae	12
Eatoniellidae	10
Elachisinidae	7
Ellobiidae	1
Epitoniidae	69
Eulimidae	20
Fasciolariidae	21
Ficidae	8
Fissurellidae	24
Haliotidae	12
Haminoeidae	1
Harpidae	3
Hipponicidae	4
Hydrobiidae*	3
Iravadidae	8
Juliidae*	3
Laubierinidae*	1
Gastropoda (continued)	
Lepetellidae*	1
Lepetidae*	2
Limacinidae	12
Litiopidae*	1
Littorinidae	8
Lottiidae	5
Marginellidae	15
Mathildidae	15
Mitridae	1
Muricidae	47
Nacellidae	4
Nassariidae	5
Naticidae	13
Neritidae	3
Olividae	7
Odostomiidae	33
Omalogyridae*	2
Orbitestellidae	15
Osteopeltidae*	1
Ovulidae	6
Patellidae	1
Peraclididae*	2
Pickworthiidae*	1
Philinidae	4
Planorbidae*	1
Plesiotrochidae*	3
Pleurotomariidae	5
Pseudococulinidae	1
Punctidae*	1
Pyramidellidae*	1
Ranellidae	21
Rastodentidae*	4
Retusidae	10
Rhytididae	1
Ringiculidae	13
Rissoellidae*	2
Rissoidae	58
Scissurellidae	22
Seguenziidae	1
Siliquariidae*	2
Siphonariidae*	2
Skeneidae	52
Spiratellidae	9
Strombidae*	2
Struthiolariidae	10
Syrnolidae	18
Terebridae	12
Tonnidae	1
Triforidae	6
Triphoridae	17
Triviidae	15
Trochaclididae*	6
Trochidae	48
Turbinellidae	12
Turbinidae	37
Turbonillidae	15
Turridae	100
Turritellidae	13
Umbraculidae*	1
Vanikoridae	14
Velutinidae*	2
Vermetidae	5
Vitrinellidae	35
Volutidae	12
Volutomitridae	11
Zerotulidae*	4
Total	**2,086**

* No Cenozoic species in this family have yet been formally described from New Zealand.

taxa, a substantial number of which lack shells and are therefore extremely unlikely to be preserved as fossils.

On currently available figures, about 38% of the recorded Cenozoic fauna is undescribed, which compares with an estimate of 36.8% undescribed species in the modern fauna.



Mesopeplum crawfordi.
From Beu et al. 1990

Geographic and stratigraphic coverage

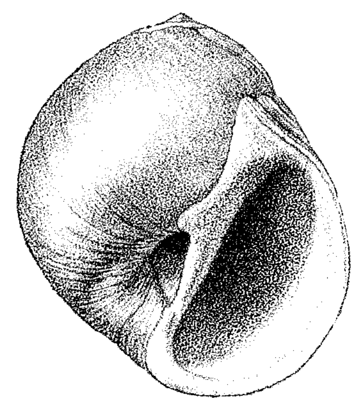
New Zealand Cenozoic molluscs are not uniformly distributed geographically or stratigraphically. For example, most of the significant Paleocene and Eocene faunules are from sites in eastern South Island, ranging from the Geraldine district in South Canterbury south to near Kaitangata, East Otago, or from the Chatham Islands. On the other hand, nearly all of the significant marine Pleistocene faunules are from the North Island. There are no records of Cenozoic molluscs from Stewart Island, and only a few from the smaller islands in the New Zealand region (i.e. Kermadec, Auckland, and Campbell Islands).

Stratigraphic coverage is not as good as could be hoped for either; no faunas of earliest Paleocene age are known and there are significant gaps in the Early and Middle Eocene and Early Oligocene, but the record is particularly good from Middle Oligocene onwards.

Ecological coverage

The Cenozoic record is overwhelmingly of marine taxa, predominantly from shelf facies. Non-marine taxa are much more poorly represented in the fossil fauna compared with the modern fauna. This is because rocks of suitable facies are few and far between. In addition, most land snails are small and thin-shelled, and therefore unlikely to survive burial. Non-marine Cenozoic sediments are not rare but are nearly always non-calcareous and usually far too coarse (typically conglomerates) to preserve molluscs. The oldest-known non-marine Cenozoic molluscs are freshwater bivalves of Early Paleocene age from near Greymouth (Kennedy 2003). Most records of land snails are from the Pleistocene, but several species of punctids and charopids are known from Early Miocene localities in Northland, and others are recorded from near St Bathans in Central Otago (probably Middle Miocene). In contrast, nearly 900 species of land snails are recorded from the modern fauna.

Fossil marginal/transitional faunas (lagoonal, estuarine, intertidal, rocky shore, etc.) are also relatively poorly known. Bathyal assemblages are much better known, but most have yet to be studied critically; they date back at least to the Middle Oligocene.



Magnatica planispira.
From Beu et al. 1990

Diversity of individual localities

Most individual Cenozoic mollusc localities are not particularly species-rich, and there are only about a dozen or so that are known to have 200 or more species. Most of these localities owe their richness to mixing of different assemblages through current and/or wave action or by mass-debris flow (e.g. submarine slumping). The richest known sites (with more than 400 species apiece) are

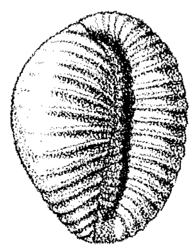
Ecological summary of New Zealand Cenozoic and Recent Mollusca (shelled taxa only)

Habitat	Cenozoic		Recent	
	Number	%	Number	%
Marine	5,541	99.43	3,398	79.45
Freshwater	20	0.36	838	19.59
Terrestrial	11	0.20	41	0.96
Total	**5,482**		**4,277**	

Hollands Point on Kaipara Harbour, Northland (Otaian, Early Miocene), and the recently discovered 'Beach Road' ephemeral outcrops of Altonian (Early Miocene) siltstone on the beach south of Awamoa Creek, North Otago (Maxwell & Fordyce 2000). For comparison, 610 species are recorded from the Early Pliocene locality at Bowden, Jamaica, and equally rich or richer sites are known from North America and Europe.

The best-known fossil fauna

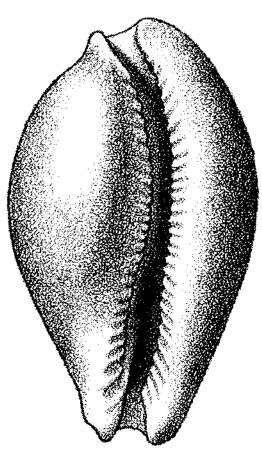
The Altonian fauna (Early Miocene, 18.5–16.4 Ma), recorded from about 25 significant sites extending from North Canterbury to North Otago, is the best known in the New Zealand Cenozoic. Among the sites are such famous fossil localities as Target Gully Shellbed (Maxwell 1999), Awamoa, Beach Road, Pukeuri, White Rock River, Sutherlands, Weka Pass and Porter River. The recorded fauna comprises close to 600 species, nearly all from inner- to outer-shelf facies, although probable upper-bathyal assemblages are known from All Day Bay in North Otago. Groups that are poorly represented or so far unrecorded in the fauna include chitons (only four species known to date), haliotids (one species recorded from Porter River), limpets, many trochids and turbinids, and some bivalves (e.g. mesodesmatids), almost certainly because suitable facies (marginal/transitional marine environments) are not preserved or have not been collected. Altonian assemblages from Southland and Northland represent warmer-water facies and differ markedly at species- and genus-group levels from one another and from the Canterbury/Otago fauna; in fact only about 15 species are known to be common to all three areas (Maxwell 2002). The Northland and Southland faunas were probably at least as diverse as the Canterbury/Otago fauna, and the total Altonian shelf and upper-bathyal fauna for what is now 'mainland' New Zealand was at least 2,000 species.



Trivia zealandica.
From Beu et al. 1990

Factors influencing the history of the New Zealand molluscan fauna

Estimating the total Cenozoic marine molluscan fauna is difficult in the absence of reliable knowledge of average species longevity (and hence the time taken for a complete faunal turnover). Many of the nearly 5,500 recorded species are known only from a single locality, or from just a few localities of similar age, but most shallow-water species seem to have survived for three to six million years, and if the Altonian fauna is any guide, the total fauna may have been between 20,000 and 40,000 species. If anything, this figure is likely to be on the conservative side, as many families are under-represented in the fossil fauna; this is particularly true for those families in which small molluscs (< 5 mm in greatest dimension) predominate (e.g. Nuculidae, Philobryidae, Scissurellidae, Skeneidae, Rissoidae; see also Cooper et al. 2006). This estimate of total Cenozoic diversity is broadly consistent with the figure of 40% completeness given above for New Zealand Neogene shelly shelf molluscs – the most complete component of the fossil molluscan fauna. The history of the New Zealand Cenozoic molluscan fauna is not one of gradual replacement of one fauna by the next; any background extinction rate is over-ridden by more rapid changes caused by climatic excursions and associated rises and falls in sea level.



Cypraea sp.
From Beu et al. 1990

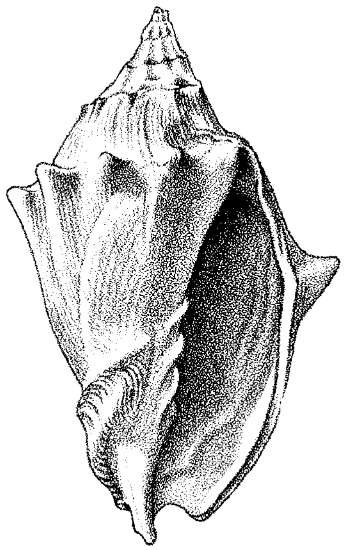
Other faunal changes have been in response to changes in oceanic circulation and tectonic activity. Some of the most important events and trends of the last 65 million years in the New Zealand region are shown in the table opposite. This is highly simplified, and there are parts of the column for which we have little direct evidence for faunal changes, but it gives some idea of the complexity of the history of the fauna. The 'Mid-Oligocene Crisis', when the Late Cretaceous–Paleogene transgression reached its peak and the New Zealand land area was reduced to a minimum, was but one of the events that helped shape the molluscan fauna. Its effects were easily overshadowed by subsequent events – a complex sequence of climatic changes, changes in sea level, and tectonic activity including mountain building. Despite the likely pulses of turnover related to these environmental changes, when major sampling biases are taken into account it seems that total diversity of shelf molluscs has been relatively constant through much of the Cenozoic, i.e. extinction and origination/immigration must have been more or less balanced (Crampton et al. 2006). This pattern does not hold for the last ~5 million years, when diversity seems to have fallen significantly, presumably in response to cooling.

Endemism and biogeographic influences

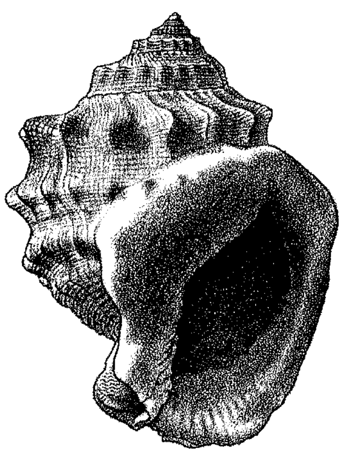
Nearly all New Zealand Cenozoic marine molluscs seem to have been endemic at the species level, the main exceptions being holoplanktic forms (Janthinidae, thecosome pteropods, nautiloids) and some with long-lived planktic larvae (i.e. many tonnoideans and architectonicids). These comprise less than 2% of the recorded fauna. No endemic families are known (although the freshwater family Latiidae was presumably present here in the Cenozoic), but at the genus-group level the fauna includes cosmopolitan, paleoaustral, neoaustral,

Important climatic and geological changes during the Cenozoic and their effects on the New Zealand molluscan fauna

Date (Ma)	Climatic events/ sea-level changes	Other events	Effect on New Zealand molluscan fauna
Late Pliocene/ Early Pleistocene	Initiation of current glacial/interglacial	Accelerated tectonic activity.	Appearance of cool-water scallop *Zygochlamys delicatula*, followed by extinction of *Eumarcia*, *Glycymeris*, *Lutraria*, *Panis*, *Patro*, etc., at end of cycles. 'Invasion' of northern taxa (*Anadara*, *Capulus*, *Eunaticina*, etc.) during warmer periods.
Late Miocene (5.5)	Cooling.		Extinction of *Aturia*, *Cucullaea*, *Lentipecten*, etc. Other genera disappear, returning in Early Pliocene.
Middle Miocene (13.8)	Cooling.		Appearance of *Xymene* and *Lamprodomina* in New Zealand, probably from South America via Antarctic Circumpolar Current (ACC).
Early Miocene (23.8–16.4)	Warming (peak about 15 Ma). Emplacement of Northland Allochthon.	Commencement of major tectonic activity.	Speciation facilitated by formation of distinct depositional basins and increase in terrigenous sediments. Distinct faunal 'provinces' in Northland and eastern South Island.
'Mid'–Late Oligocene (c. 30–24 – dates very uncertain)	Cooling, major sea-level fall, associated with erosion and phosphorite formation.	Opening of Drake Passage, enhancement of Antarctic Circumpolar Current, increase in upwelling. Minor tectonic activity?	Largest recorded increase in marine molluscan diversity in New Zealand Cenozoic during Duntroonian (c. 28–25 Ma), partly because of dispersal via ACC from South America and Australia.
'Mid'-Oligocene (c. 30)	Acme of marine transgression.		Land probably reduced to archipelago, causing some extinctions but also promoting speciation in terrestrial and shallow marine molluscs.
Eocene–Oligocene boundary (33.6)	Cooling.	Impact events (microtektites).	Earliest Oligocene molluscs poorly known, but appearance of *Zygochlamys* in North Otago possible evidence of cooling.
Late Middle Eocene (41.5)	Cooling. Erosional episode.	Separation of Australia from Antarctica, allowing some circumpolar circulation.	Extinction of *Athleta*, *Cubostrea*, *Fascioplex*, *Priscoficus*, *Speightia*, etc., followed by climatic recovery during Late Eocene, possibly aided by breakthrough of Leeuwin Current.
Late Early Eocene (49.5)	Cooling. Erosional episode.		Unknown because of poor record, but probably some (temporary?) extinctions, followed by partial recovery during Middle Eocene.
Latest Paleocene (55.4)	Late Paleocene Thermal Maximum.		Possibly represented in Waihao Valley by coral bed with only New Zealand record of *Plicatula*.
Paleocene (65–55.4)	Warming (possible cold phase in mid-Paleocene).	New Zealand continues northwards drift (commenced 80 Ma or earlier).	Recovery of fauna following terminal Cretaceous event (65 Ma), eventual replacement of many cool-temperate (Paleoaustral) elements by warm-water taxa. Late Paleocene to Early Eocene the warmest period in the New Zealand Cenozoic.



Mauira biconica.
From Beu et al. 1990



Echinophoria pollens.
From Beu et al. 1990

Southwest Pacific ('Australasian'), Indo-West Pacific, and endemic elements, their relative proportions changing in response to the northwards drift of New Zealand and its increasing isolation from large landmasses, global climatic excursions, and changes in sea level and ocean-circulation patterns. It is this mix of influences that makes the marine molluscan fauna so diverse. Of the 1,187 marine genus-group taxa recorded from the Cenozoic, 273 (about 23%) are currently regarded as endemic, but this figure seems very high and is likely to decrease as other southern hemisphere fossil faunas become better known.

The relative contributions made by vicariance and dispersal to the molluscan fauna have been the subject of considerable debate. Patrick Marshall believed New Zealand formed in its present position and has long been isolated; as a consequence its biota has evolved *in situ* with little or no immigration. He claimed: 'no one Tertiary horizon which has had its Mollusca properly collected and described shows any notable introduction of species or genera which are absent from lower horizons. Such facts go far to support the idea of a continuous isolation of New Zealand throughout Tertiary times' (Marshall 1918). This was a remarkable assertion considering the lack of a reliable stratigraphic framework, the lack of detailed work on most molluscan faunas, and the generally poor standard of Cenozoic molluscan taxonomy at that time. Marshall's ideas undoubtedly influenced Finlay, who claimed nearly all similarities between New Zealand and northern hemisphere molluscs were the result of convergence or parallelism and consequently required segregate genera (Finlay 1925). A less extreme position was taken by Marwick, who in a little-cited paper divided the New Zealand Cenozoic molluscan fauna into two broad groups – those with close relatives in the New Zealand Cretaceous and those without (Marwick 1925). Most of those in the second group do not have a pre-Tertiary record anywhere else, implying they arrived here during the Cenozoic by dispersal. Marwick concluded the most important periods of immigration of warm-water ('Indo-West Pacific') molluscs were during the Middle Eocene and Early Miocene, and suggested there may have been a shallow-water connection between northern New Zealand and New Caledonia that served as an avenue for dispersal.

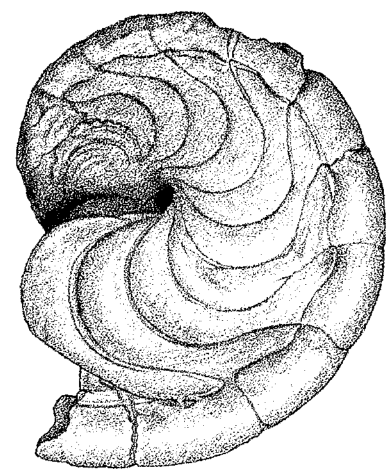
Recent work has had the effect of pushing back the earliest-known local occurrences of some genera to the Paleocene or Early Eocene, suggesting the composition of the fauna owes more to vicariance than previously thought; however, long-range dispersal has undoubtedly been very important at various times, for example in the Middle Oligocene in response to the initiation or at least enhancement of the Antarctic Circumpolar Current (Beu et al. 1997). Dispersal of shallow-water molluscs was not necessarily as long-lived larvae via current systems but may have been facilitated by island- or shoal-hopping along oceanic ridges, as Marwick suggested more than 75 years ago.

Family-group taxa that are particularly well represented in the New Zealand Cenozoic and contribute to its distinctive character include Limopsidae, Cucullaeidae, Veneridae: Dosiniinae, Struthiolariidae, Turritellidae (Tribe Zeacolpini), Volutidae: Zidoninae, and Turridae: Pseudotominae. All, however, are recorded from other southern mid-latitude Cenozoic faunas, and two, Struthiolariidae and Zidoninae, are restricted to the Southern Hemisphere. Dosiniinae apparently evolved in shallow seas off Gondwana and only later dispersed to the northern hemisphere. New Zealand Cenozoic Cucullaeidae and Struthiolariidae have probable ancestors in the Cretaceous of the southern hemisphere and represent an archaic ('paleoaustral') element in the fauna, but little is known of the early history of the other groups.

On the other hand, there are several families so far unrecorded from the Cenozoic fauna. Some are deep-water groups that are represented in the modern New Zealand fauna (e.g. Wemersoniellidae, Haloceratidae, Hyalogyrnidae), and others are restricted to warm waters (e.g. Neritopsidae, Modulidae, Placunidae, and Tridacnidae), but the absence of the widespread bivalve family Solenidae, which is present in the temperate Australian fauna, is somewhat surprising. Another widely distributed bivalve family, the Donacidae, is now known by a single Early Miocene species from Northland, but the record needs confirmation. The typically Mesozoic bivalve family Trigoniidae became extinct in most parts of the world at the end of the Cretaceous (65 Ma) and, although it survived in Australia, there are no Cenozoic records from New Zealand. Another predominantly Mesozoic (and now extinct) bivalve family, however, the Bakevelliidae, is represented in New Zealand by two genera, one of which survived until the Early Pleistocene.

Future work

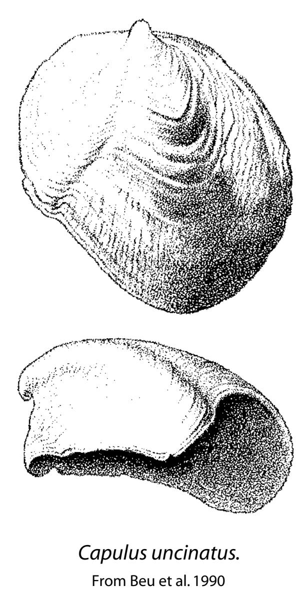
Advances in knowledge of the New Zealand Cenozoic molluscan fauna will come not only from discovery of new localities, but also from more intensive study of known localities, particularly through improved methods of sampling. Important faunas warranting detailed alpha-taxonomic study include those from Parengarenga Harbour and Hokianga/Waimamaku district in Northland (Early Miocene), Chatham Islands (Paleocene and Pliocene), Karamea and Greymouth areas in Nelson and Westland (Middle Miocene), the Hakataramea (Late Oligocene–Early Miocene) and Waihao Valleys (Eocene) in South Canterbury, and the Clifden Section in Southland (Early–Middle Miocene). The other important approach to the description of the Cenozoic fauna is through revisions of supraspecific taxa, preferably including their extant representatives – the classes Polyplacophora and Scaphopoda are long overdue for critical study, and groups with large numbers of undescribed species include Nuculidae, Veneridae, Skeneidae, Rissoidae, Cerithiopsidae, Triphoridae, Eulimidae, Epitoniidae, Muricidae, Buccinidae, Cancellariidae, Turridae, Conidae, and Pyramidelloidea. In the past, taxonomists have approached New Zealand Cenozoic Mollusca from a stratophenetic perspective, with the occasional nod to 'evolutionary systematics', but cladistics is likely to play an important part in future studies, at least at the supraspecific level.



Aturia cubaensis.
From Beu et al. 1990

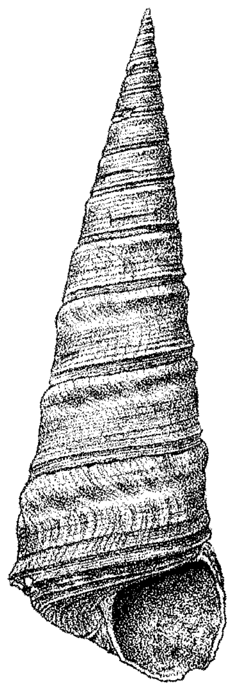
What use will this ever-expanding database be put to? Quite apart from the intrinsic interest in knowing what molluscs were here, and when, it will have a significant input into biostratigraphy, paleoecology, evolutionary models, and paleobiogeography. It is well established that molluscs are the most useful fossils for correlating marine Pliocene and Pleistocene rocks (Beu & Maxwell 1990; Beu 2001), but their potential for the zonation of older sequences is still under-appreciated. Current research, particularly on Late Oligocene and Early Miocene assemblages from the southern South Island, should do much to rectify this oversight.

Most paleoecological studies on New Zealand Cenozoic molluscs have been concerned with environmental analysis – determining physical factors such as water depth, salinity and temperature. These are undeniably important, but there is also a lot of scope for investigating biologically oriented subjects such as trophic analysis, rates of species origination and extinction (which help constrain some evolutionary models), and the evolution of ecosystems. The database is now robust enough to begin to address a basic question: What has controlled marine molluscan biodiversity in the New Zealand region during the Cenozoic? Several papers in this ongoing research programme have been published (Crampton et al. 2003, 2006a, b; Cooper et al. 2006; Foote et al. 2007), but much more needs to be done before we can confidently compensate for the sources of bias that compromise the data.



Capulus uncinatus.
From Beu et al. 1990

As Cenozoic molluscs become better known, the relative contributions made by vicariance and long-distance dispersal processes should become clearer, and help answer the question: What fraction of the modern fauna has its origins in Cretaceous Gondwanaland, and what fraction has evolved from species that arrived in New Zealand from elsewhere during the last 65 million years? The answer to this must bear strongly on the question asked above on the controls on molluscan biodiversity. (This discussion is confined to marine molluscs – fossil



Tropicolpus healyi.
From Beu et al. 1990

non-marine molluscs are poorly known but clearly have the potential to provide very important information on such biogeographic questions.)

Who is going to do it?

At present, only one Cenozoic molluscan paleontologist is in full employment in New Zealand. Others contribute when they can. This is an unsatisfactory situation, but one that is unlikely to alter until there is a profound change in attitudes towards 'traditional' taxonomy, particularly as practised by paleontologists. Collaboration with molecular geneticists will undoubtedly shed light on the systematics and evolution of taxa that are still extant, but it hardly needs to be emphasised that the vast majority of our fossil molluscs are extinct and we have only their shells to show that they once existed. They should not be ignored for that reason.

Conservation

Because many significant faunules are still not well documented it is important to conserve fossil localities as much as possible. Nearly all of the most significant mid-Cenozoic sites that P. M. Maxwell has collected from over the past 25–40 years have deteriorated to some degree. Some (e.g. Bluecliffs, South Canterbury; Paratoetoe and Te Pokere, Parengarenga Harbour) are becoming grassed over; others (McCullochs Bridge and Waihao Downs, South Canterbury) are protected from active erosion by willow growth; some (Target Gully Shellbed, Oamaru – see Maxwell 1999) are covered by slopewash and weeds; and others (much of Pukeuri road cutting, North Otago) have been removed through human activity. Significant Miocene localities in Weka Stream in North Canterbury are now almost completely inaccessible because a weir was built downstream, and the lower part of the nationally important Clifden Section in Southland has largely disappeared under vegetation since most of the water that used to flow down the Waiau River was diverted to Deep Cove. Some deterioration of fossil sites may reflect altered climatic conditions, but other changes could have been avoided or minimised if local bodies had had prior knowledge of the importance of individual localities.

Over-collection is a problem at some localities, particularly where fossils are rare and erosion is slow. This would not matter if material ended up properly curated in readily accessible collections, but many private collections get thrown out when the collector dies or loses interest. Several years ago a group of amateur collectors visited a quarry at Blands Bluff in Mid-Canterbury and removed a large quantity of an Altonian shellbed with an unusual shallow-water fauna, including one of the few fossil records of the limpet-like gastropod *Scutus*. The matrix was broken up for shark teeth and the rest dumped.

Commercial exploitation seems to be less of a problem, but in the early 1970s a very rich Altonian shellbed was discovered on a property near Oamaru. Much material was taken away by amateurs and its fate is mostly unknown; however, shortly afterwards, specimens of the large turritellid *Tropicolpus cavershamensis* that could only have come from this shellbed went on sale in a Christchurch rock shop. When the farmer learnt of this he stopped access to the locality and it has since become thoroughly obscured by slumped soil and vegetation.

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Paleozoic and Triassic Mollusca

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Checklist of New Zealand living Mollusca

Compiled by H. G. Spencer, B. A. Marshall, and R. C. Willan.

In compiling the checklist we have followed the policy of Spencer and Willan (1996) in adhering to the latest published taxonomy at the level of genus and species, even where we believe it to be equivocal. For instance, we have followed the nomenclature of the Volutidae given by Poppe and Goto (1992), even though we consider that synonymies are inevitable in the list of species they give. In doing so, we have resisted the temptation to make taxonomic changes, even though, in our opinion, these would be quite justifiable.

Our second decision concerns the admissibility of certain species to the fauna. Some species with long veliger stages are likely to drift into the New Zealand EEZ, without truly being members of the fauna (e.g. *Polinices mammatus*). Similar reasoning applies to some species with unusually buoyant shells (e.g. *Nautilus pompilius*). Such taxa have been omitted, even though their shells have occasionally been found within the EEZ.

E denotes endemic species and families, A adventive (alien/introduced) species. Endemic genera and subgenera are underlined (first entry only). All species in the checklist are to be considered marine unless otherwise indicated (i.e. F, freshwater; T, terrestrial), with the exeption of the Gastropoda subclass Pulmonata; here, all species are to be considered terrestrial unless otherwise indicated (i.e. F, freshwater; M, marine).

Species with the collection number prefixed by M. are in the collection of the Museum of New Zealand Te Papa Tongarewa, Wellington; those with A. in the collection of the Auckland Institute and Museum; those with NZOI in the collection of the National Institute of Water and Atmospheric Research, Wellington.

PHYLUM MOLLUSCA
Class APLACOPHORA
Subclass CHAETODERMOMORPHA
CHAETODERMATIDAE
Chaetodermatidae sp. 1 (NZOI Q694) E
Chaetodermatidae sp. 2 (NZOI Q727) E
Chaetodermatidae sp. 3 (M.151142) E
LIMIFOSSORIDAE
Limifossor sp. (NZOI Q722) E

Subclass NEOMENIOMORPHA
NEOMENIIDAE
Neomenia naevata Salvini-Plawen & Paar-Gausch, 2004 E
PARARRHOPALIIDAE
Metamenia sp. (M 151145) E
Pararrhopaliidae sp. (M.151146) E
PRONEOMENIIDAE
Dorymenia quincarinata (Ponder, 1970) E
Dorymenia sp. (M 151148) E
RHOPALOMENIIDAE
Rhopalomenia sp. (M.151147) E

Class POLYPLACOPHORA
Subclass NEOLORICATA
Order LEPIDOPLEURINA
FERREIRAELLIDAE
Ferreiraella xylophaga (Gowlett Holmes & Jones, 1992) E
Ferreiraella sp. (M.151389) E
HANLEYIDAE
Hemiarthrum sp. (M.151388) E
LEPTOCHITONIDAE
Leptochiton (*Leptochiton*) *deecresswellae* Anseeuw & Terryn, 2002 E
Leptochiton (*L.*) *finlayi* (Ashby, 1929) E
Leptochiton (*L.*) *inquinatus* (Reeve, 1847) E
Leptochiton (*L.*) *norfolcensis* (Hedley & Hull, 1912)
Leptochiton (*L.*) *otagoensis* (Iredale & Hull, 1929) E
Leptochiton (*L.*) *subantarcticus* (Iredale & Hull, 1930) E
Leptochiton (*Parachiton*) *mestayerae* (Iredale, 1914) E
Leptochiton (*P.*) *textilis* (Powell, 1937) E
Leptochiton sp. 1 (M.52841) E
Leptochiton sp. 2 (M.149934) E
Leptochiton sp. 3 (M.100811) E

Order ISCHNOCHITONINA
CHITONIDAE
Chiton (*Amaurochiton*) *glaucus* Gray, 1828 E
Chiton (*Chiton*) *themeropis* (Iredale, 1914) E
Onithochiton neglectus neglectus Rochebrune, 1881 E
Onithochiton n. subantarcticus Suter, 1907 E
Onithochiton oliveri (Iredale, 1914) E
Rhyssoplax aerea (Reeve, 1847) E
Rhyssoplax canaliculata (Quoy & Gaimard, 1835) E
Rhyssoplax exasperata Iredale, 1914 E
Rhyssoplax stangeri (Reeve, 1847) E
Sypharochiton aorangi (Creese & O'Neill, 1987) E
Sypharochiton pelliserpentis (Quoy & Gaimard, 1835)
Sypharochiton torri (Suter, 1907)
Sypharochiton sp. (M.136797)
ISCHNOCHITONIDAE
Callochiton crocinus (Reeve, 1847)
Callochiton empleurus (Hutton, 1872) E
Callochiton kapitiensis Mestayer, 1926 E
Callochiton mortenseni Odhner, 1924 E
Callochiton oligosulculatus Kaas & Van Belle, 1985 E
Callochiton perscrutandus (Iredale & Hull, 1929) E
Callochiton sulculatus Suter, 1907 E
Eudoxochiton nobilis (Gray, 1843) E
Ischnochiton circumvallatus (Reeve, 1847)

Ischnochiton intermedius Hedley & Hull, 1912
Ischnochiton luteoroseus Suter, 1907
Ischnochiton maorianus Iredale, 1914 E
Ischnochiton sp. 1 (M.152560) E
Ischnochiton sp. 2 (M.94038) E
Lepidozona beui O'Neill, 1987 E
MOPALIIDAE
Placiphorella sp. (M.80615) E
Plaxiphora (*Frembleya*) *egregia* (H. Adams, 1866) E
Plaxiphora (*Plaxiphora*) *aurata* (Spalowsky, 1795) E
Plaxiphora (*P.*) *australis* (Suter, 1907) E
Plaxiphora (*P.*) *biramosa* (Quoy & Gaimard, 1835) E
Plaxiphora (*P.*) *boydeni* R. C. Murdoch, 1982 E
Plaxiphora (*P.*) *caelata* (Reeve, 1847) E
Plaxiphora (*P.*) *murdochi* Suter, 1905 E
Plaxiphora (*P.*) *obtecta* Carpenter *in* Pilsbry, 1893 E
Plaxiphora (*P.*) sp. (M.217056) E
SCHIZOCHITONIDAE
Lorica haurakiensis Mestayer, 1921 E
Loricella profundior (Dell, 1956)

Order ACANTHOCHITONINA
ACANTHOCHITONIDAE
Acanthochitona thileniusi (Thiele, 1909) E
Acanthochitona zelandica (Quoy & Gaimard, 1835) E
Notoplax aupouria Powell, 1937 E
Notoplax facilis Iredale & Hull, 1931 E
Notoplax latalamina Dell, 1956 E
Notoplax mariae (Webster, 1908) E
Notoplax rubiginosa (Hutton, 1872) E
Notoplax violacea (Quoy & Gaimard, 1835) E
Notoplax websteri Powell, 1937 E
Cryptoconchus porosus (Burrow, 1815) E
Pseudotonicia cuneata (Suter, 1908) E

Class MONOPLACOPHORA
Order TRYBLIDIIDA
MICROPILINIDAE
Micropilina rakiura B. Marshall, 1998 E
Micropilina reinga B. Marshall, 2006 E
Micropilina tangaroa B. Marshall, 1990 E
Micropilina wareni B. Marshall, 2006 E
Rokopella capulus B. Marshall, 2006 E

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order SOLEMYOIDA
MANZANELLIDAE
Nucinella maoriana (Hedley, 1904) E
SOLEMYIDAE
Acharax clarificata Dell, 1995 E
Solemya (*Solemyarina*) *parkinsonii* E.A. Smith, 1874 E
Solemya sp. (M.141637) E

Order NUCULOIDA
MALLETIIDAE
Malletia cuneata (Jeffreys, 1876) E
Malletia galatheae Knudsen, 1970 E
Neilo annectens Powell, 1931 E
Neilo australis (Quoy & Gaimard, 1835) E
Neilo blacki B. Marshall, 1978 E
Neilo wairoana delli B. Marshall, 1978 E
Pseudomalletia aoteana (B. Marshall, 1978) E
NEILONELLIDAE
Austrotindaria benthicola Dell, 1956 E
Austrotindaria wrighti Fleming, 1948 E
Austrotindaria sp. 1 (M.61142) E
Austrotindaria sp. 2 (M.60460) E
Austrotindaria sp. 3 (M.59638) E
Neilonella hadalis Knudsen, 1970 E
Neilonella kermadecensis Knudsen, 1970 E
Pseudotindaria flemingi (Dell, 1956) E
NUCULANIDAE
Bathyspinula (*Acutispinula*) *calcar* (Dall, 1908)
Bathyspinula (*Acutispinula*) *kermadecensis* (Knudsen, 1970) E
Bathyspinula (*Acutispinula*) *tasmanica* (Knudsen, 1970) E
Bathyspinula (*Acutispinula*) sp. (M.149936) E
Jupiteria manawatawhia (Powell, 1937) E
Jupiteria wolffi Dell, 1956 E
Jupiteria sp. 1 (M.225631) E
Jupiteria sp. 2 (M.226787) E
?*Jupiteria* sp. (M.225626) E
Ledella herdmani Dell, 1953 E
Ledella kermadecensis Knudsen, 1970 E
Ledella librata Dell, 1952 E
Ledella sp. 1 (NZOI P929) E
Ledella sp. 2 (NZOI S204) E
Ledella sp. 3 (NZOI P942) E
Ledella sp. 4 (NZOI P937) E
Ledella sp. 5 (M.35022) E
Ledella sp. 6 (M.58531) E
Microgloma sp. (NZOI P934) E
Poroleda lanceolata (Hutton, 1885) E
Poroleda sp. (M.50881) E
Saccella maxwelli Beu, 2006 E
Saccella hedleyi (Fleming, 1951) E
Thestyleda investigator Dell, 1952 E
Thestyleda sp. 1 (M.149907) E
Thestyleda sp. 2 (M.35294) E
Yoldia kermadecensis Knudsen, 1970 E
Yoldiella finlayi (Powell, 1935) E
Yoldiella hamiltoni (Powell, 1935) E
Yoldiella powelli (Dell, 1950) E
Yoldiella sp. 1 (NZOI S154) E
Yoldiella sp. 2 (M.45261) E
Nuculanidae sp. (Knudsen, 1970) E
NUCULIDAE
Austronucula galatheae Dell, 1956 E
Austronucula schencki Powell, 1939 E
Lamellinucula dunedinensis (Finlay, 1928) E
Leionucula strangei (A. Adams, 1856) E
Leionucula strangeiformis (Dell, 1956) E
Linucula recens Dell, 1956 E
Linucula sp. 1 (M.54690) E
Linucula sp. 2 (M.66556) E
Linucula sp. 3 (M.152992) E
Linucula sp. 4 (M.154251) E
Nucula certisinus Finlay, 1930 E
Nucula hartvigiana Dohrn, 1864 E
Nucula nitidula A. Adams, 1856 E
Nucula nitidulaformis Powell, 1971 E
Nucula rossiana Finlay, 1930 E
Nucula sp. 1 (M.154226) E
Nucula sp. 2 (M.94512) E
Nucula sp. 3 (M.143975) E
Nucula sp. 4 (M.144509) E
Nucula sp. 5 (M.144510) E
Nucula sp. 6 (M.144511) E
Nucula sp. 7 (M.154218) E
Nucula sp. 8 (M.144513) E
Nucula sp. 9 (M.144514) E
Nucula sp. 10 (M.144515) E
Pronucula bollonsi Powell, 1955 E
Pronucula kermadecensis Oliver, 1915
Pronucula maoria Powell, 1937 E
Pronucula tenuis Powell, 1927 E
Varinucula gallinacea (Finlay, 1930) E
PHASEOLIDAE
Phaseolus faba Knudsen, 1970 E
TINDARIIDAE
Tindaria antarctica Thiele *in* Thiele & Jaeckel, 1931
Tindaria sp. (NZOI S153) E

Subclass PTERIOMORPHA
Order ARCOIDA
ARCIDAE
Acar plicata (Dillwyn, 1817)
Acar sandersonae Powell, 1933 E
Acar sociella (Brookes, 1926) E
Acar sp. 1 (M.60097) E
Acar sp. 2 (M.109415) E
Acar sp. 3 (M.93951) E
Barbatia (*Barbatia*) *decussata* (G. B. Sowerby I, 1823)
Barbatia (*B.*) *novaezealandiae* (E.A. Smith, 1915) E
Barbatia (*B.*) sp. cf. *nuttingi* (Dall, Bartsch & Rehder, 1938)
Barbatia (*Hawaiarca*) *alia* (Dall, Bartsch & Rehder, 1938)
Barbatia sp. (NZOI U599) E
Bathyarca cybaea Hedley, 1906 E
Bathyarca orbiculata (Dall, 1881)
Bathyarca sp. 1 (M.225617) E
Bathyarca sp. 2 (M.249897) E
Bentharca asperula (Dall, 1881)
Bentharca sp. (M.153632) E
GLYCYMERIDIDAE
Glycymeris (*Glycymerula*) *modesta* (Angas, 1879) E
Tucetona laticostata (Quoy & Gaimard, 1835) E
LIMOPSIDAE
Pectunculina lata (E.A. Smith, 1885) E
Pectunculina proceritas Crozier, 1966 E
Pectunculina sp. 1 (M.225612) E
Pectunculina sp. 2 (M.225313) E
Pectunculina sp. 3 (M.60409) E
PHILOBRYIDAE
Adacnarca sp. (NZOI U602) E
Aupouria parvula Powell, 1937 E
Cosa costata (F. Bernard, 1896) E
Cosa dispar Powell, 1937 E
Cosa filholi (F. Bernard, 1897) E
Cosa laevicostata Powell, 1933 E
Cosa serratocostata Powell, 1933 E
Cosa sp. (M.214621) E
Cratis delicatula Powell, 1937 E
Cratis retiaria Powell, 1937 E
Cratis sp. (M.148650) E
Lissarca aucklandica E.A. Smith, 1902 E
Lissarca benthicola (Dell, 1956) E
Lissarca exilis Suter, 1913 E
Lissarca harrisonae Powell, 1927 E
Lissarca ornata (Crozier, 1966) E
Lissarca pileopsis (Powell, 1927) E
Lissarca pisum Suter, 1913 E
Lissarca stationis Fleming, 1948 E
Lissarca stewartiana Powell, 1935 E
Lissarca trapezina (F. Bernard, 1897) E
Lissarca sp. 1 (M.144660) E
Lissarca sp. 2 (M.154343) E
Aff. *Lissarca* sp. (NZOI U602) E
Philobrya acutangula (Powell, 1935) E
Philobrya meleagrina (F. Bernard, 1896) E
Philobrya modiolus Suter, 1913 E
Philobrya munita (Finlay, 1930) E
Philobrya pinctada (Finlay, 1930) E
Philobrya sculpturalis (Dell, 1956) E
Philobrya sp. 1 (M.144667) E
Philobrya sp. 2 (M.134171) E
Philobrya sp. 3 (M.148652) E
Philobrya sp. 4 (M.148651) E
Philobrya sp. 5 (M.232078) E
Philobrya sp. 6 (M.232077) E
Verticipronus mytilus Hedley, 1904 E
Verticipronus sp. (M.60817) E
Philobryidae sp. (M.102104) E

Order MYTILOIDA
MYTILIDAE
Adipicola arcuatilis Dell, 1995 E
Adipicola osseocola Dell, 1987 E
Amygdalum sp. (M.147338) E
Aulacomya maoriana (Iredale, 1915) E
Bathymodiolus tangaroa Cosel & B. Marshall, 2003 E
Benthomodiolus lignocola Dell, 1987 E
Crenella radians (Suter, 1908)
Crenella sp. (M.225435) E
Dacrydium pelseneeri Hedley, 1906 E

Dacrydium sp. 1 (M.71439) E
Dacrydium sp. 2 (M.144701) E
Dacrydium sp. 3 (M.138398) E
Dacrydium sp. 4 (M.58602) E
Dacrydium sp. 5 (M.226795) E
Gigantidas gladius Cosel & B. Marshall, 2003 E
Idas japonica (Habe, 1976)
Idas washingtoniana (F. R. Bernard, 1978)
Limnoperna pulex (Lamarck, 1819)
Limnoperna securis (Lamarck, 1819)
Lithophaga sp. (M.213891) E
Modiolarca impacta (Hermann, 1782) E
Modiolus areolatus (Gould, 1850) E
Modiolus auriculatus (Krauss, 1848)
Musculista senhousia (Benson *in* Cantor, 1842) A
Musculus cumingianus (Reeve, 1857)
Mytilus galloprovincialis Lamarck, 1819
Perna canaliculus (Gmelin, 1791) E
Septifer bryanae (Pilsbry, 1921)
Trichomusculus barbatus (Reeve, 1858)
<u>*Zelithophaga*</u> *truncata* (Gray, 1843) E
PINNIDAE
Atrina zelandica (Gray, 1835) E
Streptopinna saccata (Linnaeus, 1758)

Order PTERIOIDA
ANOMIIDAE
Anomia trigonopsis Hutton, 1877 E
Pododesmus (*Monia*) *zelandicus* (Gray, 1843)
DIMYIDAE
Dimya sp. (M.225610) E
Dimyarina maoria (Powell, 1937) E
GRYPHAEIDAE
Neopycnodonte sp. (M.226358) E
ISOGNOMONIDAE
Isognomon (*Parviperna*) sp. cf. *nucleus* (Lamarck, 1836)
LIMIDAE
Acesta maui B. Marshall, 2001 E
Acesta saginata B. Marshall, 2001 E
Ctenoides sp. 1 (NZOI T213) E
Ctenoides sp. 2 (NZOI S573) E
Divarilima sydneyensis (Hedley, 1904)
Divarilima sp. 1 (M.225434) E
Divarilima sp. 2 (M.226366) E
Divarilima sp. 3 (M.138256) E
Divarilima sp. 4 (M.60740) E
Escalima regularis Powell, 1955 E
Fukama sp. (NZOI U599) E
Lima zealandica G.B. Sowerby II, 1876 E
Lima sp. 1 (M.60100) E
Lima sp. 2 (NIWA Stn K795) E
Limaria orientalis (A. Adams & Reeve, 1850) A
Limatula (*Limatula*) *acherontis* Fleming, 1978 E
Limatula (*L.*) *maoria* Finlay, 1926 E
Limatula (*L.*) *powelli* Fleming, 1978
Limatula (*L.*) *raoulica* Fleming, 1978 E
Limatula (*L.*) *suteri* (Dall, 1908) E
Limatula (*L.*) *vigilis* Fleming, 1978 E
Limatula (*Limatuletta*) *aupouria* Powell, 1937 E
Limatula (*L.*) *delli* Fleming, 1978 E
Limatula (*L.*) *insularis* Oliver, 1915 E
Limatula (*L.*) *spinulosa* Fleming, 1978
Limatula (*Stabilima*) *oliveri* Powell, 1958
Limatula sp. 1 (M.137551) E
Limatula sp. 2 (NZOI U573) E
Limatula sp. 3 (M.131837) E
Limatula sp. 4 (M.131856) E
Limatula sp. 5 (M.134000) E
Limatula sp. 6 (NZOI P942) E
Limatula sp. 7 (NZOI P937) E
Limatula sp. 8 (NZOI P937) E
Limea sp. 1 (M.94253) E
Limea sp. 2 (M.225310) E
Limea sp. 3 (NZOI P937) E
OSTREIDAE
Crassostrea gigas (Thunberg, 1793) A
Ostrea aupouria Dinamani, 1981 E
Ostrea chilensis Philippi *in* Küster, 1844
Saccostrea glomerata (Gould, 1850)
Saccostrea sp. (M.226969)
PECTINIDAE
Annachlamys iredalei (Powell, 1958)
Cryptopecten bullatus (Dautzenberg & Bavay, 1912)
Delectopecten fosterianum (Powell, 1933) E
Hyalopecten hadalis (Knudsen, 1970) E
Mesopeplum convexum (Quoy & Gaimard, 1835) E
Mimachlamys sanguinea (Linnaeus, 1758)
Pascahinnites coruscans coruscans (Hinds, 1845)
Pecten novaezelandiae Reeve, 1852 E
Pecten raoulensis Powell, 1958 E
Talochlamys dichroa (Suter, 1909) E
Talochlamys gemmulata (Reeve, 1853) E
Talochlamys zelandiae (Gray, 1843) E
Veprichlamys kiwaensis (Powell, 1933)
Pseudamussium challengeri (E.A. Smith, 1891)
Zygochlamys delicatula (Hutton, 1873)
PROPEAMUSSIIDAE
Catillopecten tasmani Dijkstra & B. Marshall, 2008 E
Cyclochlamys aupouria (Powell, 1937) E
Cyclochlamys lemchei (Powell, 1958)
Cyclochlamys mestayerae (Dell, 1956) E
Cyclochlamys transenna (Suter, 1913) E
Cyclopecten fluctuosus Dijkstra & B. Marshall, 2008 E
Cyclopecten horridus Dijkstra, 1995
Cyclopecten kapalae Dijkstra, 1990
Cyclopecten kermadecensis (E.A. Smith, 1885) E
Cyclopecten powelli Dell, 1956 E
Cyclopecten secundus (Finlay, 1926) E
Parvamussium cancellorum Dijkstra & Marshall, 2008 E
Parvamussium cristatellum (Dautzenberg & Bavay, 1912)
Parvamussium maorium Dell, 1956
Parvamussium retiaculum Dijkstra, 1995
Parvamussium retiolum Dijkstra, 1995
Parvamussium squalidulum Dijkstra, 1995
Parvamussium vesiculatum Dijkstra, 1995
Propeamussium investigatoris (E.A. Smith, 1906)
Propeamussium meridionale (E.A. Smith, 1885)
Propeamussium sibogai (Dautzenberg & Bavay, 1904)
PTERIIDAE
Electroma sp. (M.222042)
Pinctada maculata (Gould, 1850)
Pteria avicula (Holten, 1802)
Pteria levitata (Iredale, 1939)
PULVINITIDAE
Pulvinites exempla (Hedley, 1914)
SPONDYLIDAE
Spondylus ostreoides E.A. Smith, 1885 E
Spondylus raoulensis Oliver, 1915 E
Spondylus jamarcki Okutani, 1983
Spondylus sparsispinosus Dall, Bartsch & Rehder, 1938

Subclass PALAEOHETERODONTA
Order UNIONOIDA
HYRIIDAE
Cucumerunio websteri delli McMichael & Hiscock, 1958 E F
Cucumerunio w. websteri (Simpson, 1902) E F
<u>*Echyridella*</u> *menziesii* (Gray, 1843) E F

Subclass HETERODONTA
Order VENEROIDA
CARDIIDAE
Acrosterigma sorenseni (Powell, 1967) E
Corculum inexpectatum Crozier, 1966 E
Nemocardium bechei (Reeve, 1852)
Nemocardium sp. (NZOI T256) E
Pratulum pulchellum (Gray, 1843) E
CARDITIDAE
Cardita aoteana Finlay, 1926 E
Cardita brookesi Finlay, 1926 E
Carditella delli Crozier, 1966 E
Carditella sp. (M.20766) E
Hamacuna aupouria (Powell, 1937) E
Hamacuna gibbosa (Powell, 1937) E
Hamacuna otagoensis (Powell, 1927) E
Hamacuna sp. 1 (M.21169) E
Hamacuna sp. 2 (M.143347) E
Pleuromeris latiuscula benthicola Powell, 1937 E
Pleuromeris l. latiuscula Powell, 1937 E
Pleuromeris marshalli (Marwick, 1924) E
Pleuromeris paucicostata Laws, 1940 E
Pleuromeris ultima Dell, 1956 E
Pleuromeris zelandica (Deshayes, 1854) E
Pleuromeris sp. 1 (M. 148741) E
Pleuromeris sp. 2 (M.93952) E
Pleuromeris sp. 3 (M.94511) E
Pleuromeris sp. 4 (M.64739) E
<u>*Purpurocardia*</u> *purpurata* (Deshayes, 1854) E
Purpurocardia reinga (Powell, 1933) E
CHAMIDAE
Chama plinthota Cox, 1927
Chama sp. 1 (M.222104) E
Chama sp. 2 (M.227223) E
Chama sp. 3 (M.222117) E
CONDYLOCARDIIDAE
Benthocardiella hamatadens Powell, 1930 E
Benthocardiella obliquata bountyensis Powell, 1933 E
Benthocardiella o. chathamensis Powell, 1933 E
Benthocardiella o. obliquata Powell, 1930 E
Benthocardiella orbicula Powell, 1930 E
Benthocardiella pusilla Powell, 1930 E
Benthocardiella rakiura Powell, 1939 E
Benthocardiella striatula Powell, 1931 E
Benthocardiella sp. 1 (M.148673) E
Benthocardiella sp. 2 (M.148674) E
Benthocardiella sp. 3 (M.148675) E
Benthocardiella sp. 4 (M.148676) E
Benthocardiella sp. 5 (M.34573) E
Condylocardia crassicosta F. Bernard, 1897 E
Condylocardia pectinata chathamensis Powell, 1933 E
Condylocuna concentrica (F. Bernard, 1897) E
Condylocuna mernoo (Dell, 1952) E
Condylocuna torquata (Marwick, 1928) E
Condylocuna sp. 1 (M.34567) E
Condylocuna sp. 2 (M.43727) E
Condylocuna sp. 3 (M.144652) E
Condylocuna sp. 4 (M.144656) E
Condylocuna sp. 5 (M.144657) E
Condylocuna sp. 6 (M.144658) E
Condylocuna sp. 7 (M.44038) E
Cuna carditelloides Suter, 1911 E
Cuna compressidens Powell, 1933 E
Cuna laqueus Finlay, 1926 E
Cuna manawatawhia Powell, 1937 E
Cuna mayi Powell, 1930 E
Cuna mendica Dell, 1952 E
Cuna waikukuensis Powell, 1937 E
CRASSATELLIDAE
Talabrica bellula (A. Adams, 1854) E
Talabrica iredalei (Powell, 1958) E
Talabrica sp. (M.137651) E
CYAMIIDAE
Cyamiomactra problematica F. Bernard, 1897 E
Cyamiomactra sp. 1 (M.33947) E
Cyamiomactra sp. 2 (M.65648) E
Cyamiomactra sp. 3 (M.7424) E
Cyamiomactra sp. 4 (M.60854) E
Kidderia (<u>*Costokidderia*</u>) *costata* Odhner, 1924 E
Kidderia (*Kidderia*) *acrobeles* (Suter, 1913) E
Kidderia (*K.*) *aupouria aupouria* Powell, 1933 E
Kidderia (*K.*) *a. fiordlandica* Fleming, 1948 E
Kidderia (*K.*) *campbellica* Odhner, 1924 E
Kidderia (*K.*) *marshalli* Fleming, 1948 E
Kidderia (*K.*) *rakiura* Powell, 1939 E

Kidderia sp. 1 (M.144711) E
Kidderia sp. 2 (M.134686) E
Kidderia sp. 3 (M.144643) E
Kidderia sp. 4 (M.134975) E
Perrierina (*Legrandina*) *aucklandica* (Powell, 1933) E
Perrierina (*L.*) *harrisonae* (Powell, 1935) E
Perrierina (*L.*) *turneri* (Powell, 1939) E
Perrierina (*Perrierina*) *georgiana* Fleming, 1948 E
Perrierina (*P.*) *insulana* Powell, 1933 E
Perrierina (*P.*) *matai* Fleming, 1948 E
Perrierina (*P.*) *mestayerae* Powell, 1933 E
Perrierina (*P.*) *perstriata* Fleming, 1948 E
Perrierina (*P.*) *subquadrangula* Dell, 1952 E
Perrierina (*P.*) *substriata* Powell, 1935 E
Perrierina (*P.*) *taxodonta* F. Bernard, 1897 E
Perrierina sp. (M.96189) E
GAIMARDIIDAE
Gaimardia (*Gaimardia*) *forsteriana aucklandica* Finlay, 1926 E
Gaimardia (*G.*) *f. forsteriana* Finlay, 1926 E
Gaimardia (*G.*) *trapesina flemingi* Powell, 1955 E
Gaimardia (*Neogaimardia*) *finlayi* (Powell, 1933) E
Gaimardia (<u>*Progaimardia*</u>) *minutissima* (Iredale, 1908) E
GALEOMMATIDAE
Scintilla stevensoni Powell, 1932
Scintillona zelandica (Odhner, 1924) E
Divariscintilla maoria Powell, 1932 E
Divariscintilla sp. (M.153643) E
Galeommatidae sp. (AK 78569) E
GLOSSIDAE
Meiocardia sp. (NZOI T256)
KELLIELLIDAE
Kelliella bruuni (Filatova, 1969)
Kelliella tasmanensis Knudsen, 1970 E
Kelliella sp. (Knudsen, 1970)
KELLIIDAE
Kellia (*Kaneoha*) *minima* Ponder, 1971 E
Kellia (*Kellia*) *cycladiformis* (Deshayes, 1834) E
Kellia sp. (M.75247) E
LASAEIDAE
Arthritica bifurca (Webster, 1908) E
Arthritica crassiformis Powell, 1933 E
Arthritica hulmei Ponder, 1965 E
Arthritica sp. 1 (M.149692) E
Arthritica sp. 2 (M.50993) E
Arthritica sp. 3 (M.41799) E
Arthritica sp. 4 (M.26798) E
Borniola bidentifera (Powell, 1933) E
Borniola decapitata (Powell, 1939) E
Borniola neozelanica Powell, 1937 E
Borniola powelli Crozier, 1966 E
Borniola profunda (Dell, 1952) E
Borniola quadrata (Dell, 1956) E
Borniola reniformis (Suter, 1908) E
Borniola taieriensis (Powell, 1939) E
Borniola sp. 1 (M.134739) E
Borniola sp. 2 (M.148649) E
Lasaea hinemoa Finlay, 1928 E
Lasaea maoria (Powell, 1933) E
Lasaea parengaensis Powell, 1935 E
Lasaea sp. 1 (M.256360) E
Lasaea sp. 2 (M.141706) E
Melliteryx parva (Deshayes, 1856) E
Melliteryx sp. 1 (M.144232) E
Melliteryx sp. 2 (M.143027) E
Myllita (<u>*Zemyllita*</u>) *stowei* (Hutton, 1873) E
<u>*Myllitella*</u> *vivens pinguis* Marwick, 1928 E
Myllitella v. vivens Finlay, 1926 E
LUCINIDAE
<u>*Bathyaustriella*</u> *thionipta* Glover, Taylor & Rowden, 2004 E
Ctena bella (Conrad, 1834)
Divalucina cumingi (A. Adams & Angas, 1864)
Epicodakia neozelanica Powell, 1937 E
Gonimyrtea concinna (Hutton, 1885) E
Lucinoma galatheae Marwick, 1953 E
MACTRIDAE
<u>*Crassula*</u> *aequilatera* (Deshayes *in* Reeve, 1854) E
<u>*Cyclomactra*</u> *ovata* (Gray, 1843) E
Cyclomactra tristis (Reeve, 1854) E
Lutraria bruuni Powell, 1967
Mactra discors Gray, 1837 E
Mactra murchisoni Deshayes *in* Reeve, 1854 E
<u>*Maorimactra*</u> *ordinaria* (E.A. Smith, 1898) E
Oxyperas (*Pseudoxyperas*) *belliana* (Oliver, 1915) E
Oxyperas (*P.*) *elongata* (Quoy & Gaimard, 1835) E
<u>*Resania*</u> *lanceolata* Gray, 1853 E
<u>*Scalpomactra*</u> *scalpellum* (Reeve, 1854) E
<u>*Zenatia*</u> *acinaces* (Quoy & Gaimard, 1835) E
MACTROMYIDAE
Bathycorbis sp. (M.225457) E
MESODESMATIDAE
Ervilia bisculpta (Gould, 1861)
Ervilia sandwichensis (E.A. Smith, 1885)
Paphies australis (Gmelin, 1791) E
Paphies donacina (Spengler, 1793) E
Paphies subtriangulata (Wood, 1828) E
Paphies ventricosa (Gray, 1843) E
MONTACUTIDAE
Montacuta semiradiata neozelanica (Dell, 1956) E
Montacuta sp. (M.151174) E
Mysella alpha Powell, 1937 E
Mysella beta Powell, 1937 E
Mysella henryi Fleming, 1948 E
Mysella hounselli (Powell, 1931) E
Mysella lachlani Dell, 1952 E
Mysella larochei Powell, 1940 E
Mysella morioria Dell, 1952 E
Mysella tellinula (Odhner, 1924) E
Mysella unidentata (Odhner, 1924) E
Mysella sp. 1 (M.51502) E
Mysella sp. 2 (M.144584) E
Mysella sp. 3 (M.8605) E
Mysella sp. 4 (M.10796) E
Tellimya benthicola (Dell, 1956) E
Tellimya reinga (Crozier, 1966) E
Tellimya vitrea aupouria (Ponder, 1968) E
NEOLEPTONIDAE
Neolepton antipodum (Filhol, 1880)
Neolepton sublaevigatum (Powell, 1937) E
Neolepton subobliquum (Powell, 1937) E
Neolepton triangulare (Dell, 1956) E
Neolepton sp. 1 (M.49522) E
Neolepton sp. 2 (M.141600) E
Neolepton sp. 3 (M.51170) E
Neolepton sp. 4 (M.141712) E
<u>*Pachykellya*</u> *bernardi* Powell, 1927 E
Pachykellya concentrica Powell, 1927 E
Pachykellya edwardsi F. Bernard, 1897 E
Pachykellya minima Powell, 1931 E
Pachykellya rotunda Powell, 1927 E
Pachykellya sp. 1 (M.144906) E
Pachykellya sp. 2 (M.70916) E
Pachykellya sp. 3 (M.45499) E
Pachykellya sp. 4 (M.53560) E
Pachykellya sp. 5 (M.144897) E
Pachykellya sp. 6 (M.48927) E
Pachykellya sp. 7 (M.70917) E
Puysegura cuneata Powell, 1927 E
Puysegura prognata Powell, 1927 E
Puysegura tani Powell, 1939 E
Puysegura sp. 1 (M.35020) E
Puysegura sp. 2 (M.35021) E
Puysegura sp. 3 (M.144858) E
PSAMMOBIIDAE
Gari (*Gobraeus*) *stangeri* (Gray, 1843) E
Gari (*Kermadysmea*) *galatheae* (Powell, 1958)
Gari (*Psammobella*) *pusilla* Bertin, 1880
Gari (*Psammobia*) *convexa* Reeve, 1857 E
Gari (*P.*) *lineolata* (Gray, 1835) E
Heteroglypta contraria (Deshayes, 1863)
Soletellina nitida (Gray, 1843) E
Soletellina siliquens Willan, 1993 E
SEMELIDAE
Abra profundorum (E.A. Smith, 1885)
Abra sp. (M.225609) E
Leptomya retiaria aucklandica Powell, 1955 E
Leptomya r. retiaria (Hutton, 1885) E
Semele brambleyae Powell, 1967 E
Theora (*Endopleura*) *lubrica* Gould, 1861 A
SOLECURTIDAE
Solecurtus sp. (M.225439) E
SPHAERIIDAE
Musculium (*Sphaerinova*) *novaezelandiae* (Deshayes, 1854) E F
Pisidium (*Afropisidium*) *hodgkini* (Suter, 1905) E F
Pisidium (*Rivulina*) *novaezelandiae* Prime, 1862 E F
SPORTELLIDAE
Anisodonta (<u>*Austrosportella*</u>) *pseudoscintilla* Ponder, 1971 E
Anisodonta (<u>*Tahunanuia*</u>) *alata alata* (Powell, 1952) E
Anisodonta (*T.*) *a. trigonia* (Powell, 1952) E
Benthoquetia integra (Hedley, 1907)
TELLINIDAE
Agnomyax nana (Powell, 1958)
Elliptotellina urinatoria (Suter, 1911) E
Macomona liliana (Iredale, 1915) E
Moerella huttoni (E.A. Smith, 1885) E
Peronaea gaimardi (Iredale, 1915) E
Pseudarcopagia disculus (Deshayes, 1855) E
Rexithaerus spenceri (Suter, 1907) E
Serratina charlottae (E.A. Smith, 1885) E
Tellinella radians (Deshayes, 1854)
Tellinota edgari (Iredale, 1915) E
THYASIRIDAE
Axinulus sp. 1 (M.226814) E
Axinulus sp. 2 (M.50937) E
Axinulus sp. 3 (M.65168) E
Conchocele sp. (M.28418) E
Genaxinus cookianus Fleming, 1950 E
Genaxinus otagoensis (Suter, 1913) E
Maorithyas flemingi Powell, 1955 E
Maorithyas marama Fleming, 1950 E
Maorithyas sp. (M.116961) E
Mendicula sp. 1 (M.58628) E
Mendicula sp. 2 (M.149396) E
Parathyasira neozelanica Iredale, 1930 E
Parathyasira sp. (M.149431) E
Thyasira peregrina (Iredale, 1930) E
Thyasira waikanae Fleming, 1950 E
UNGULINIDAE
Diplodonta (*Zemysina*) *globus* (Finlay, 1926) E
Diplodonta (*Z.*) *striatula* (Finlay, 1926) E
Diplodonta sp. 1 (NZOI T256) E
Diplodonta sp. 2 (M.61348) E
Diplodonta sp. 3 (M.148635) E
Felaniella (<u>*Zemysia*</u>) *rakiura* (Powell, 1939) E
Felaniella (*Z.*) sp. aff. *rakiura* (Powell, 1939) (M.266058) E
Felaniella (*Z.*) *zelandica* (Gray, 1835) E
VENERIDAE
<u>*Austrovenus*</u> *stutchburyi* (Wood, 1828) E
Circomphalus yatei (Gray, 1835) E
<u>*Dosina*</u> *crebra* (Hutton, 1873) E
Dosina zelandica Gray, 1835 E
Dosinia (*Asa*) *lambata* (Gould, 1850) E
Dosinia (<u>*Austrodosinia*</u>) *anus* (Philippi, 1848) E
Dosinia (<u>*Kereia*</u>) *greyi* Zittel, 1864 E
Dosinia (*Phacosoma*) *maoriana* Oliver, 1923 E
Dosinia (*P.*) *subrosea* (Gray, 1835) E
Globivenus toreuma (Gould, 1850)
Gomphina (<u>*Gomphinella*</u>) *maorum* E.A. Smith, 1902 E
Irus (<u>*Notirus*</u>) *reflexus* (Gray, 1843) E
Irus (*Notopaphia*) *elegans* (Deshayes, 1854) E
Notocallista (<u>*Striacallista*</u>) *multistriata* (G.B. Sowerby II, 1851) E
Pitar (*Pitarina*) sp. cf. *affinis* (Gmelin, 1791)

Plurigens phenax Finlay, 1930 E
Protothaca crassicosta (Deshayes, 1835) E
Ruditapes largillierti (Philippi, 1849) E
Tawera bollonsi Powell, 1932 E
Tawera marionae Finlay, 1928 E
Tawera rosa Powell, 1955 E
Tawera spissa (Deshayes, 1835) E
Timnoclea sp. (M.225471) E
VESICOMYIDAE
Calyptogena sp. 1 (M.116946) E
Calyptogena sp. 2 (NZGS TM7662) E
Calyptogena sp. 3 (M.117575) E
Vesicomya sp. 1 (M.59785) E
Vesicomya sp. 2 (M.116945) E

Order MYOIDA
CORBULIDAE
Corbula (*Caryocorbula*) *zelandica* Quoy & Gaimard, 1835 E
GASTROCHAENIDAE
Gastrochaena retzii Deshayes, 1863
HIATELLIDAE
Hiatella arctica (Linnaeus, 1767)
Panopea smithae Powell, 1950 E
Panopea zelandica (Quoy & Gaimard, 1835) E
PHOLADIDAE
Barnea (*Anchomasa*) *similis* (Gray, 1835) E
Pholadidea acherontea Beu & Climo, 1974 E
Pholadidea suteri Lamy, 1926 E
Pholadidea tridens (Gray, 1843) E
Xylophaga galatheae Knudsen, 1961
Xylophaga hadalis Knudsen, 1961
Xylophaga wolffi Knudsen, 1961
Xylophaga sp. (M.75015) E
Xyloredo sp. 1 (M.84306) E
Xyloredo sp. 2 (M.84307) E
Xyloredo sp. 3 (M.84305) E
Xylopholas sp. (M.84303) E
TEREDINIDAE
Bankia australis (Calman, 1920)
Bankia neztalia Turner & McKoy, 1979
Lyrodus medilobatus (Edmonson, 1942)
Lyrodus pedicellatus (Quatrefages, 1849)
Nausitora sp. cf. *aurita* (Hedley, 1899)
Nototeredo edax (Hedley, 1895)
Uperotus clavus (Gmelin, 1791)

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
CLEIDOTHAERIDAE
Cleidothaerus albidus (Lamarck, 1819)
CUSPIDARIIDAE
Cardiomya bruuni Dell, 1956 E
Cardiomya rectimarginata Dell, 1962 E
Cardiomya sp. 1 (M.225628) E
Cardiomya sp. 2 (NZOI U601) E
Cardiomya sp. 3 (NZOI U602) E
Cuspidaria delli Knudsen, 1970 E
Cuspidaria fairchildi Suter, 1908 E
Cuspidaria morelandi Dell, 1956 E
Cuspidaria morioria Dell, 1956 E
Cuspidaria trailli (Hutton, 1873) E
Cuspidaria tuhua Dell, 1962 E
Cuspidaria willetti Fleming, 1948 E
Cuspidaria (*Soyomya*) sp. (M.226805) E
Cuspidaria sp. 1 (M.225547) E
Cuspidaria sp. 2 (M.272645) E
Cuspidaria sp. 3 (M.225619) E
Cuspidaria sp. 4 (M.225627) E
Cuspidaria sp. 5 (M.225618) E
Cuspidaria sp. 6 (NZOI U601) E
Cuspidaria sp. 7 (NZOI U601) E
Cuspidaria sp. 8 (NZOI U602) E
Cuspidaria sp. 9 (NZOI T243) E
Cuspidaria sp. 10 (NZOI U573) E
Cuspidaria sp. 11 (M.88379) E
Halonympha sp. 1 (M.225630) E
Halonympha sp. 2 (M.225299) E
Myonera tasmanica (Knudsen, 1970) E
Myonera sp. (NZOI S203) E
Plectodon lepidus B. Marshall, 2002 E
Plectodon pruinosus B. Marshall, 2002 E
Plectodon regalis B. Marshall, 2002 E
Pseudogrippina wanganellica B. Marshall, 2002 E
Pseudoneaera wellmani (Fleming, 1948) E
Rhinoclama (*Rhinoclama*) *aupouria* (Dell, 1950) E
Rhinoclama (*Austroneaera*) *brevirostris* (Powell, 1937) E
Rhinoclama (*A.*) *brooki* B. Marshall, 2002 E
Rhinoclama (*A.*) *finlayi* (Powell, 1937) E
Rhinoclama (*A.*) *raoulensis* (Powell, 1958) E
Rhinoclama (*A.*) *tangaroa* B. Marshall, 2002
EUCIROIDAE
Euciroa galatheae (Dell, 1956) E
Euciroa sp. (NZOI T242) E
LYONSIELLIDAE
Lyonsiella aotearoa Dell, 1995 E
Lyonsiella sp. (M.225520) E
Policordia sp. (M. 150054) E
LYONSIIDAE
Bentholyonsia sp. 1 (M.225433) E
Bentholyonsia sp. 2 (M.144379) E
MYOCHAMIDAE
Hunkydora novozelandica (Reeve, 1859) E
Hunkydora rakiura B. Marshall, 2002 E
Myadora antipodum E.A. Smith, 1880 E
Myadora boltoni E.A. Smith, 1880 E
Myadora novaezelandiae E.A. Smith, 1880 E
Myadora striata (Quoy & Gaimard, 1835) E
Myadora subrostrata E.A. Smith, 1880 E
Myadoropsis wairua B. Marshall, 2002 E
Myochama tasmanica (Tenison Woods, 1877)
PARILIMYIDAE
Panacca sp. (M.60412) E
Parilimya maoria (Dell, 1963) E
Parilimya neozelanica (Suter, 1914) E
Parilimya sp. (M.144385) E
PERIPLOMATIDAE
Pendaloma micans (Hedley, 1901)
Offadesma angasi Crosse & P. Fischer, 1864
SPHENIOPSIDAE
Grippina acherontis B. Marshall, 2002 E
Grippina aupouria (Powell, 1937) E
Grippina globosa B. Marshall, 2002 E
Grippina pumila B. Marshall, 2002 E
Grippina punctata B. Marshall, 2002 E
Grippina rex B. Marshall, 2002 E
Grippina spirata B. Marshall, 2002 E
Grippina sp. (M.151543) E
THRACIIDAE
Asthenothaerus maxwelli B. Marshall, 2002 E
Barythaerus biconvexa (Powell, 1927) E
Barythaerus cuneatus (Powell, 1937) E
Parvithracia (*Parvithracia*) *ampla* B. Marshall, 2002 E
Parvithracia (*P.*) *suteri* Finlay, 1927 E
Parvithracia (*Pseudoasthenothaerus*) *fragilissima* B. Marshall, 2002 E
Parvithracia (*P.*) *melchior* B. Marshall, 2002
Thracia (*Crassithracia*) *meridionalis* E.A. Smith, 1885 E
Thracia (*Odoncineta*) *vitrea* (Hutton, 1873) E
Thracia (*Thracia*) *vegrandis* P. Marshall & R. Murdoch, 1919 E
Thracia sp. 4 (M.10860) E
Trigonothracia mimica B. Marshall, 2002 E
VERTICORDIIDAE
Halicardia maoria Dell, 1978 E
Halicardia sp. (NZOI U602) E
Haliris (*Setaliris*) *setosa* (Hedley, 1907)
Haliris sp. 1 (M.154487) E
Haliris sp. 2 (M.154488) E
Haliris sp. 3 (M.225624) E
Haliris sp. 4 (M. 154493) E
Spinosipella ericia (Hedley, 1911)

Order POROMYOIDA
POROMYIDAE
Cetoconcha galatheae Knudsen, 1970 E
Poromya laevis E.A. Smith, 1885
Poromya microsculpta Dell, 1995 E
Poromya neozelanica (Dell, 1956) E
Poromya undosa Hedley & Petterd, 1906
Poromya sp. 1 (M.225411) E
Poromya sp. 2 (NZOI P939) E

Class SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Antalis diarrhox (Watson, 1879) E
Antalis glaucarena (Dell, 1953) E
Antalis nana (Hutton, 1873) E
Antalis suteri (Emerson, 1954) E
Fissidentalium zelandicum (G.B. Sowerby II, 1860) E
Fissidentalium sp. 1 (NZOI P971) E
Fissidentalium sp. 2 (NZOI P926) E
Fissidentalium sp. 3 (NZOI S154) E
Fissidentalium sp. 4 (NZOI S151) E
Graptacme sp. (NZOI P929) E
Striodentalium sp. (NZOI Q699) E
Dentaliidae sp. 1 (M.59992) E
Dentaliidae sp. 2 (M.34173) E
Dentaliidae sp. 3 (M.111857) E
Dentaliidae sp. 4 (M.50920) E
Dentaliidae sp. 5 (M.49212) E
Dentaliidae sp. 6 (M.33751) E
Dentaliidae sp. 7 (M.34834) E
Dentaliidae sp. 8 (M.34094) E
Dentaliidae sp. 9 (M.58488) E
Dentaliidae sp. 10 (M.225401) E
Dentaliidae sp. 11 (M.226667) E
Dentaliidae sp. 12 (M.227128) E
GADILINIDAE
Episiphon sp. (NZOI P937) E
LAEVIDENTALIIDAE
Laevidentalium sp. 1 (NZOI P939) E
Laevidentalium sp. 2 (NZOI P927) E

Order GADILIDA
ENTALINIDAE
Costentalina sp. (NZOI P937) E
Pertusiconcha tridentata Chistikov, 1982
Rhomboxiphus sp. 1 (M.60152) E
Rhomboxiphus sp. 2 (NZOI P937) E
Rhomboxiphus sp. 3 (NZOI P939) E
GADILIDAE
Gadilidae sp. 1 (M.34833) E
Gadilidae sp. 2 (M.49213) E
Cadulus teliger Finlay, 1926 E
Cadulus sp. 1 (NZOI P929) E
Cadulus sp. 2 (NZOI P937) E
Compressidens sp. (NZOI S151) E
Gadila sp. (NZOI P939) E
Polyschides sp. 1 (NZOI S204) E
Polyschides sp. 2 (NZOI P937) E
Siphonodentalium colubridens (Watson, 1879)
Siphonodentalium delicatulum (Suter, 1913) E
Siphonodentalium sp. (NZOI S152) E
PULSELLIDAE
Annulipulsellum sp. (NZOI P939) E
Pulsellum sp. (NZOI S152) E
WEMERSONIELLIDAE
Chistikovia kermadecae Scarabino, 1995 E
Wemersoniella knudseni Scarabino, 1995 E

Class GASTROPODA
Subclass PROSOBRANCHIA
Order DOCOGLOSSA
LEPETIDAE

Lepetidae sp. 1 (NZOI U601) E
Lepetidae sp. 2 (NZOI U601) E
Lepetidae sp. 3 (NZOI U602) E
Iothia sp. (M.59627) E
Maoricrater explorata (Dell, 1953) E
LOTTIIDAE
Actinoleuca campbelli campbelli (Filhol, 1880) E
Actinoleuca c. bountyensis Powell, 1955 E
Asteracmea suteri (Iredale, 1915) E
Atalacmea fragilis (G. B. Sowerby I, 1823) E
Atalacmea multilinea Powell, 1934 E
Notoacmea (*Notoacmea*) *elongata* (Quoy & Gaimard, 1834) E
Notoacmea (*N.*) *helmsi* (E.A. Smith, 1894) E
Notoacmea (*N.*) *parviconoidea* (Suter, 1907) E
Notoacmea (*N.*) *pileopsis pileopsis* (Quoy & Gaimard, 1834) E
Notoacmea (*N.*) *p. cellanoides* Oliver, 1926 E
Notoacmea (*N.*) *p. sturnus* (Hombron & Jacquinot, 1841)
Notoacmea (*N.*) *scopulina* Oliver, 1926 E
Notoacmea (*N.*) *subtilis* (Suter, 1907) E
Notoacmea (*Thalassacmea*) *badia* Oliver, 1926 E
Notoacmea? sp. (M.133828) E
Patelloida corticata (Hutton, 1880) E
Radiacmea inconspicua (Gray, 1843) E
Radiacmea intermedia (Suter, 1907) E
NACELLIDAE
Cellana craticulatus (Suter, 1905) E
Cellana denticulata (Martyn, 1784) E
Cellana flava (Hutton, 1873) E
Cellana ornata (Dillwyn, 1817) E
Cellana radians (Gmelin, 1791) E
Cellana stellifera (Gmelin, 1791) E
Cellana strigilis bollonsi Powell, 1955 E
Cellana s. chathamensis (Pilsbry, 1891) E
Cellana s. flemingi Powell, 1955 E
Cellana s. oliveri Powell, 1955 E
Cellana s. redimiculum (Reeve, 1854) E
Cellana s. strigilis (Hombron & Jacquinot, 1841) E
Cellana sp. (M.24376) E
Nacella (*Patinigera*) *terroris* (Filhol, 1880)
PATELLIDAE
Patella (*Scutellastra*) *kermadecensis* (Pilsbry, 1894) E
PECTINODONTIDAE
Pectinodonta aupouria B. Marshall, 1985 E
Pectinodonta marinovichi B. Marshall, 1998 E
Pectinodonta morioria B. Marshall, 1985 E
Pectinodonta sp. (NZOI U584) E
Pectinodontidae? sp. 1 (M.116947) E
Pectinodontidae? sp. 2 (M.118347) E

Order COCCULINIFORMIA
ADDISONIIDAE
Addisonia sp. (M.111239) E
BATHYSCIADIIDAE
Bathysciadium sp. 1 (NZOI S151) E
Bathysciadium sp. 2 (NZOI S151) E
Bathysciadium sp. 3 (NZOI E880) E
CHORISTELLIDAE
Bichoristes sp. 1 (NZOI U602) E
Bichoristes sp. 2 (M.49043) E
Bichoristes sp. 3 (M.34684) E
Choristella marshalli McLean, 1992 E
COCCULINELLIDAE
Cocculinella kopua B. Marshall, 1983 E
Cocculinella osteophila B. Marshall, 1983 E
COCCULINIDAE
Coccopigya crebrilamina B. Marshall, 1986 E
Coccopigya crinita B. Marshall, 1986 E
Coccopigya hispida B. Marshall, 1986 E
Coccopigya oculifera B. Marshall, 1986 E
Paracocculina cervae (Fleming, 1948) E
LEPETELLIDAE
Tecticrater compressa (Suter, 1908) E
Tecticrater finlayi (Powell, 1937) E
Tecticrater grandis Crozier, 1966 E
Tecticrater subcompressa (Powell, 1937) E
Tectisumen clypidellaeformis (Suter, 1908) E
OSTEOPELTIDAE
Osteopelta mirabilis B. Marshall, 1987 E
Osteopelta praeceps B. Marshall, 1994 E
PSEUDOCOCCULINIDAE
Amphiplica knudseni McLean, 1988 E
Caymanabyssia (*Caymanabyssia*) *rhina* B. Marshall, 1986 E
Caymanabyssia (*Dictyabyssia*) *sinespina* B. Marshall, 1986 E
Colotrachelus hestica B. Marshall, 1986 E
Copulabyssia gradata (B. Marshall, 1986) E
Kaiparapelta sp. (M.137534) E
Kurilabyssia antipodensis B. Marshall, 1986
Mesopelex zelandica B. Marshall, 1986 E
Notocrater craticulata (Suter, 1908) E
Notocrater gracilis B. Marshall, 1986 E
Pseudococculina gregaria B. Marshall, 1986
Tentaoculus balantiophaga B. Marshall, 1996 E
Tentaoculus haptricola B. Marshall, 1986 E
Tentaoculus lithodicola B. Marshall, 1986 E
Tentaoculus neolithodicola B. Marshall, 1986 E
Tentaoculus? sp. (M.116948)

Order VETIGASTROPODA
ANATOMIDAE
Anatoma aupouria (Powell, 1937)
Anatoma finlayi (Powell, 1937) E
Anatoma regia (Mestayer, 1916) E
Anatoma sp. 1 (M.226872) E
Anatoma sp. 2 (M.225392) E
Anatoma sp. 3 (M.226899) E
Anatoma sp. 4 (M.226889) E
Anatoma sp. 5 (NZOI U602) E
Anatoma sp. 6 (M.148568) E
Anatoma sp. 7 (NZOI S151) E
Anatoma sp. 8 (M.227088) E
Thieleella flemingi B. Marshall, 2002 E
ANGARIIDAE
Angaria delphinus (Linnaeus, 1758)
CALLIOSTOMATIDAE
Bathyfautor rapuhia B. Marshall, 1995
Calliostoma (*Ampullotrochus*) *peregrinum* B. Marshall 1995
Calliostoma (*A.*) *xanthos* B. Marshall 1995
Calliostoma (*Benthastelena*) *tosaense* (Kuroda & Habe, 1961)
Calliostoma (*B.*) sp. (NZOI T256) E
Calliostoma (*Fautor*) *consobrinum* (Powell, 1958) E
Calliostoma (*Maurea*) *antipodense* B. Marshall, 1995 E
Calliostoma (*M.*) *aupourianum* B. Marshall, 1995 E
Calliostoma (*M.*) *benthicola* (Dell, 1950) E
Calliostoma (*M.*) *blacki* (Powell, 1950) E
Calliostoma (*M.*) *eminens* B. Marshall, 1995 E
Calliostoma (*M.*) *foveauxanum* (Dell, 1950) E
Calliostoma (*M.*) *gibbsorum* B. Marshall, 1995 E
Calliostoma (*M.*) *granti* (Powell, 1931) E
Calliostoma (*M.*) *jamiesoni* B. Marshall, 1995 E
Calliostoma (*M.*) *maui* B. Marshall, 1995 E
Calliostoma (*M.*) *osbornei* Powell, 1926 E
Calliostoma (*M.*) *pellucidum* (Valenciennes, 1846) E
Calliostoma (*M.*) *penniketi* B. Marshall, 1995 E
Calliostoma (*M.*) *punctulatum* (Martyn, 1784) E
Calliostoma (*M.*) *regale* B. Marshall, 1995 E
Calliostoma (*M.*) *selectum* (Dillwyn, 1817) E
Calliostoma (*M.*) *simulans* B. Marshall, 1994 E
Calliostoma (*M.*) *spectabile* (A. Adams, 1855) E
Calliostoma (*M.*) *tigris* (Gmelin, 1791) E
Calliostoma (*M.*) *turnerarum* (Powell, 1964) E
Calliostoma (*M.*) *waikanae* Oliver, 1926 E
Calliostoma (*M.*) sp. (M.150581) E
Calliostoma (*Otukaia*) *alertae* B. Marshall, 1995 E
Calliostoma (*Tristichotrochus*) *gendalli* B. Marshall, 1979 E
Carinastele coronata B. Marshall, 1988 E
Carinastele jugosa B. Marshall, 1988 E
Carinastele kristelleae B. Marshall, 1988 E
Fautrix candida B. Marshall, 1995
Selastele kopua (B. Marshall, 1995) E
Selastele onustum (Odhner, 1924) E
Selastele limatulum (B. Marshall, 1995) E
Thysanodonta aucklandica B. Marshall, 1988 E
Thysanodonta wairua B. Marshall, 1988 E
CHILODONTIDAE
Brookula (*Aequispirella*) *corulum* (Hutton, 1885) E
Brookula (*A.*) *enderbyensis* Powell, 1931 E
Brookula (*A.*) *finlayi* Powell, 1933 E
Brookula (*Brookula*) *annectens* Powell, 1937 E
Brookula (*B.*) *benthicola* Dell, 1956 E
Brookula (*B.*) *contigua* Powell, 1940 E
Brookula (*B.*) *prognata* Finlay, 1926 E
Brookula (*B.*) *stibarochila* Iredale, 1912 E
Brookula sp. 1 (M.20886) E
Brookula sp. 2 (M.34646) E
Brookula sp. 3 (M.49177) E
Brookula sp. 4 (M.43966) E
Brookula sp. 5 (M.34001) E
Brookula sp. 6 (NZOI S152) E
Brookula sp. 7 (NZOI P941) E
Brookula sp. 8 (NZOI U573) E
Brookula sp. 9 (NZOI U573) E
Brookula sp. 10 (NZOI U573) E
Brookula sp. 11 (NZOI U573) E
Brookula sp. 12 (NZOI S152) E
Calliotropis acherontis B. Marshall, 1979
Calliotropis blacki B. Marshall, 1979
Calliotropis crystalophora B. Marshall, 1979
Calliotropis delli B. Marshall, 1979
Calliotropis eucheloides B. Marshall, 1979
Calliotropis powelli B. Marshall, 1979
Calliotropis sp. 1 (NZOI P941) E
Calliotropis sp. 2 (NZOI I697) E
Calliotropis sp. 3 (M.48958) E
Calliotropis sp. 4 (NZOI P941) E
Calliotropis sp. 5 (NZOI S152) E
Calliotropis sp. 6 (M.152799) E
Calliotropis sp. 7 (M.150055) E
Calliotropis sp. 8 (M.151313) E
Calliotropis sp. 9 (M.152747) E
Calliotropis? sp. (NZOI U581) E
Danilia insperata Beu & Climo, 1974 E
Danilia sp. (NZOI U599) E
Granata sp. (M.148566) E
Herpetopoma alacerrima Dell, 1956 E
Herpetopoma bella (Hutton, 1873) E
Herpetopoma benthicola Powell, 1937 E
Herpetopoma foveolata (A. Adams, 1851)
Herpetopoma larochei (Powell, 1926) E
Herpetopoma mariae Finlay, 1930 E
Herpetopoma pruinosa (B. Marshall, 1979) E
Herpetopoma sp. 1 (M.34245) E
Herpetopoma sp. 2 (M.148564) E
Herpetopoma sp. 3 (M.74585) E
Herpetopoma sp. 4 (M.148565) E
Herpetopoma sp. 5 (M.34247) E
Putzeysia sp. (M.109385) E
Liotella aupouria (Powell, 1937) E
Liotella indigens (Finlay, 1926) E
Liotella mackenae (Dell, 1956) E
Liotella polypleura (Hedley, 1904) E
Liotella rotula (Suter, 1908) E
Liotella sp. 1 (M.148560) E
Liotella sp. 2 (NZOI U602) E
Solaricida infundibulum (Watson, 1879)
Vetulonia sp. (M.225591)
COLLONIIDAE
Argalista crassicostata (R. Murdoch, 1905) E
Argalista fluctuata (Hutton, 1883) E
Argalista imperforata (Suter, 1908) E

Argalista micans Powell, 1931 E
Argalista nana Finlay, 1930 E
Argalista rotella Powell, 1937 E
Argalista umbilicata Powell, 1926 E
Argalista variecostata Powell, 1937 E
Argalista sp. 1 (M.109409) E
Argalista sp. 2 (M.148551) E
Argalista sp. 3 (M.148552) E
Argalista sp. 4 (M.131314) E
Argalista sp. 5 (M.226949) E
Cantrainea inexpectata B. Marshall, 1979 E
Cantrainea sp. (M.244900) E
Leptothyra benthicola B. Marshall, 1979 E
Leptothyra kermadecensis B. Marshall, 1979 E
Colloniidae sp. 1 (NZOI U598) E
Colloniidae sp. 2 (NZOI U602) E
FISSURELLIDAE
Clathrosepta sp. (NZOI U608) E
Cornisepta festiva (Crozier, 1966) E
Cranopsis sp. (M.225516) E
Diodora bollonsi (Oliver, 1915) E
Emarginula (*Emarginula*) *striatula* Quoy & Gaimard, 1834 E
Emarginula (*Subzeidora*) *connectens* Thiele, 1915
Emarginula sp. 1 (M.225694) E
Emarginula sp. 2 (M.226883) E
Emarginula sp. 3 (NZOI T256) E
Emarginula sp. 4 (NZOI U599) E
Emarginula sp. 5 (M.148573) E
Emarginula sp. 6 (M.144326) E
Emarginula sp. 7 (M.60102) E
Emarginula sp. 8 (M.53975) E
Emarginula sp. 9 (M.52783) E
Emarginula sp. 10 (M.118138) E
Emarginula sp. 11 (M. 225687) E
Fissurisepta manawatawhia Powell, 1937 E
Fissurisepta sp. (M.138467) E
<u>*Monodilepas*</u> *diemenensis* Finlay, 1930 E
Monodilepas monilifera carnleyensis Powell, 1955 E
Monodilepas m. cookiana Dell, 1953 E
Monodilepas m. monilifera (Hutton, 1873) E
Monodilepas otagoensis Finlay, 1930 E
Monodilepas skinneri Finlay, 1928 E
Monodilepas sp. (M.148574) E
Montfortula chathamensis Finlay, 1928 E
Profundisepta sp. 1 (M.225559) E
Profundisepta sp. 2 (M.225600) E
Profundisepta sp. 3 (M.257052) E
Profundisepta sp. 4 (M.148575) E
Profundisepta sp. 5 (M.138462) E
Puncturella (*Puncturella*) sp. cf. *analoga* Martens, 1902
Puncturella (*Vacerrena*) *demissa* Hedley, 1904 E
Puncturella sp. (NZOI U601) E
Rimulanax sp. (M.225598) E
Scutus breviculus Blainville, 1817 E
Tugali colvillensis Finlay, 1926 E
Tugali elegans Gray, 1843 E
Tugali stewartiana Powell, 1939 E
Tugali suteri suteri (Thiele, 1916) E
Tugali s. sutherlandi Fleming, 1948 E
Tugali sp. (M.36012) E
Zeidora maoria Powell, 1937 E
Zeidora sp. 1 (M.225448) E
Zeidora sp. 2 (M.225396) E
Zeidora sp. 3 (NZOI U602) E
Fissurellidae sp. (M.118002) E
HALIOTIDAE
Haliotis (<u>*Paua*</u>) *iris* Gmelin, 1791 E
Haliotis (*P.*) *virginia crispata* Gould, 1847 E
Haliotis (*P.*) *v. huttoni* Filhol, 1880 E
Haliotis (*P.*) *v. morioria* Powell, 1938 E
Haliotis (*P.*) *v. virginea* Gmelin, 1791 E
Haliotis (*Padollus*) *australis* Gmelin, 1791 E
LIOTIIDAE
Munditia anomala Powell, 1940 E
Munditia aupouria Powell, 1937 E
Munditia delicatula Powell, 1940 E
Munditia echinata Powell, 1937 E
Munditia manawatawhia Powell, 1937 E
Munditia owengaensis Powell, 1933 E
Munditia serrata (Suter, 1908) E
Munditia suteri (Mestayer, 1919) E
Munditia tryphenensis (Powell, 1926) E
Munditia sp. (M.147316) E
PENDROMIDAE
Pendroma sp. (NZOI Q696) E
Rugulina sp. 1 (M.52881) E
Rugulina sp. 2 (M.81504) E
Rugulina sp. 3 (NZOI P971) E
Rugulina sp. 4 (M.225321) E
PHASIANELLIDAE
Phasianellidae sp. (M.225701) E
PLEUROTOMARIIDAE
Perotrochus tangaroana Bouchet & Métivier, 1982
SCISSURELLIDAE
Ariella pauperata (Powell, 1933) E
Incisura lytteltonensis (E.A. Smith, 1894) E
Incisura rosea (Hedley, 1904) E
<u>*Larochea*</u> *miranda* Finlay, 1927 E
Larochea secunda Powell, 1937 E
Larocheopsis amplexa B. Marshall, 1993 E
Scissurella bountyensis Powell, 1933 E
Scissurella fairchildi Powell, 1933 E
Scissurella manawatawhia Powell, 1937 E
Scissurella marshalli Bandel, 1998 E
Scissurella prendrevillei Powell, 1933 E
Scissurella sp. 1 (NZOI U602) E
Scissurella sp. 2 (M.148569) E
Scissurella? sp. (M.148570) E
Sinezona bandeli B. Marshall, 2002 E
Sinezona brevis (Hedley, 1904) E
Sinezona iota (Finlay, 1926) E
Sinezona laqueus (Finlay, 1926) E
Sinezona levigata (Iredale, 1908) E
Sinezona macleani Geiger, 2006
Sinezona pacifica (Oliver, 1915) E
Sinezona sp. 1 (M.226874) E
Sinezona sp. 2 (M.226873) E
Sinezona sp. 3 (M.49826) E
Sinezona sp. 4 (M.148571) E
Sukashitrochus lyallensis (Finlay, 1926) E
Sukashitrochus sp. (M.226765) E
SEGUENZIIDAE
Ancistrobasis dilecta B. Marshall, 1983 E
Anxietas sp. (M.147308) E
Asthelys cf. *simplex* (Watson, 1879) E
Asthelys sp. (NZOI U602) E
Basilissa? sp. (NZOI U601) E
Basilissopsis regina (B. Marshall, 1983) E
Basilissopsis sp. (NZOI U602) E
Calliobasis miranda B. Marshall, 1983 E
Carenzia fastigiata B. Marshall, 1983 E
Carenzia venusta B. Marshall, 1983 E
Fluxinella lenticulosa B. Marshall, 1983 E
Fluxinella lepida B. Marshall, 1983 E
Fluxinella sp. (NZOI U598) E
Fluxinella? sp. (NZOI U598) E
Guttula galatheae Knudsen, 1964 E
Guttula sp. (M.148567) E
Hadroconus diadematus B. Marshall, 1988 E
Quinnia patulus (B. Marshall, 1983)
Seguenzia chelina B. Marshall, 1983
Seguenzia compta B. Marshall, 1983 E
Seguenzia conopia B. Marshall, 1983 E
Seguenzia fulgida B. Marshall, 1983 E
Seguenzia matara B. Marshall, 1988
Seguenzia textilis B. Marshall, 1983 E
Seguenzia transenna B. Marshall, 1983 E
<u>*Seguenziopsis*</u> *bicorona* B. Marshall, 1983 E
<u>*Sericogyra*</u> *metallica* B. Marshall, 1988 E
Sericogyra periglenes B. Marshall, 1988 E
<u>*Thelyssina*</u> *sterrha* B. Marshall, 1983 E
Seguenziidae sp. (NZOI U601) E
SKENEIDAE
Adeuomphalus crenulata (Powell, 1937) E
Adeuomphalus sp. 1 (NZOI U602) E
Adeuomphalus sp. 2 (NZOI U573) E
Anekes sp. 1 (M.226875) E
Anekes sp. 2 (M.257048) E
Bathyxylophila excelsa B. Marshall, 1988 E
Bathyxylophila iota B. Marshall, 1988
Bathyxylophila pusilla B. Marshall, 1988 E
Bruceiella laevigata B. Marshall, 1994 E
Bruceiella pruinosa B. Marshall, 1994 E
Cirsonella consobrina Powell, 1930 E
Cirsonella densilirata Suter, 1908 E
Cirsonella laxa Powell, 1937 E
Cirsonella maoria (Powell, 1937) E
Cirsonella paradoxa Powell, 1937 E
Cirsonella parvula Powell, 1926 E
Cirsonella pisiformis Powell, 1937 E
Cirsonella propelaxa Dell, 1956 E
Cirsonella variecostata Powell, 1940 E
Cirsonella waikukuensis Powell, 1937 E
Cirsonella sp. 1 (NZOI U573) E
Cirsonella sp. 2 (M.148563) E
Cirsonella sp. 3 (M.58834) E
Cirsonella sp. 4 (M.139137) E
Conradia sp. (M.224666) E
Crossea sp. (M.225470) E
Crosseola bollonsi Dell, 1956 E
Crosseola cuvieriana (Mestayer, 1919) E
Crosseola errata Finlay, 1926 E
Crosseola favosa Powell, 1937 E
Crosseola intertexta Powell, 1937 E
Dillwynella haptricola B. Marshall, 1988 E
Dillwynella ingens B. Marshall, 1988 E
Dillwynella lignicola B. Marshall, 1988 E
Eudaronia sp. 1 (M.230824) E
Eudaronia sp. 2 (NZOI U602) E
Eudaronia sp. 3 (M.148611) E
Granigyra sp. 1 (NZOI P971) E
Granigyra sp. 2 (NZOI S151) E
Granigyra sp. 3 (NZOI S153) E
Granigyra sp. 4 (NZOI S153) E
Lapidicola sp. 1 (M.148561) E
Lapidicola sp. 2 (M.52883) E
Lapidicola sp. 3 (M.148562) E
Leptogyra constricta B. Marshall, 1988 E
Leptogyra patula B. Marshall, 1988 E
Leptogyropsis kalinovoae B. Marshall, 1988 E
Leptogyropsis kaltanae B. Marshall, 1988 E
Lirapex sp. 1 (NZOI P937) E
Lirapex sp. 2 (NZOI S153) E
Lissomphalia sp. (M.52872) E
Lissotesta ambigua Dell, 1956 E
Lissotesta aupouria Powell, 1937 E
Lissotesta benthicola Powell, 1927 E
Lissotesta bicarinata Powell, 1940 E
Lissotesta conoidea Powell, 1937 E
Lissotesta decipiens Powell, 1940 E
Lissotesta errata Finlay, 1926 E
Lissotesta granum (R. Murdoch & Suter, 1906) E
Lissotesta oblata Powell, 1940 E
Lissotesta otagoensis Dell, 1956 E
Lissotesta sp. 1 (M.226886) E
Lissotesta sp. 2 (M.225643) E
Lissotesta sp. 3 (M.226862) E
Lissotesta sp. 4 (M.226876) E
<u>*Lissotestella*</u> *caelata* (Powell, 1937) E
Lissotestella consobrina (Powell, 1940) E
Lissotestella cookiana Dell, 1956 E
Lissotestella rissoaformis (Powell, 1931) E
Lissotestella tenuilirata (Powell, 1931) E
Lissotestella tryphenensis (Powell, 1931) E
Lodderena formosa Powell, 1930 E
Lodderena nana nana Powell, 1930 E

Lodderena n. pooki Fleming, 1948 E
Lodderia eumorpha eumorpha (Suter, 1908) E
Lodderia e. cookiana (Dell, 1952) E
Lodderia iota Powell, 1940 E
Lodderia waitemata Powell, 1940 E
Moelleriopsis sp. 1 (M.92216) E
Moelleriopsis sp. 2 (M.92204) E
Moelleriopsis sp. 3 (NZOI U602) E
Moelleriopsis sp. 4 (NZOI U573) E
Moelleriopsis sp. 5 (M.225555) E
Moelleriopsis sp. 6 (NZOI S152) E
Palazzia nautiliformis (Powell, 1927) E
Palazzia ramosa (Powell, 1940) E
Palazzia sp. 1 (M.112988) E
Palazzia sp. 2 (M.148609) E
Palazzia sp. 3 (M.148610) E
Pareuchelus sp. (M.226877) E
Parviturbo sp. (M.225488) E
Philorene texturata Oliver, 1915 E
Putilla aoteana (Powell, 1937) E
Putilla neozelanica (Suter, 1898) E
Putilla sp. (NZOI P971) E
Retigyra sp. (M.225650) E
Skeneoides sp. 1 (M.34267) E
Skeneoides sp. 2 (M.49831) E
Skeneoides sp. 3 (M.72678) E
Skeneoides sp. 4 (M.148557) E
Skeneoides sp. 5 (M.148558) E
Skeneoides sp. 6 (M.148559) E
Skeneoides sp. 7 (M.141395) E
Tasmocrossea benthicola Dell, 1952 E
Trenchia wolffi Knudsen, 1964 E
Trenchia sp. 1 (M.225335) E
Trenchia sp. 2 (NZOI P937) E
Trenchia sp. 3 (M.58576) E
Trenchia sp. 4 (M.225335) E
Xyloskenea consors B. Marshall, 1988 E
Xyloskenea costulifera B. Marshall, 1988 E
Xyloskenea depressa B. Marshall, 1988 E
Zalipais benthicola Powell, 1927 E
Zalipais lissa (Suter, 1908) E
Zalipais turneri Powell, 1939 E
Skeneidae sp. 1 (NZOI P941) E
Skeneidae sp. 2 (NZOI P939) E
Skeneidae sp. 3 (NZOI P927) E
Skeneidae sp. 4 (M.58573) E
Skeneidae? sp. 1 (M.147309) E
Skeneidae? sp. 2 (M.66734) E
SOLARIELLIDAE
Archiminolia alabida (B.A. Marshall, 1979) E
Archiminolia dawsoni (B.A. Marshall, 1979) E
Archiminolia diplax B.A. Marshall, 1999 E
Archiminolia episcopalis B.A. Marshall, 1999 E
Archiminolia hurleyi (B.A. Marshall, 1979) E
Archiminolia meridiana (Dell, 1953) E
Archiminolia regalis B.A. Marshall, 1999 E
Archiminolia tenuiseptum B.A. Marshall, 1999 E
Bathymophila asphala B.A. Marshall, 1999
Bathymophila gravida B.A. Marshall, 1999 E
Bathymophila valentia B.A. Marshall, 1999 E
Solariella basilica B.A. Marshall, 1999 E
Solariella benthicola (Powell, 1937) E
Solariella exigua B.A. Marshall, 1999 E
Solariella flavida B.A. Marshall, 1999 E
Solariella luteola (Powell, 1937) E
Solariella peristicta B.A. Marshall, 1999 E
Solariella plicatula (R. Murdoch & Suter, 1906)
Solariella semireticulata (Suter, 1908) E
Solariella tryphenensis (Powell, 1930) E
Solariella vera (Powell, 1937) E
Zetela annectens B.A. Marshall, 1999 E
Zetela kopua B.A. Marshall, 1999
Zetela tangaroa B.A. Marshall, 1999 E
Zetela textilis (R. Murdoch & Suter, 1906) E
Zetela variabilis (Dell, 1956) E
TROCHACLIDIDAE
Acremodonta crassicosta (Powell, 1937) E
Acremodontina atypica (Powell, 1937) E
Acremodontina carinata (Powell, 1940) E
Acremodontina kermadecensis B. Marshall, 1995 E
Acremodontina magna B. Marshall, 1995 E
Acremodontina poutama (E. C. Smith, 1962) E
Acremodontina simplex (Powell,1937) E
Acremodontina varicosa B. Marshall, 1995 E
Trochaclis attenuata B. Marshall, 1995 E
Trochaclis calva B. Marshall, 1995 E
Trochaclis cristata B. Marshall, 1995 E
Trochaclis elata B. Marshall, 1995 E
Trochaclis regalis B. Marshall, 1995 E
TROCHIDAE
Antimargarita maoria Dell, 1995 E
Antisolarium egenum (Gould, 1849) E
Cantharidella tesselata (A. Adams, 1851) E
Cantharidus (*Cantharidus*) *opalus* (Martyn, 1784) E
Cantharidus (*Mawhero*) *purpureus* (Gmelin, 1791) E
Cantharidus (*M.*) *burchorum* B. Marshall, 1998 E
Clanculus (*Clanculopsis*) *atypicus* Iredale, 1912 E
Clanculus (*Euclanculus*) *persica* Habe & Shikama, 1968
Clanculus (*Paraclanculus*) *peccatus* (Finlay, 1926) E
Diloma aethiops (Gmelin, 1791) E
Diloma coracina (Philippi, 1851) E
Diloma arida (Finlay, 1926) E
Diloma nigerrima (Gmelin, 1791)
Diloma bicanaliculata (Dunker in Philippi, 1844) E
Diloma subrostrata subrostrata (Gray, 1835) E
Diloma s. novazelandiae (Anton, 1838) E
Diloma zelandica (Quoy & Gaimard, 1834) E
Fossarina rimata (Hutton, 1884) E
Fossarina sp. (M.43558) E
Infundibulum tomlini (Fulton, 1930)
Margarella antipoda antipoda (Hombron & Jacquinot, 1854) E
Margarella a. hinemoa Powell, 1955 E
Margarella a. puysegurensis Powell, 1939 E
Margarella a. rosea (Hutton, 1873) E
Margarella fulminata (Hutton, 1873) E
Margarella turneri Powell, 1939 E
Margarella sp. 1 (M.59506) E
Margarella sp. 2 (M.131607) E
Margarites sp. (NZOI I684) E
Micrelenchus (Micrelenchus) huttonii (E.A. Smith, 1876) E
Micrelenchus (M.) sanguineus (Gray, 1843) E
Micrelenchus (M.) tenebrosus (A. Adams, 1853) E
Micrelenchus (Plumbelenchus) artizona (A. Adams, 1853) E
Micrelenchus (P.) caelatus (Hutton, 1884) E
Micrelenchus (P.) capillaceus (Philippi, 1849)
Micrelenchus (P.) dilatatus (G.B. Sowerby II, 1870) E
Micrelenchus (P.) festivus B. Marshall, 1998 E
Micrelenchus (P.) mortenseni (Odhner, 1924) E
Micrelenchus (P.) rufozona (A. Adams, 1853) E
Monilea incerta Iredale 1912 E
Stomatella oliveri (Iredale, 1912) E
Tectus royanus (Iredale, 1912) E
Thoristella carinata B. Marshall, 1998 E
Thoristella carmesina (Webster, 1908) E
Thoristella chathamensis (Hutton, 1873) E
Thoristella davegibbsi B. Marshall, 1998 E
Thoristella oppressa (Hutton, 1873) E
Thoristella polychroma B. Marshall, 1998 E
Thoristella rex B. Marshall, 1998 E
Trochus (Camelotrochus) camelophorus Webster, 1906 E
Trochus (Coelotrochus) tiaratus Quoy & Gaimard, 1834 E
Trochus (Thorista) viridis Gmelin, 1791 E
Zethalia zelandica (Hombron & Jacquinot, 1855) E
Trochidae sp. (NZOI T243) E
TURBINIDAE
Astraea heliotropium (Martyn, 1784) E
Bolma (Bolma) kermadecensis Beu & Ponder, 1979 E
Bolma (Ormastralium) recens (Dell, 1967)
Cookia sulcata (Gmelin, 1791) E
Modelia granosa (Martyn, 1784) E
Turbo smaragdus Gmelin, 1791 E

Order NERITOPSIDA
HYDROCENIDAE
Georissa purchasi (Pfeiffer, 1862) E T
NERITIDAE
Nerita (*Melanerita*) *atramentosa* Reeve, 1855
Nerita (*Ritena*) *plicata* Linnaeus 1758

Order ARCHITAENIOGLOSSA
PUPINIDAE
Liarea aupouria aupouria Powell, 1954 E T
Liarea a. tara Powell, 1954 E T
Liarea bicarinata (Suter, 1907) E T
Liarea egea egea (Gray, 1850) E T
Liarea e. tessellata Powell, 1954 E T
Liarea hochstetteri alta Powell, 1954 E T
Liarea h. carinella (Pfeiffer, 1861) E T
Liarea h. hochstetteri (Pfeiffer, 1861) E T
Liarea lepida (Suter, 1904) E T
Liarea ornata Powell, 1954 E T
Liarea turriculata partula Powell, 1954 E T
Liarea t. turriculata (Pfeiffer, 1855) E T
Liarea t. waipoua Powell, 1954 E T
Cytora ampla (Powell, 1941) E T
Cytora annectens (Powell, 1948) E T
Cytora aranea (Powell, 1928) E T
Cytora brooki Marshall & Barker, 2007 E T
Cytora calva (Hutton, 1882) E T
Cytora chiltoni (Suter, 1896) E T
Cytora climoi Marshall & Barker, 2007 E T
Cytora cytora (Gray, 1850) E T
Cytora depressa Gardner, 1968 E T
Cytora fasciata (Suter, 1894) E T
Cytora filicosta (Powell, 1948) E T
Cytora gardneri Marshall & Barker, 2007 E T
Cytora goulstonei Marshall & Barker, 2007 E T
Cytora hazelwoodi Marshall & Barker, 2007 E T
Cytora hedleyi (Suter, 1894) E T
Cytora hirsutissima (Powell, 1951) E T
Cytora hispida Gardner, 1967 E T
Cytora houhora Marshall & Barker, 2007 E T
Cytora jamiesoni Marshall & Barker, 2007 E T
Cytora kahurangi Marshall & Barker, 2007 E T
Cytora kakano Marshall & Barker, 2007 E T
Cytora kamura Marshall & Barker, 2007 E T
Cytora kerrana Gardner, 1968 E T
Cytora lignaria (Pfeiffer, 1857) E T
Cytora malleata Marshall & Barker, 2007 E T
Cytora maui Marshall & Barker, 2007 E T
Cytora mayhillae Marshall & Barker, 2007 E T
Cytora minor Marshall & Barker, 2007 E T
Cytora motu Marshall & Barker, 2007 E T
Cytora pakotai Marshall & Barker, 2007 E T
Cytora pallida (Hutton, 1883) E T
Cytora pannosa (Hutton, 1882) E T
Cytora paparoa Marshall & Barker, 2007 E T
Cytora parrishi Marshall & Barker, 2007 E T
Cytora rakiura Marshall & Barker, 2007 E T
Cytora septentrionalis (Suter, 1907) E T
Cytora solitaria (Powell, 1935) E T
Cytora taipa Marshall & Barker, 2007 E T
Cytora tawhiti Marshall & Barker, 2007 E T
Cytora tepakiensis Gardner, 1967 E T
Cytora tokerau Marshall & Barker, 2007 E T
Cytora torquillum (Suter, 1894) E T
Cytora tuarua Marshall & Barker, 2007 E T

Order NEOTAENIOGLOSSA
ACLIDIDAE
Aclis expansa (Powell, 1930) E
Aclis maoria Powell, 1937 E

Aclis pseudopareora Powell, 1940 E
Aclis subcarinata (R. Murdoch & Suter, 1906) E
Aclis terebra (Powell, 1930) E
Aclis sp. (M.150058) E
Awanuia dilatata Powell, 1927 E
Awanuia porcellana Ponder, 1967 E
Awanuia sp. (M.94403) E
Graphis blanda (Finlay, 1924) E
Graphis sculpturata (Oliver, 1915) E
Larochella alta Powell, 1927 E
Larochella toreuma Powell, 1927
Larochella sp. 1 (M.226768) E
Larochella sp. 2 (M.141932) E
Ruapukea allanae E.C. Smith, 1962 E
Ruapukea carolus Dell, 1952 E
Scalaronoba costata Powell, 1927 E
Scalaronoba secunda Powell, 1940 E
Scalaronoba sp. 1 (M.49015) E
Scalaronoba sp. 2 (M.148600) E
Aclididae? sp. 1 (M.49361) E
Aclididae? sp. 2 (M.49833) E
ANABATHRIDAE
Amphithalamus (*Amphithalamus*) *falsestea* (Ponder, 1968) E
Amphithalamus (*A.*) *incidatus maoria* (Ponder, 1968) E
Amphithalamus (*A.*) *latisulcus* (Ponder, 1968) E
Amphithalamus (*A.*) *semen* (Odhner, 1924) E
Amphithalamus (*A.*) sp. 1 (M.158856) E
Amphithalamus (*A.*) sp. 2 (M.158868) E
Amphithalamus (*A.*) sp. 3 (M.158854) E
Amphithalamus (*A.*) sp. 4 (M.43677) E
Amphithalamus (*Notoscrobs*) *erosus* (Odhner, 1924) E
Amphithalamus (*N.*) *ornatus* (Powell, 1927) E
Amphithalamus (*N.*) *sundayensis* Oliver, 1915
Anabathron (*Scrobs*) *angulatus* (Powell, 1927) E
Anabathron (*S.*) *elongatus* (Powell, 1927) E
Anabathron (*S.*) *excelsus* (Powell, 1933) E
Anabathron (*S.*) *hedleyi* (Suter, 1908) E
Anabathron (*S.*) *ovatus* (Powell, 1927) E
Anabathron (*S.*) sp. aff. *ovatus* (Powell, 1927) (M.227089) E
Anabathron (*S.*) *rugulosus* (Powell, 1930) E
Anabathron (*S.*) *trailli* (Powell, 1939) E
Microdryas striatus (Powell, 1927) E
Microdryas sp. 1 (M.148662)
Microdryas sp. 2 (M.148663)
Pisinna angustata (Powell, 1927) E
Pisinna asymmetrica (Laws, 1941) E
Pisinna hipkinsi (Ponder, 1965) E
Pisinna olivacea impressa (Hutton, 1885) E
Pisinna insulana porrecta (Powell, 1933) E
Pisinna i. porrectoides (Powell, 1937) E
Pisinna juddi (Ponder, 1968) E
Pisinna manawatawhia (Powell, 1937) E
Pisinna micronema micronema (Suter, 1898) E
Pisinna m. morioria (Powell, 1933) E
Pisinna minor (Suter, 1898) E
Pisinna praecidecosta (Ponder, 1965) E
Pisinna rekohuana lactorubra (Ponder, 1965) E
Pisinna r. rekohuana (Powell, 1933) E
Pisinna rufoapicata (Suter, 1908) E
Pisinna rugosa recens (Ponder, 1968) E
Pisinna semiplicata (Powell, 1927) E
Pisinna semisulcata (Hutton, 1885) E
Pisinna subfusca aupouria (Ponder, 1968) E
Pisinna s. subfusca (Hutton, 1873) E
Pisinna subrufa (Powell, 1937) E
Pisinna zosterophila (Webster, 1905) E
Pisinna sp. 1 (M.49420) E
Pisinna sp. 2 (M.158802) E
Pisinna sp. 3 (M.158916) E
Pisinna sp. 4 (M.160027) E
Pisinna sp. 5 (M.160026) E
Pisinna sp. 6 (M.158934) E
Pisinna sp. 7 (M.158922) E
Pisinna sp. 8 (M.158973) E
Pisinna sp. 9 (M.158750) E
Pisinna sp. 10 (M.49154) E
Pisinna sp. 11 (M.134762) E
Pisinna sp. 12 (M.158974) E
Pisinna sp. 13 (M.160054) E
Pisinna sp. 14 (M.137164) E
Pisinna sp. 15 (M.120013) E
Pisinna sp. 16 (M.158963) E
Pisinna sp. 17 (M.160043) E
Pisinna sp. 18 (M.158743) E
Pisinna sp. 19 (M.158753) E
Pisinna sp. 20 (M.160008) E
Pisinna sp. 21 (M.112667) E
Pisinna sp. 22 (M.160061) E
Pisinna sp. 23 (M.139292) E
Pisinna sp. 24 (M.137163) E
Pisinna sp. 25 (M.148664) E
Pisinna sp. 26 (M.148665) E
Pisinna sp. 27 (M.33710) E
Pisinna sp. 28 (M.160034) E
Pisinna sp. 29 (M.158815) E
Pisinna sp. 30 (M.119670) E
Pisinna sp. 31 (M.158809) E
Pisinna sp. 32 (M.134698) E
Pisinna sp. 33 (M.160106) E
Pisinna sp. 34 (M.160108) E
Pisinna sp. 35 (M.160129) E
Pisinna sp. 36 (M.160110) E
Pisinna sp. 37 (M.160122) E
Pisinna sp. 38 (M.160142) E
Pseudestea crassiconus (Powell, 1933) E
ASSIMINEIDAE
Assiminea vulgaris (Webster, 1905)
Suterilla neozelanica (R. Murdoch, 1899) E
ATLANTIDAE
Atlanta fusca Souleyet, 1852
Atlanta turriculata d'Orbigny, 1836
Protatlanta souleyeti (E.A. Smith, 1888)
BARLEEIDAE
Fictonoba carnosa carnosa (Webster, 1905) E
Fictonoba c. martini (Finlay, 1928) E
Fictonoba oliveri (Powell, 1927) E
Fictonoba rufolactea (Suter, 1908) E
BATILLARIIDAE
Zeacumantus lutulentus (Kiener, 1841) E
Zeacumantus subcarinatus (G.B. Sowerby II, 1855) E
BURSIDAE
Bursa granularis (Röding, 1798)
Bursa rosa (Perry, 1811)
Bursa verrucosa (G.B. Sowerby I, 1825)
Tutufa (*Tutufa*) *bubo* (Linnaeus, 1758)
Tutufa (*T.*) *bufo* (Röding, 1798)
CAECIDAE
Caecum (*Brochina*) *digitulum* Hedley, 1904 E
Caecum (*B.*) *maori* Pizzini & Raines, 2006 E
Caecum sp. 1 (M.42041) E
Caecum sp. 2 (M.72706) E
Caecum sp. 3 (M.66282) E
Caecum sp. 4 (M.34803) E
CALYPTRAEIDAE
Grandicrepidula collinae B. Marshall, 2003 E
Maoricrypta costata (G.B. Sowerby I, 1824) E
Maoricrypta kopua B. Marshall, 2003 E
Maoricrypta monoxyla (Lesson, 1830) E
Maoricrypta sodalis B. Marshall, 2003 E
Maoricrypta youngi Powell, 1940 E
Sigapatella novaezelandiae (Lesson, 1830) E
Sigapatella spadicea Boshier, 1961 E
Sigapatella superstes Fleming, 1958 E
Sigapatella tenuis (Gray, 1867) E
Sigapatella terraenovae (Peile, 1924) E
CAPULIDAE
Antisabia sp. cf. *foliacea* (Quoy & Gaimard, 1834)
Capulus novaezelandiae Dell, 1978 E
Capulus sp. 1 (NZOI T256) E
Capulus sp. 2 (NZOI P941) E
Capulus sp. 3 (M.148591) E
Krebsia (*Tenpetasus*) *liberata* (Pease, 1868)
Malluvium calcareum (Suter, 1909) E
Torellia sp. 1 (NZOI U599) E
Torellia sp. 2 (NZOI S153) E
Trichosirius cavatocarinatus (Laws, 1940) E
Trichosirius inornatus (Hutton, 1873) E
Trichosirius octocarinatus Powell, 1931 E
Trichosirius sp. 1 (M.143865) E
Trichosirius sp. 2 (M.42944) E
Zelippistes benhami (Suter, 1902) E
CARINARIIDAE
Carinaria galea Benson, 1835
Carinaria lamarcki Péron & Lesueur, 1810
Cardiapoda placenta (Lesson, 1830)
CASSIDAE
Casmaria perryi (Iredale, 1912)
Galeodea triganceae Dell, 1953 E
Oocorys sp. 1 (NZOI U595) E
Oocorys sp. 2 (NZOI U601) E
Semicassis labiata (Perry, 1811)
Semicassis pyrum (Lamarck, 1822)
Semicassis royana (Iredale, 1914)
Semicassis sophia (Brazier, 1872)
Semicassis thomsoni (Brazier, 1875)
CERITHIIDAE
Argyropeza sp. (M.226822) E
Cerithium abditum Houbrick, 1992
Cerithium atromarginatum Dautzenberg & Bouge, 1933
Cerithium citrinum (G.B. Sowerby II, 1855)
Cerithium columna G.B. Sowerby II, 1834
Cerithium echinatum (Lamarck, 1822)
Cerithium sp. cf. *interstriatum* G.B. Sowerby II, 1855
Cerithium matukense Watson, 1880
Cerithium nesioticum Pilsbry & Vanatta, 1906
Cerithium ophioderma (Habe, 1968)
Pseudovertagus clava (Gmelin, 1791)
Royella sinon (Bayle, 1880)
Zebittium editum Powell, 1930 E
Zebittium exile (Hutton, 1873) E
Zebittium laevicordatum Powell, 1937 E
Zebittium sp. 1 (M.148576) E
Zebittium sp. 2 (M.93892) E
Zebittium sp. 3 (M.148577) E
CERITHIOPSIDAE
Alipta crenistria (Suter, 1907) E
Aliptina acheronae B. Marshall, 1978 E
Ataxocerithium huttoni (Cossmann, 1895) E
Ataxocerithium sp. 1 (M.33374) E
Ataxocerithium sp. 2 ((NZOI U582) E
Ataxocerithium sp. 3 (M.227011) E
Cerithiella nucleoproducta (Dell, 1956) E
Cerithiella stiria (Webster, 1906) E
Cerithiella sp. 1 (NZOI U602) E
Cerithiella sp. 2 (NZOI U602) E
Cerithiella sp. 3 (M.33498) E
Cerithiella sp. 4 (M.148588) E
Cerithiella sp. 5 (NZOI S147) E
Cerithiella sp. 6 (NZOI P941) E
Cerithiella sp. 7 (M.134289) E
Cerithiella sp. 8 (NZOI P927) E
Cerithiopsidella blacki B. Marshall, 1978 E
Cerithiopsis powelli B. Marshall, 1978
Cyrbasia (*Joculator*) *sublima* (B. Marshall, 1978) E
Eumetula (*Altispecula*) *aureola* (Powell, 1933) E
Eumetula sp. 1 (M.60457) E
Eumetula sp. 2 (NZOI P927) E
Horologica cowei B. Marshall, 1978 E
Horologica diremptus (Odhner, 1924) E
Mendax hebetatus B. Marshall, 1978 E
Mendax marginata (Suter, 1908) E
Mendax seilaformis B. Marshall, 1978 E
Mendax subapicina (Dell, 1956) E
Mendax trizonalis odhneri (Powell, 1927) E

Mendax t. trizonalis (Odhner, 1924) E
Mendax trizonaloides B. Marshall, 1978 E
Mendax sp. (M.148585) E
Onchodia sp. 1 (M.148599) E
Onchodia sp. 2 (M.49246) E
Prolixodens benthica B. Marshall, 1978 E
Prolixodens crassa B. Marshall, 1978 E
Prolixodens infracolor (Laseron, 1951)
Prolixodens sp. 1 (M.93282) E
Prolixodens sp. 2 (M.148587) E
Prolixodens sp. 3 (M.61435) E
Retilaskeya (*Marshallaskeya*) *elegantula* (Powell, 1930) E
Retilaskeya (*Retilaskeya*) *zelandica* B. Marshall, 1978 E
Retilaskeya (*R.*) sp. 1 (M.96366) E
Retilaskeya (*R.*) sp. 2 (M.61432) E
Retilaskeya (*R.*) sp. 3 (M.148583) E
Retilaskeya (*R.*) sp. 4 (M.148589) E
Seila (*Hebeseila*) *bulbosa* Suter, 1908 E
Seila (*H.*) *regia* B. Marshall, 1978 E
Seila (*Lyroseila*) *cincta* (Hutton, 1885) E
Seila (*L.*) *dilecta* B. Marshall, 1978 E
Seila (*L.*) *maoria* B. Marshall, 1978 E
Seila (*Notoseila*) *elegantissima* B. Marshall, 1978 E
Seila (*N.*) *terebelloides* (Hutton, 1873) E
Socienna cracens cracens B. Marshall, 1979 E
Socienna c. regia B. Marshall, 1979 E
Specula campbellica (Powell, 1955) E
Specula retifera (Suter, 1908) E
Specula styliformis (Suter, 1908) E
Specula sp. (M.94442) E
Sundaya exquisita Oliver, 1915 E
Sundaya tuberculata Powell, 1927 E
Synthopsis acuminata B. Marshall, 1978 E
Synthopsis caelata (Powell, 1930) E
Synthopsis regia B. Marshall, 1978 E
Tasmalira vitrea (Suter, 1908) E
Zaclys murdochi B. Marshall, 1978 E
Zaclys sarissa (R. Murdoch, 1905) E
Zaclys sp. (M.148586) E
Cerithiopsidae sp. 1 (M.225745) E
Cerithiopsidae sp. 2 (M.225740) E
Cerithiopsidae sp. 3 (M.33378) E
Cerithiopsidae sp. 4 (M.94415) E
Cerithiopsidae sp. 5 (M.70797) E
Cerithiopsidae sp. 6 (M.33402) E
Cerithiopsidae sp. 7 (M.148590) E
Cerithiopsidae sp. 9 (M.223360) E
Cerithiopsidae sp. 10 (M.100625) E
Cerithiopsidae sp. 11 (M.33424) E
Cerithiopsidae sp. 12 (M.262498) E
Cerithiopsidae sp. 13 (M.223363) E
Cerithiopsidae sp. 14 (M.223371) E
Cerithiopsidae sp. 15 (M.212406) E
Cerithiopsidae sp. 16 (M.225736) E
Cerithiopsidae sp. 17 (M.227060) E
Cerithiopsidae sp. 18 (M.223366) E
Cerithiopsidae sp. 19 (M.223367) E
Cerithiopsidae sp. 20 (M.225880) E
Cerithiopsidae sp. 21 (M.262498) E
Cerithiopsidae sp. 22 (M.223361) E
Cerithiopsidae sp. 23 (M.223368) E
CINGULOPSIDAE
Eatonina (*Captitonia*) *crassicarinata* (Powell, 1937) E
Eatonina (*Eatonina*) *atomaria* (Powell, 1933) E
Eatonina (*E.*) *maculosa* Ponder, 1965 E
Eatonina (*E.*) *micans* (Webster, 1905) E
Eatonina (*Otatara*) *subflavescens* (Iredale, 1915) E
Eatonina sp. 1 (M.65559) E
Eatonina sp. 2 (M.147728) E
Eatonina sp. 3 (M.227090) E
Skenella (*Rufodardanula*) *spadix* (Ponder, 1965) E
Skenella (*R.*) sp. (M.227101) E
Tubbreva exaltata exaltata (Powell, 1933) E
Tubbreva e. sorenseni (Powell, 1955) E
Tubbreva exigua (Ponder, 1965) E
Tubbreva minutula (Powell, 1937) E
Tubbreva sp. 1 (M.140208) E
Tubbreva sp. 2 (M.147693) E
Tubbreva sp. 3 (M.227097) E
Cingulopsidae sp. 1 (M.147675) E
Cingulopsidae sp. 2 (M.147676) E
Cingulopsidae sp. 3 (M.147677) E
Cingulopsidae sp. 4 (M.147681) E
Cingulopsidae sp. 5 (M.147682) E
Cingulopsidae sp. 6 (M.147695) E
CYPRAEIDAE
Cypraea (*Blasicrura*) *teres* Linnaeus, 1758
Cypraea (*Erosaria*) *caputserpentis* Linnaeus, 1758
Cypraea (*E.*) *cernica* G. B. Sowerby II, 1870
Cypraea (*E.*) *poraria* Linnaeus, 1758
Cypraea (*Luria*) *isabella* Linnaeus, 1758
Cypraea (*Lyncina*) *vitellus* Linnaeus, 1758
Cypraea (*Monetaria*) *moneta* Linnaeus, 1758
Cypraea (*Talparia*) *talpa* Linnaeus, 1758
Cypraea sp. (NZOI K797)
DIALIDAE
Finella sp. 1 (M.225872) E
Finella sp. 2 (M.227070) E
Finella sp. 3 (M.227074) E
Finella sp. 4 (M.227075) E
EATONIELLIDAE
Crassitoniella carinata Ponder, 1965 E
Crassitoniella thola (Ponder, 1965) E
Eatoniella (*Albosabula*) *lampra* (Suter, 1908) E
Eatoniella (*A.*) *poutama* (E. C. Smith, 1962) E
Eatoniella (*A.*) *rakiura* Ponder, 1965 E
Eatoniella (*Caveatoniella*) *perforata* Ponder, 1965 E
Eatoniella (*C.*) *puniceomacer* Ponder, 1965 E
Eatoniella (*Eatoniella*) *albocolumella* Ponder, 1965 E
Eatoniella (*E.*) *atervisceralis* Ponder, 1965 E
Eatoniella (*E.*) *atropurpurea* (Frauenfeld, 1867)
Eatoniella (*E.*) *bathamae* Ponder, 1965 E
Eatoniella (*E.*) *delli* Ponder, 1965 E
Eatoniella (*E.*) *dilatata* (Powell, 1955) E
Eatoniella (*E.*) *flammulata* (Hutton, 1878) E
Eatoniella (*E.*) *fossa* Ponder, 1965 E
Eatoniella (*E.*) *fuscosubucula* Ponder, 1965 E
Eatoniella (*E.*) *globosa* Ponder, 1965 E
Eatoniella (*E.*) *iredalei* (Oliver, 1915) E
Eatoniella (*E.*) *kerguelenensis chiltoni* (Suter, 1909) E
Eatoniella (*E.*) *latebricola* Ponder, 1965 E
Eatoniella (*E.*) *limbata* (Hutton, 1883) E
Eatoniella (*E.*) *lutea* (Suter, 1908) E
Eatoniella (*E.*) *mortoni* Ponder, 1965 E
Eatoniella (*E.*) *notalabia* Ponder, 1965 E
Eatoniella (*E.*) *notata* Ponder & Yoo, 1977 E
Eatoniella (*E.*) *obtusispira* (Powell, 1955) E
Eatoniella (*E.*) *olivacea* (Hutton, 1882) E
Eatoniella (*E.*) *pallida* (Powell, 1937) E
Eatoniella (*E.*) *pfefferi* (Suter, 1909) E
Eatoniella (*E.*) *pullmitra* Ponder, 1965 E
Eatoniella (*E.*) *roseocincta* (Suter, 1908) E
Eatoniella (*E.*) *roseola* (Iredale, 1915) E
Eatoniella (*E.*) *roseospira* (Powell, 1937) E
Eatoniella (*E.*) *smithi* Ponder, 1965 E
Eatoniella (*E.*) *stewartiana* Ponder, 1965 E
Eatoniella (*E.*) *tenella* (Powell, 1937) E
Eatoniella (*E.*) *varicolor* Ponder, 1965 E
Eatoniella (*E.*) *verecunda* (Suter, 1908) E
Eatoniella sp. 1 (M.225733) E
Eatoniella sp. 2 (M.70017) E
Eatoniella sp. 3 (M.225862) E
Eatoniella sp. 4 (M.141763) E
Eatoniella sp. 5 (M.66030) E
Eatoniella sp. 6 (M.141096) E
Liratoniella bicarinata Ponder, 1965 E
Pupatonia atoma Ponder, 1965 E
Pupatonia gracilispira (Powell, 1933) E
Pupatonia minutula (Powell, 1933) E
Pupatonia pupinella (Finlay, 1927) E
Pupatonia sp. 1 (M.34757) E
Pupatonia sp. 2 (M.67005) E
Pupatonia? sp. 1 (M.143304) E
Pupatonia? sp. 2 (M.34761) E
Pupatonia? sp. 3 (M.66273) E
ELACHISINIDAE
Dolicrossea vesca Finlay, 1926 E
Elachisina iredalei (Brookes, 1926) E
Elachisina sp. (AK 83551) E
Laeviphitis sp. 1 (M116964) E
Laeviphitis sp. 2 (NZGS TM7665) E
EPITONIIDAE
Acirsa cookiana (Dell, 1956) E
Amaea thielei Boury, 1913
Cirsotrema (*Cirsotrema*) *zelebori* (Dunker, 1866) E
Cirsotrema (*Tioria*) *forresti* Dell, 1956 E
Cirsotrema sp. (M.60098) E
Claviscala kuroharai Kuroda *in* Habe, 1961
Claviscala sp. (M.249888) E
Cylindriscala sp. (NZOI Q699) E
Epitonium (*Acutiscala*) *minora* (Iredale, 1936)
Epitonium (*Asperiscala*) *billeeana* (Du Shane & Bratcher, 1965)
Epitonium (*Cycloscala*) cf. *hyalinium* (G. B. Sowerby II, 1844)
Epitonium (*Hyaloscala*) *bucknilli* Powell, 1924 E
Epitonium (*H.*) *jukesianum* (Forbes, 1852)
Epitonium (*Papyriscala*) *tenellum* (Hutton, 1885) E
Epitonium sp. 1 (M.226831) E
Epitonium sp. 2 (M.226832) E
Epitonium sp. 3 (NZOI U602) E
Epitonium sp. 4 (M.225813) E
Funiscala maxwelli Finlay, 1930 E
Gregorioiscala sp. (M.274143) E
Gyroscala lamellosa (Lamarck, 1822)
Iphitus neozelanicus (Dell, 1956) E
Iphitus sp. (NZOI U619) E
Murdochella alacer Finlay, 1926 E
Murdochella levifoliata (R. Murdoch & Suter, 1906) E
Murdochella superlata Finlay, 1930 E
Murdochella sp. (NZOI U602) E
Nodiscala ahiparana (Powell, 1930) E
Nodiscala zelandica Finlay, 1930 E
Opalia sp. (M.226829) E
Opalia? sp. 1 (M.226830) E
Opalia? sp. 2 (M.225472) E
Papuliscala sp. 1 (M.225640) E
Papuliscala sp. 2 (M.93312) E
Papuliscala sp. 3 (NZOI P939) E
Epitoniidae sp. 1 (M.118387) E
Epitoniidae sp. 2 (M.94388) E
Epitoniidae sp. 3 (M.148592) E
Epitoniidae sp. 4 (M.93830) E
Epitoniidae sp. 5 (M.112804) E
Epitoniidae? sp. (NZOI U602) E
EULIMIDAE
Annulobalcis marshalli Warén, 1981 E
Asterophila sp. Warén & Lewis, 1994 E
Chileutomia neozelanica Powell, 1940 E
Coenaculum secundum Powell, 1937 E
Coenaculum tertium Dell, 1952 E
Coenaculum sp. 1 (M.225346) E
Coenaculum sp. 2 (M.34802) E
Coenaculum sp. 3 (M.48997) E
Coenaculum sp. 4 (M.148601) E
Crinolamia kermadecensis (Knudsen, 1964) E
Curveulima aupouria (Powell, 1937) E
Curveulima bollonsi (Powell, 1937) E
Curveulima otakauica (Dell, 1956) E
Curveulima titahica (Suter, 1908) E
Eulima perspicua (Oliver, 1915) E
Fuscapex ophioacanthicola Warén, 1981 E
Fusceulima goodingi Warén, 1981 E
Fusceulima mangonuica (Powell, 1940) E
Fusceulima murdochi (Hedley, 1904) E
Hypermastus bulbula (R. Murdoch & Suter, 1906) E

Melanella alertae (Dell, 1956) E
Melanella archeyi (Finlay, 1928) E
Melanella aucklandica (Suter, 1909) E
Melanella hadalis Knudsen, 1964 E
Melanella kermadecensis Oliver, 1915 E
Melanella luminosa B. Marshall, 1997 E
Melanella maoria (Powell, 1940) E
Melanella maui (Dell, 1952) E
Melanella otagoensis (Powell, 1927) E
Melanella oxyacme (Suter, 1908) E
Melanella perplexa Oliver, 1915 E
Melanella paxillus (Hedley, 1904) E
Melanella puhana (Dell, 1956) E
Melanella truncata (Suter, 1908) E
Melanella spinosa Oliver, 1915 E
Melanella vegrandis (R. Murdoch & Suter, 1906) E
Ophieulima fuscoapicata Warén, 1981 E
Pelseneeria bountyensis (Powell, 1933) E
Pelseneeria secunda (Powell, 1940) E
Pictobalcis articulata (G. B. Sowerby I, 1834)
<u>*Punctifera*</u> *ophiomoerae* Warén, 1981 E
Pyramidelloides (<u>*Teretianax*</u>) *pagoda* (Powell, 1926) E
Pyramidelloides (*T.*) *suteri* (Oliver, 1915) E
Pyramidelloides (*T.*) sp. (M.34471) E
Sabinella infrapatula (R. Murdoch & Suter, 1906) E
Stilapex sp. (M.232084) E
Stilifer sp. (M.150057) E
Eulimidae sp. 1 (M.226827) E
Eulimidae sp. 2 (M.225769) E
Eulimidae sp. 3 (M.137448) E
Eulimidae sp. 4 (M.59788) E
Eulimidae sp. 5 (M.149938) E
Eulimidae sp. 6 (M.149939) E
Eulimidae sp. 7 (M.149940) E
Eulimidae sp. 8 (M.149941) E
Eulimidae sp. 9 (M.34469) E
Eulimidae sp. 10 (M.34470) E
HALOCERATIDAE
Haloceras sp. 1 (NZOI U573) E
Haloceras sp. 2 (M.147782) E
Haloceras sp. 3 (NZOI P941) E
Zygoceras tropidophora Warén & Bouchet, 1991
HIPPONICIDAE
Cheilea sp. (M.226602) E
Hipponix conicus (Schumacher, 1817)
Leptonotis perplexus (Suter, 1907)
HYDROBIIDAE
<u>*Catapyrgus*</u> *fraterculus* Haase, 2008 E F
Catapyrgus matapango Haase, 2008 E F
Catapyrgus sororius Haase, 2008 E F
Catapyrgus spelaeus Climo, 1974 E F
<u>*Hadopyrgus*</u> *anops* Climo, 1974 E F
Hadopyrgus brevis Climo, 1974 E F
Hadopyrgus dubius Haase, 2008 E F
Hadopyrgus expositus Haase, 1980 F
Hadopyrgus ngataana Haase, 2008 E F
Hadopyrgus rawhiti Haase, 2008 E F
Halopyrgus pagodulus Haase, 2008 E F
Halopyrgus pupoides Hutton, 1882 E F
<u>*Kuschelita*</u> *inflata* Climo, 1974 E F
Kuschelita mica Climo, 1974 E F
<u>*Leptopyrgus*</u> *manneringi* (Climo, 1974) E F
Leptopyrgus melbourni Haase, 2008 E F
Leptopyrgus tainui Haase, 2008 E F
<u>*Meridiopyrgus*</u> *inanga* Haase, 2008 E F
Meridiopyrgus muaupoko Haase, 2008 E F
Meridiopyrgus murihiku Haase, 2008 E F
Meridiopyrgus pupiformis Haase, 2008 E F
<u>*Obtusopyrgus*</u> *alpinus* Haase, 2008 E F
<u>*Opacuincola*</u> *abradeta* Haase, 2008 E F
Opacuincola caeca Ponder, 1966 E F
Opacuincola cervicesmadentes Haase, 2008 E F
Opacuincola conosimilis Haase, 2008 E F
Opacuincola delira Haase, 2008 E F
Opacuincola dulcinella Haase, 2008 E F
Opacuincola eduardstraussi Haase, 2008 E F
Opacuincola favus Haase, 2008 E F
Opacuincola fruticis Haase, 2008 E F
Opacuincola geometrica Haase, 2008 E F
Opacuincola ignorata Haase, 2008 E F
Opacuincola johannstraussi Haase, 2008 E F
Opacuincola josefstraussi Haase, 2008 E F
Opacuincola kuscheli Climo, 1974 E F
Opacuincola lentesferens Haase, 2008 E F
Opacuincola mete Haase, 2008 E F
Opacuincola ngatapuna Haase, 2008 E F
Opacuincola ovata Haase, 2008 E F
Opacuincola permutata Haase, 2008 E F
Opacuincola piriformis Haase, 2008 E F
Opacuincola roscoei Haase, 2008 E F
Opacuincola takakaensis Haase, 2008 E F
Opacuincola terraelapsus Haase, 2008 E F
Opacuincola turriformis Haase, 2008 E F
<u>*Paxillostium*</u> *nanum* Gardner, 1970 E F
<u>*Platypyrgus*</u> *nelsonensis* (Climo, 1977) E F
Potamopyrgus acus Haase, 2008 E F
Potamopyrgus antipodarum (Gray, 1843) E F
Potamopyrgus dawbini Powell, 1955 E F
Potamopyrgus doci Haase, 2008 E F
Potamopyrgus estuarinus Winterbourn, 1970 E F
Potamopyrgus kaitunuparaoa Haase, 2008 E F
Potamopyrgus oppidanus Haase, 2008 E F
Potamopyrgus subterraneus Suter, 1905 E F
Potamopyrgus troglodytes (Climo, 1974) E F
<u>*Rakipyrgus*</u> *gardneri* (Climo, 1974) E F
<u>*Rakiurapyrgus*</u> *cresswelli* (Climo, 1974) E F
Rakiurapyrgus micula Haase, 2008 E F
<u>*Sororipyrgus*</u> *kutukutu* Haase, 2008 E F
Sororipyrgus marshalli Haase, 2008 E F
Sororipyrgus raki Haase, 2008 E F
<u>*Tongapyrgus*</u> *kohitatea* Haase, 2008 E F
IRAVADIIDAE
Iravadia (*Pseudonoba*) *inflata* (Ponder, 1967) E
Nozeba emarginata (Hutton, 1885) E
Nozeba mica Finlay, 1930 E
JANTHINIDAE
Janthina exigua Lamarck, 1822
Janthina globosa Swainson, 1826
Janthina janthina (Linnaeus, 1758)
Janthina umbilicata d'Orbigny, 1840
Recluzia rollandiana Petit de la Saussaye, 1853
LAUBIERINIDAE
Akibumia orientalis (Schepman, 1909)
LITIOPIDAE
Litiopa sp. (M.147323) E
LITTORINIDAE
Austrolittorina antipodum (Philippi, 1847) E
Austrolittorina cincta (Quoy & Gaimard, 1833) E
Echinolittorina cinerea (Pease, 1869)
Echinolittorina millegrana (Philippi, 1848)
Laevilitorina (*Laevilitorina*) *antipodum* (Filhol, 1880) E
Laevilitorina (*L.*) *bifasciata* Suter, 1913 E
Laevilitorina (*Macquariella*) *aucklandica* (Powell, 1933)
Laevilitorina (*M.*) *delli* (Powell, 1955) E
Laevilitorina (*Rissolittorina*) *alta* (Powell, 1940) E
<u>*Risellopsis*</u> *varia* (Hutton, 1873) E
MELANOPSIDAE
<u>*Zemelanopsis*</u> *trifasciata* (Gray, 1843) E F
NATICIDAE
Falsilunatia ambigua (Suter, 1913) E
Falsilunatia amphiala (Watson, 1881) E
Falsilunatia subperforata Dell, 1956 E
Falsilunatia sp. (M.9770) E
Friginatica conjuncta Dell, 1953 E
Friginatica sp. (M.26330) E
<u>*Globisinum*</u> *drewi* (R. Murdoch, 1899) E
Naticarius orientalis (Gmelin, 1791)
Notocochlis gualteriana (Récluz, 1844)
Notocochlis migratoria (Powell, 1927)
Polinices (*Mammilla*) *simiae* (Deshayes *in* Deshayes & Milne-Edwards, 1838)
Polinices (*Polinices*) *tawhitirahia* Powell, 1965
Polinices (*P.*) *putealis* Garrard, 1961
Polinices sp. (M.74950) E
<u>*Proxiuber*</u> *australe* (Hutton, 1878) E
Proxiuber hulmei Powell, 1954 E
Proxiuber sp. (M.140895) E
Tanea lemniscata (Philippi, 1852)
Tanea zelandica (Quoy & Gaimard, 1832) E
<u>*Uberella*</u> *alacris* Dell, 1956 E
Uberella barrierensis (Marwick, 1924) E
Uberella denticulifera (Marwick, 1924) E
Uberella vitrea (Hutton, 1873) E
Uberella sp. (M.150465) E
Naticidae sp. 1 (NZOI U601) E
Naticidae sp. 2 (NZOI U601) E
Naticidae sp. 3 (NZOI U601) E
Naticidae sp. 4 (M.225563) E
Naticidae sp. 5 (M.225544) E
Naticidae sp. 6 (NZOI K858) E
Naticidae sp. 7 (NZOI T256) E
Naticidae sp. 8 (NZOI S204) E
Naticidae sp. 9 (NZOI S154) E
Naticidae sp. 10 (M.59739) E
OVULIDAE
Crenavolva sp. (M.70712) E
Galeravolva sp. (M.222116) E
Ovula costellata Lamarck, 1810
Ovula ovum Linnaeus, 1758
Pedicularia pacifica Pease, 1865
Phenacovolva birostris (Linnaeus, 1758)
Phenacovolva wakayamaensis Cate & Azuma, 1973
Phenacovolva sp. (NZOI T235) E
Primovula sp. (M.226367) E
Pseudosimnia sp. (NZOI T255) E
PERSONIDAE
Distorsio habei Lewis, 1972
Distorsionella lewisi (Beu, 1978)
PISANIANURIDAE
Pisanianura breviaxe (Kuroda & Habe, 1961)
Pisanianura sp. (NZOI U609) E
PLANAXIDAE
Hinea brasiliana (Lamarck, 1822)
PROVANNIDAE
Provanna sp. 1 (M.116950) E
Provanna sp. 2 (M.116949) E
Provanna sp. 3 (NZGS TM7666) E
PTEROTRACHEIDAE
Firoloida desmaresti Lesueur, 1817
Pterotrachea coronata Forsskål, 1775
Pterotrachea scutata Gegenbaur, 1855
RANELLIDAE
Argobuccinum pustulosum tumidum (Dunker, 1862)
Cabestana spengleri (Perry, 1811)
Cabestana tabulata (Menke, 1843)
Charonia lampas (Linnaeus, 1758)
Charonia tritonis (Linnaeus, 1758)
Cymatium (*Linatella*) *cingulatum* (Lamarck, 1822)
Cymatium (*Monoplex*) *exaratum* (Reeve, 1844)
Cymatium (*M.*) *nicobaricum* (Röding, 1798)
Cymatium (*M.*) *parthenopeum* (Salis Marschlins, 1793)
Cymatium (*Ranularia*) *dunkeri* (Lischke, 1868)
Cymatium (*Turritriton*) *labiosum* (Wood, 1828)
Fusitriton magellanicus laudandus Finlay, 1926
Ranella australasia australasia (Perry, 1811)
Ranella olearium (Linnaeus, 1758)
Sassia kampyla kampyla (Watson, 1885)
Sassia palmeri (Powell, 1967) E
Sassia parkinsonia (Perry, 1811)
Sassia remensa (Iredale, 1936)
RASTODENTIDAE
Rastodens electra (Oliver, 1915) E
Rastodens pseudomarginata Ponder, 1966 E
Rastodens puerilis Ponder, 1966 E
Tridentifera crassicordata (Powell, 1937) E

Tridentifera roseoculma Ponder, 1966 E
RISSOIDAE
Alvania (*Alvania*) *kermadecensis* (Oliver, 1915) E
Alvania (Linemera) *abrupta* (Dell, 1956) E
Alvania (*L.*) *aupouria* (Powell, 1937) E
Alvania (*L.*) *bountyensis* (Dell, 1950) E
Alvania (*L.*) *exserta* (Suter, 1908) E
Alvania (*L.*) *gallinacea* (Finlay, 1930) E
Alvania (*L.*) *gradatoides* (Finlay, 1930) E
Alvania (*L.*) *maclurgi* (Powell, 1933) E
Alvania (*L.*) *pingue* (Webster, 1906) E
Alvania (*L.*) *pinguoides* (Powell, 1940) E
Alvania (*L.*) *solitaria* (Dell, 1956) E
Alvania (*L.*) *venusta* (Powell, 1926) E
Attenuata affinis affinis (Powell, 1940) E
Attenuata a. orientalis (Dell, 1956) E
Attenuata bollonsi (Powell, 1930) E
Attenuata cochlearella (Powell, 1937) E
Attenuata contigua (Powell, 1940) E
Attenuata finlayi (Powell, 1930) E
Attenuata hinemoa (Fleming, 1948) E
Attenuata manawatawhia (Powell, 1937) E
Attenuata merelina (Dell, 1956) E
Attenuata regis (Powell, 1940) E
Benthonella sp. 1 (M.225554) E
Benthonella sp. 2 (NZOI U573) E
Benthonella sp. 3 (NZOI P929) E
Benthonellania sp. (M.225601) E
Lironoba anomala Powell, 1940 E
Lironoba elegans E. C. Smith, 1962 E
Lironoba matai Dell, 1952 E
Lironoba suteri (Hedley, 1904) E
Manzonia (*Simulamerelina*) sp. (M.212370)
Manzonia (*S.*) sp. (AK 78521)
Merelina cochleata Powell, 1937 E
Merelina compacta Powell, 1927 E
Merelina coronata (Powell, 1926) E
Merelina crassissima Powell, 1937 E
Merelina crispulata Powell, 1937 E
Merelina crosseaformis (Powell, 1926) E
Merelina foliata (Suter, 1908) E
Merelina gemmata Powell, 1927 E
Merelina harrisonae Powell, 1939 E
Merelina lacunosa (Powell, 1940) E
Merelina lyalliana (Suter, 1898) E
Merelina manawatawhia Powell, 1937 E
Merelina maoriana Powell, 1939 E
Merelina paupereques Powell, 1937 E
Merelina plaga Finlay, 1926 E
Merelina rubiginosa Ponder, 1967 E
Merelina superba Powell, 1927 E
Merelina taupoensis Powell, 1939 E
Merelina tricarinata (Powell, 1937) E
Merelina waitangiensis Powell, 1933 E
Merelina sp. 1 (NZOI U602) E
Merelina sp. 2 (M.148654) E
Merelina sp. 3 (M.148655) E
Merelina sp. 4 (M.148656) E
Merelina sp. 5 (M.148669) E
Merelina sp. 6 (M.148670) E
Merelina sp. 7 (M.148671) E
Merelina sp. 8 (M.148668) E
Microstelma sp. (M.249913) E
Onoba (Manawatawhia) *analoga* (Powell, 1937) E
Onoba (*Onoba*) *alpha* (Powell, 1955) E
Onoba (*O.*) *aupouria* (Powell, 1940) E
Onoba (*O.*) *beta* (Powell, 1955) E
Onoba (*O.*) *candidissima* (Webster, 1905) E
Onoba (*O.*) *delicatula* (Powell, 1933) E
Onoba (*O.*) *delta* (Powell, 1955) E
Onoba (*O.*) *edita* (Powell, 1939) E
Onoba (*O.*) *fallai* (Powell, 1955) E
Onoba (*O.*) *foveauxiana* (Suter, 1898) E
Onoba (*O.*) *fumata* (Suter, 1898) E
Onoba (*O.*) *gamma* (Powell, 1955) E
Onoba (*O.*) *inornata* (Powell, 1933) E
Onoba (*O.*) *insculpta* (R. Murdoch, 1905) E
Onoba (*O.*) *iredalei* (Powell, 1937) E
Onoba (*O.*) *kermadecensis* (Powell, 1927) E
Onoba (*O.*) *morioria* (Powell, 1933) E
Onoba (*O.*) *obliquata* (Powell, 1940) E
Onoba (*O.*) *oliveri* (Powell, 1955) E
Onoba (*O.*) *parvula* (Powell, 1931) E
Onoba (*O.*) *paucicostata* (Powell, 1931) E
Onoba (*O.*) *sorenseni* (Powell, 1955) E
Onoba (*O.*) *tenuistriata* (Powell, 1933) E
Onoba (*Ovirissoa*) *delli* (Ponder, 1968) E
Onoba (*O.*) *duplicata* (Powell, 1937) E
Onoba (*O.*) *elegans* (Ponder, 1965) E
Onoba (*O.*) *exuta* (Powell, 1937) E
Onoba (*O.*) *lubrica* (Suter, 1898) E
Onoba (*O.*) *paupereques* (Finlay, 1926) E
Onoba (*O.*) *simplex* (Powell, 1927) E
Onoba (*Ovirissoa*) sp. 1 (NZOI U602)
Onoba (*O.*) sp. 2 (NZOI U602)
Onoba sp. 1 (M.148657) E
Onoba sp. 2 (M.148660) E
Onoba sp. 3 (M.148661) E
Onoba sp. 4 (M.134847) E
Powellisetia bilirata Ponder, 1965 E
Powellisetia crassilabrum (Powell, 1940) E
Powellisetia gradata (Suter, 1908) E
Powellisetia lineata (E. C. Smith, 1962) E
Powellisetia microstriata (R. Murdoch, 1905) E
Powellisetia porcellana (Suter, 1908) E
Powellisetia porcellanoides (Powell, 1937) E
Powellisetia retusa (Powell, 1927) E
Powellisetia subgradata (Powell, 1937) E
Powellisetia subtenuis (Powell, 1937) E
Powellisetia tenuisculpta (Powell, 1933) E
Powellisetia unicarinata (Powell, 1930) E
Powellisetia sp. 1 (M.147462) E
Powellisetia sp. 2 (M.147463) E
Powellisetia sp. 3 (M.147464) E
Powellisetia sp. 4 (M.147465) E
Powellisetia sp. 5 (M.147466) E
Powellisetia sp. 6 (M.147467) E
Powellisetia sp. 7 (M.147468) E
Powellisetia sp. 8 (M.147469) E
Powellisetia sp. 9 (M.147470) E
Powellisetia sp. 10 (M.147471) E
Powellisetia sp. 11 (M.147472) E
Powellisetia sp. 12 (M.147473) E
Powellisetia sp. 13 (M.147474) E
Powellisetia sp. 14 (M.54000) E
Powellisetia sp. 15 (M.54001) E
Powellisetia sp. 16 (M.71294) E
Powellisetia sp. 17 (M.148658) E
Powellisetia sp. 18 (M.227147) E
Powellisetia sp. 19 (M.227168) E
Powellisetia sp. 20 (M.225641) E
Powellisetia sp. 21 (M.272652) E
Pusillina (*Haurakia*) *aupouria* (Powell, 1937) E
Pusillina (*H.*) *crassicosta* (Powell, 1955) E
Pusillina (*H.*) *finlayi* (Powell, 1937) E
Pusillina (*H.*) *hamiltoni* (Suter, 1898) E
Pusillina (*H.*) *huttoni* (Suter, 1898) E
Pusillina (*H.*) *infecta* (Suter, 1908) E
Pusillina (*H.*) *latiambita* (Ponder, 1967) E
Pusillina (*H.*) *minuscula* (Powell, 1955) E
Pusillina (*H.*) *mobilicosta* (Ponder, 1967) E
Pusillina (*H.*) *otagoensis* (Dell, 1956) E
Pusillina (*H.*) *pellucida* (Powell, 1937) E
Pusillina (*H.*) *semireticulata* (R. Murdoch & Suter, 1906) E
Pusillina (*H.*) *sinuastoma* (Ponder, 1967) E
Pusillina (*H.*) *subsuturalis* (Dell, 1956) E
Pusillina (*H.*) *wallacei* (Oliver, 1915) E
Pusillina sp. 1 (M.148659) E
Pusillina sp. 2 (M.147753) E
Rissoa cylindrella Odhner, 1924 E
Rissoina (*Apataxia*) *miltozona* Tomlin, 1915
Rissoina (*Rissoina*) *achatina* Odhner, 1924 E
Rissoina (*R.*) *achatinoides* Powell, 1937 E
Rissoina (*R.*) *anguina* Finlay, 1926 E
Rissoina (*R.*) *aupouria* Powell, 1937 E
Rissoina (*R.*) *chathamensis* (Hutton, 1873) E
Rissoina (*R.*) *costata* A. Adams, 1851
Rissoina (*R.*) *fictor* Finlay, 1930 E
Rissoina (*R.*) *fucosa* Finlay, 1930 E
Rissoina (*R.*) *larochei* Finlay, 1930 E
Rissoina (*R.*) *manawatawhia* Powell, 1937 E
Rissoina (*R.*) *powelli* Finlay, 1930 E
Rissoina (*R.*) *zonata* Suter, 1909 E
Rissoina sp. 1 (AK.78517) E
Rissoina sp. 2 (M.95347) E
Rissoina sp. 3 (M.93957) E
Rissoina sp. 4 (M.93895) E
Rissoina sp. 5 (M.33858) E
Rissoina sp. 6 (M.33921) E
Schwartziella (*Pandalosia*) *scalariformis* (Watson, 1886)
Stosicia (*Isseliella*) *chiltoni* (Oliver, 1915)
Stosicia (*I.*) *polytropa* (Hedley, 1899)
Striatestea bountyensis Powell, 1927 E
Striatestea eulima Powell, 1940 E
Striatestea poutama Ponder, 1967 E
Zebina (*Zebina*) *bidentata* (Philippi, 1845)
Zebina sp. (M.227152) E
Rissoidae sp. (M.148667)
SILIQUARIIDAE
Stephopoma rosea (Quoy & Gaimard, 1834) E
Tenagodus maoria (Powell, 1940) E
Tenagodus weldii (Tenison Woods, 1876) E
Tenagodus sp. 1 (M.226359) E
Tenagodus sp. 2 (M.222123) E
STROMBIDAE
Strombus (*Canarium*) *haemastoma* (G. B. Sowerby I, 1842)
Strombus (*C.*) *mutabilis* (Swainson, 1821)
Strombus (*Euprotomus*) *vomer* (Röding, 1798)
Strombus (*Tricornis*) *thersites* Swainson, 1823
STRUTHIOLARIIDAE
Pelicaria *vermis bradleyi* (Neef, 1970) E
Pelicaria v. flemingi (Neef, 1970) E
Pelicaria v. grahami (Neef, 1970) E
Pelicaria v. powelli (Neef, 1970) E
Pelicaria v. vermis (Martyn, 1784) E
Struthiolaria (*Struthiolaria*) *papulosa* (Martyn, 1784) E
THALASSOCYNIDAE
Thalassocyon tui Dell, 1967
THIARIDAE
Melanoides tuberculatus (O.F. Müller, 1774) A F
TONNIDAE
Eudolium bairdii (Verrill & S. Smith *in* Verrill, 1881)
Eudolium pyriforme (G.B. Sowerby III, 1914)
Malea pomum (Linnaeus, 1758)
Tonna cerevisina Hedley, 1919
Tonna cumingii (Reeve, 1849)
Tonna maculata (Lamarck, 1822)
Tonna melanostoma (Jay, 1839)
Tonna olearium (Linnaeus, 1758)
Tonna perdix (Linnaeus, 1758)
Tonna tetracotula Hedley, 1919
TORNIDAE
Tornus aupouria (Powell, 1937) E
Tornus maoria (Powell, 1937) E
TRIFORIDAE
Triforis (*Granulotriforis*) *antepallaxa* B. Marshall, 1977 E
Triforis (*G.*) *blacki* B. Marshall, 1977 E
Triforis (*G.*) cf. *epallaxa* (Verco, 1909) E
Triforis (*G.*) *tui* B. Marshall, 1977 E
Triforis (Paramendax) *apicina* (Powell, 1937) E
Triforis (*P.*) *attenuatispira* (Powell, 1937) E
TRIPHORIDAE
Adelacerithium mirabilis B. Marshall, 1984 E

Bouchetriphora pallida (Pease, 1870)
Cautor luteus (Suter, 1908) E
Euthymella sp. (M.262681) E
Iniforis sp. cf. *chaperi* (Jousseaume, 1884)
Mastonia sp. cf. *evanida* Laseron, 1958
Mesophora granosa (Pease, 1870)
Metaxia duplicarinata (Powell, 1940) E
Metaxia exaltata (Powell, 1930) E
Metaxia kermadecensis B. Marshall 1977 E
Metaxia maoria (Finlay, 1930) E
Metaxia solitaria B. Marshall, 1979 E
Monophorus fascelina Suter, 1908 E
Nototriphora aupouria (Powell, 1937) E
Nototriphora sp. (M.227341) E
Sagenotriphora ampulla Hedley, 1902
Subulophora rutilans (Hervier, 1897)
Subulophora sp. (M.214588) E
Teretriphora huttoni (Suter, 1908) E
Viriola cancellata (Hinds, 1843)
Viriola sp. cf. *intergranosa* (Hervier, 1897)
Viriola sp. cf. *vulpina* (Hinds, 1843)
Triphoridae sp. 1 (M.225664) E
Triphoridae sp. 2 (M.226839) E
Triphoridae sp. 3 (M.226841) E
Triphoridae sp. 4 (M.225384) E
Triphoridae sp. 5 (M.230835) E
Triphoridae sp. 6 (NZOI U601) E
Triphoridae sp. 7 (M.60086) E
Triphoridae sp. 8 (M.59360) E
Triphoridae sp. 9 (M.148593) E
Triphoridae sp. 10 (M.148594) E
Triphoridae sp. 11 (M.148595) E
Triphoridae sp. 12 (M.61408) E
Triphoridae sp. 13 (M.61416) E
Triphoridae sp. 14 (M.61411) E
Triphoridae sp. 15 (M.148596) E
Triphoridae sp. 16 (M.148597) E
Triphoridae sp. 17 (M.33111) E
Triphoridae sp. 18 (M.33109) E
Triphoridae sp. 19 (M.33119) E
Triphoridae sp. 20 (M.61405) E
Triphoridae sp. 21 (M.148598) E
Triphoridae sp. 22 (M.61406) E
Triphoridae sp. 23 (M.33118) E
Triphoridae sp. 24 (M.33120) E
Triphoridae sp. 25 (M.33117) E
Triphoridae sp. 26 (M.212380) E
Triphoridae sp. 27 (M.227044) E
Triphoridae sp. 28 (M.223375) E
Triphoridae sp. 29 (M.227047) E
Triphoridae sp. 30 (M..214589) E
Triphoridae sp. 31 (M.214590) E
Triphoridae sp. 32 (M.227052) E
Triphoridae sp. 33 (M.214591) E
Triphoridae sp. 34 (M.262682) E
Triphoridae sp. 35 (AK 79284) E
Triphoridae sp. 36 (AK 79281) E
TRIVIIDAE
Notoficula otagoensis Dell, 1962 E
Proterato lachryma (G.B. Sowerby I, 1832)
Proterato sp. (M.226985) E
Trivia (*Ellatrivia*) *merces* (Iredale, 1924)
Trivia (*Trivirostra*) *oryza* (Lamarck, 1810)
Trivia (*T.*) *pellucidula* (Reeve, 1846)
Trivellona paucicostata valerieae (Hart, 1996)
TURRITELLIDAE
<u>*Maoricolpus*</u> *finlayi* Powell, 1940 E
Maoricolpus roseus roseus (Quoy & Gaimard, 1834) E
Maoricolpus r. manukauensis Powell, 1931 E
Vermicularia maoriana Powell, 1937 E
<u>*Zeacolpus*</u> (<u>*Stiracolpus*</u>) *ahiparanus* (Powell, 1927) E
Zeacolpus (*S.*) *ascensus* Marwick, 1957 E
Zeacolpus (*S.*) *blacki* Marwick, 1957 E
Zeacolpus (*S.*) *knoxi knoxi* Marwick, 1957 E
Zeacolpus (*S.*) *k. tardior* Marwick, 1957 E
Zeacolpus (*S.*) *maorius* (Powell, 1940) E
Zeacolpus (*S.*) *mixtus* Finlay, 1930 E
Zeacolpus (*S.*) *pagoda pagoda* (Reeve, 1849) E
Zeacolpus (*S.*) *p. powelli* Marwick, 1957 E
Zeacolpus (*S.*) *symmetricus* (Hutton, 1873) E
Zeacolpus (<u>*Zeacolpus*</u>) *vittatus* (Hutton, 1873) E
Turritellidae sp. (NZOI U602)
VANIKORIDAE
Constantia sp. (M.147642) E
Lyocyclus sp. 1 (NZOI U602) E
Lyocyclus sp. 2 (NZOI U599) E
Lyocyclus sp. 3 (M.81290) E
Lyocyclus? sp. (M.257053) E
Naricava neozelanica Powell, 1940 E
Nilsia cuvieriana (Suter, 1908) E
<u>*Radinista*</u> *corrugata* (Hedley, 1904) E
Radinista scalarina Powell, 1940 E
Radinista sp. 1 (M.147646) E
Radinista sp. 2 (M.113218) E
Radinista sp. 3 (M.50661) E
Radinista sp. 4 (M.50938) E
Talassia sp. (NZOI U573) E
Vanikoro wallacei Iredale, 1912 E
<u>*Zeradina*</u> *odhneri* Powell, 1927 E
Zeradina ovata (Odhner, 1924) E
Zeradina producta (Odhner, 1924) E
Zeradina sp. 1 (M.93462) E
Zeradina sp. 2 (M.147643) E
Vanikoridae? sp. 1 (M.227173) E
Vanikoridae? sp. 2 (M.93610) E
VELUTINIDAE
Lamellaria cerebroides Hutton, 1882 E
Lamellaria nodosa Ev. Marcus, 1987 E
Lamellaria ophione Gray, 1850 E
Lamellaria sp.(AK 132093)
Mysticoncha harrisonae Powell, 1946 E
VERMETIDAE
Dendropoma planata (Suter, 1913) E
Dendropoma squamifera Ponder, 1967 E
Dendropoma sp. (M.224488) E
Dendropoma? sp. (M.147313) E
Novastoa lamellosa (Hutton, 1873) E
Serpulorbis aotearoicus J. Morton, 1951 E
Serpulorbis zelandicus (Quoy & Gaimard, 1834) E
Serpulorbis sp. (M.214592) E
VITRINELLIDAE
Cochliolepis albiceratus Ponder, 1966 E
<u>*Conjectura*</u> *glabella* (R. Murdoch, 1908) E
Conjectura sp. (M.148556) E
Cyclostremiscus sp. (M.226735) E
Elachorbis diaphana Finlay, 1924 E
Elachorbis subtatei (Suter, 1907) E
Lurifax sp. (M.116953) E
Mareleptopoma sp. (M.227082) E
Neusas sp. (M.92208) E
<u>*Scrupus*</u> *hyalinus* (Odhner, 1924) E
Scrupus uniliratus Powell, 1931 E
Scrupus sp. 1 (M.34361) E
Scrupus sp. 2 (M.49091) E
Teinostoma? sp. (M.225371) E
Vitrinellidae sp. 1 (M.58574) E
Vitrinellidae sp. 2 (M.34277) E
Vitrinellidae sp. 3 (M.148578) E
Vitrinellidae sp. 4 (M.148579) E
Vitrinellidae sp. 5 (M.148580) E
Vitrinellidae sp. 6 (M.148581) E
Vitrinellidae sp. 8 (M.59499) E
Vitrinellidae sp. 9 (M.72674) E
Vitrinellidae? sp. 10 (M.148582) E
XENOPHORIDAE
Xenophora neozelanica kermadecensis Ponder, 1983 E
Xenophora n. neozelanica Suter, 1908 E
ZEROTULIDAE
Dickdellia sp. (M.10452) E
Trilirata triregis Warén & Hain, 1996 E
Zerotula bicarinata (Suter, 1908) E
Zerotula coronata Warén & Hain, 1996 E
Zerotula hedleyi (Mestayer, 1916) E
Zerotula nummaria Powell, 1940 E
Zerotula triangulata Powell, 1937 E
Zerotula sp. (NZOI S151) E

Order NEOGASTROPODA
BUCCINIDAE
Aeneator attenuatus Powell, 1927 E
Aeneator benthicolus Dell, 1963 E
Aeneator comptus (Finlay, 1924) E
Aeneator elegans (Suter, 1917) E
Aeneator galatheae Powell, 1958 E
Aeneator marshalli separabilis Dell, 1956 E
Aeneator otagoensis Finlay, 1930 E
Aeneator recens (Dell, 1951) E
Aeneator valedictus (Watson, 1886) E
Antarctodomus powelli Dell, 1995 E
Austrofusus chathamensis Finlay, 1928 E
Austrofusus glans (Röding, 1798) E
Belomitra climacella (Dall, 1895)
Belomitra sp. (M.225364) E
Buccinulum colensoi (Suter, 1908) E
Buccinulum flexicostatum Dell, 1956 E
Buccinulum fuscozonatum (Suter, 1908) E
Buccinulum linea (Martyn, 1784) E
Buccinulum mariae Powell, 1940 E
Buccinulum pallidum pallidum Finlay, 1928 E
Buccinulum p. powelli Ponder, 1971 E
Buccinulum pertinax finlayi Powell, 1929 E
Buccinulum p. pertinax (Martens, 1878) E
Buccinulum robustum Powell, 1929 E
Buccinulum vittatum bicinctum (Hutton, 1873) E
Buccinulum v. vittatum (Quoy & Gaimard, 1833) E
Buccinulum sp. 1 (M.148633) E
Buccinulum? sp. 2 (M.36015) E
Buccinulum? sp. 3 (M.59781) E
Buccinulum sp. 4 (M.118125) E
Cantharus (*Enginella*) *spica* (Melvill & Standen, 1895)
Cantharus (*Prodotia*) *isotomus* (Gray, 1843)
Cominella (*Cominella*) *adspersa* (Bruguière, 1789) E
Cominella (*C.*) *maculosa* (Martyn, 1784) E
Cominella (*C.*) *tolagaensis* Ponder, 1968 E
Cominella (<u>*Eucominia*</u>) *alertae* (Dell, 1956) E
Cominella (*E.*) *elegantula marlboroughensis* Powell, 1946 E
Cominella (*E.*) *mirabilis canturiensis* (Dell, 1951) E
Cominella (*E.*) *m. mirabilis* Powell, 1929 E
Cominella (*E.*) *m. powelli* (Fleming, 1948) E
Cominella (*E.*) *nassoides consobrina* Powell, 1933 E
Cominella (*E.*) *n. haroldi* Powell, 1946 E
Cominella (*E.*) *n. iredalei* (Finlay, 1928) E
Cominella (*E.*) *n. nassoides* (Reeve, 1846) E
Cominella (*E.*) *n. nodicincta* (Martens, 1878) E
Cominella (*E.*) *n. otakauica* Powell, 1946 E
Cominella (*E.*) *olsoni* (Dell, 1956) E
Cominella (*E.*) *otagoensis* (Finlay, 1926) E
Cominella (*Josepha*) *glandiformis* (Reeve, 1847) E
Cominella (*J.*) *quoyana accuminata* Hutton, 1893 E
Cominella (*J.*) *q. griseicalx* Willan, 1978 E
Cominella (*J.*) *q. necopinata* (Finlay, 1930) E
Cominella (*J.*) *q. quoyana* A. Adams, 1854 E
Cominella (*J.*) *regalis* Willan, 1978 E
Cominella (*J.*) *virgata brookesi* Powell, 1952 E
Cominella (*J.*) *v. virgata* H. & A. Adams, 1853 E
Cumia adjuncta (Iredale, 1929)
Cumia reticulata (A. Adams, 1855)
Eosipho aldermenensis (Powell, 1971) E
Eosipho sp. 1 (NZOI S151) E
Eosipho sp. 2 (M.75223) E
Eosipho sp. 3 (M.150056) E
Eosipho? sp. (NZOI Z9586) E
<u>*Euthrenopsis*</u> *bountyensis* Powell, 1929 E
Euthrenopsis otagoensis Powell, 1929 E
Euthrenopsis venusta Powell, 1929 E

Iredalula alticincta (R. Murdoch & Suter, 1906) E
Iredalula striata (Hutton, 1873) E
Iredalula venusta Powell, 1934 E
Kapala sp. 1 (NZOI X652) E
Kapala sp. 2 (M.147780) E
Kapala sp. 3 (M.59626) E
Metula sp. (NZOI K826) E
Nassaria (*Microfusus*) sp. cf. *problematica* (Iredale, 1936)
Nassaria (*M.*) *solida* Kuroda & Habe *in* Habe, 1961
Nassaria (*M.*) *spinigera* (Hayashi & Habe, 1965)
Pareuthria campbelli (Filhol, 1880) E
Penion benthicolus Dell, 1956 E
Penion chathamensis (Powell, 1938) E
Penion cuvierianus cuvierianus (Powell, 1927) E
Penion c. jeakingsi (Powell, 1947) E
Penion fairfieldae (Powell, 1947) E
Penion ormesi (Powell, 1927) E
Penion sulcatus (Lamarck, 1816) E
Phos (*Phos*) *hirasei* G.B. Sowerby III, 1913
Phos (*Strongylocera*) *textilis* A. Adams, 1851
Pisania (*Jeannea*) *hedleyi* (Iredale, 1912) E
CANCELLARIIDAE
Admete bruuni Knudsen, 1964 E
Anapepta sp. (NZOI P941) E
Bonellitia superstes Finlay, 1930 E
Brocchinia septentrionalis (Finlay, 1930) E
Inglisella marwicki (Dell, 1956) E
Oamaruia deleta Finlay, 1930 E
Oamaruia sp. 1 (NZOI S202) E
Oamaruia sp. 2 (NZOI S202) E
Oamaruia sp. 3 (M.150074) E
Zeadmete aupouria Powell, 1940 E
Zeadmete barkeri Powell, 1952 E
Zeadmete finlayi Powell, 1940 E
Zeadmete otagoensis Dell, 1956 E
Zeadmete ovalis Dell, 1956 E
Zeadmete subantarctica Powell, 1933 E
Zeadmete traillі (Hutton, 1873) E
Cancellariidae sp. 1 (M.148632) E
Cancellariidae sp. 2 (NZOI U262) E
Cancellariidae sp. 3 (NZOI S202) E
COLUMBELLIDAE
Antimitrella laxa Powell, 1937 E
Aoteatilia acicula (Suter, 1908) E
Aoteatilia amphipsila (Suter, 1908) E
Aoteatilia larochei Powell, 1940 E
Aoteatilia psila (Suter, 1908) E
Aoteatilia substriata (Suter, 1899) E
Aoteatilia tenuistriata (Suter, 1908) E
Euplica varians (G.B. Sowerby I, 1832)
Exomilopsis hipkinsi Powell, 1964 E
Liratilia compta Powell, 1930 E
Liratilia conquisita angulata (Suter, 1908) E
Liratilia c. chathamensis Dell, 1956 E
Liratilia c. conquisita (Suter, 1907) E
Liratilia c. gracilis Powell, 1940 E
Liratilia elegantula Powell, 1937 E
Liratilia isolata Dell, 1956 E
Liratilia sinuata Powell, 1937 E
Liratilia subnodosa Powell, 1934 E
Liratilia sp. (M.50704) E
Macrozafra cophinodes (Suter, 1908) E
Macrozafra enwrighti Powell, 1940 E
Macrozafra mariae Powell, 1940 E
Macrozafra nodicincta (Suter, 1899) E
Macrozafra subabnormis (Suter, 1899) E
Macrozafra vivens (Powell, 1934) E
Mitrella ligula (Duclos, 1840)
Paxula allani Finlay, 1928 E
Paxula leptalea (Suter, 1908) E
Paxula paxillus (R. Murdoch, 1905) E
Paxula subantarctica sorenseni Powell, 1955 E
Paxula s. subantarctica (Suter, 1908) E
Paxula transitans (R. Murdoch, 1905) E
Zafra fuscolineata Oliver, 1915 E
Zafra kermadecensis Oliver 1915 E
Zemitrella annectens Powell, 1937 E
Zemitrella attenuata Powell, 1940 E
Zemitrella benthicola Dell, 1956 E
Zemitrella choava (Reeve, 1859) E
Zemitrella circumcincta Dell, 1962 E
Zemitrella daemona (Webster, 1906) E
Zemitrella fallax Powell, 1940 E
Zemitrella finlayi Powell, 1933 E
Zemitrella laevigata curvirostris Powell, 1937 E
Zemitrella l. laevigata (Suter, 1908) E
Zemitrella laevirostris Powell, 1940 E
Zemitrella pseudomarginata (Suter, 1908) E
Zemitrella regis Powell, 1940 E
Zemitrella rosea (Hutton, 1873) E
Zemitrella sericea Powell, 1937 E
Zemitrella stephanophora (Suter, 1908) E
Zemitrella sulcata constans Powell, 1955 E
Zemitrella s. sulcata (Hutton, 1873) E
Zemitrella turgida Powell, 1937 E
Zemitrella websteri (Suter, 1913) E
Zemitrella whangaroaensis Dell, 1956 E
Columbellidae sp. 1 (M.224479) E
Columbellidae sp. 2 (M.225770) E
Columbellidae sp. 3 (M.225595) E
Columbellidae sp. 4 (M.249889) E
Columbellidae sp. 5 (NZOI U601) E
Columbellidae sp. 6 (NZOI U602) E
Columbellidae sp. 7 (M.43865) E
Columbellidae sp. 8 (M.43874) E
Columbellidae sp. 9 (M.43864) E
CONIDAE
Antiguraleus abernethyi Dell, 1956 E
Antiguraleus fenestratus Powell, 1942 E
Antiguraleus fusiformis Dell, 1956 E
Antiguraleus infandus (Webster, 1906) E
Antiguraleus multistriatus Dell, 1956 E
Antiguraleus mundus (Suter, 1909) E
Antiguraleus murrheus (Webster, 1906) E
Antiguraleus otagoensis Powell, 1942 E
Antiguraleus pedicus Powell, 1942 E
Antiguraleus pulcherrimus Dell, 1956 E
Antiguraleus rossianus Powell, 1942 E
Antiguraleus subtruncatus Powell, 1942 E
Antiguraleus sp. 1 (M.59762) E
Antiguraleus sp. 2 (M.65155) E
Antiguraleus sp. 3 (M.147771) E
Antiguraleus sp. 4 (M.150066) E
Asperdaphne aculeata (Webster, 1906) E
Asperdaphne expeditionis Dell, 1956 E
Asperdaphne ula (Watson, 1881) E
Awateria optabilis (R. Murdoch & Suter, 1906) E
Bathytoma (*Micantapex*) *murdochi murdochi* Finlay, 1930 E
Bathytoma (*Riuguhdrillia*) *parengonius* (Dell, 1956) E
Conus bruuni Powell, 1955
Conus capitaneus Linnaeus, 1758
Conus chaldeus (Röding, 1798)
Conus coelinae Crosse, 1858
Conus coronatus Lamarck, 1810
Conus flavidus Lamarck, 1810
Conus howelli Iredale, 1929
Conus lischkeanus Weinkauff, 1875
Conus lividus Hwass *in* Bruguière, 1792
Conus magnificus Reeve, 1843
Conus miles Linnaeus, 1758
Conus miliaris Hwass *in* Bruguière, 1792
Conus nielsenae Marsh, 1963
Conus obscurus G.B. Sowerby I, 1833
Conus plinthis Richard & Moolenbeek, 1988
Conus raoulensis Powell, 1958
Conus smirna Bartsch & Rehder, 1943
Conus sponsalis Hwass *in* Bruguière, 1792
Conus striatus Linnaeus, 1758
Conus teramachii (Kuroda, 1956)
Conus textile Linnaeus, 1958
Conus sp. 1 (NZOI T256) E
Conus sp. 2 (NZOI K843) E
Conus sp. 3 (NZOI K861) E
Daphnella cancellata Hutton, 1878 E
Etrema hedleyi (Oliver, 1915) E
Heterocithara mediocris Odhner, 1924 E
Kermia benhami Oliver, 1915 E
Lienardia (*Hemilienardia*) *apiculata* (Montrouzier, 1864)
Lienardia (*H.*) sp. (M.226701) E
Lienardia (*Lienardia*) *roseocincta* (Oliver, 1915) E
Liracraea epentroma epentroma (R. Murdoch, 1905) E
Liracraea e. subantarctica Powell, 1942 E
Liracraea e. whangaroaensis (R. Murdoch, 1905) E
Liracraea odhneri benthicola Dell, 1956 E
Liracraea o. odhneri Powell, 1942 E
Liracraea otakauica Powell, 1942 E
Liracraea sp. 1 (M.118604) E
Liracraea sp. 2 (M.118586) E
Liracraea sp. 3 (M.42299) E
Liracraea sp. 4 (M.148630) E
Liracraea sp. 5 (M.262684) E
Macteola interrupta (Reeve, 1846)
Maorimorpha secunda Powell, 1942 E
Maorimorpha suteri (R. Murdoch, 1905) E
Mitromorpha (*Mitrolumna*) *barrierensis* (Powell, 1942) E
Mitromorpha (*M.*) *benthicola* (Dell, 1962) E
Mitromorpha (*M.*) *expeditionis* Oliver, 1915 E
Mitromorpha (*M.*) *gemmata* Suter, 1908 E
Mitromorpha (*M.*) *granulifera* (Powell, 1937) E
Mitromorpha (*M.*) *regis* (Powell, 1937) E
Mitromorpha sp. 1 (NZOI U602) E
Mitromorpha sp. 2 (M.51218) E
Mitromorpha sp. 3 (M.148626) E
Mitromorpha sp. 4 (M.148627) E
Mitromorpha sp. 5 (M.113363) E
Mitromorpha sp. 6 (M.148628) E
Mitromorpha sp. 7 (M.148629) E
Neoguraleus amoenus (E.A. Smith, 1884) E
Neoguraleus benthicolus Powell, 1942 E
Neoguraleus finlayi Powell, 1942 E
Neoguraleus huttoni (E.A. Smith, 1915) E
Neoguraleus interruptus Powell, 1942 E
Neoguraleus lyallensis lyallensis (R. Murdoch, 1905) E
Neoguraleus l. tenebrosus (Powell, 1926) E
Neoguraleus manukauensis Powell, 1942 E
Neoguraleus murdochi (Finlay, 1924) E
Neoguraleus oruaensis Powell, 1942 E
Neoguraleus sandersonae (Bucknill, 1927) E
Neoguraleus sinclairi (Gillies, 1882) E
Nepotilla finlayi Powell, 1937 E
Nepotilla nitidula Powell, 1940 E
Nepotilla powelli Dell, 1956 E
Nepotilla vera Powell, 1940 E
Nepotilla sp. 1 (M.226863) E
Nepotilla sp. 2 (NZOI U602) E
Phenatoma rosea (Quoy & Gaimard, 1833) E
Phenatoma zealandica (E.A. Smith, 1877) E
?*Pontiothauma* sp. (NZOI U601) E
Scrinium neozelanicum (Suter, 1908) E
Scrinium sp. 1 (M.34450) E
Scrinium sp. 2 (M.118626) E
Scrinium sp. 3 (M.118645) E
Stilla anomala Powell, 1955 E
Stilla delicatula Powell, 1927 E
Stilla fiordlandica Fleming, 1948 E
Stilla flexicostata (Suter, 1899) E
Stilla paucicostata Powell, 1937 E
Stilla sp. (M.150069) E
Taranis benthicola (Dell, 1956) E
Taranis gratiosa (Suter, 1908) E
Taranis imporcata (Dell, 1962) E
Taranis nexilis bicarinata (Suter, 1915) E
Taranis n. recens (Fleming, 1948) E
Taranis spirulata (Dell, 1962) E

Taranis sp. (M.118661) E
Tomopleura (*Maoritomella*) *albula* (Hutton, 1873) E
Tomopleura (*M.*) *ischna* (Watson, 1881) E
Tomopleura (*M.*) *multiplex* (Webster, 1906) E
Tomopleura (*M.*) *orientalis* (Dell, 1956) E
Tomopleura sp. 1 (M.60452) E
Tomopleura sp. 2 (M.60444) E
Veprecula cooperi Mestayer, 1919 E
Xanthodaphne maoria Dell, 1956 E
Xanthodaphne membranacea (Watson, 1886) E
Xanthodaphne xanthias (Watson, 1886) E
Zenepos totolirata (Suter, 1908) E
COSTELLARIIDAE
Austromitra angulata (Suter, 1908) E
Austromitra lawsi Finlay, 1930 E
Austromitra planata (Hutton, 1885) E
Austromitra rubiginosa (Hutton, 1873) E
Austromitra zafra Powell, 1952 E
Austromitra sp. 1 (M.148602) E
Austromitra sp. 2 (M.148603) E
Austromitra sp. 3 (M.148604) E
Austromitra sp. 4 (M.112543) E
Austromitra sp. 5 (M.148605) E
Austromitra sp. 6 (M.93997) E
Austromitra sp. 7 (M.93964) E
Austromitra sp. 8 (M.93965) E
Austromitra sp. 9 (M.148606) E
Austromitra sp. 10 (M.94001) E
Austromitra sp. 11 (M.93989) E
Austromitra sp. 12 (M.93293) E
Austromitra sp. 13 (M.148607) E
Austromitra sp. 14 (M.93757) E
Austromitra sp. 15 (M.138796) E
Vexillum (*Costellaria*) *angustissimum* (E.A. Smith, 1903)
Vexillum (*C.*) *castum* (H. Adams, 1872)
Vexillum (*C.*) *iredalei* (Powell, 1958) E
Vexillum (*C.*) *sculptile* (Reeve, 1845)
Vexillum sp. 1 (NZOI K870) E
Vexillum sp. 2 (M.34902) E
Costellariid sp. 1 (M.147783) E
Costellariid sp. 2 (M.147786) E
CYSTISCIDAE
Cystiscus vidae (Dell, 1956) E
Cystiscus sp. (M.212384) E
Gibberula ficula (R. Murdoch & Suter, 1906) E
Gibberula hardingae (Dell, 1956) E
Granulina sp. cf. *bougei* (Bavay, 1917)
Pugnus parvus Hedley, 1896
DRILLIIDAE
Iredalea subtropicalis Oliver, 1915
Splendrillia (*Hauturua*) *vivens* (Powell, 1942) E
Splendrillia (*Splendrillia*) *aoteana* Finlay, 1930 E
Splendrillia (*S.*) *armata* Powell, 1942 E
Splendrillia (*S.*) *benthicola* Dell, 1956 E
Splendrillia (*S.*) *campbellensis* Sysoev & Kantor, 1989 E
Splendrillia (*S.*) *chathamensis* Sysoev & Kantor, 1989 E
Splendrillia (*S.*) *debilis* Finlay, 1927 E
Splendrillia (*S.*) *hermata* Dell, 1956 E
Splendrillia (*S.*) *jacula* Dell, 1956 E
Splendrillia (*S.*) *kapuranga* Dell, 1953 E
Splendrillia (*S.*) *kingmai* Marwick, 1965 E
Splendrillia (*S.*) *larochei* Powell, 1940 E
Splendrillia (*S.*) *majorina* Beu, 1979 E
Splendrillia (*S.*) *otagoensis* Powell, 1942 E
Splendrillia (*S.*) *roseacincta* Dell, 1956 E
Splendrillia (*S.*) *runcinata* Dell, 1956 E
Splendrillia (*S.*) *zeobliqua* Beu, 1979 E
Drilliidae sp. (M.141557) E
FASCIOLARIIDAE
Fusinus genticus (Iredale, 1936)
Fusinus sp. 1 (M.225565) E
Fusinus sp. 2 (NZOI U573) E
Fusinus sp. 3 (M.226595) E
Fusinus sp. 4 (M.225604) E
<u>*Glaphyrina*</u> *caudata* (Quoy & Gaimard, 1833) E
Glaphyrina plicata Powell, 1929 E
Glaphyrina sp. (M.225362) E
'Microfulgur' carinatus Ponder, 1970 E
Pleia cryptocarinata Dell, 1956 E
<u>*Taron*</u> *albocostus* Ponder, 1968 E
Taron dubius (Hutton, 1878) E
Taron mouatae Powell, 1940 E
HARPIDAE
Harpa amouretta Röding, 1798
Morum (*Oniscidia*) *bruuni* (Powell, 1958)
MARGINELLIDAE
Dentimargo amoena (Suter, 1908) E
Dentimargo cairoma (Brookes, 1924) E
Dentimargo fusula (R. Murdoch & Suter, 1906) E
Dentimargo fusuloides (Dell, 1956) E
Dentimargo hebescens (R. Murdoch & Suter, 1906) E
Dentimargo lurida (Suter, 1908) E
Dentimargo stewartiana (Suter, 1908) E
Dentimargo subamoena (Powell, 1937) E
Dentimargo subfusula (Powell, 1932) E
Dentimargo wormaldi (Powell, 1971) E
Mesoginella aupouria (Powell, 1937) E
Mesoginella cracens (Dell, 1956) E
Mesoginella ergastula (Dell, 1953) E
Mesoginella judithae (Dell, 1956) E
Mesoginella koma B. Marshall, 2004 E
Mesoginella larochei (Powell, 1932) E
Mesoginella manawatawhia (Powell, 1937) E
Mesoginella otagoensis (Dell, 1956) E
Mesoginella pisinna B. Marshall, 2004 E
Mesoginella pygmaeiformis (Powell, 1937) E
Mesoginella tryphenensis (Powell, 1932) E
Mesoginella vailei (Powell, 1932) E
Ovaginella maoria (Powell, 1937) E
Ovaginella profunda (Suter, 1909) E
Serrata albescens (Hutton, 1873) E
Serrata fasciata (G.B. Sowerby II, 1846) E
Serrata maoriana (Powell, 1932) E
Serrata parvistriata (Suter, 1908) E
Serrata plicatula (Suter, 1910) E
Serrata raoulica B. Marshall, 2004 E
Serrata sp. 1 (M.227078) E
Marginellidae sp. 1 (NZOI U601) E
Marginellidae sp. 2 (NZOI U601) E
Marginellidae sp. 3 (NZOI U601) E
Marginellidae sp. 4 (M.66269) E
Marginellidae sp. 5 (M.143325) E
Marginellidae sp. 6 (M.143328) E
Marginellidae sp. 7 (M.134399) E
Marginellidae sp. 8 (M.148648) E
Marginellidae sp. 9 (M.35758) E
Marginellidae sp. 10 (M.35921) E
Marginellidae sp. 11 (M.43885) E
Marginellidae sp. 12 (M.34160) E
Marginellidae sp. 13 (M.20851) E
Marginellidae sp. 14 (M.43884) E
Marginellidae sp. 15 (M.34891) E
Marginellidae sp. 16 (M.148639) E
Marginellidae sp. 17 (M.20849) E
Marginellidae sp. 18 (M.43886) E
Marginellidae sp. 19 (M.148640) E
Marginellidae sp. 20 (M.148641) E
Marginellidae sp. 21 (M.34170) E
Marginellidae sp. 22 (M.35922) E
Marginellidae sp. 23 (M.148642) E
Marginellidae sp. 24 (M.148643) E
Marginellidae sp. 25 (M.148644) E
Marginellidae sp. 26 (M.148645) E
Marginellidae sp. 27 (M.148646) E
Marginellidae sp. 28 (M.148647) E
MITRIDAE
Cancilla (*Domiporta*) *strangei* (Angas, 1867)
Cancilla (*Ziba*) *cernohorskyi* (Rehder & Wilson, 1975)
Cancilla (*Z.*) sp. cf. *rehderi* (Webb, 1958)
Cancilla (*Z.*) *kermadecensis* (Cernohorsky, 1978) E
Charitodoron sp. (NZOI U601) E
Eumitra sp. (NZOI U601) E
Mitra (*Mitra*) *carbonaria* Swainson, 1822
Mitra (*M.*) *mitra* (Linnaeus, 1758)
Mitra (*Nebularia*) *coronata* Lamarck, 1811
Mitra (*Strigatella*) *fastigium* Reeve, 1845
Mitra (*S.*) *typha* Reeve, 1845
Neocancilla takiisaoi (Kuroda, 1959)
MURICIDAE
Agnewia tritoniformis (Blainville, 1833)
Babelomurex (*Babelomurex*) *lischkeanus* (Dunker, 1882)
Babelomurex (*Echinolatiaxis*) *wormaldi* (Powell, 1971)
<u>*Comptella*</u> *coronata* Dell, 1956 E
Comptella curta (R. Murdoch, 1905) E
Comptella devia (Suter, 1908) E
Comptella sp. 1 (M.148369) E
Comptella sp. 2 (M.96229) E
Comptella sp. 3 (M.76004) E
Comptella sp. 4 (M.66961) E
Coralliophila bulbiformis (Conrad, 1837)
Coralliophila radula (A. Adams, 1855)
Coralliophila sertata (Hedley, 1903)
Coralliophila sp. 1 (NZOI E719) E
Coralliophila sp. 2 (NZOI T235) E
Coralliophila sp. 3 (M.225766) E
Coralliophila sp. 4 (NZOI K826) E
Dicathais orbita (Gmelin, 1791)
Emozamia licinus (Hedley & Petterd, 1906)
Galeropsis monodontus (Blainville, 1832)
<u>*Haustrum*</u> *haustorium* (Gmelin, 1791) E
Haustrum lacunosum (Bruguière, 1789) E
Haustrum scobina (Quoy & Gaimard, 1833) E
Hexaplex puniceus Oliver, 1915 E
Latiaxis sp. (M.225496) E
<u>*Lenitrophon*</u> *convexus* (Suter, 1909) E
Maculotriton serriale (Deshayes in Laborde, 1834)
Magilus antiquus Monfort, 1810
Mipus sp. (M.226560) E
Morula chaidea (Duclos, 1832)
Morula palmeri Powell, 1967
Muricopsis (*Murexsul*) *mariae* (Finlay, 1930) E
Muricopsis (*M.*) *octogonus* (Quoy & Gaimard, 1833) E
Muricopsis (*M.*) *profunda* B. Marshall & Burch, 2000 E
Neothais clathrata (A. Adams, 1854)
Neothais smithi (Brazier, 1889)
Pagodula carduelis (Watson, 1883)
Pagodula sp. 1 (M.59539) E
Pagodula sp. 2 (NZOI K804) E
Pagodula sp. 3 (M.118124) E
<u>*Paratrophon*</u> *cheesemani cheesemani* (Hutton, 1882) E
Paratrophon c. exsculptus Powell, 1933 E
Paratrophon patens (Hombron & Jacquinot, 1854) E
Paratrophon quoyi (Reeve, 1854) E
Phyllocoma (*Galfridus*) *speciosa virginalis* (Suter, 1913) E
Poirieria kopua Dell, 1956 E
Poirieria syrinx B. Marshall & Houart, 1995 E
Poirieria zelandica (Quoy & Gaimard, 1833) E
Pterynotus flemingi Beu, 1967 E
Pterynotus sp. (NZOI K804) E
Rolandiella scotti B. Marshall & Burch, 2000 E
<u>*Terefundus*</u> (<u>*Terefundus*</u>) *anomalus* Dell, 1956 E
Terefundus (*T.*) *axirugosus* Dell, 1956 E
Terefundus (*T.*) *crispulatus* (Suter, 1908) E
Terefundus (*T.*) *cuvierensis* (Mestayer, 1919) E
Terefundus (*T.*) *quadricinctus quadricinctus* (Suter, 1908) E
Terefundus (*T.*) *q. unicarinatus* Dell, 1956 E
Terefundus (<u>*Minortrophon*</u>) *crassiliratus* (Suter, 1908) E
Trophon subtropicalis Iredale, 1912 E
<u>*Uttleya*</u> *ahiparana* (Powell, 1927) E

Uttleya marwicki Powell, 1952 E
Uttleya williamsi Powell, 1952 E
Xymene ambiguus (Philippi, 1844) E
Xymene aucklandicus (E.A. Smith, 1902) E
Xymene huttoni (R. Murdoch, 1900) E
Xymene mortenseni caudatinus (Finlay, 1930) E
Xymene m. mortenseni (Odhner, 1924) E
Xymene plebeius (Hutton, 1873) E
Xymene pulcherrimus (Finlay, 1930) E
Xymene pumilus (Suter, 1909) E
Xymene teres (Finlay, 1930) E
Xymene traversi (Hutton, 1873) E
Xymene warreni Ponder, 1972 E
Xymene sp. 1 (M.112547) E
Xymene sp. 2 (M.34435) E
Xymene sp. 3 (M.71291) E
Xymene sp. 4 (M.65199) E
Xymene sp. 5 (M.65812) E
Xymene sp. 6 (M.100650) E
Xymenella pusilla (Suter, 1907) E
NASSARIIDAE
Nassarius (*Alectrion*) *aoteanus* Finlay, 1926 E
Nassarius (*A.*) *spiratus* (A. Adams, 1852)
Nassarius (*Cryptonassarius*) *ephamillus* (Watson, 1882)
Nassarius (Niotha) himeroessa (Melvill & Standen, 1903)
Nassarius (*N.*) *nodifer* (Powys, 1835)
Nassarius (*Telasco*) *gaudiosus* (Hinds, 1844)
OLIVIDAE
Amalda (*Baryspira*) *australis* (G.B. Sowerby I, 1830) E
Amalda (*B.*) *bathamae* (Dell, 1956) E
Amalda (*B.*) *depressa* (G.B. Sowerby II, 1859) E
Amalda (*B.*) *mucronata* (G.B. Sowerby I, 1830) E
Amalda (*B.*) *raoulensis* (Powell, 1967) E
Amalda (*B.*) *southlandica* (Fleming, 1948) E
Amalda (*Gracilispira*) *benthicola* (Dell, 1956) E
Amalda (*G.*) *northlandica* Hart 1995 E
Amalda (*G.*) *novaezelandiae* (G.B. Sowerby II, 1859) E
Amalda sp. (M.60298) E
Olivella sp. (M.225525) E
PSEUDOLIVIDAE
Benthobia complexirhyna Simone, 2003
Fusulculus albus Bouchet & Vermeij, 1998
TEREBRIDAE
Hastula penicillata (Hinds, 1844)
Pervicacia tristis (Deshayes, 1859) E
Terebra circumcincta Deshayes, 1857
Terenolla pygmaea (Hinds, 1944)
TURBINELLIDAE
Ceratoxancus elongatus Sakurai, 1958
Ceratoxancus leios Kantor & Bouchet, 1997
Columbarium veridicum Dell, 1963 E
Coluzea altocanalis Dell, 1956 E
Coluzea mariae Powell, 1952 E
Coluzea spiralis (A. Adams, 1856) E
Coluzea wormaldi (Powell, 1971) E
Egestas waitei (Suter, 1909) E
Exilia hilgendorfi (Martens, 1897)
Exilia expeditionis (Dell, 1956) E
Exilia kiwi Kantor & Bouchet *in* Kantor, Bouchet & Oleinik, 2001 E
Fulgurofusus sp. cf. *benthocallis* (Melvill & Standen, 1907)
Fulgurofusus sp. (NZOI I689) E
Metzgeria problematica (Ponder, 1968) E
Metzgeria shirleyi (Cernohorsky, 1980) E
Metzgeria sp. (M.225360) E
TURRIDAE
Aforia lepta (Watson, 1881)
Aforia sp. 1 (NZOI S202) E
Aforia sp. 2 (NZOI S154) E
Anticomitas vivens Powell, 1942 E
Antimelatoma ahiparana Powell, 1942 E
Antimelatoma benthicola Powell, 1942 E
Antimelatoma buchanani maorum (E.A. Smith, 1877) E
Aoteadrillia bulbacea (Watson, 1881) E
Aoteadrillia chordata (Suter, 1908) E
Aoteadrillia otagoensis Powell, 1942 E
Aoteadrillia wanganuiensis (Hutton, 1873) E
Aoteadrillia sp. (M.12901) E
Austrodrillia (*A.*) *rawitensis* Hedley, 1922 E
Austrodrillia (*Regidrillia*) *secunda* Powell, 1965 E
Austrodrillia (*R.*) *sola* Powell, 1942 E
Comitas onokeana vivens Dell, 1956 E
Comitas trailli (Hutton, 1873) E
Comitas sp. 1 (M.249893) E
Comitas sp. 2 (M.226598) E
Comitas sp. 3 (M.90146) E
Comitas sp. 4 (M.60090) E
Comitas sp. 5 (M.118130) E
Comitas sp. 6 (M.148620) E
Comitas sp. 7 (M.50968) E
Comitas sp. 8 (M.58690) E
Comitas sp. 9 (NZOI P929) E
Comitas sp. 10 (M.65219) E
Comitas sp. 11 (M.59779) E
Comitas sp. 12 (M.118443) E
Comitas sp. 13 (M.60177) E
Comitas sp. 14 (NZOI P942) E
Gemmula sp. 1 (M.225562) E
Gemmula sp. 2 (M.226587) E
Gemmula sp. 3 (M.74640) E
Leucosyrinx canyonensis (Dell, 1956) E
Leucosyrinx eremita (R. Murdoch & Suter, 1906) E
Leucosyrinx pikei (Dell, 1963) E
Lophiotoma (*Xenuroturris*) *cingulifera* (Lamarck, 1822)
Lophiotoma (*X.*) *millepunctata* (G. B. Sowerby III, 1908)
Lucerapex angustatus (Powell, 1940) E
Lusitanops sp. (M.102544) E
Paracomitas (*Macrosinus*) *haumuria* Beu, 1979 E
Paracomitas (*Paracomitas*) *augusta augusta* (R. Murdoch & Suter, 1906) E
Paracomitas (*P.*) *a. powelli* Dell, 1956 E
Paracomitas (*P.*) *gypsata* (Watson, 1881) E
Paracomitas sp. 1 (NZOI P939) E
Paracomitas sp. 2 (M.138434) E
Paracomitas sp. 3 (NZOI P942) E
Paracomitas sp. 4 (NZOI P942) E
Paracomitas sp. 5 (NZOI P939) E
Paracomitas sp. 6 (NZOI S154) E
Paracomitas sp. 7 (M.148621) E
Zemacies excelsa Sysoev & Bouchet, 2001
Turridae sp. 1 (M.225464) E
Turridae sp. 2 (M.222129) E
Turridae sp. 3 (M.225715) E
Turridae sp. 4 (M.227124) E
Turridae sp. 5 (M.225586) E
Turridae sp. 6 (M.225584) E
Turridae sp. 7 (M.225578) E
Turridae sp. 8 (M.225535) E
Turridae sp. 9 (M.225539) E
Turridae sp. 10 (M.226570) E
Turridae sp. 11 (M.226778) E
Turridae sp. 12 (M.225537) E
Turridae sp. 13 (M.225536) E
Turridae sp. 14 (NZOI U601) E
Turridae sp. 15 (M.225521) E
Turridae sp. 16 (M.225524) E
Turridae sp. 17 (NZOI T241) E
Turridae sp. 18 (NZOI U601) E
Turridae sp. 19 (M.225568) E
Turridae sp. 20 (M.226783) E
Turridae sp. 21 (M.225576) E
Turridae sp. 22 (M.225582) E
Turridae sp. 23 (M.225580) E
Turridae sp. 24 (M.225368) E
Turridae sp. 25 (M.227133) E
Turridae sp. 26 (M.225523) E
Turridae sp. 27 (M.225579) E
Turridae sp. 28 (M.225713) E
Turridae sp. 29 (M.225466) E
Turridae sp. 30 (M.225710) E
Turridae sp. 31 (M.225572) E
Turridae sp. 32 (M.225573) E
Turridae sp. 33 (M.225708) E
Turridae sp. 34 (M.225570) E
Turridae sp. 35 (M.225540) E
Turridae sp. 36 (M.225387) E
Turridae sp. 37 (M.257047) E
Turridae sp. 38 (M.225709) E
Turridae sp. 39 (NZOI U601) E
Turridae sp. 40 (M.147322) E
Turridae sp. 41 (M.226570) E
Turridae sp. 42 (NZOI K840) E
Turridae sp. 43 (NZOI K826) E
Turridae sp. 44 (NZOI T256) E
Turridae sp. 45 (NZOI T235) E
Turridae sp. 46 (NZOI T241) E
Turridae sp. 47 (NZOI U573) E
Turridae sp. 48 (NZOI K826) E
Turridae sp. 49 (NZOI S202) E
Turridae sp. 50 (M.148622) E
Turridae sp. 51 (NZOI P939) E
Turridae sp. 52 (NZOI S202) E
Turridae sp. 53 (NZOI S204) E
Turridae sp. 54 (M.60156) E
Turridae sp. 55 (NZOI S151) E
Turridae sp. 56 (M.60433) E
Turridae sp. 57 (NZOI S151) E
Turridae sp. 58 (NZOI P930) E
Turridae sp. 59 (NZOI P926) E
Turridae sp. 60 (NZOI P942) E
Turridae sp. 61 (NZOI P941) E
Turridae sp. 62 (M.18498) E
Turridae sp. 63 (M.118133) E
Turridae sp. 64 (M.60262) E
Turridae sp. 65 (M.71767) E
Turridae sp. 66 (M.60680) E
Turridae sp. 67 (M.118628) E
Turridae sp. 68 (M.148623) E
Turridae sp. 69 (M.60079) E
Turridae sp. 70 (M.53287) E
Turridae sp. 71 (M.118634) E
Turridae sp. 72 (M.18502) E
Turridae sp. 73 (M.118631) E
Turridae sp. 74 (M.60448) E
Turridae sp. 75 (M.118636) E
Turridae sp. 76 (M.118650) E
Turridae sp. 77 (M.60375) E
Turridae sp. 78 (M.118629) E
Turridae sp. 79 (M.118572) E
Turridae sp. 80 (M.60158) E
Turridae sp. 81 (M.148624) E
Turridae sp. 82 (M.148625) E
Turridae sp. 83 (M.60424) E
Turridae sp. 84 (M.118678) E
Turridae sp. 85 (M.59748) E
Turridae sp. 86 (M.34906) E
Turridae sp. 87 (M.66710) E
Turridae sp. 88 (M.100333) E
Turridae sp. 89 (M.118511) E
Turridae sp. 90 (M.148631) E
Turridae sp. 91 (M.226945) E
Turridae sp. 92 (M.226700) E
TYPHIDAE
Monstrotyphis pauperis (Mestayer, 1916) E
Prototyphis (*Ponderia*) *zealandicus* (Hutton, 1873) E
Prototyphis (*Prototyphis*) *eos* (Hutton, 1873) E
Prototyphis (*P.*) *paupereques* (Powell, 1974) E
Siphonochelus solus Vella, 1961 E
Typhina sp. 1 (M.148608) E
Typhina sp. 2 (M.33846) E

Typhina sp. 3 (M.153161) E
VOLUTIDAE
Alcithoe arabica (Gmelin, 1791) E
Alcithoe benthicola (Dell, 1963) E
Alcithoe calva Powell, 1928 E
Alcithoe chathamensis (Dell, 1956) E
Alcithoe davegibbsi Hart, 1999 E
Alcithoe fissurata (Dell, 1963) E
Alcithoe flemingi Dell, 1978 E
Alcithoe fusus fusus (Quoy & Gaimard, 1833) E
Alcithoe f. haurakiensis Dell, 1956 E
Alcithoe f. hedleyi (R. Murdoch & Suter, 1906) E
Alcithoe jaculoides Powell, 1924 E
Alcithoe knoxi (Dell, 1956) E
Alcithoe larochei Marwick, 1926 E
Alcithoe lutea (Watson, 1882) E
Alcithoe ostenfeldi (Iredale, 1937) E
Alcithoe wilsonae (Powell, 1933) E
Calliotectum egregium Bouchet & Poppe, 1995
Lyria nucleus (Lamarck, 1811)
Provocator mirabilis (Finlay, 1926) E
Zygomelon zodion Harasewych & B. Marshall, 1995 E
VOLUTOMITRIDAE
Microvoluta marginata (Hutton, 1885) E
Microvoluta royana Iredale, 1924
Peculator hedleyi (R. Murdoch, 1905) E
Peculator obconicus (Powell, 1952) E
Peculator porphyria (Verco, 1896)
Peculator sp. 1 (M.148547) E
Peculator sp. 2 (M.43724) E
Volutomitra banksi (Dell, 1951) E
Volutomitra obscura (Hutton, 1873)
Volutomitra sp. 1 (NZOI U573) E
Volutomitra sp. 2 (M.147580) E

Subclass HETEROBRANCHIA
Order HETEROSTROPHA
ARCHITECTONICIDAE
Adelphotectonica nomotoi (Kosuge, 1979)
Adelphotectonica reevei (Hanley, 1862)
Architectonica maxima (Philippi, 1849)
Granosolarium aspersum (Hinds, 1844)
Granosolarium gemmiferum Bieler, 1993
Heliacus (*Gyriscus*) *asteleformis* (Powell, 1965)
Heliacus (*Heliacus*) *areola areola* (Gmelin, 1791)
Heliacus (*H.*) *variegatus* (Gmelin, 1791)
Heliacus (*Torinista*) *caelatus* (Hinds, 1844)
Heliacus (*T.*) *costatus* (Schepman, 1909)
Heliacus (*T.*) *hyperionis* Bieler, 1993
Heliacus (*T.*) *implexus* (Mighels, 1845)
Philippia lutea (Lamarck, 1822)
Psilaxis oxytropis (A. Adams, 1855)
Psilaxis radiatus (Röding, 1798)
Pseudomalaxis zanclaeus meridionalis (Hedley, 1903)
Pseudotorinia amoena (R. Murdoch & Suter, 1906)
Solatisonax injussa Iredale, 1931
Solatisonax supraradiata (Martens, 1904)
Solatisonax sp. aff. *alleryi* (Seguenza, 1876)
Spirolaxis argonauta Bieler, 1993
Spirolaxis cornuarietis Bieler, 1993
Spirolaxis rotulacatharinea (Melvill & Standen, 1903)
CIMIDAE
Cima sp. 1 (M.119637) E
Cima sp. 2 (M.141936) E
Cima sp. 3 (M.113263) E
Cima sp. 4 (M.49588) E
Cima sp. 5 (M.148653) E
Cimidae sp. (M.226847) E
HYALOGYRINIDAE
Hyalogyra expansa B. Marshall, 1988 E
Hyalogyrina glabra B. Marshall, 1988 E
Hyalogyrina sp. (M.116951) E
Hyalogyrinidae sp. 1 (NZOI U598) E
MATHILDIDAE
Brookesena neozelanica (Suter, 1908) E
Brookesena succincta (Suter, 1908) E
Brookesena sp. 1 (M.94437) E
Brookesena sp. 2 (M.34398) E
Mathilda decorata Hedley, 1903
Mathilda maoria (Powell, 1940)
Tuba valkyrie (Powell, 1971)
OMALOGYRIDAE
Ammonicera sp. 1 (M.141006) E
Ammonicera sp. 2 (M.143473) E
Ammonicera sp. 3 (M.49439) E
Ammonicera sp. 4 (M.109357) E
Ammonicera sp. 5 (M.227092) E
Ammonicera sp. 6 (M.226891) E
Omalogyra ammonitoides (Powell, 1940)
Omalogyra fusca Suter, 1908 E
Retrotortina sp. (M.90185) E
ORBITESTELLIDAE
Boschitestella sp. 1 (M.226888) E
Boschitestella sp. 2 (M.49222) E
Microdiscula sp. 1 (M.90182) E
Microdiscula sp. 2 (M.141959) E
Orbitestella hinemoa Mestayer, 1919 E
Orbitestella parva (Finlay, 1924) E
Orbitestella toreuma Powell, 1930 E
Orbitestella sp. 1 (M.226871) E
Orbitestella sp. 2 (M.66295) E
Orbitestella sp. 3 (M.112639) E
Orbitestella sp. 4 (M.34688) E
Orbitestella sp. 5 (M.148612) E
Orbitestella sp. 6 (M.148613) E
Orbitestella sp. 7 (M.148616) E
Orbitestella sp. 8 (M.148617) E
Orbitestella sp. 9 (M.148618) E
Orbitestella sp. 10 (M.148619) E
Orbitestella sp. 11 (M.49220) E
Orbitestella sp. 12 (M.212378) E
Orbitestella sp. 13 (M.149946) E
Orbitestella sp. 14 (M.150068) E
PYRAMIDELLIDAE
Agatha georgiana (Hutton, 1885) E
Besla insularis (Oliver, 1915) E
Besla rossiana Laws, 1941 E
Besla subrugata (Powell, 1927)
Besla vaga Laws, 1941 E
Besla waitangiensis Laws, 1941 E
Chemnitzia acer Laws, 1937 E
Chemnitzia aoteana Powell, 1930 E
Chemnitzia barrierensis Laws, 1937 E
Chemnitzia bucknilli Laws, 1937 E
Chemnitzia campbellica (Odhner, 1924) E
Chemnitzia cookiana Laws, 1937 E
Chemnitzia dunedinensis Laws, 1937 E
Chemnitzia errabunda Laws, 1937 E
Chemnitzia finlayi (Powell, 1926) E
Chemnitzia forsteriana Laws, 1937 E
Chemnitzia informis Laws, 1937 E
Chemnitzia jactura Laws, 1937 E
Chemnitzia kingi Laws, 1937 E
Chemnitzia lawsi Powell, 1937 E
Chemnitzia lillingtoniana Laws, 1937 E
Chemnitzia mitis Laws, 1937 E
Chemnitzia owenga Laws, 1937 E
Chemnitzia powelli (Bucknill, 1924) E
Chemnitzia rakiura Laws, 1937 E
Chemnitzia scala Laws, 1937 E
Chemnitzia stipes Laws, 1937 E
Chemnitzia vegrandis Laws, 1937 E
Chemnitzia verecunda Laws, 1937 E
Chemnitzia vigilia Laws, 1937 E
Chemnitzia waitemata Laws, 1937 E
Chemnitzia zealandica Hutton, 1873 E
Chrysallida sp. 1 (M.226856) E
Chrysallida sp. 2 (M.225556) E
Chrysallida sp. 3 (M.227195) E
'*Epigrus*' *insularis* Oliver, 1915 E
'*Epigrus*' *gracilis* Oliver, 1915 E
'*Epigrus*' sp. (M.214543) E
Eulimella coena Webster, 1905 E
Eulimella inexpectata (Oliver, 1915) E
Eulimella levilirata R. Murdoch & Suter, 1906 E
Eulimella limbata (Suter, 1907) E
Eulimella sp. (M.226851) E
Evalea liricincta (Suter, 1908) E
Evalea plana Laws, 1941 E
Evalea propria Laws, 1941 E
Evalea sabulosa (Suter, 1908) E
Evalea sp. (M.139225) E
Gumina dolichostoma (Suter, 1908) E
Gumina minor Laws, 1940 E
Herviera sp. cf. *isidella* (Melvill & Standen, 1898)
Hinemoa punicea Oliver, 1915 E
Ividella maoria Powell, 1940 E
Linopyrga rugata parva Laws, 1941 E
Linopyrga r. rugata (Hutton, 1886) E
Menestho sp. (NZOI U602) E
Microthyca sp. 1 (M.58566) E
Microthyca sp. 2 (M.274144) E
Miralda austropacifica Oliver, 1915
Obexomia denselirata (Suter, 1908) E
Odostomia acutangula Suter, 1908 E
Odostomia aucklandica Laws, 1939 E
Odostomia chordata Suter, 1908 E
Odostomia sp. cf. *clara* Brazier, 1877
Odostomia corpulentoides Dell, 1956 E
Odostomia cryptodon Suter, 1908 E
Odostomia geoffreyi Laws, 1939 E
Odostomia haurakiensis Laws, 1939 E
Odostomia hyphala Watson, 1886 E
Odostomia incidata Suter, 1908 E
Odostomia manukauensis Laws, 1939 E
Odostomia sp. cf. *metata* Hedley, 1907
Odostomia murdochi Suter, 1913 E
Odostomia parvacutangula Laws, 1939 E
Odostomia pedica Laws, 1939 E
Odostomia pervaga Laws, 1939 E
Odostomia pudica Suter, 1908 E
Odostomia takapunaensis Suter, 1908 E
Odostomia taumakiensis Suter, 1908 E
Odostomia vaga Laws, 1939 E
Odostomia vestalis R. Murdoch, 1905 E
Odostomia sp. 1 (M.74988) E
Odostomia sp. 2 (M.74993) E
Odostomia sp. 3 (M.74994) E
Otopleura mitralis (A. Adams, 1855)
Planpyrgiscus lawsi Dell, 1956 E
Puposyrnola fastigiata (Suter, 1906) E
Puposyrnola missile Laws, 1937 E
Pyramidella sulcata (A. Adams, 1854)
Pyramidella terebellum (Müller, 1774)
Pyrgiscilla otakauica Laws, 1937 E
Pyrgiscilla taiaroa (Laws, 1937) E
Rissopsetia maoria Dell, 1956 E
Rissopsetia sp. (M.150062) E
Siogamaia morioria Laws, 1941 E
Striarcana cryptolira Laws, 1937 E
Striarcana tauranga Laws, 1937 E
Striodostomia orewa Laws, 1940 E
Syrnola crawfordi Powell, 1927 E
Syrnola lurida (Suter, 1908) E
Syrnola menda Finlay, 1926 E
Syrnola sp. 1 (M.227123) E
Syrnola sp. 2 (M.227161) E
Syrnola sp. 3 (M.227122) E
Terelimella aupouria (Powell, 1937) E
Terelimella benthicola Dell, 1956 E
Terelimella larochei (Powell, 1930) E
Terelimella sp. (AK 98054) E
Turbonilla eques Laws, 1937 E
Turbonilla haroldi Laws, 1937 E
Turbonilla moorei Laws, 1937 E
Turbonilla oceanica Oliver, 1915 E
Turbonilla suteri Powell, 1926 E

Turbonilla sp. 1 (M.225636) E
Turbonilla sp. 2 (M.140780) E
Turbonilla sp. 3 (M.138979) E
Turbonilla sp. 4 (M.150053) E
Pyramidellidae sp. 1 (M.225515) E
Pyramidellidae sp. 2 (M.138485) E
Pyramidellidae sp. 3 (M.225593) E
Pyramidellidae sp. 4 (NZOI U601) E
Pyramidellidae sp. 5 (M.60438) E
Pyramidellidae sp. 6 (M.138597) E
Pyramidellidae sp. 7 (M.142881) E
RISSOELLIDAE
Rissoella (*Jeffreysiella*) *rissoaformis* (Powell, 1939) E
Rissoella (*J.*) *secunda* (Iredale, 1912)
Rissoella (*Rissoella*) *elongatospira* Ponder, 1966 E
Rissoella (*R.*) *flemingi* Ponder, 1968 E
Rissoella (<u>*Zelaxitas*</u>) *cystophora* (Finlay, 1924) E
Rissoella (*Z.*) *micra* (Finlay, 1924) E
Rissoella sp. 1 (M.225853) E
Rissoella sp. 2 (M.135643) E
TJAERNOEIDAE
Tjaernoeia sp. (M.35241) E
XYLODISCULIDAE
Xylodiscula eximia B. Marshall, 1988 E
Xylodiscula librata B. Marshall, 1988 E
Xylodiscula osteophila B. Marshall, 1994 E
Xylodiscula sp. (M.116952) E

Subclass OPISTHOBRANCHIA
Order INCERTAE SEDIS
ACTEONIDAE
Acteon (*Maxacteon*) *cratericulatus* Hedley, 1906 E
Acteon (*M.*) *flammeus* (Bruguière, 1789)
Acteon (*M.*) *hancocki* (Rudman, 1971) E
Acteon (*M.*) *milleri* (Rudman, 1971) E
Acteon sp. 1 (M.226568) E
Acteon sp. 2 (M.225689) E
Neactaeonina inexpectata Dell, 1956 E
Neacteonina sp. (NZOI P939) E
Obrussena sp. 1 (M.225377) E
Obrussena sp. 2 (M.112943) E
Pupa kirki (Hutton, 1873) E
Pupa sulcata (Gmelin, 1791)
Tenuiactaeon ambiguus (Hutton, 1885) E
Tomlinula sp. (M.225588) E
Acteonidae sp. 1 (M.225587) E
Acteonidae sp. 2 (NZOI S204) E
BULLINIDAE
Bullina sp. cf. *lauta* Pease, 1860
Bullina lineata (Gray, 1825)
Bullina sp. cf. *melior* (Iredale, 1929)
Bullina roseana Rudman, 1971 E
Bullina vitrea Pease, 1860
HYDATINIDAE
Hydatina albocincta (van der Hoeven, 1839)
Hydatina physis (Linnaeus, 1758)
Micromelo undata (Bruguière, 1792)
RINGICULIDAE
Ringicula (*Ringiculina*) *delecta* R. Murdoch & Suter, 1906 E
Ringicula sp. 1 (M.226801) E
Ringicula sp. 2 (NZOI S154) E
Ringicula sp. 3 (M.58510) E
Ringicula sp. 4 (NZOI P929) E

Order CEPHALASPIDEA
AGLAJIDAE
Aglaja lineolata (H. & A. Adams, 1854)
Melanochlamys cylindrica Cheeseman, 1881 E
Melanochlamys lorrainae (Rudman, 1968) E
Melanochlamys virgo (Rudman, 1968) E
Philinopsis taronga Allan, 1933
BULLIDAE
Bulla angasi Pilsbry, 1893
Bulla quoyii Gray, 1843
CYLICHNIDAE
Bucconia sp. (M.60579)
Cylichna bulloides Dell, 1956 E
Cylichna thetidis Hedley, 1903
Cylichna zealandica Kirk, 1880 E
Cylichna sp. 1 (M.225671) E
Cylichna sp. 2 (M.225462) E
Cylichna? sp. (NZOI U601) E
Cylichnium sp. 1 (M.225599) E
Cylichnium sp. 2 (M.59745) E
Sabatia sp. 1 (NZOI U601) E
Sabatia sp. 2 (NZOI U608) E
Scaphander otagoensis Dell, 1956 E
Tornatina sp. cf. *apicina* Gould, 1859
Tornatina decorata Pilsbry, 1904
DIAPHANIDAE
Colpodaspis sp. (M.35854) E
Diaphana brazieri Angas, 1877
Diaphana tasmanica (Beddome, 1883)
Diaphana sp. 1 (M.257043) E
Diaphana sp. 2 (M.94354) E
Diaphana sp. 3 (M.66690) E
Toledonia succineaformis Powell, 1955 E
Toledonia sp. 1 (M.227216) E
Toledonia sp. 2 (NZOI U602) E
Toledonia sp. 3 (M.49025) E
Toledonia sp. 4 (M.150005) E
Toledonia sp. 5 (M.150006) E
Toledonia sp. 6 (M.150007) E
Toledonia sp. 7 (M.93569) E
Toledonia? sp. (M.48972) E
HAMINOEIDAE
Haminoea zelandiae (Gray, 1843) E
Haminoea sp. (M.274146) E
Limulatys sp. cf. *muscarius* (Gould, 1859)
Limulatys reliquus Iredale, 1936
Roxania sp. (NZOI U602) E
Haminoeidae sp. (NZOI P939) E
PHILINIDAE
Philine angasi Crosse & P. Fischer, 1865
Philine auriformis Suter, 1909 E
Philine constricta R. Murdoch & Suter, 1906 E
Philine powelli Rudman, 1970 E
Philine umbilicata R. Murdoch & Suter, 1906 E
Philine sp. 1 (M.50971) E
Philine sp. 2 (M.113205) E
Philine sp. 3 (M.148530) E
Philine sp. 4 (NZOI S151) E
Philine sp. 5 (NZOI P971) E
Philine sp. 6 (M.50889) E
Philine sp. 7 (M.138478) E
Philine sp. 8 (NZOI P934) E
Philine sp. 9 (M.212480) E
RETUSIDAE
Cylichnina opima Finlay, 1926 E
Cylichnina striata (Hutton, 1873) E
Cylichnina sp. 1 (M.65804) E
Cylichnina sp. 2 (M.49382) E
Pyrunculus sp. 1 (M.225590) E
Pyrunculus sp. 2 (M.100646) E
Relichna aupouria Powell, 1937 E
Relichna pachys (Watson, 1883) E
Relichna simplex (R. Murdoch & Suter, 1906) E
Retusa oruaensis (Webster, 1908) E
Retusa sp. 1 (M.225510) E
Retusa sp. 2 (M.149976) E
Retusa sp. 3 (M.9646) E
Retusa sp. 4 (M.149977) E
Retusa sp. 5 (M.50925) E
Retusa sp. 6 (M.9074) E
Retusa sp. 7 (M.20839) E
Retusa sp. 8 (M.150015) E
Retusa sp. 9 (NZOI P971) E
Retusa sp. 10 (M.227136) E
Volvulella nesentus Finlay, 1926 E
Volvulella truncata Dell, 1956 E
RUNCINIDAE
<u>*Pseudoilbia*</u> *lineata* Miller & Rudman, 1968 E
Runcina katipoides (Miller & Rudman, 1968) E
<u>*Runcinella*</u> *zelandica* Odhner, 1924 E

Order ANASPIDEA
APLYSIIDAE
Aplysia (*Aplysia*) *juliana* (Quoy & Gaimard, 1832)
Aplysia (*Varria*) *dactylomela* Rang, 1828
Aplysia (*V.*) *extraordinaria* (Allan, 1932)
Aplysia (*V.*) *keraudreni* Rang, 1828
Aplysia (*Pruvotaplysia*) *parvula* Guilding *in* Mörch, 1863
Bursatella leachii Blainville, 1817
Dolabrifera brazieri G.B. Sowerby II, 1870
Stylocheilus longicauda (Quoy & Gaimard, 1825)

Order SACOGLOSSA
JULIIDAE
Julia exquisita Gould, 1862
Berthelinia sp. (M.49858) E
LIMAPONTIIDAE
Ercolania felina (Hutton, 1882) E
Ercolania n. sp. NIWA E
Limapontia sp. (Burn, 1974) E
Stiliger smaragdinus Baba, 1949
Placida dendritica (Alder & Hancock, 1843)
OXYNOIDAE
Oxynoe viridis (Pease, 1861)
PLAKOBRANCHIDAE
Elysia maoria Powell, 1937

Order THECOSOMATA
CAVOLINIIDAE
Cavolinia gibbosa (d'Orbigny, 1836)
Cavolinia globulosa (Gray, 1850)
Cavolinia inflexa (Lesueur, 1813)
Cavolinia tridentata (Forsskål, 1775)
Cavolinia uncinata (Rang, 1829)
Clio antarctica Dall, 1908
Clio convexa (Boas, 1886)
Clio cuspidata (Bosc, 1802)
Clio pyramidata Linnaeus, 1767
Clio sulcata (Pfeffer, 1879)
Clio sp. (M.148634)
Creseis acicula (Rang, 1828)
Creseis virgula (Rang, 1828)
Cuvierina columnella (Rang, 1827)
Diacavolinia longirostris (Blainville, 1821)
Diacria major (Boas, 1886)
Diacria quadridentata (Blainville, 1821)
Diacria trispinosa (Blainville, 1821)
Hyalocylis striata (Rang, 1828)
Styliola subula (Quoy & Gaimard, 1827)
CYMBULIIDAE
Cymbulia parvidentata Pelseneer, 1888
PERACLIDIDAE
Peraclis apicifulva Meisenheimer, 1906
Peraclis moluccensis Tesch, 1903
Peraclis reticulata (d'Orbigny, 1836)
Peraclis valdiviae (Meisenheimer, 1905)
LIMACINIDAE
Limacina (*Embolus*) *inflata* (d'Orbigny, 1836)
Limacina (*Limacina*) *bulimoides* (d'Orbigny, 1836)
Limacina (*L.*) *helicina* (Phipps, 1774)
Limacina (*L.*) *lesueurii* (d'Orbigny, 1836)
Limacina (*L.*) *retroversa* (Fleming, 1823)
Limacina (*L.*) *trochiformis* (d'Orbigny, 1836)
Limacina (*Thilea*) *helicoides* Jeffreys, 1877

Order GYMNOSOMATA
CLIONIDAE
Thliptodon antarcticus Meisenheimer, 1906
Thliptodon diaphanus (Meisenheimer, 1903)
Thliptodon gegenbauri Boas, 1886
CLIOPSIDAE
Cliopsis krohni Troschel, 1854

HYDROMYLIDAE
Hydromyles globulosa (Rang, 1825)
NOTOBRANCHAEIDAE
Microdonta tetrabranchiata (Bonnevie, 1913)
Notobranchaea macdonaldi Pelseneer, 1886
PNEUMODERMATIDAE
Pneumoderma atlanticum pacificum (Dall, 1871)
Pneumodermopsis (*Crucibranchaea*) *macrochira* Meisenheimer, 1905
Pneumodermopsis (*Pneumodermopsis*) *paucidens* (Boas, 1886)
Schizobrachium polycotylum Meisenheimer, 1903
Spongiobranchea australis d'Orbigny, 1836
Spongiobranchea intermedia Pruvot-Fol, 1926

Order NOTASPIDEA
PLEUROBRANCHIDAE
Berthella medietas Burn, 1962
Berthella ornata (Cheeseman, 1878) E
Berthellina citrina (Rüppell & Leuckart, 1828)
Bathyberthella zelandiae Willan, 1983 E
Pleurobranchaea maculata (Quoy & Gaimard, 1832)
TYLODINIDAE
Anidolyta? sp. (M.223348) E
UMBRACULIDAE
Umbraculum umbraculum (Lightfoot, 1786)

Order NUDIBRANCHIA
ACTINOCYCLIDAE
Hallaxa gilva Miller, 1987 E
AEOLIDIIDAE
Aeolidiella drusilla Bergh, 1900
Anteaeolidiella indica (Bergh, 1888)
Baeolidia australis (Rudman, 1982)
Burnaia helicochorda (Miller, 1988)
Protaeolidiella juliae (Burn, 1966)
Spurilla faustina (Bergh, 1900)
ARMINIDAE
Armina aoteana Miller & Willan, 1986 E
Dermatobranchus pulcherrimus Miller & Willan, 1986
CHROMODORIDIDAE
Cadlina tasmanica Rudman, 1990
Cadlina willani Miller, 1980 E
Cadlinella ornatissima (Risbec, 1928)
Ceratosoma amoena (Cheeseman, 1886)
Chromodoris aureomarginata Cheeseman, 1881 E
Chromodoris rufomaculata Pease, 1871
Hypselodoris kaname Baba, 1994
DENDRODORIDIDAE
Dendrodoris citrina (Cheeseman, 1881) E
Dendrodoris denisoni (Angas, 1864)
Dendrodoris maugeana Burn, 1962
Dendrodoris nigra (Stimpson, 1855)
DISCODORIDIDAE
Alloiodoris lanuginata (Abraham, 1877) E
Atagema carinata (Quoy & Gaimard, 1832) E
Atagema molesta (Miller, 1989) E
Geitodoris sticta Miller, 1996 E
Halgerda willeyi Eliot, 1903
Hoplodoris nodulosa (Angas, 1864)
Jorunna pantherina (Angas, 1864)
Jorunna ramicola Miller, 1996 E
Paradoris leuca Miller, 1995 E
Rostanga muscula (Abraham, 1877) E
DORIDIDAE
Aphelodoris luctuosa (Cheeseman, 1882) E
Doriopsis granulosa (Pease, 1860)
Doris nanula (Bergh, 1904) E
Doris violacea (Bergh, 1904) E
Doris wellingtonensis Abraham, 1877
DOTIDAE
Doto pita Er. Marcus, 1955
Doto sp. cf. *bella* Baba, 1938
EMBLETONIIDAE
Embletonia gracile Risbec, 1928
EUBRANCHIDAE
Eubranchus agrius Er. Marcus, 1959
Eubranchus rubeolus Burn, 1964
FACELINIDAE
Babakina caprinsulensis (Miller, 1974) E
Favorinus tsuruganus Baba & Abe, 1964
<u>Jason</u> mirabilis Miller, 1974 E
Phidiana indica (Bergh, 1896)
Phidiana milleri Rudman, 1980 E
Phidiana pegasus Willan, 1988 E
Phyllodesmium magnum Rudman, 1991
Pteraeolidia ianthina (Angas, 1864)
FIONIDAE
Fiona pinnata (Eschscholtz, 1831)
FLABELLINIDAE
Flabellina albomarginata (Miller, 1971) E
Tularia bractea (Burn, 1962)
GLAUCIDAE
Glaucus atlanticus Forster, 1777
GONIODORIDIDAE
Goniodoris castanea Alder & Hancock, 1845 A
Goniodoris punctata Bergh, 1905 A
Hopkinsia plana (Baba, 1960) A
Okenia mija Burn, 1967
Okenia pellucida Burn, 1967
Trapania brunnea Rudman, 1987
Trapania rudmani Miller, 1981 E
HETERODORIDIDAE
Heterodoris antipodes Willan, 1981 E
ONCHIDORIDIDAE
Acanthodoris globosa Abraham, 1877 E
Acanthodoris mollicella Abraham, 1877 E
Acanthodoris pallida Bergh, 1905 E
PHYLLIDIIDAE
Phyllidiella pustulosa (Cuvier, 1804)
PHYLLIROIDAE
Phylliroe bucephala Péron & Lesueur, 1810
POLYCERIDAE
<u>Heteroplocamus</u> pacificus (Bergh, 1884) E
Kaloplocamus ramosus (Cantraine, 1835)
Plocamopherus imperialis Angas, 1864
Polycera fujitai (Baba, 1937)
Polycera hedgpethi Er. Marcus, 1964 A
Polycera melanosticta Miller, 1996 E
Roboastra luteolineata (Baba, 1936)
Tambja morosa (Bergh, 1877)
Tambja verconis (Basedow & Hedley, 1905)
Thecacera pennigera (Montagu, 1815) A
PSEUDOVERMIDAE
Pseudovermis hancocki Challis, 1969 E
TERGIPEDIDAE
Phestilla melanobrachia Bergh, 1874
Trinchesia alpha (Baba & Hamatani)
Trinchesia beta (Baba & Abe, 1964) A
Trinchesia reflexa (Miller, 1977)E
Trinchesia scintillans (Miller, 1977) E
Trinchesia zelandica Odhner, 1924 E
TRITONIIDAE
Tritonia flemingi (Powell, 1937) E
Tritonia incerta Bergh, 1904 E
VAYSSIEREIDAE
Okadaia cinnabarea (Ralph, 1944) E
ZEPHYRINIDAE
Caldukia albolineata Miller, 1970 E
Caldukia rubiginosa Miller, 1970 E
<u>Galeojanolus</u> ionnae Miller, 1971 E
Janolus eximius Miller & Willan, 1986 E
Janolus hyalinus (Alder & Hancock, 1854)
Janolus ignis Miller & Willan, 1986 E
Janolus mokohinau Miller & Willan, 1986 E
Janolus novozealandicus (Eliot, 1907) E

Subclass PULMONATA
Order SYSTELLOMATOPHORA
ONCHIDIIDAE
Onchidella campbelli Filhol, 1880 E M
Onchidella flavescens Wissel, 1904 E M
Onchidella nigricans (Quoy & Gaimard, 1832) E M
SMEAGOLIDAE
Smeagol climoi Tillier & Ponder, 1992 E M
Smeagol manneringi Climo, 1980 E M

Order BASOMMATOPHORA
AMPHIBOLIDAE
<u>Amphibola</u> crenata (Gmelin, 1791) E M
ANCYLIDAE
Gundlachia lucasi Suter, 1905 E F
Gundlachia neozelanica Suter, 1905 E F
ELLOBIIDAE
Leuconopsis obsoleta (Hutton, 1878) E M
Leuconopsis pacifica Oliver, 1915 E M
Marinula filholi Hutton, 1878 E M
Marinula striata Odhner, 1924 E M
Melampus albus Gassies, 1865 M
Melampus luteus Quoy & Gaimard, 1832 M
Microtralia insularis (Powell, 1933) E M
Myosotella myosotis (Draparnaud, 1801) A M
Ophicardelus costellaris (H. & A. Adams, 1854) E M
LATIIDAE E
<u>Latia</u> climoi Starobogatov, 1986 E F
Latia lateralis (Gould, 1852) E F
Latia neritoides Gray, 1850 E F
LYMNAEIDAE
Austropeplea tomentosa hamiltoni (Dell, 1956) E F
Austropeplea t. tomentosa (Pfeiffer, 1855) F
Galba truncatula (Müller, 1774) A F
Lymnaea stagnalis (Linnaeus, 1758) A F
Pseudosuccinea columella (Say, 1817) A F
Radix auricularia (Linnaeus, 1758) A F
PHYSIDAE A
Physa acuta Draparnaud, 1805 A F
PLANORBIDAE
Glyptophysa oconnori (Cumber, 1941) E F
Glyptophysa variabilis (Gray, 1843) E F
Gyraulus corinna (Gray, 1850) E F
Gyraulus kahuica (Finlay & Laws, 1931) E F
Planorbarius corneus (Linnaeus, 1758) A F
Segmentina complanata (Linnaeus, 1758) A F
SIPHONARIIDAE
<u>Benhamina</u> obliquata (G. B. Sowerby I, 1825) E M
Kerguelenella innominata (Iredale, 1915) E M
Kerguelenella stewartiana (Powell, 1939) E M
Siphonaria australis Quoy & Gaimard, 1833 E M
Siphonaria propria Jenkins, 1983 E M
Siphonaria raoulensis Oliver, 1915 E M
Williamia radiata nutata (Hedley, 1908) M
TRIMUSCULIDAE
Trimusculus conicus (Angas, 1867) M

Order STYLOMMATOPHORA
ACHATINELLIDAE
Elasmias apertum (Pease, 1864)
Tornatellides subperforatus kermadecensis Pilsbry & Cooke, 1915 E
Tornatellides s. subperforatus (Suter, 1909) E
Tornatellinops novoseelandica (Pfeiffer, 1853) E
Tornatellinops iredalei (Pilsbry & Cooke, 1915) E
Tubuaia raoulensis (Pilsbry & Cooke, 1915) E
AGRIOLIMACIDAE A
Deroceras (*Agriolimax*) *reticulatum* (Müller, 1774) A
Deroceras (*Deroceras*) *laeve* (Müller, 1774) A
Deroceras (*D.*) *panormitanum* (Lessona & Pollonera, 1882) A
ARIONIDAE A
Arion distinctus Mabille, 1868 A
Arion hortensis Férussac, 1819 A
Arion intermedius Normand, 1852 A
ATHORACOPHORIDAE
<u>Athoracophorus</u> bitentaculatus (Quoy & Gaimard, 1832) E
Athoracophorus maculosus Burton, 1963 E
Athoracophorus suteri Burton, 1963 E
Athoracophorus sp. 1 (M.151427) E

Athoracophorus sp. 2 (M.151428) E
Athoracophorus sp. 3 (M.151429) E
Athoracophorus sp. 4 (M.151430) E
Athoracophorus sp. 5 (M.151431) E
Athoracophorus sp. 6 (M.151432) E
Athoracophorus sp. 7 (M.151433) E
Athoracophorus sp. 8 (M.151434) E
Athoracophorus sp. 9 (M.151435) E
Athoracophorus sp. 10 (M.151436) E
Athrocophorus sp. 11 (M. 158288) E
Palliopodex verrucosus (Simroth, 1889) E
Pseudaneitea aspera Burton, 1963 E
Pseudaneitea campbellensis Burton, 1963 E
Pseudaneitea delli (Burton, 1963) E
Pseudaneitea dendyi (Suter, 1897) E
Pseudaneitea gigantea (Suter, 1909) E
Pseudaneitea grana Burton, 1983 E
Pseudaneitea gravisulca Burton, 1963 E
Pseudaneitea huttoni (Suter, 1909) E
Pseudaneitea johnsi Burton, 1963 E
Pseudaneitea leva Burton, 1977 E
Pseudaneitea maculata Burton, 1963 E
Pseudaneitea marmorata (Simroth, 1889) E
Pseudaneitea multistriata Burton, 1963 E
Pseudaneitea nodosa Burton, 1977 E
Pseudaneitea pallida Climo, 1973 E
Pseudaneitea papillata (Hutton, 1879) E
Pseudaneitea powelli Burton, 1963 E
Pseudaneitea pseudophyllum (Burton, 1963) E
Pseudaneitea ramsayi Climo, 1973 E
Pseudaneitea schauinslandi (Plate, 1897) E
Pseudaneitea simrothi (Suter, 1896) E
Pseudaneitea sorenseni Powell, 1955 E
Pseudaneitea sp. 1 (M.151420) E
Pseudaneitea sp. 2 (M.151421) E
Pseudaneitea sp. 3 (M.151422) E
Pseudaneitea sp. 4 (M.151423) E
Pseudaneitea sp. 5 (M.151424) E
Pseudaneitea sp. 6 (M.151425) E
Pseudaneitea sp. 7 (M.151426) E
Pseudaneitea sp. 8 (M.151399) E
Pseudaneitea sp. 9 (M.151419) E
Pseudaneitea sp. 10 (M.15213) E
BULIMULIDAE
Placostylus (*Basileostylus*) *bollonsi arbutus* Powell, 1948 E
Placostylus (*B.*) *b. bollonsi* Suter, 1908 E
Placostylus (*B.*) *b. caperatus* Powell, 1948 E
Placostylus (*Maoristylus*) *ambagiosus ambagiosus* Suter, 1906 E
Placostylus (*M.*) *a. annectens* Powell, 1938 E
Placostylus (*M.*) *a. consobrinus* Powell, 1938 E
Placostylus (*M.*) *a. gardneri* Powell, 1951 E
Placostylus (*M.*) *a. hinemoa* Powell, 1947 E
Placostylus (*M.*) *a. keenorum* Powell, 1947 E
Placostylus (*M.*) *a. lesleyae* Powell, 1947 E
Placostylus (*M.*) *a. michiei* Powell, 1951 E
Placostylus (*M.*) *a. pandora* Powell, 1951 E
Placostylus (*M.*) *a. paraspiritus* Powell, 1951 E
Placostylus (*M.*) *a. priscus* Powell, 1938 E
Placostylus (*M.*) *a. spiritus* Powell, 1947 E
Placostylus (*M.*) *a. watti* Powell, 1947 E
Placostylus (*M.*) *a. whareana* Powell, 1951 E
Placostylus (*M.*) *a. worthyi* Powell, 1947 E
Placostylus (*M.*) *hongii* Lesson, 1830 E
CHAROPIDAE
Aeschrodomus stipulatus (Reeve, 1852) E
Allodiscus absidatus Marshall & Barker, 2008 E
Allodiscus adriana (Hutton, 1883) E
Allodiscus austrodimorphus Dell, 1955 E
Allodiscus basiliratus Gardner, 1967 E
Allodiscus brooki Marshall & Barker, 2008 E
Allodiscus cassandra (Hutton, 1883) E
Allodiscus chion (Sykes, 1896) E
Allodiscus climoi Marshall & Barker, 2008 E
Allodiscus cooperi (Suter, 1907) E
Allodiscus cryptobidens (Suter, 1891) E
Allodiscus dimorphus (Reeve, 1852) E
Allodiscus ergodes Marshall & Barker, 2008 E
Allodiscus erua Marshall & Barker, 2008 E
Allodiscus fallax Powell, 1952 E
Allodiscus fectoloides Dell, 1955 E
Allodiscus godeti (Suter, 1891) E
Allodiscus goulstonei Marshall & Barker, 2008 E
Allodiscus granum (Pfeiffer, 1857) E
Allodiscus laganus Marshall & Barker, 2008 E
Allodiscus morioria Marshall & Barker, 2008 E
Allodiscus occidaneus Marshall & Barker, 2008 E
Allodiscus patulus Marshall & Barker, 2008 E
Allodiscus spiritus Powell, 1952 E
Allodiscus stewartensis David, 1934 E
Allodiscus tataensis (Climo, 1971) E
Allodiscus tawhiti Marshall & Barker, 2008 E
Allodiscus tessellatus Powell, 1941 E
Allodiscus tullia (Gray, 1850) E
Allodiscus turbotti Powell, 1948 E
Allodiscus undulatus Marshall & Barker, 2008 E
Allodiscus urquharti Suter, 1894 E
Allodiscus venulatus (Pfeiffer, 1857) E
Allodiscus wairoaensis Suter, 1894 E
Allodiscus waitomo Marshall & Barker, 2008 E
Alsolemia cresswelli (Climo, 1978) E
Alsolemia monoplax (Suter, 1913) E
Canallodiscus karamea Marshall & Barker, 2008 E
Cavellia anguicula (Reeve, 1852) E
Cavellia biconcava (Pfeiffer, 1853) E
Cavellia brouni (Suter, 1891) E
Cavellia buccinella (Reeve, 1852) E
Cavellia colensoi (Suter, 1890) E
Cavellia delli (Climo, 1969) E
Cavellia irregularis (Suter, 1890) E
Cavellia marstoni (Climo, 1969) E
Cavellia marsupialis (Powell, 1941) E
Cavellia mutabilis (Suter, 1891) E
Cavellia reeftonensis (Suter, 1892) E
Cavellia roseveari (Suter, 1896) E
Cavellia serpentinula (Suter, 1891) E
Cavellia sterkiana (Suter, 1891) E
Cavellia subinfecta (Suter, 1899) E
Cavellia sylvia (Hutton, 1883) E
Cavellia tapirina (Hutton, 1882) E
Cavellioropa cookiana (Dell, 1952) E
Cavellioropa huttoni (Suter, 1890) E
Cavellioropa microrhina (Suter, 1909) E
Cavellioropa moussoni (Suter, 1890) E
Cavellioropa subantialba (Suter, 1909) E
Charopa bianca (Hutton, 1883) E
Charopa coma (Gray, 1843) E
Charopa longstaffae Suter, 1913 E
Charopa macgillivrayana Iredale, 1913 E
Charopa montivaga Suter, 1894 E
Charopa parva (Suter, 1909) E
Charopa pilsbryi (Suter, 1894) E
Charopa pseudocoma Suter, 1894 E
Chaureopa depressa Climo, 1985 E
Chaureopa hazelwoodi Climo, 1985 E
Chaureopa microumbilicata Climo, 1985 E
Chaureopa mossi (R. Murdoch, 1897) E
Chaureopa planulata (Hutton, 1883) E
Chaureopa roscoei Climo, 1985 E
Chaureopa rustica (Suter, 1894) E
Chaureopa subdepressa Climo, 1985 E
Chaureopa titirangiensis (Suter, 1896) E
Climocella akarana Goulstone, 1996 E
Climocella barkeri Goulstone, 1997 E
Climocella cavelliaformis Goulstone, 1996 E
Climocella haurakiensis Goulstone, 1996 E
Climocella hukutaia Goulstone & Mayhill, 1998 E
Climocella intermedia Goulstone, 1997 E
Climocella isolata Goulstone, 1997 E
Climocella kaitaka Goulstone, 1996 E
Climocella kenepuruensis (Suter, 1909) E
Climocella maculata (Suter, 1890) E
Climocella manawatawhia (Powell, 1935) E
Climocella mayhillae Goulstone, 1997 E
Climocella prestoni (Sykes, 1895) E
Climocella puhore Goulstone & Mayhill, 1998 E
Climocella pukanui Goulstone & Brook, 1999 E
Climocella rata Goulstone, 1996 E
Climocella reinga Goulstone, 1997 E
Climocella runga Goulstone, 1997 E
Climocella segregata (Suter, 1894) E
Climocella triticum Goulstone & Mayhill, 1998 E
Climocella waenga Goulstone, 1997 E
Costallodiscus kaikoura Marshall & Barker, 2008 E
Costallodiscus parrishi Marshall & Barker, 2008 E
Costallodiscus pegasus Marshall & Barker, 2008 E
Damonita geminoropiformis Climo, 1981 E
Discocharopa aperta (Möllendorff, 1888)
Fectola charopiformis (Gardner, 1967) E
Fectola infecta (Reeve, 1852) E
Fectola jamiesoni Climo, 1978 E
Fectola jessica (Hutton, 1883) E
Fectola melchior Goulstone & Brook, 1999 E
Fectola mira (Webster, 1908) E
Fectola paytoni (Climo, 1970) E
Fectola trilamellata Climo, 1978 E
Fectola unidentata Climo, 1978 E
Fectola varicosa (Pfeiffer, 1853) E
Flammocharopa accelerata (Climo, 1970) E
Flammocharopa costulata (Hutton, 1882) E
Flammocharopa montana (Suter, 1891) E
Flammoconcha compressivoluta (Reeve, 1852) E
Flammoconcha cumberi (Powell, 1941) E
Flammoconcha stewartensis Dell, 1952 E
Flammulina albozonata Gardner, 1969 E
Flammulina arboricola (Iredale, 1913) E
Flammulina chiron (Gray, 1850) E
Flammulina cornea (Hutton, 1882) E
Flammulina crebriflammis (Pfeiffer, 1853) E
Flammulina feredayi feredayi (Suter, 1891) E
Flammulina f. glacialis (Suter, 1891) E
Flammulina jacquenetta (Hutton, 1883) E
Flammulina lateaperta Dell, 1955 E
Flammulina olivacea (Suter, 1892) E
Flammulina perdita (Hutton, 1883) E
Flammulina tepakiensis Gardner, 1977 E
Flammulina zebra (Le Guillou, 1842) E
Geminoropa vortex (R. Murdoch, 1897) E
Gerontia pantherina Hutton, 1882 E
Hirsutodiscus rakiura Climo, 1971 E
Huonodon aorangi (Suter, 1890) E
Huonodon gadus (Dell, 1954) E
Huonodon hectori (Suter, 1890) E
Huonodon microundulatum (Suter, 1890) E
Huonodon pseudoleoidon (Suter, 1890) E
Kermodon royanum (Iredale, 1913) E
Loisthodon benhami (Suter, 1909) E
Mitodon suteri (R. Murdoch & Finlay, 1923) E
Mitodon wairarapa (Suter, 1890) E
Mocella elliottae (Climo, 1969) E
Mocella eta (Pfeiffer, 1853) E
Mocella rakiura (Powell, 1939) E
Mocella spelaeus (Climo, 1971) E
Montaropa macsweeneyi Climo, 1984 E
Otoconcha (Maoriconcha) fiordlandica (Dell, 1952) E
Otoconcha (M.) oconnori (Powell, 1941) E
Otoconcha (M.) roscoei Climo, 1971 E
Otoconcha (Otoconcha) dimidiata (Pfeiffer, 1853) E
Paracharopa chrysaugeia (Webster, 1904) E
Paracharopa delicatula Climo, 1983 E
Paracharopa fuscosa (Suter, 1894) E
Paracharopa goulstonei Climo, 1983 E
Paracharopa rimu Climo, 1985 E
Phacussa elliottae (Gardner, 1968) E
Phacussa fulminata costata Suter, 1899 E
Phacussa f. fulminata (Hutton, 1882) E
Phacussa helmsi (Hutton, 1882) E

Phacussa henryi (Suter, 1899) E
Phacussa hypopolia (Pfeiffer, 1853) E
Phacussa oconnori (Powell, 1941) E
Phacussa prousei (Powell, 1952) E
Phenacharopa novoseelandica (Pfeiffer, 1853) E
Phenacharopa pseudanguicula (Iredale, 1913) E
Phenacohelix aurea Goulstone, 2001 E
Phenacohelix brooki Goulstone, 2001 E
Phenacohelix giveni Cumber, 1961 E
Phenacohelix hakarimata Goulstone, 2001 E
Phenacohelix lucetta (Hutton, 1884) E
Phenacohelix mahlfeldae Goulstone, 2001 E
Phenacohelix perplexa (R. Murdoch, 1897) E
Phenacohelix pilula (Reeve, 1852) E
Phenacohelix ponsonbyi (Suter, 1897) E
Phenacohelix tholoides (Suter, 1907) E
Phenacohelix ziczag (Gould, 1848) E
Protoflammulina johnsi Climo, 1971 E
Pseudallodiscus ponderi Climo, 1971 E
Pseudegestula brookesi (Dell, 1954) E
Pseudegestula transenna (Suter, 1904) E
Pseudegestula worleyi (Powell, 1928) E
Ptychodon blacki Dell, 1955 E
Ptychodon leiodon (Hutton, 1882) E
Ptychodon protoleoidon Climo, 1978 E
Ptychodon roscoei Climo, 1978 E
Pulchridomus barbatulus (Reeve, 1852) E
Rotadiscus insularis (Climo, 1978) E
Rotadiscus jamiesoni (Climo, 1978) E
Rotadiscus protoinsularis Climo, 1989 E
Rotadiscus smithae (Dell, 1954) E
Rotadiscus takakaensis (Climo, 1981) E
Serpho kivi (Gray, 1843) E
Serpho matthewsi Suter, 1909 E
Suteria ide (Gray, 1850) E
Suteria raricostata Cumber, 1962 E
Ranfurlya constanceae Suter, 1903 E
Thalassohelix antipoda (Hombron & Jacquinot, 1841) E
Thalassohelix chathamensis (Suter, 1909) E
Thalassohelix igniflua (Reeve, 1852) E
Thalassohelix laingi (Suter, 1905) E
Thalassohelix propinqua (Hutton, 1882) E
Thalassohelix pygmaea Suter, 1913 E
Thalassohelix zelandiae (Gray, 1843) E
Therasia decidua (Pfeiffer, 1857) E
Therasia ophelia (Pfeiffer, 1855) E
*Therasia thais*a Hutton, 1883 E
Therasia traversi (E.A. Smith, 1884) E
Therasia valeria Hutton, 1883 E
Therasiella celinde (Gray, 1850) E
Therasiella elevata Cumber, 1967 E
Therasiella neozelanica Cumber, 1967 E
Therasiella pectinifera (Powell, 1935) E
Therasiella serrata Cumber, 1967 E
Therasiella tamora (Hutton, 1883) E
Thermia cressida (Hutton, 1883) E
Thermia subincarnata (Suter, 1894) E
Thermia virescens (Suter, 1899) E
Zelandiscus elevata (Climo, 1978) E
Zelandiscus worthyi Climo, 1989 E
Charopidae sp. 1 (M.79608) E
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Charopidae sp. 164 (M.88458) E
Charopidae sp. 166 (M.79360) E
Charopidae sp. 167 (M.99790) E
CIONELLIDAE
Cochlicopa lubrica (Müller, 1774) A
EUCONULIDAE
Coneuplecta calculosa (Gould, 1852) A
FERUSSACIIDAE
Cecilioides (*Cecilioides*) *acicula* (Müller, 1774) A
HELICARIONIDAE
Fanulum expositum (Mousson, 1873) E
Kermarion kermadecensis (E.A. Smith, 1873) E
Kieconcha kermadeci (Pfeiffer, 1856) E
HELICIDAE A
Cornu aspersum (Müller, 1774) A
HELICODISCIDAE
Egestula bicolor (Climo, 1973) E
Egestula egesta (Gray, 1850) E
Egestula gaza (Suter, 1909) E
Egestula microgaza (Climo, 1973) E
Egestula pandora Gardner, 1967 E

Helicodiscus (*Hebetodiscus*) *singleyanus* (Pilsbry, 1889) A
HYGROMIIDAE A
Candidula intersecta (Poiret, 1801) A
Prietocella barbara (Linnaeus, 1758) A
LIMACIDAE A
Lehmannia nyctelia (Bourguignat, 1861) A
Lehmannia valentiana (Férussac, 1822) A
Limacus flavus (Linnaeus, 1758) A
Limax (*Limax*) *maximus* Linnaeus, 1758 A
MILACIDAE A
Milax gagates (Draparnaud, 1801) A
Tandonia budapestensis (Hazay, 1881) A
Tandonia sowerbyi (Férussac *in* Férussac & Deshayes, 1823) A
PUNCTIDAE
Kokikora angulata Climo & Goulstone, 1995 E
Kokikora mimiwhangata Climo & Goulstone, 1995 E
Laoma ciliata Suter, 1894 E
Laoma labyrinthica Powell, 1948 E
Laoma leimonias (Gray, 1850) E
Laoma mariae aupouria Cumber, 1967 E
Laoma m. mariae (Gray, 1843) E
Laoma marina (Hutton, 1883) E
Laoma minuta Climo, 1971 E
Laomarex minuta (Gardner, 1967) E
Laomarex regia (Gardner, 1968) E
Laomarex sericea Powell, 1948 E
Obanella allanae Dell, 1952 E
Obanella rimutaka Dell, 1952 E
Obanella spectabilis (Powell, 1928) E
Paralaoma allochroida (Suter, 1890) E
Paralaoma ambigua Iredale, 1913 E
Paralaoma buddlei Powell, 1951 E
Paralaoma lateumbilicata (Suter, 1890) E
Paralaoma manawatawhia Goulstone & Brook, 1999 E
Paralaoma miserabilis (Iredale, 1913) E
Paralaoma pagoda Climo, 1973 E
Paralaoma pumila (Hutton, 1882) E
Paralaoma raki Goulstone & Brook, 1999 E
Paralaoma raricostata (Suter, 1890) E
Paralaoma regia Powell, 1948 E
Paralaoma sericata (Suter, 1890) E
Paralaoma serratocostata Webster, 1906 E
Paralaoma servilis (Shuttleworth, 1852)
Paralaoma thomsoni (Suter, 1917) E
Paralaoma turbotti Powell, 1948 E
Pasmaditta jungermanniae (Petterd, 1879)
Phrixgnathus alfredi (Suter, 1909) E
Phrixgnathus ariel Hutton, 1883 E
Phrixgnathus blacki Powell, 1951 E
Phrixgnathus brunneus Climo & Goulstone, 1993 E
Phrixgnathus celia Hutton, 1883 E
Phrixgnathus cheesemani Suter, 1894 E
Phrixgnathus clathratus (Gardner, 1972) E
Phrixgnathus cognatus (Suter, 1909) E
Phrixgnathus compressus (Suter, 1909) E
Phrixgnathus conella (Pfeiffer, 1862) E
Phrixgnathus douglasi Climo & Goulstone, 1993 E
Phrixgnathus erigone (Gray, 1850) E
Phrixgnathus fatuus (Pfeiffer, 1857) E
Phrixgnathus filicostus (Suter, 1907) E
Phrixgnathus flemingi flemingi Dell, 1950 E
Phrixgnathus f. stewartensis Dell, 1954 E
Phrixgnathus forsteri Dell, 1952 E
Phrixgnathus fulguratus (Suter, 1909) E
Phrixgnathus glabriusculus (Pfeiffer, 1853) E
Phrixgnathus gracilis (Suter, 1913) E
Phrixgnathus haasti Hutton, 1883 E
Phrixgnathus hamiltoni (Suter, 1896) E
Phrixgnathus laqueus Dell, 1950 E
Phrixgnathus larochei (Powell, 1928) E
Phrixgnathus levis (Suter, 1913) E
Phrixgnathus liratulus (Suter, 1909) E
Phrixgnathus lucidus (Suter, 1896) E
Phrixgnathus marginatus Hutton, 1882 E
Phrixgnathus microreticulatus (Suter, 1890) E
Phrixgnathus moellendorffi (Suter, 1896) E
Phrixgnathus murdochi Suter, 1894 E
Phrixgnathus paralaomiformis (Climo, 1971) E
Phrixgnathus phrynia Hutton, 1883 E
Phrixgnathus pirongiaensis (Suter, 1894) E
Phrixgnathus poecilostictus (Pfeiffer, 1853) E
Phrixgnathus powelli (Climo, 1971) E
Phrixgnathus rakiura rakiura Dell, 1954 E
Phrixgnathus r. solanderi Dell, 1954 E
Phrixgnathus ruforadiatus (Gardner, 1972) E
Phrixgnathus sciadium (Pfeiffer, 1857) E
Phrixgnathus sorenseni (Powell, 1955) E
Phrixgnathus spiralis (Suter, 1896) E
Phrixgnathus subariel Powell, 1948 E
Phrixgnathus sublucidus (Suter, 1896) E
Phrixgnathus titania Hutton, 1883 E
Phrixgnathus trailli (Suter, 1909) E
Phrixgnathus transitans Suter, 1892 E
Phrixgnathus viridulus caswelli Dell, 1955 E
Phrixgnathus v. viridulus (Suter, 1909) E
Phrixgnathus waipoua (Gardner, 1969) E
Taguahelix antipodensis (Powell, 1955) E
Taguahelix campbellica (Filhol, 1880) E
Taguahelix crispata Climo & Goulstone, 1993 E
Taguahelix delicatula (Powell, 1955) E
Taguahelix elaiodes (Webster, 1904) E
Taguahelix francesci (Webster, 1904) E
Taguahelix hirsuta (Powell, 1955) E
Taguahelix subantarctica (Suter, 1909) E
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Punctidae sp. 86 (M.70256) E
Punctidae sp. 87 (M.83482) E
Punctidae sp. 88 (M.83489) E
Punctidae sp. 89 (M.106729) E
Punctidae sp. 90 (M.106034) E
Punctidae sp. 91 (M.83481) E
Punctidae sp. 92 (M.123238) E
Punctidae sp. 93 (M.86482) E
Punctidae sp. 94 (M.32092) E
Punctidae sp. 95 (M.99823) E
Punctidae sp. 96 (M.80251) E
Punctidae sp. 97 (M.86586) E
Punctidae sp. 98 (M.61626) E
Punctidae sp. 99 (M.83503) E
Punctidae sp. 100 (M.84972) E
Punctidae sp. 101 (M.83477) E
Punctidae sp. 102 (M.85773) E
Punctidae sp. 103 (M.25561) E
Punctidae sp. 104 (M.54260) E
Punctidae sp. 105 (M.62094) E
Punctidae sp. 106 (M.62100) E
Punctidae sp. 107 (M.62109) E
Punctidae sp. 108 (M.62099) E
Punctidae sp. 109 (M.127337) E
Punctidae sp. 110 (M.88210) E
Punctidae sp. 111 (M.115948) E
Punctidae sp. 112 (M.122338) E
Punctidae sp. 113 (M.88209) E
Punctidae sp. 114 (M.75378) E
Punctidae sp. 115 (M.25238) E
Punctidae sp. 116 (M.55611) E
Punctidae sp. 117 (M.77714) E
Punctidae sp. 118 (M.4095) E
Punctidae sp. 119 (M.14534) E
Punctidae sp. 120 (M.98899) E
Punctidae sp. 121 (M.57797) E

Punctidae sp. 122 (M.121796) E
Punctidae sp. 123 (M.104232) E
Punctidae sp. 124 (M.105749) E
Punctidae sp. 125 (M.106084) E
Punctidae sp. 126 (M.105949) E
Punctidae sp. 127 (M.62085) E
Punctidae sp. 128 (M.88158) E
Punctidae sp. 129 (M.88157) E
Punctidae sp. 130 (M.62132) E
Punctidae sp. 131 (M.37923) E
Punctidae sp. 132 (M.83422) E
Punctidae sp. 133 (M.62141) E
Punctidae sp. 134 (M.30901) E
Punctidae sp. 135 (M.109635) E
Punctidae sp. 136 (M.47328) E
Punctidae sp. 137 (M.99833) E
Punctidae sp. 138 (M.56549) E
Punctidae sp. 139 (M.125809) E
Punctidae sp. 140 (M.29067) E
Punctidae sp. 141 (M.61794) E
Punctidae sp. 142 (M.83411) E
Punctidae sp. 143 (M.68770) E
Punctidae sp. 144 (M.88107) E
Punctidae sp. 145 (M.88110) E
Punctidae sp. 146 (M.88148) E
Punctidae sp. 147 (M.151443) E
Punctidae sp. 148 (M.22290) E
Punctidae sp. 149 (M.98347) E
Punctidae sp. 150 (M.82946) E
Punctidae sp. 151 (M.38683) E
Punctidae sp. 152 (M.78786) E
Punctidae sp. 153 (M.87994) E
Punctidae sp. 154 (M.88208) E
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Punctidae sp. 156 (M.79798) E
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Punctidae sp. 160 (M.151446) E
Punctidae sp. 161 (M.37698) E
Punctidae sp. 162 (M.87995) E
Punctidae sp. 163 (M.151447) E
Punctidae sp. 164 (M.55868) E
Punctidae sp. 165 (M.88206) E
Punctidae sp. 166 (M.151450) E
Punctidae sp. 167 (M.88205) E
Punctidae sp. 168 (M.151448) E
Punctidae sp. 169 (M.38015) E
Punctidae sp. 170 (M.99071) E
Punctidae sp. 171 (M.83431) E
Punctidae sp. 172 (M.83490) E
Punctidae sp. 173 (M.61625) E
Punctidae sp. 174 (M.84398) E
Punctidae sp. 175 (M.104045) E
Punctidae sp. 176 (M.30449) E
Punctidae sp. 177 (M.99639) E
Punctidae sp. 178 (M.84473) E
Punctidae sp. 179 (M.30373) E
Punctidae sp. 180 (M.77762) E
Punctidae sp. 181 (M.77324) E
Punctidae sp. 182 (M.89837) E
Punctidae sp. 183 (M.57616) E
Punctidae sp. 184 (M.105776) E
Punctidae sp. 185 (M.83539) E
Punctidae sp. 186 (M.57571) E
Punctidae sp. 187 (M.69540) E
Punctidae sp. 188 (M.78582) E
Punctidae sp. 189 (M.31873) E
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Punctidae sp. 196 (M.103034) E
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Punctidae sp. 198 (M.84406) E
Punctidae sp. 199 (M.92849) E
Punctidae sp. 200 (M.87558) E
Punctidae sp. 201 (M.97024) E
Punctidae sp. 202 (M.92807) E
Punctidae sp. 203 (M.109730) E
Punctidae sp. 204 (M.129156) E
Punctidae sp. 205 (M.55905) E
Punctidae sp. 206 (M.57248) E
Punctidae sp. 207 (M.61578) E
Punctidae sp. 208 (M.84447) E
Punctidae sp. 209 (M.151452) E
Punctidae sp. 210 (M.93024) E
Punctidae sp. 211 (M.83400) E
Punctidae sp. 212 (M.99660) E
Punctidae sp. 213 (M.62095) E
Punctidae sp. 214 (M.85552) E
Punctidae sp. 215 (M.154822) E
Punctidae sp. 216 (M.47067) E
Punctidae sp. 217 (M.79488) E
Punctidae sp. 218 (M.38666) E
Punctidae sp. 219 (M.61568) E
Punctidae sp. 220 (M.84936) E
Punctidae sp. 221 (M.25117) E
Punctidae sp. 222 (AK155577) E
Punctidae sp. 223 (M.151458) E
Punctidae sp. 224 (AK96422) E
Punctidae sp. 225 (M.98351) E
Punctidae sp. 226 (M.154908) E
Punctidae sp. 227 (M.84435) E
Punctidae sp. 228 (M.88222) E
Punctidae sp. 229 (M.79639) E
Punctidae sp. 230 (M.84467) E
Punctidae sp. 231 (M.79385) E
Punctidae sp. 232 (M.88026) E
Punctidae sp. 233 (M.77777) E
Punctidae sp. 234 (M.103559) E
Punctidae sp. 235 (M.126713) E
Punctidae sp. 236 (M.105178) E
Punctidae sp. 237 (M.79272) E
Punctidae sp. 238 (M.127773) E
Punctidae sp. 239 (M.106667) E
Punctidae sp. 240 (M.84471) E
Punctidae sp. 241 (M.82153) E
Punctidae sp. 242 (M.83495) E
Punctidae sp. 243 (M.61602) E
Punctidae sp. 244 (M.75477) E
Punctidae sp. 245 (M.89779) E
Punctidae sp. 246 (M.37005) E
Punctidae sp. 247 (M.25419) E
Punctidae sp. 248 (M.107891) E
Punctidae sp. 249 (M.126644) E
Punctidae sp. 250 (M.55454) E
Punctidae sp. 251 (M.116650) E
Punctidae sp. 252 (M.96782) E
Punctidae sp. 253 (M.69812) E
Punctidae sp. 254 (M.61752) E
Punctidae sp. 255 (M.63384) E
Punctidae sp. 256 (M.38192) E
Punctidae sp. 257 (M.89799) E
Punctidae sp. 258 (M.88136) E
Punctidae sp. 259 (M.126644) E
PUPILLIDAE
Lauria cylindracea (da Costa, 1778) A
Pronesopupa senex (Iredale, 1913) E
RHYTIDIDAE
<u>*Amborhytida*</u> *dunniae dunniae* (Gray, 1840) E
Amborhytida d. forsythi (Powell, 1952) E
Amborhytida pycrofti (Powell, 1932) E
Amborhytida tarangaensis (Powell, 1930) E
Amborhytida duplicata (Suter, 1904) E
Amborhytida sp. (M.151457) E
<u>*Delos*</u> *coresia* (Gray, 1850) E
Delos jeffreysiana (Pfeiffer, 1853) E
Delos regia Climo, 1973 E
Delos striata Climo, 1973 E
Delos sp. 1 (M.29346) E
Delos sp. 2 (M.38250) E
Delos sp. 3 (M.38219) E
Delos sp. 4 (M.154820) E
Delos sp. 5 (M.55818) E
Delos sp. 6 (M.154818) E
Delos sp. 7 (M.57306) E
Delos sp. 8 (M.154819) E
Delos sp. 9 (M.154821) E
Delos sp. 10 (M.85643) E
Delos sp. 11 (M.83166) E
Delos sp. 12 (M.154823) E
Delos sp. 13 (M.29345) E
<u>*Delouagapia*</u> *cordelia* (Hutton, 1883) E
Delouagapia tasmani Goulstone & Brook, 1999 E
<u>*Paryphanta*</u> *busbyi busbyi* (Gray, 1850) E
Paryphanta b. watti Powell, 1946 E
<u>*Powelliphanta*</u> *augusta* Walker, Trewick & Barker, 2008
Powelliphanta gilliesi (E.A. Smith, 1880) E
Powelliphanta hochstetteri fiordlandica (Climo, 1971) E
Powelliphanta h. hochstetteri (Pfeiffer, 1862) E
Powelliphanta h. lignaria (Hutton, 1888) E
Powelliphanta h. rossiana (Powell, 1930) E
Powelliphanta h. superba (Powell, 1930) E
Prolesophanta sp. aff. *dyeri* (Petterd, 1879) E
<u>*Rhytida*</u> *australis* Hutton, 1882 E
Rhytida citrina Hutton, 1882 E
Rhytida greenwoodi greenwoodi (Gray, 1850) E
Rhytida g. webbi Powell, 1949 E
Rhytida meesoni meesoni Suter, 1891 E
Rhytida m. perampla Powell, 1946 E
Rhytida oconnori Powell, 1946 E
Rhytida otagoensis Powell, 1930 E
Rhytida patula Hutton, 1882 E
Rhytida stephenensis Powell, 1930 E
<u>*Wainuia*</u> *clarki* (Powell, 1936) E
Wainuia edwardi (Suter, 1899) E
Wainuia nasuta Powell, 1946 E
Wainuia urnula (Pfeiffer, 1855) E
<u>*Rhytidarex*</u> *buddlei* (Powell, 1948) E
Rhytidarex johnsoni (Powell, 1948) E
<u>*Schizoglossa*</u> *gigantea* Powell, 1930 E
Schizoglossa major Powell, 1938 E
Schizoglossa novoseelandica barrierensis Powell, 1949 E
Schizoglossa n. novoseelandica (Pfeiffer, 1862) E
Schizoglossa worthyae Powell, 1949 E
SUCCINEIDAE
Succinea (*Succinea*) *archeyi* Powell, 1933 E
TESTACELLIDAE A
Testacella haliotidea Draparnaud, 1801 A
Testacella maugei Férussac, 1819 A
VALLONIIDAE A
Vallonia costata (Müller, 1774) A
Vallonia excentrica Sterki, 1893 A
VERTIGINIDAE A
Vertigo ovata (Say, 1822) A
ZONITIDAE A
Oxychilus (*Oxychilus*) *alliarius* (Miller, 1822) A
Oxychilus (*O.*) *cellarius* (Müller, 1774) A
Oxychilus (*O.*) *draparnaudi* (Beck, 1837) A
Vitrea (*Vitrea*) *crystallina* (Müller, 1774) A
Zonitoides (*Zonitoides*) *arboreus* (Say, 1816) A

Class CEPHALOPODA
Subclass COLEOIDEA
Order SEPIIDA
SEPIADARIIDAE
Sepioloidea pacifica (Kirk, 1882)
Sepioloidea sp. (NZOI Z8567)
SEPIIDAE
Sepia sp. (M.172995)
SPIRULIDAE
Spirula spirula (Linnaeus, 1758)

Order SEPIOLIDA
SEPIOLIDAE
Heteroteuthis sp. (NZOI Z9922)
Iridoteuthis maoria Dell, 1959 E
Iridoteuthis sp. (NZOI Z8522)

Order TEUTHIDA
ANCISTROCHEIRIDAE
Ancistrocheirus lesueurii (d'Orbigny *in* Férussac & d'Orbigny, 1842)
ARCHITEUTHIDIDAE
Architeuthis dux Steenstrup, 1857
BATHYTEUTHIDIDAE
Bathyteuthis sp. (NZOI Z8745)
CHIROTEUTHIDIDAE
Asperoteuthis lui Salcedo-Vargas, 1999 E
Chiroteuthis capensis G.Voss, 1967 (M.102109)
Chiroteuthis sp. 1 (NZOI Z9920)
Chiroteuthis sp. 2 (NZOI Z8858)
Grimalditeuthis bonplandi (Verany, 1839) M.172940
CRANCHIIDAE
Bathothauma lyromma Chun, 1906 (NZOI X606)
Cranchia scabra Leach, 1817
Galiteuthis pacifica (Robson, 1948) (M.102110)
Galiteuthis suhmi (Hoyle, 1885) (NZOI Z9924)
Helicocranchia pfefferi Massy, 1907 (M.74367)
Leachia (*Pyrgopsis*) *rynchophorus* (Rochebrune, 1884)
Liguriella pardus (Berry, 1916)
Liguriella podophtalma Issel, 1908 (M.151519)
Megalocranchia maxima Pfeffer, 1884
Sandalops melancholicus Chun, 1906
Taonius sp. (NZOI Z9322)
Teuthowenia pellucida (Chun, 1910)
CHTENOPTERYGIDAE
Chtenopteryx sicula (Vérany, 1851) (NZOI Z9929)
Chtenopteryx sp. (M.74504)
CYCLOTEUTHIDIDAE
Cycloteuthis sp. (NZOI Z9122)
ENOPLOTEUTHIDIDAE
Abralia astrolineata Berry, 1914
Abralia sp. B Riddell, 1985
Abraliopsis gilchristi (Robson, 1924)
Abraliopsis tui Riddell, 1985
Enoploteuthis galaxias Berry, 1918
Enoploteuthis sp. cf. *jonesi* Burgess, 1982
Enoploteuthis reticulata Rancurel, 1970
GONATIDAE
Gonatus (*Gonatus*) *antarcticus* Lönnberg, 1898
HISTIOTEUTHIDIDAE
Histioteuthis atlantica (Hoyle, 1885)
Histioteuthis bonnellii (Férussac, 1834)
Histioteuthis eltaninae N.Voss, 1969
Histioteuthis hoylei (Goodrich, 1896)
Histioteuthis macrohista N.Voss, 1969
Histioteuthis meleagroteuthis (Chun, 1910)
Histioteuthis miranda (Berry, 1918)
LEPIDOTEUTHIDIDAE
Lepidoteuthis grimaldii Joubin, 1895 (NZOI Z9737)
LOLIGINIDAE
Sepioteuthis australis Quoy & Gaimard, 1832
Sepioteuthis lessoniana Lesson, 1830
LYCOTEUTHIDIDAE
Lampadioteuthis megaleia Berry, 1916
Lycoteuthis lorigera (Steenstrup, 1875)
Nematolampas regalis Berry, 1913 E
MASTIGOTEUTHIDIDAE
Idioteuthis (*Idioteuthis*) *cordiformis* (Chun, 1908) (NZOI Z9183)
Idioteuthis (*Magnoteuthis*) *magna* Joubin, 1913 (NZOI Z8289)
Mastigoteuthis (*M.*) *agassizii* Verrell, 1881
Mastigoteuthis sp. 1 (NZOI Z9926)
Mastigoteuthis sp. 2 (M.74447)
OCTOPOTEUTHIDIDAE
Octopoteuthis rugosa Clarke, 1980
Octopoteuthis sp. (Clarke, 1980)
Taningia danae Joubin, 1931
OMMASTREPHIDAE
Eucleoteuthis luminosa (Sasaki, 1915)
Hyaloteuthis pelagica (Bosc, 1802)
Martialia hyadesi Rochebrune & Mabille, 1889
Nototodarus gouldi (McCoy, 1888)
Nototodarus sloanii (Gray, 1849) E
Ommastrephes bartramii (Lesueur, 1821)
Sthenoteuthis oualaniensis (Lesson, 1830)
Todarodes angolensis Adam, 1962
Todarodes filippovae Adam, 1975
ONYCHOTEUTHIDIDAE
Ancistroteuthis lichtensteinii (Férussac & d'Orbigny, 1839)
Moroteuthis ingens (E.A. Smith, 1881)
Moroteuthis robsoni Adam, 1962
Moroteuthis sp. (NZOI Z9925)
Onychoteuthis aequimanus Gabb, 1868
PHOLIDOTEUTHIDIDAE
Pholidoteuthis boschmai Adam, 1950 (NZOI Z8307)
PYROTEUTHIDIDAE
Pterygioteuthis gemmata Chun, 1908
Pterygioteuthis giardi H. Fischer, 1896
Pterygioteuthis microlampas Berry, 1913
Pyroteuthis margaritifera (Rüppell, 1844)
Pyroteuthis serrata Riddell, 1985
THYSANOTEUTHIDIDAE
Thysanoteuthis rhombus Troschel, 1857 (NIWA)

Order VAMPYROMORPHA
VAMPYROTEUTHIDIDAE
Vampyroteuthis infernalis Chun, 1903

Order OCTOPODA
ALLOPOSIDAE
Haliphron atlanticus Steenstrup, 1861
AMPHITRETIDAE
Amphitretus pelagicus Hoyle, 1885
Amphitretus thielei Robson, 1930
ARGONAUTIDAE
Argonauta argo Linnaeus, 1758
Argonauta nodosa Lightfoot, 1786
BOLITAENIDAE
Bolitaena microtyla Steenstrup *in* Hoyle, 1886
Eledonella pygmaea Verrill, 1884
Japetella diaphana (Hoyle, 1885)
CIRROTEUTHIDIDAE
Cirroteuthis sp. cf. *muelleri* Eschricht, 1836 E
Cirroteuthis sp. cf. *magna* (Hoyle, 1885) E
GRIMPOTEUTHIDIDAE
Grimpoteuthis innominata (O'Shea, 1999) E
Luteuthis dentata O'Shea, 1999 E
OCTOPODIDAE
Benthoctopus clyderoperi O'Shea, 1999 E
Benthoctopus tangaroa O'Shea, 1999 E
Benthoctopus tegginmathae O'Shea, 1999 E
Benthoctopus sp. (NZOI Z9579)
Enteroctopus zealandicus (Benham, 1944) E
Graneledone challengeri (Berry, 1916) E
Graneledone taniwha kubodera O'Shea, 1999 E
Graneledone t. taniwha O'Shea, 1999 E
Octopus campbelli (E.A. Smith, 1902) E
Octopus gibbsi O'Shea, 1999 E
Octopus huttoni Benham, 1943)
Octopus kaharoa O'Shea, 1999 E
Octopus mernoo O'Shea, 1999 E
Octopus oliveri (Berry, 1914)
Octopus sp. cf. *rugosus* (Bosc, 1792)
Octopus tetricus Gould, 1852
Octopus sp. O'Shea, 1999 E
Pareledone sp. O'Shea, 1999
Pinnoctopus cordiformis (Quoy & Gaimard, 1832)
Pinnoctopus kermadecensis (Berry, 1914) E
Thaumeledone marshalli O'Shea, 1999 E
Thaumeledone zeiss O'Shea, 1999 E
OCYTHOIDAE
Ocythoe tuberculata Rafinesque, 1814
OPISTHOTEUTHIDIDAE
Cirroctopus hochbergi O'Shea, 1999 E
Opisthoteuthis chathamensis O'Shea, 1999 E
Opisthoteuthis mero O'Shea, 1999 E
Opisthoteuthis robsoni O'Shea, 1999 E
Opisthoteuthis sp. (NZOI Z9276)
TREMOCTOPODIDAE
Tremoctopus robsonianus Kirk, 1883 E
VITRELEDONELLIDAE
Vitreledonella richardi Joubin, 1918

Notes concerning certain species

Chiton glaucus and *Neilo australis*: Introduced accidentally to Tasmania with oysters intended for an aquaculture industry about 1910 and now established there.

Ruditapes largillierti: Deliberately introduced to Tasmania and now established there.

Zeacumantus subcarinatus: Introduced accidentally to New South Wales and now established there.

Potamopyrgus antipodarum: Introduced to Australia, Europe, and North America and now established in all three continents.

Maoricolpus roseus roseus: Introduced accidentally to Tasmania, now established there and spreading rapidly in eastern Australia.

Conus flavidus, *Harpa amouretta*, *Mitra coronata*, *M. fastigium*, *M. typha*, and *Terenolla pygmaea*: Each known from one dead shell from Raoul Island.

Conus miliaris, C. obscurus, and *Micromelo undata*: Each known from one living specimen from Raoul Island.

Neothais clathrata: Known from one specimen from Parengarenga Harbour.

Philine auriformis: Introduced accidentally to San Francisco Bay and now established there.

Austropeplea tomentosa hamiltoni, Glyptophysa oconnori, Placostylus ambagiosus gardneri, P. a. hinemoa, P. a. priscus, P. a. spiritus, P. a. worthyi, Damonita geminoropiformis, Mocella elliottae, M. spelaeus, and *Schizoglossa major*: Presumed extinct.

Cambrian, Ordovician, and Silurian Mollusca

Compiled by H. J. Campbell, R. A. Cooper, J. Pojeta Jr, and M. A. Bradshaw.

MC = Middle Cambrian; EO = Early Ordovician; S = Silurian.

Class MONOPLACOPHORA
Order BELLEROPHONTIDA
MULTIFARIIDAE
Protowenella cobbensis MacKinnon, 1985 MC

Order CYRTONELLIDA
ENIGMACONIDAE
Enigmaconus parvus MacKinnon, 1985 MC
HELCIONELLIDAE
Helcionella sp. MacKinnon 1985 MC
Latouchella cf. *accordionata* Runnegar & Jell, 1976 MC
Latouchella cf. *orientalis* (Walcott, 1905) MC
SCENELLIDAE
Obtusoconus foliaceus MacKinnon, 1985 MC
STENOTHECIDAE
Anabarella simesi MacKinnon, 1985 MC
Eurekapegma cooperi MacKinnon, 1985 MC

Order PELAGIELLIDA
PELAGIELLIDAE
Costipelagiella cf. *zazvorkai* Horny, 1964 MC

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order NUCULOIDA
NUCULITIDAE
Nuculites spp. indet. Bradshaw S

INCERTAE SEDIS
Gen. et sp. indet. Pojeta unpubl. EO

Subclass PTERIOMORPHA
Order TUARANGIIDA
TUARANGIIDAE
Tuarangia paparua MacKinnon, 1982 MC

Class ROSTROCONCHIA
Unidentified 'pteriiform' Pojeta unpubl. EO

Class GASTROPODA
Subclass PROSOBRANCHIA
Order ARCHAEOGASTROPODA
HOLOPEIDAE
Holopea sp. Cocks & Cooper 2004 EO
cf. *Matherella* sp. Pojeta unpubl. EO

Class CEPHALOPODA
Subclass NAUTILOIDA
Order ORTHOCERIDA
ORTHOCERATIDAE
Gen. et spp. indet. (orthocone) EO

Devonian Mollusca

Compiled by M. A. Bradshaw and H. J. Campbell

The list of Devonian fossil molluscs from New Zealand has been compiled from two sources – Shirley (1938) and Bradshaw (1999). Only nine genera and species have been recognised in the Baton River Formation (Shirley 1938; Willis 1965) and some of these have been reidentified. These are indicated below by BRF. A single specimen collected from the Ellis Formation (?Silurian) near Baton River is indicated by an S. The remainder of the species are from the Reefton Group.

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order NUCULOIDA
CTENODONTIDAE
Praectenodonta sp. BRF
MALLETIIDAE
Ctenodontella gagei Bradshaw, 1999 E
NUCULIDAE
Notonucula madida Bradshaw, 1999 E
Notonucula orilla Bradshaw, 1999 E
Notonucula subcircularis Bradshaw, 1999 E
Notonucula talenti Bradshaw, 1999 E
Notonucula umbra (Bradshaw, 1974) E
Notonucula vespa (Bradshaw, 1974) E
Nuculid BRF
NUCULITIDAE
Nuculites cf. *argentinium* Sánchez, 1992
Nuculites primus Bradshaw, 1999 E
Nuculites stonyensis Bradshaw, 1999 E
Nuculites sp. S
Paleyoldia devonica Bradshaw, 1999 E
Phestia arenacea Bradshaw, 1999 E
Phestia hegani Bradshaw, 1999 E
Phestia ranfti Bradshaw, 1999 E
Phestia ranfti lagea Bradshaw, 1999 E
Phestia suggatei Bradshaw, 1999 E
Phestia pluvia Bradshaw, 1999 E
Phestia sp.
PRAENUCULIDAE
Nuculodonta sp.

Subclass PTERIOMORPHA
Order ARCOIDA
CYRTODONTIDAE
Cyrtodonta sp.

Order PTERIOIDA
PTERINEIDAE
Cornellites sp. BRF
Cornellites flemingi Bradshaw, 1999 E
Cornellites johnstoni Bradshaw, 1999 E
Cornellites mackayi (Fleming, 1957) E
Cornellites sp.
Glyptodesma allani Bradshaw, 1999 E
Leptodesma (*Leiopteria*) *pojetai* Bradshaw, 1999 E
Ptychopteria sp.
PTERINOPECTINIDAE
Lyriopecten casterorum (Fleming, 1957) E
Pterinea sp. BRF
Pterinopecten (*Pterinopecten*) sp.

Subclass ANOMALODESMATA/ ISOFILIBRANCHIA
Order MODIOMORPHOIDA
CYPRICARDINIIDAE
Cypricardinia crenistria (G. & F. Sandberger, 1855)
Cypricardinia sp. BRF
MECYNODONTIDAE
Goniophora sp.
MODIOMORPHIDAE
Modiomorpha cf. *herculi* Bradshaw, 1991 E
Modiomorpha kaka Bradshaw, 1999 E
Modiomorpha sp.
Modiomorpha sp. BRF
Nargunella cf. *nitida* Talent, 1963

Order PHOLADOMYOIDA
EDMONDIIDAE
Cimitaria hendersoni (Allan, 1935) E
Glossites sp. BRF
Glossites cf. *lingualis* Hall, 1885
Grammysioidea cf. *circularis* Hall, 1870
Obrimia sp.
Pholadella sp.
ORTHONOTIDAE
Orthonota sp.
Paleosolen miro Bradshaw, 1999 E
Prothyris (*Prothyris*) sp.
SINODOROIDAE
Paleodora angulata Bradshaw, 1999 E
Paleodora reeftonensis Fleming, 1957 E

Subclass HETEROCONCHIA
Order TRIGONIOIDA
EOSCHIZODIDAE
Eoschizodus? sp.

Class GASTROPODA
Subclass PROSOBRANCHIA
Order ARCHAEOGASTROPODA
ANOMAPHALIDAE
Gen. et spp. indet.
BELLEROPHONTIDAE
cf. *Tropidiscus* sp.
Gen. et spp. indet. (reticulate)
CYRTOLITIDAE
Cyrtolites sp. BRF
EUOMPHALIDAE
Straparollus sp.
LOPHOSPIRIDAE
cf. *Ruedemannia* sp.
LOXONEMIDAE

Loxonema sp.
OMPHALOTROCHIDAE
cf. *Omphalotrochus* sp. BRF
PALAEOZYGOPLEURIDAE
Gen. et spp. indet. BRF
PLATYCERATIDAE
Platyceras sp. BRF
SINUITIDAE
Bucanella sp.

Subclass OPISTHOBRANCHIA
PTEROPODA
Hyolithes sp.

Class CEPHALOPODA
Subclass NAUTILOIDA
Order ORTHOCERIDA
ORTHOCERATIDAE
Gen. et spp. indet. (orthocones)
Gen. et spp. indet. (orthocones) BRF

Class SCAPHOPODA
Gen. et sp. indet.

Permian Mollusca

Compiled by Hamish J. Campbell

For the purposes of this review, ages are given as Early Permian (EP), Middle Permian (MP) or Late Permian (LP), with New Zealand Permian stage assignment indicated where known as follows (from oldest to youngest): pre-Telfordian (Ypt), Telfordian (YAt), Mangapirian (YAm), Barrettian (YAr), Flettian (YAf), Puruhauan (YDp), Waiitian (YDw), Mangarewan (YDm).

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order NUCULOIDA
NUCULANIDAE
Glyptoleda flexuosa Waterhouse, 1965 E MPYAf
Glyptoleda glomerata Fletcher, 1945 MPYAr
Glyptoleda intricata Waterhouse, 1965 E MPYAf
Glyptoleda reidi Fletcher, 1945 MPYAf
Glyptoleda aff. *reidi* Fletcher, 1945 EPYAm
Glyptoleda simplicata Waterhouse, 1965 E MPYAf
Glyptoleda sp. EPYAm
Nucundata obliqua Waterhouse, 1965 E MPYAr-YAf
Nucundata prolonga Waterhouse, 1965 E MPYAf
Nucundata truncata Waterhouse, 1965 E MPYAf
Nucundata undata Waterhouse, 1965 E MPYAf
Nucundata sp. EPYAm
Polidevcia antequadrata Waterhouse, 1965 E MPYAf
Polidevcia nodulosa Waterhouse, 1965 E
Polidevcia ovata (Laseron, 1910) MPYAf
Polidevcia spp. E-MPYam-YAf
NUCULIDAE
Nuculopsis imperta Waterhouse, 1965 E EPYAm
Nuculopsis glendonensis (Dana, 1849) MPYAr-YAf
Nuculopsis oviformis Waterhouse, 1965 E MPYAf
Quadratonucula asymmetrica Waterhouse, 1965 E MPYAf

Subclass PTERIOMORPHA
Order ARCOIDA
LIMIDAE
Calcicanicularia sp. MPYAf
Elimata symmetrica Waterhouse, 1987 E EPYAm
Elimata sp. MPYAf
Plagiostoma? cf. *inversa* (Waagen, 1881) MPYAr-YAf
PARALLELODONTIDAE
Parallelodon dickinsi Waterhouse, 1980 E MPYAf
Parallelodon aff. *dickinsi* Waterhouse, 1980 MPYAf
Parallelodon sp. MPYAm

Order MYTILOIDA
MYTILIDAE
Promytilus mytiliformis (Etheridge, 1892) E-MP Yam-YAf
Promytilus sp. E-MPYam-YAf

Order PTERIOIDA
ATOMODESMIDAE
Atomodesma sp. LP
Atomodesmin gen. et sp. indet. EPYAm
DELTOPECTINIDAE
Corrugopecten altoprimus Waterhouse, 1982 E MP YAf
Corrugopecten cf. *multicostatus* (Fletcher, 1929) EP YAt
Deltopecten aff. *limaeformis* (Morris, 1845) EPYAt
Squamuliferipecten cf. *squamuliferus* (Morris, 1845) EPYAt
ETHERIPECTINIDAE
Etheripecten chandleri Waterhouse, 1982 E E-MP YAm-YAr
Etheripecten aff. *chandleri* Waterhouse, 1982 E EP YAm
Etheripecten escalatus Waterhouse, 1982 E MPYAf
Etheripecten latus (Fletcher, 1929) E-MPYAm-YAr
Etheripecten latus mangarewensis Waterhouse, 1982 E MPYAr-YAf
Etheripecten aff. *latus* (Fletcher, 1929) MPYAm
Etheripecten leniusculus (Dana, 1847)
Etheripecten leniusculus delicatulus (Fletcher, 1929) MPYAf
Etheripecten tenuicollis (Dana, 1847) EPYAt
Etheripecten sp. MPYAr
Etheripecten sp. MPYAf
Fletcheripecten sp. EPYAm
Fletcheripecten heterosus Waterhouse, 1982 E MPYAf
Fletcheripecten? sp. MPYAf
Glabripecten glaber Waterhouse, 1982 E MPYAf
Heteropecten sp. MPYAr-YAf
Heteropecten? sp. MPYAf
EURYDESMIDAE
Gen. et sp. indet. EPYAt
INOCERAMIDAE
Aphanaia ? glabra Waterhouse, 2001 EPYAm
Aphanaia aff. *mitchelli* (M'Coy, 1847) MPYAf
Aphanaia otamaensis Waterhouse, 1979 E EPYAm
Aphanaia cf. *otamaensis* Waterhouse, 1979 EPYAm
Aphanaia proiectus Waterhouse, 2001 E MPYAf
Aphanaia cf. *tivertonensis* Waterhouse, 1979 EPYAt
Aphanaia? sp. indet. MPYAf
Maitaia obliquata (Waterhouse, 1963) E MPYAr
Maitaia trechmanni Marwick, 1934 E LPYDp
Mytilidesmatella sivellii Waterhouse, 2002 E LPYDp
Mytilidesmatella woodi (Waterhouse, 1963) E LP YDp
Trabeculatia marwicki (Waterhouse, 1958) E MP YAr-YAf
Trabeculatia trabecula (Waterhouse, 1963) E LPYDp
MYALINIDAE
Myalina? sp. LP
Volsellina sp. LP
PSEUDOMONOTIDAE
Pseudomonotis sp. EPYAt
Pseudomonotis sp. EPYAm
Pseudomonotis sp. MPYAr
PTERIINIDAE
Merismopteria macroptera (Morris, 1845) MPYAf
STREBLOCHONDRIIDAE
Streblochondria flexuosa Waterhouse, 1982 E E-MP YAm-YAf
Streblopteria minauris Waterhouse, 1987 EPYAm
Streblopteria cf. *parkesi* (Fletcher, 1929) MPYAf
Streblopteria sp. EPYAm
Streblopteria sp. MPYAf
Streblopteria sp. EPYAt
Striochondria auriocosta (Waterhouse, 1982) E-MP YAm-YAr
Striochondria erecta (Waterhouse, 1982) E MPYAr
Striochondria cf. *erecta* (Waterhouse, 1982) E MPYAf
Striochondria orbiculata (Waterhouse, 1982) E LP
Striochondria parkesi (Fletcher, 1929) MPYAf

Subclass HETERODONTA
Order VENEROIDA
ASTARTIDAE
Middalya? sp. MPYAf
Oriocrassatella sp. LPYDm
MEGADESMIDAE
Stutchburia compressa (Morris, 1845) MPYAf
Stutchburia costata (Morris, 1845) MPYAr
Stutchburia muderongensis Dickins, 1956 MPYAf
Stutchburia? sp. EPYAm
Stutchburia or *Permophorus* sp. LPYAf
ORTHONOTIDAE
Palaeosolen permiana Waterhouse, 1980 E MPYAf
Palaeosolen sp. EPYAm

Subclass PALAEOHETERODONTA
Order TRIGONIOIDA
MYOPHORIDAE
Kaibabella? sp. LP
Schizodus sp. LPYDm

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
EDMONDIIDAE
Edmondia sp. MPYAf
Myonia cf. *carinella* Runnegar, 1967 MPYAf

Myonia compacta Waterhouse, 1969 E MPYAr-YAf
Myonia depressa Fletcher, 1932 MPYAf
Myonia elongata Dana, 1847 MPYAf
Myonia ovata Waterhouse, 1969 E MPYAf
Myonia undata (Dana, 1847) MPYAf
Myonia (Myomedia) carinata (Morris, 1845) LP
Myonia sp. EPYAm
aff. *Myonia* gen. et sp. indet. MPYAf
Pachymyonia triangulata Waterhouse, 1969 E MPYAf
Pachymyomia corrugata (Fletcher, 1932) MPYAf
Pachymyonia sp. MPYAr
Pachymyonia sp. EPYAm
MEGADESMATIDAE
Astartila? *intrepida* Dana, 1847 MPYAf
Astartila sp. MPYAf
Megadesmus aff. *robusta* (Laseron, 1910) MPYAf
Megadesmus sp. EPYAm
Notomya gigantissima Waterhouse, 1969 E MPYAf
Pleurikodonta sp. LP
Pyramus myiformis Dana, 1847 MPYAf
Gen. et sp. indet. E-MPYAm-YAr
PHOLADOMYIDAE
Vacunella curvata (Morris, 1845) MPYAf
Vacunella curvata ornata Waterhouse, 1969 E MPYAf
Vacunella oblonga Waterhouse, 1969 E-MP YAm-WAf
Vacunella n. sp. A MPYAr
Vacunella n. sp. B MPYAf
Vacunella spp. E-MPYAm-YAf

Class GASTROPODA
Subclass PROSOBRANCHIA
Order ARCHAEOGASTROPODA
Suborder BELLEROPHONTINA
BELLEROPHONTIDAE
Knightites (Retispira) sp. LP
SINUITIDAE
Warthia micromphala (Morris, 1845) MPYAf
Warthia perspecta Fletcher, 1958 E-MPYAm-YAf
Warthia perspecta? Fletcher, 1958 EPYAm
Warthia stricta (Dana, 1847) MPYAf

Suborder MACLURITINA
EUOMPHALIDAE
Straporollus (Euomphalus) sp. LP

Suborder PLEUROTOMARIINA
EOTOMARIIDAE
Eirlysia modesta Waterhouse, 1986 MPYAf
Glabrocingulum (Ananias) campbelli Waterhouse, 1963 E LP
Mourlonopsis strzeleckiana (Morris, 1845) E-MP YAm-YAf
Mourlonopsis? sp. MPYAr
Neoplatyteichum impressa (Waterhouse, 1966) E E-MP
Platyteichum loratum Waterhouse, 1963 E-MP YAm-YAf
Platyteichum spirolaxum Waterhouse, 1963 E EP YAm
Platyteichum aff. *waterhousei* (Etheridge, 1898) MP YAf
Platyteichum sp. MP
Walnichollsia erecta Waterhouse, 1986 E MPYAf
Walnichollsia minuta Waterhouse, 1963 E EPYAm
PHYMATOPLEURIDAE
Bicarinella bicarinata (Waterhouse, 1963) E LP
Collabrina sp. E-MP
Coronpsis regularis Waterhouse, 1963 E EP
Coronopsis vagrans Waterhouse, 1963 E EP
Peruvispira imbricata Waterhouse, 1963 E E-MP YAm-YAf
Peruvispira imbricata alta Waterhouse, 1963 E EP YAm
Peruvispira modesta Waterhouse, 1963 E LP
Peruvispira robusta Waterhouse, 1963 E EPYAt
Peruvispira volupta Waterhouse, 1963 E MPYAf
Peruvispira sp. MPYAr-YAf
Spirovallum fasciatum Waterhouse, 1963 E EPYAm
Spirovallum liratum Waterhouse, 1963 E LP
Spirovallum sp. MP
SINUOPEIDAE
Keeneia ocula (Sowerby, 1938) MPYAr-YAf
Keeneia sp. MPYAf

Pandospira fimbriae Waterhouse, 1963 E MPYAf
Pandospira nuda Waterhouse, 1963 E EPYAt

Suborder TROCHINA
ANOMPHALIDAE
Cycloscena costata Waterhouse, 1963 E EPYAt
Cycloscena glabra Waterhouse, 1963 E MPYAf
HOLOPEIDAE
Spironemella dignitas (Waterhouse, 1963) E EPYAm
Spironemella? sp. EP
PLATYCERATIDAE
Rhabdocantha sp. MPYAr
Strotostoma clintonensis Waterhouse, 1986 E LP

Suborder NERITOPSINA
NERITOPSIDAE
Naticopsis extensa Waterhouse, 1963 E MPYAf

Class SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Prodentalium sp. MPYAf
Plagioglypta sp. E-MPYAm-YAf
?*Plagioglypta furcata* Waterhouse, 1980 E MPYAf
?*Plagioglypta* sp. MPYAr

Class ROSTROCONCHIA
Order CONOCARDIOIDA
BRANSONIIDAE
Bransonia cf. *australe* (M'Coy, 1847) MPYAr-YAf
Bransonia robustum (Fletcher, 1943) MPYAf
Bransonia spp. E-MP

Class CEPHALOPODA
Subclass NAUTILOIDEA
Order ORTHOCERIDA
ORTHOCERATIDAE
'*Orthoceras*' sp. MPYAr

Subclass AMMONOIDEA
Order CERATITIDA
XENODISCIDAE
Paraceltites ? sp. MP

Triassic Mollusca

Compiled by Hamish J. Campbell

The following lists includes all described and known undescribed taxa. New Zealand local Triassic stage symbols are as follows (oldest to youngest): Gore Series G: Gm = Malakovian; Ge = Etalian; Gk = Kaihikuan. Balfour Series B: Br = Oretian; Bm = Otamitan; Bw = Warepan; Bo = Otapirian. E = endemic to New Zealand; EE = endemic to New Zealand and New Caledonia.

PHYLUM MOLLUSCA
Class GASTROPODA
Subclass EOGASTROPODA
Order PATELLOGASTROPODA
PATELLIDAE
Patella nelsonensis Trechmann, 1918 Gk E

Subclass PROSOBRANCHIA
Order DOCOGLOSSA
EOTOMARIIDAE
Neilsoniinae n. gen. et sp. Begg 1981 Ge E
LOPHOSPIRIDAE
Mellarium mutchi Waterhouse, 1960 Ge E
*Mellarium n*odulosum Waterhouse, 1960 Ge E
Worthenia phillipsi Waterhouse, 1961 Ge E
Ruedemanniinae ? n. gen. Begg 1981 Ge E
RHAPHISTOMATIDAE
Sisenna hectori Trechmann, 1918 Br EE
Sisenna? sp. [Begg, 1981] Ge E

Subclass ORTHOGASTROPODA
Order VETIGASTROPODA
AMBERLEYIDAE
Lepidotrochus marshalli (Trechmann, 1918) Br EE
Lepidotrochus wilckensi Marwick, 1953 Ge E
PLEUROTOMARIIDAE
Kamupena greggi Speden, 1962 Gk E
Pleurotomaria hokonuiensis Trechmann, 1918 Bm EE
Pleurotomaria (*Pleurotomaria*) n. sp. Begg 1981 Ge E
Pleurotomariidae n. gen. et sp. Begg 1981 Ge E
Pleurotomariidae n. gen. et sp. Begg 1981 Br E
SCHIZOGONIIDAE
Schizogonium sp. Begg 1981 Ge E
Schizogonium? sp. Begg 1981 Gm E
Schizogoniidae n. gen. Begg 1981 Br E
TROCHIDAE
Proconulinae n. gen. et sp. Begg 1981 Ge E

Order CENOGASTROPODA
NERITOPSIDAE
Naticopsis (*Naticopsis*) sp. Begg 1981 Br E
ZYGOPLEURIDAE
Allocosmia sp.[Begg 1981 Ge E
*Raha spec*tabilis (Trechmann, 1918) Br-Bm EE
Zygopleuridae gen. et sp. indet. Begg 1981 Ge E
Zygopleuridae? gen. et sp. indet. Begg 1981 Gm E
Zygopleuridae? gen. et sp. indet. H.J. Campbell, GNS Ref. Coll. ?Ge E

Order MESOGASTROPODA
LITTORINIDAE
Poroa arata (Trechmann, 1918) Br E

Class SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Dentalium sp. A
Dentalium sp. B GNS Ref Coll. Bo
FUSTIARIIDAE
Fustiaria sp. Campbell 1992 Ge E
*Plagioglypt*a sp. Bw

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order SOLEMYOIDA
Solemya n. sp. H. J. Campbell, GNS Ref. Coll. Ge E

Order NUCULOIDA
MALLETIIDAE
Mesosaccella hamiltoni (Wickens, 1927) Br-Bm
Mesosaccella mundeni (Fleming, 1954) Bm
Mesosaccella otamitensis (Trechmann, 1918) Br-Bm
Mesosaccella cf. *praeacuta* Klipstein, 1845 Bm
Mesosaccella sp. Gk
Mesosaccella sp. A Begg 1981 Ge E
Mesosaccella sp. B Begg 1981 Br E
Mesosaccella sp. C Begg 1981 Br E
Phaenodesmia sp. Begg 1981 Ge E
Phaenodesmia sp. Bm
Phaenodesmia sp. Bw-Bo
Malletiidae n. gen. et sp. Begg 1981 Ge
NUCULANIDAE
Nuculana (*Nuculana*) *semicrenulata* (Trechmann, 1918) Bm EE
Nuculana (*N.*) n. sp. Begg 1981 Ge E
Veteranella (*Veteranella*) sp. Begg 1981 Br E
Nuculanidae n. gen. et sp. Begg 1981 Ge E
NUCULIDAE
Paleonucula sp. Begg 1981 Ge E
Paleonucula sp. Bw

Subclass PTERIOMORPHA
Order ARCOIDA
PARALELLODONTIDAE
Cucullaea wellmani Marwick, 1953 Br EE
Grammatodon (*Grammatodon*) sp. A [Begg, 1981] Gm E
Grammatodon (*G.*) sp. B Begg 1981 Ge E
Grammatodon (*G.*) sp. C Begg 1981 Br E
Grammatodon (*G.*) *otagoensis* (Wilkens, 1927) Gk E
Paralellodontidae n. gen. et sp. H.J. Campbell, GNS Ref. Coll. Bm E

Order MYTILOIDA
MYTILIDAE
Manticula problematica (Zittel, 1864) Bm EE
Modiolus (*Modiolus*) sp. A Begg 1981 Ge E
Modiolus (*M.*) sp. B Begg 1981 Br E
Mysidioptera globularis (Trechmann, 1918) Bm EE
Mysidioptera riceae Waterhouse, 1960 Bm EE
Mytilidae n. gen. et sp. Begg 1981 Br E
PINNIDAE
Pinna (*Pinna*) *octavi*a Marwick, 1953 Br-Bo EE

Order PTERIOIDA
ASOELLIDAE
Asoella sp. Bw
Etalia johnstoni Begg & Campbell, 1985 Ge E
BUCHIIDAE
Hokonuia limaeformis Trechmann, 1918 Br-Bw EE
Sichuania marwicki Waterhouse, 1980 Ge E
BAKEVELLIIDAE
Bakevelloides sp. GNS Ref. Coll] Gk E
Cassianella sp. Trechmann 1918 Bm E
ENTOLIIDAE
Entolium (*Entolium*) sp. Begg 1981 Ge E
HALOBIIDAE
Aparimella apteryx (Marwick, 1953) Gk
Aparimella beggi Campbell, 1994 Ge
Daonella jadii Campbell, 1994 Ge
Halobia (*Halobia*) *styriaca* (Mojsisovics, 1874) Br
Halobia (*H.*) *austriaca* Mojsisovics, 1874 Br
Halobia (*H.*) *hoernesi* Mojsisovics, 1874 Br
Halobia (*H.*) *plico*sa Mojsisovics, 1874 Bm
Halobia (*Parahalobia*) sp. A [H. J. Campbell, 1994] Br
Halobia (*Zittelihalobia*) *superba* Mojsisovics, 1874 Br
Halobia (*Z.*) *hochstetter*i Mojsisovics, 1874 Br-Bm
Halobia (*Z.*) *zealandica* Trechmann, 1918 Bm
LIMIDAE
Antiquilima sp. Braithwaite 1984 Bo E
'*Lima*' n. gen. A *georgii-boemi* Wilckens, 1927 Gk-Bm EE
'*Lima*' n. gen. n. sp. A Braithwaite 1984 Br E
'*Lima*' n. gen. n. sp. B Braithwaite 1984 Br-Bm E
Limatula sp. A D.A.B. MacFarlan 1975 E
Palaeolima sp. A Braithwaite 1984 Ge E
Palaeolima sp. B Braithwaite 1984 Br E
Paleolima sp. Begg 1981 Br E
Plagiostoma sp. A Braithwaite 1984 Ge
Plagiostoma sp. B Braithwaite 1984
Plagiostoma sp. Begg 1981 Br E
Plagiostoma sp. GNS Ref. Coll. Bo E
Pseudolimea cf. *harburgensis* Cox Braithwaite 1984 Bo-Hu
*Pseudolime*a fide Marwick 1953 Bo-Hu E
*Pseudolime*a sp. A Braithwaite 1984 Ge E
Pseudolimea sp. B Braithwaite 1984 Gk E
Pseudolimea sp. C Braithwaite 1984 Br-Bm E
Pseudolimea sp. D Braithwaite 1984 Bo E
Pseudolimea sp. E Braithwaite 1984 Bo E
Pseudolimea sp. F Braithwaite 1984 Bo E
Pseudolimea sp.G Braithwaite 1984 Bo E
Limidae n. gen. et sp. Begg 1981 Br E
Limidae gen. et sp. indet. A Braithwaite 1984 Bo-Ha E
MONOTIDAE
Monotis (*Entomonotis*) *intermedia* Trechmannm, 1918 Bw
Monotis (*E.*) *richmondiana acutecostata* (Trechmann, 1918) Bw EE
Monotis (*E.*) *r. richmondiana* Zittel, 1864 Bw EE
Monotis (*E.*) *kiritehereensis* Grant-Mackie, 1980 Bw EE
Monotis (*E.*) *rauparaha aries* Grant-Mackie, 1980 Bw E
Monotis (*E.*) *r.* mokaui Grant-Mackie, 1980 Bw E
Monotis (*E.*) *r. rauparaha* Grant-Mackie, 1980 Bw EE
Monotis (*E.*) *murihikuensis murihikuensis* Grant-Mackie, 1980 Bw E
Monotis (*E.*) *m. taringatura* Grant-Mackie, 1980 Bw E
Monotis (*E.*) *marwicki* Grant-Mackie, 1980 Bw E
Monotis (*E.*) *wairakae* Grant-Mackie, 1980 Bw E
Monotis (*Inflatomonotis*) *hemispherica* Trechmann, 1918 Bw E
Monotis (*I.*) *warepan*a Grant-Mackie, 1980 Bw E
Monotis (*Maorimonotis*) *awakinoensi*s Grant-Mackie, 1978 Bw EE
Monotis (*M.*) *calvat*a Marwick, 1953 Bw EE

Monotis (*M.*) *maniapotoi* Grant-Mackie, 1978 Bw EE
Monotis (*M.*) *routhieri* Avias, 1953 Bw EE
Monotis (*Pacimonotis*) *discordans* Grant-Mackie, 1978 Bw EE
Monotis (*P.*) *gigantea* Avias, 1953 Bw EE
Otapiria dissimilis (Cox, 1878) Bw EE
MYALINIDAE
aff. *Falcimytilus* sp. Begg 1981 Br E
aff. *Falcimytilu*s sp. GNS Ref. Coll. Bo E
Myalinidae gen. et sp. indet. [Begg 1981] Ge E
OSTREIDAE
Liostrea sp. GNS Ref. Coll. Bm-Bo
Ostreacea gen. et sp. GNS Ref. Coll. Gk
Ostreacea gen. et sp. GNS Ref. Coll. Br
Ostreacea gen. et sp. GNS Ref. Coll. Bo
OXYTOMIDAE
Oxytoma sp. Begg 1981 Br E
PECTINIDAE
Camptonectes (*Camptochlamys*) n. sp. Begg 1981 Br E
Chlamys (*Chlamys*) sp. Begg 1981 Gm E
Chlamys (*Chlamys*) sp. Begg 1981 Br E
Chlamys sp. A [GNS Ref. Coll.] Gk
Chlamys sp.B Br
PERGAMIDIIDAE
Krumbeckiella sp. Begg 1981 Br
Oretia coxi Marwick, 1953 Br E
PLICATULIDAE
*Pseudoplacunopsis placen*toides Trechmann, 1918 Bm E
PTERIIDAE
*Pteria sp*edeni Waterhouse, 1960 Bm E
Pteria n. sp. Begg 1981 Ge
*Pteri*a sp. Grant-Mackie 1959 Bo E
Rhaetavicula? *contorta* (Portlock, 1843) Bo

Order TRIGONIOIDA
MINETRIGONIIDAE
Maoritrigonia comes Fleming, 1987 Bw EE
Maoritrigonia heslingtonensis (Trechmann, 1918) Bm EE
Maoritrigonia leedae Fleming, 1987 Bo EE
*Maoritrigonia nugge*tensis (Trechmann, 1918) Br EE
Maoritrigonia otamitensis (Trechmann, 1918) Bm EE
Maoritrigonia pirouteti (Avias, 1953) Bm EE
Maoritrigonia trechmanni Fleming, 1987 Bw-Bo EE
Maoritrigonia waddicki Fleming, 1987 Br EE
Maoritrigonia aff. *otamitensis* (Trechmann, 1918) [Fleming 1987] Bo EE
Minetrigonia otapiriensis Fleming, 1987 Bo EE
MYOPHORIIDAE
Agonisca corbiensis Fleming, 1963 Gk E
Agonisca? aff. *corbiensis* Fleming, 1963 Gk E
Agonisca? *thomsoniana* (Wilkens, 1927) Gk E
Neoschizodus (*Caledogonia*) *globosa* (Freneix & Avias, 1977) Bm EE
Neoschizodus cf. *laevigatu*s (Goldfuss, 1837) Gk
TRIGONIIDAE
Praegonia coombsi Fleming, 1962 Gk E
Trigonia (*Heslingtonia*) *campbellorum* Fleming, 1987 Br E
Trigonia (*Trigonia*) *balmae* Fleming, 1987 Ge E
Trigonia (*T.*) cf. *tobacoensis* Barthel, 1958 [Begg 1981] Ge
Trigonia (*T.*) sp. A Fleming 1987 Ge E
Trigonia (*T.*) n. sp. H.J. Campbell, GNS Ref. Coll. Bm E

Order VENEROIDA
ASTARTIDAE
*Astart*e? sp. A GNS Ref. Coll. Gk
Astarte? sp. B GNS Ref. Coll. Gk
CARDINIIDAE
Balantioselena gairi Speden, 1962 Gk E
Balantioselena? sp. GNS Ref. Coll. Ge
Balantioselena? sp. GNS Ref. Coll. Gk
Sphaeriola sp. GNS Ref. Coll. Bo
Torastarte bensoni Marwick, 1953 Bo EE
Torastarte n. sp. Begg 1981 Br E
Tutcheria parvula (Trechmann, 1918) Bm E
Cardiniidae n. gen. sp. A Begg 1981 Gm E
Cardiniidae n. gen. sp. B Begg 1981 Ge E
Cardiniidae n. gen. sp. C Begg 1981 Br E
Cardiniidae n. gen. et sp. D GNS Ref. Coll. Bm
CARDITIDAE
Palaeocardita trapezoidalis (Krumbeck, 1924) [Kristan-Tollman 1986] Bo
PERMOPHORIDAE
Kalentera marwicki Grant-Mackie, 1960 Bw-Ha EE
Ouamouia grantmackiei Campbell, 1984 Bm EE
Permophorus obovatus Waterhouse, 1979 Ge E
Permophorus n. sp. Begg 1981 Ge E
Permophorus n. sp. Begg 1981 Gk E
Triaphorus zealandicus (Trechmann, 1918) Bm EE
Triaphorus n. sp. Begg 1981 Br E

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
CERATOMYIDAE
Ochotomya sp. J.A. Grant-Mackie, GNS, AU, OU Ref. Coll. Bw-Bo EE
MEGALODONTIDAE
Megalodontidae gen. et sp. [H. J. Campbell id. GNS Ref. Coll.] Bm E
PACHYCARDIIDAE
Unionites angulata Trechmann, 1918 Br EE
Unionites ovalis Trechmann, 1918 Br-Bw EE
Unionites edmondiiformis Trechmann, 1918 Br E
Unionites sp A Begg 1981 Ge E
Unionites sp.
PLEUROMYIDAE
Mycetopoda? sp. Begg 1981 Br E
Mycetopoda? sp. H.J. Campbell, GNS Ref. Coll. Bo E
Pleuromya sp. H. J. Campbell, GNS Ref. Coll. Ge E

Class CEPHALOPODA
Subclass NAUTILOIDEA
CLYDONAUTILIDAE
Proclydonautilus mandevillei (Marshall, 1909) Bm-Bw
Proclydonautilus n. sp. Begg 1981 Br
GRYPOCERATIDAE
Cenoceras sp.
Grypoceras sp. Marwick 1953 Bm
ORTHOCERATIDAE
Orthoceras sp. Br
'*Orthoceras* sp.
aff. *Bitaunioceras* sp. Bw
Michellinoceras sp. A Begg 1981 Gm
Michellinoceras sp. B Begg 1981 Ge
Michellinoceras sp. C Begg 1981 Ge
Michellinoceras sp. D Begg 1981 Ge
SYRINGONAUTILIDAE
cf. *Clymenonautilus* sp. Br J.A. Grant-Mackie, AU Ref. Coll.
Syringonautilus sp. Begg 1981 Ge

Subclass AMMONOIDEA
Order CERATITIDA
ARCESTIDAE
Arcestes hokonui Marshall, 1909 Bm
Arcestes cf. *rhaeticus* Clark, 1888 Bo
Arcestidae gen. et sp. indet. Begg 1981 Br
ARCTOCERATIDAE
Arctoceratidae gen. et sp. Owen 1991
CERATITIDAE
Anagymnotoceras n. sp. Begg 1981 Ge
*Frechite*s sp. H.J. Campbell, GNS Ref. Coll. Ge
Beyrichitinae gen. et sp. Owen 1991
GYMNITIDAE
Epigymnites sp. GNS Ref. Coll. Br
FLEMINGITIDAE
Durvilleoceras woodmani Waterhouse, 1973 [Owen 1991] E
*Flemingite*s sp. H.J. Campbell, OU Ref. Coll.
Flemingitidae gen. et sp. A Owen, 1991
Flemingitidae gen. et sp. B Owen 1991
Flemingitidae gen. et sp. C Owen 1991
HALORITIDAE
Haloritidae gen. et sp. A. H.J. Campbell, GNS Ref. Coll. Bw
Haloritidae gen. et sp. B. H.J. Campbell, GNS Ref. Coll. Bw
MEEKOCERATIDAE
Proptychitinae? gen. et sp. indet. Begg 1981 Gm
Wyomingites sp. Begg 1981 Gm
PARANANNITIDAE
Owenites cf. *koeneni* Hyatt & Smith, 1959 Gm
PARAPOPANOCERATIDAE
Amphipopanoceras fraseri (Browne, 1951) Ge
Amphipopanoceras routi (Browne, 1951) Ge
Amphipopanoceras cf. *selwyni* (McLearn, 1948) Ge
Parapopanoceratidae gen.et sp. indet. Begg 1981
PINACOCERATIDAE
Pinacoceras sp. Marwick 1953 Bm
PROCARNITIDAE
Procarnitidae gen. et sp. Owen 1991
PROPTYCHITIDAE
Proptychitidae gen. et sp. A Owen 1991
Proptychitidae gen. et sp. B Owen 1991
Proptychitidae gen. et sp. C Owen 1991
Proptychitidae gen. et sp. D Owen 1991
PROSPHINGITIDAE
Prosphingites coombsi (Kummel, 1960) Ge
Prosphingites? sp. Begg 1981 Gm
PTYCHITIDAE
Ptychitidae gen. et sp. Owen 1991
STURIIDAE
Discoptychites cf. *megalodiscus* (Beyrich, 1867) [Kummel 1960] Ge
Sturia sp. Begg 1981 Ge
TIBETITIDAE
Tibetitidae gen. et sp. Owen 1991
XENODISCIDAE
Subvishnuites? sp. Begg 1981 Gm

Order PHYLLOCERATINA
CLADISCITIDAE
Cladiscites cf. *beyrichi* Welter, 1914 [Kummel 1960] Bm
Cladiscites sp. A H.J. Campbell, GNS Ref. Coll.] Br-Bm
Cladiscites sp. B H.J. Campbell, GNS Ref. Coll. Bw
Cladiscites sp. C H.J. Campbell, GNS Ref. Coll. Bo
DISCOPHYLLITIDAE
Rhacophyllites debilis (Hauer, 1846) [Kummel 1960] Bm
Rhacophyllites sp. Marwick 1953 Bm
Rhacophyllites sp. GNS Ref. Coll. Bo
Rhacophyllites? sp. indet. Begg 1981 Br
NORITIDAE
Bosnites sp. Begg 1981 Ge
Leiophyllites marshalli Browne, 1951 Ge
PALEOPHYLLITIDAE
Paleophyllitidae gen. et sp. Owen 1991
USSURITIDAE
Eophyllites sp. Begg 1981 Gm
Monophyllites cf. *sphaerophyllus* (Hauer, 1846) [Begg 1981] Ge
Monophyllites n. sp. A Begg 1981 Ge
Monophyllites n. sp. B Begg 1981 Ge
Ussurite? sp. Begg 1981 Gm

Subclass COLEOIDEA
Order AULACOCERIDA
AULACOCERATIDAE
Aulacoceras otapiriense (Hector, 1878) Bo
Prographularia n. sp. Jeletzky &Zapfe 1967 Bo-Ha

Jurassic Mollusca

Compiled by J. A. Grant-Mackie.

The list below, because of the high proportion of names in open nomenclature, has been compiled from a small number of regional stratigraphic studies known to include exhaustive lists of well-identified fossils, as well as from systematic papers and reference collections of GNS Science and the Geology Programme SGGES, University of Auckland. Duplication of taxa from the use of different forms of open nomenclature has been avoided as much as possible without going back to original collections, but some may exist. It is more likely, from the compiler's conservative approach, that diversity in some of the cosmopolitan groups (e.g. *Palaeonucula* spp., *Nuculana* spp., etc.) has been slightly understated.

E = endemic species and family-group taxa (New Zealand only); EE = endemic to New Zealand and New Caledonia; endemic genera are underlined; det. = identifier of new record, where known (viz J. G. Begg, D. F. Hasibuan, R. N. Gardner, J. A. Grant-Mackie, N. Hudson, D. A. B. MacFarlan, G. R. Stevens, G. E. G. Westermann); * = new record (not previously published); ¶ = new combination. Specimens used as the basis for new records are shown as housed at the Geology Programme SGGES, University of Auckland (AUG), University of Otago (OUG), or GNS Science (GNS).

PHYLUM MOLLUSCA
Class GASTROPODA
Subclass PROSOBRANCHIA
Order DOCOGLOSSA
ACMAEIDAE
cf. *Marbodeia* sp.* det. Grant-Mackie; GNS Kt
Scurriopsis (*Hennocquia*) sp. Hudson 1999 Kt
Scurriopsis (*Scurriopsis*) sp. Hudson 1999 Kt
cf. *Scurriopsis* (*Dietrichiella*) sp.* det. Grant-Mackie AUG Ko-Op
Acmaeidae gen. et sp. indet. Hudson 1999 Hu-Kt

Order VETIGASTROPODA
CIRRIDAE
Hamusina maxwelli Bandel, 1993 E Late Jur
CROSSOSTOMATIDAE
Crossostoma globulifera Bandel et al., 2000 E Early-Mid Jur
CYCLOSTREMATIDAE
aff. *Teinostomopsis* sp. Hudson 1999 Kh
EMARGINULIDAE
Austriacopsis ovalis Bandel et al., 2000 E Early-Mid Jur
Emarginula kaiwarensis Bandel et al., 2000 E Early-Mid Jur
Emarginula sp. Bandel et al. 2000 Early-Mid Jur
Loxotoma jurassica Bandel et al. 2000 E Early-Mid Jur
MICRODOMATIDAE
Eucochlis costata Bandel et al., 2000 E Early-Mid Jur
PLEUROTOMARIIDAE
Bathrotomaria sp.* AUG Op
Bathrotomaria sp.* det. Gardner Kt
cf. *Conotomaria* sp.* det. Hudson; AUG Kh
Dictyomaria gondwanaensis Bandel et al., 2000 E Early-Mid Jur
Leptomaria sp. A Hudson 1999 Hu-Kh
Leptomaria sp. B Hudson 1999 Kt-Kh
Leptomaria? sp.* det. Begg; AUG Op
Pleurotomaria sp.* GNS Hu
Pleurotomaria sp. Hudson 1999 Hu
Talantodiscus trechmanni (Marwick, 1953) E Ha
PSEUDOPHORIDAE
Sallya calyptraeensis Bandel et al., 2000 E Early-Mid Jur
SCISSURELLIDAE
Maxwellia novozeelandica Bandel, 1998. E Late Jur.
TROCHACLIDIDAE
cf. *Cirsostylus* sp.* det. Grant-Mackie; AUG Hu
Lewisiella? sp.* GNS Ha
Lewisiella? sp. Grant-Mackie 1959 Kh
Trochaclididae n. gen. et sp.* AUG Kh
TROCHIDAE
Amberleya (*Amberleya*) *torosa* Marwick, 1953 E Ha
Amberleya (*A.*) *zealandica* Trechmann, 1923 E Kt
Amberleya (*A.*) cf. *zealandica* Trechmann, 1923* AUG Kh-Ko
Amberleya (*Eucyclus*) sp.* Ha
Amberleya (*E.*) sp. Grant-Mackie 1959 Kt
Amberleya (*?E.*) sp.* det. Grant-Mackie; GNS Kh
Amberleya sp.* Hudson 1999 Kt
Amberleya sp.* det. Begg; AUG Op
Amberleya? sp. C Grant-Mackie 1959 Hu
cf. *Chrysostoma* sp.* GNS Op
aff. Colloniinae gen. et sp. indet.* GNS Kt/Kh
Guidonia sp. Bandel & Maxwell in prep. Late Jur
cf. *Riselloidea* sp.* GNS Op
Tylotrochus keuppi Bandel et al., 2000 E Early-Mid Jur
Proconulinae n. gen. et sp.* Kh
TURBINIDAE
Coelocentrus pacificus Bandel et al., 2000 E Early-Mid Jur
Eucycloscala torulosa Bandel et al., 2000 E Early-Mid Jur
cf. *Praelittorina* sp.* Hu

Order CYCLONERITIMORPHA
PILEOLIDAE
Pileolus convexus Bandel et al., 2000 E Early-Mid Jur

Order NEOTAENIOGLOSSA
CANTERBURYELLIDAE E
Canterburyella pacifica Bandel et al., 2000 E Early-Mid Jur
COELOSTYLINIDAE
Coelostylina sp.* GNS Kt
MAORAXIDAE E
Maoraxis kieli Bandel et al., 2000 E Early-Mid Jur
PRISCIOPHORIDAE
Prisciophora schroederi Bandel et al., 2000 E Early-Mid Jur
PROCERITHIIDAE
Paracerithium pacificum Bandel et al., 2000 E Early-Mid Jur
Paracerithium spinosum Bandel et al., 2000 E Early-Mid Jur
Rhabdocolpus? *kowalkei* Bandel et al., 2000 E Early-Mid Jur
Rhabdocolpus sp.* Gardner & Grant-Mackie in prep. Kt
aff.*Rhynchocerithium* sp. MacFarlan 1975 Kt-Kh
aff. *Uchauxia* sp. MacFarlan 1975 Kt-Kh
aff. *Uchauxia* sp. B Hudson 1999 Kt
Paracerithiinae n. gen. et sp. A* det. Begg; AUG Kh
Paracerithiinae n. gen. et sp. B* det. Begg; AUG Kh
Paracerithiinae n. gen. et sp. C* AUG Op
Procerithiidae gen. et sp.* Hu
PURPURINIDAE
Purpurinidae n. gen. et sp.* AUG Op
SUBULITIDAE
cf. *Hypsipleura* sp. Hudson 1999 Kh
Zygopleura sp. Gardner & Grant-Mackie in prep. Kt-Kh

Order LITTORINIMORPHA
POMMEROZYGIIDAE
Brevizygia spiralosulcata Bandel et al., 2000 E Early-Mid Jur

Order 'META-MESOGASTROPODA'
APORRHAIDAE
Pietteia christchurchi Bandel et al., 2000 E Early-Mid Jur

Order ALLOGASTROPODA
MATHILDIDAE
Tricarilda cancellata Bandel et al., 2000 E Early-Mid Jur
ORBITESTELLIDAE
Kaiwarella beui Bandel et al., 2000 E Early-Mid Jur
Orbitestellidae gen. et sp.* Late Jur
TOFANELLIDAE
Camponaxis zardiniensis Bandel et al., 2000 E Early-Mid Jur
Conusella? *pacifica Bandel* et al., 2000 E Early-Mid Jur
Crisalloella parva Bandel et al., 2000 E Early-Mid Jur

Order OPISTHOBRANCHIA
BULLINIDAE
Bullina (*Sulcoactaeon*) *zealata* Bandel et al. 2000 E Early-Mid Jur
CYLINDROBULLINIDAE
Actaeonina novozealandica Bandel et al., 2000 E Early-Mid Jur
NERINEIDAE
'*Nerinea*' sp. Hudson 1999 Kt
Nerinea? sp.* GNS Ko

Class SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Dentalium (*Antalis*) sp. MacFarlan 1998 Kh
Dentalium (*Antalis*) sp.* AUG Op
Prodentalium sp.* Gardner Kt
LAEVIDENTALIIDAE
Laevidentalium sp. Grant-Mackie 1959 Hu
Laevidentalium sp. Hudson 1999 Kh
Laevidentalium sp.* GNS Op

Class BIVALVIA
Subclass PALAEOTAXODONTA
Order SOLEMYOIDA
SOLEMYIDAE
Solemya maikaensis (Marwick, 1953) ¶ E Kt
Solemya? sp.* AUG Op

Order NUCULOIDA
MALLETIIDAE
Mesosaccella sp. A Grant-Mackie 1959 ¶ Hu
Mesosaccella sp.* AUG Ha-Hu
Mesosaccella sp. Grant-Mackie 1959 ¶ Kt-Kh
Mesosaccella sp.* AUG Ko-Op
NUCULANIDAE
Nuculana (*Nuculana*) *vexillata* Marwick, 1953 E Ha
Nuculana (*N.*) *willetti* Marwick, 1953 E Hu-Ko
Nuculana (*N.*) aff. *willetti* Marwick, 1953* Op
Nuculana (*Praesaccella*) sp.* GNS Ko-Op
Nuculana (s.l.) sp. A GNS Ha
Nuculana (s.l.) sp. B AUG Hu-Kt
Nuculana (s.l.) sp. C AUG Kh
Nuculana (s.l.) sp. D AUG Ko
Nuculana (s.l.) sp. E AUG Op
NUCULIDAE
Palaeonucula cuneiformis (Sowerby, 1840) Kt-Kh
Palaeonucula putiensis Marwick, 1953 E Kt-Op
Palaeonucula sp. A AUG Ha-Hu
Palaeonucula sp. B AUG Kh
Palaeonucula sp. C AUG Op
Palaeonucula sp. Hudson 1999 Kt
'*Palaeonucula* sp. AUG Kh
POLIDEVCIIDAE
Dacryomya sp.* AUG Kt
Ryderia n.sp.* GNS Hu
SAREPTIDAE
aff. *Yoldia* sp.* det. Grant-Mackie; AUG Op

Subclass PTERIOMORPHIA
Order ARCOIDA
ARCIDAE
Arca (*Eonavicula*) sp. A Hudson 1999 Kt-Kh
Arca (*E.*) sp. B Hudson 1999 Kh
Arca (*E.*) sp.* Op
'*Arca* sp. Gardner & Campbell in prep. Late Jur
CUCULLAEIDAE
Cucullaea n. sp. * Maxwell & Gardner in prep. Mid or Late Jur
PARALELLODONTIDAE
Grammatodon (*Cosmetodon*) *keyserlingi* (d'Orbigny, 1850) Kt
Grammatodon (*C.*) sp.* det. Grant-Mackie AUG Op
Grammatodon (*Grammatodon*) sp. Maxwell & Campbell in prep. Mid or Late Jur
Grammatodon (*Indogrammatodon*) *fyfei* Marwick, 1953 E Op
Grammatodon (*I.*) *implicatus* Gardner & Campbell, 1997 E Kt
Grammatodon (*I.*) *obscurus* Gardner & Campbell, 1997 E Kt
Grammatodon (*I.*) *sparsilineatus* Marwick, 1953 E Ko-Op
Grammatodon (*I.*) *taylori* Marwick, 1953 E Kh
Grammatodon (*I.*) *venustus* Gardner & Campbell, 1997 E Kt
Grammatodon (*I.*) sp. Hudson 1999 Hu-Kt
Grammatodon (s.l.) sp. Speden 1971 Ha
Paralellodon (s.l.) sp. A Hudson 1999 Hu
Paralellodon (s.l.) sp. B Hudson 1999 Kt

Order MYTILOIDA
MYTILIDAE
Modiolus (*Modiolus*) sp. det. Grant-Mackie; AUG Kh
Modiolus (*M.*) sp.* det. Grant-Mackie; AUG Op
Modiolus sp. Hudson 1999 Kt
PINNIDAE
Pinna kawhiana Marwick, 1953 E Kt-Kh
Pinna n. sp. Hudson 1999 Kt
Pinna n. sp.* det. Grant-Mackie; AUG Op
Pinna? sp. Speden 1971 Ha

Order PTERIOIDA
AVICULOPECTINIDAE
Asoella sp. MacFarlan 1998 EE Hu
BAKEVELLIIDAE
Bakevellia sp.* Hu
Cultriopsis sp. Damborenea & Mancenido 1992 Hu
Cultriopsis? sp.* Late Jur
Gervillia (*Gervillia*) sp. Hudson 1999 Kt
BUCHIIDAE
Australobuchia hochstetteri (Fleming, 1959) E Op
Australobuchia aff. *hochstetteri* (Fleming, 1959) E Op
Australobuchia partimlirata Hikuroa & Grant-Mackie, 2008 E Op
Australobuchia aff. *partimlirata* Hikuroa & Grant-Mackie, 2008 E Op
Australobuchia plicata (Zittel, 1864) E Op
Australobuchia aff. *plicata* (Zittel, 1864) E Op
Australobuchia aff. *subpallasi* (Krumbeck, 1934) Late Jur
Australobuchia wherowhero Hikuroa & Grant-Mackie 2008 E Op
Malayomaorica malayomaorica (Krumbeck, 1923) Kh-Ko
Malayomaorica aff. *malayomaorica* (Krumbeck, 1923) Late Jur
<u>*Pseudaucella*</u> *marshalli* (Trechmann, 1923) EE Hu
ENTOLIIDAE
Cingentolium sp. Gardner & Campbell, in prep. Late Jur
Entolium fossatum Marwick, 1953 E Ha
Entolium sp. A MacFarlan 1975 Ha-Hu
Entolium sp. B MacFarlan 1975 Kt-Kh
Entolium sp. Purser 1961 Op
INOCERAMIDAE
Anopaea aff. *verbeeki* Boehm, 1904 Late Jur
Anopaea n. sp. Fleming 1958 Late Jur
'*Inoceramus* *ururoaensis* Speden, 1970 EE Hu-Kt
'*Inoceramus* sp. Hudson 1999 Hu
Parainocermus martini Speden, 1970 EE Hu
ISOGNOMONIDAE
Isognomon (*Isognomon*) sp. Crampton 1988 Kt
Isognomon (*Mytiloperna*) sp. A Crampton 1988 Kt-Kh
Isognomon (*Mytiloperna*) sp. B Crampton 1988 Hu
LIMIDAE
Acesta brycei Marwick, 1953 E Kt-Kh
Acesta? sp.* Kh
Antiquilima sp. A Braithwaite 1984 E Hu
Antiquilima sp. E Hudson 1999 Hu
Ctenoides sp. Braithwaite 1984 E Op
cf. *Ctenoides* sp. Hudson 1999 Kt
Lima (*Lima*) *williamsoni* Marwick, 1953 E Kt-Kh
Lima sp. Braithwaite 1984 E Hu
Limatula sp. MacFarlan 1975 Bo-Ha
Limatula sp. Speden 1971 Kt
Plagiostoma aff. *gigantea* (Sowerby, 1814) Op
Plagiostoma aff. *tenuistriata* (Munster, 1836) Ha
Plagiostoma sp. Hudson 1999 Kt
Plagiostoma sp.* GNS Kh
Pseudolimea fida Marwick, 1953 E Ha
Pseudolimea cf. *harburgensis* Cox, 1944 Bo-Hu
Pseudolimea inanis Marwick, 1953 E Hu
Pseudolimea sp. A Braithwaite 1984 E Ko-Op
Pseudolimea sp. B Braithwaite 1984 E Op
Pseudolimea sp. C Braithwaite 1984 E Kh
Pseudolimea sp. F Braithwaite 1984 E Hu
Pseudolimea sp. G Braithwaite 1984 E Ha-Hu
Pseudolimea sp. P Braithwaite 1984 E Hu
Pseudolimea sp. Hudson 1999 Kt
Limidae gen. et sp. indet. A Braithwaite 1984 E Bo-Ha
Limidae gen. et sp. indet. B Braithwaite 1984 E Kh
MONOTIDAE
Otapiria marshalli (Trechmann, 1923) EE Ha
Otapiria cf. *marshalli* (Trechmann, 1923) Ha
Otapiria masoni Marwick, 1953 E Op
Otapiria sp. Hudson 1999 Hu-Kt
Otapiria sp.* Op
aff. *Otapiria* n.sp. MacFarlan 1998 Ha-Hu
OSTREIDAE
Lopha cf. *haidingeriana* (Emmrich, 1853) Hu
Ostrea sp. A Speden 1971 Kt-Kh
'*Ostrea* sp. Speden 1971 Ha-Kt
Ostreoidea gen. et sp. indet. A* Kh
Ostreacea gen. et sp. indet. B* Ko
Ostreacea gen. et sp. indet. C* Op
OXYTOMIDAE
Meleagrinella n. sp. Hudson 1999 EE Kt
Meleagrinella? sp.* GNS Op
Oxytoma (*Oxytoma*) sp. B Marwick 1953 Kt-Kh
Oxytoma (<u>*Palmoxytoma*</u>) sp. Damborenea & Mancenido 1992 Ha
Oxytoma (s.l.) sp. Martin 1975 AUG Hu
Oxytoma (s.l.) sp.* Op
PECTINIDAE
Agerchlamys wunschae (Marwick, 1953) Hu
Agerchlamys sp. Hudson, 1999 Hu
Agerchlamys ? sp.* AUG Op
aff. *Camptonectes* (*Boreionectes*) sp.* det. Grant-Mackie; AUG Ha
Camptonectes (*Camptochlamys*) sp. Hudson 1999 Kt
Camptonectes (*C.*) *grandis* (Hector, 1886) E Kt-Kh
Camptonectes (*C.*) aff. *grandis* (Hector, 1886) Kh
Camptonectes (*C.*) cf. *laminatus* (Sowerby, 1818) Kt-Kh
Camptonectes (*C.*) sp. MacFarlan 1998 Kh
Camptonectes (s.l.) sp.* AUG Op
Chlamys sp. Ha
Chlamys sp. Hu
'*Chlamys* sp. Kt-Kh
aff. *Eburneopecten* sp.* det. Grant-Mackie; AUG Op
Eopecten? sp.* Ha
Kolymonectes? sp. Damborenea & Mancenido 1992 Kt
Pseudopecten sp.* det. Grant-Mackie GNS Op
PLICATULIDAE
Plicatula (*Harpax*) cf. *rapa* Bayle & Coquand, 1851 Ha-Hu
Plicatula (s.l.) sp.* Kh-Op
PROPEAMUSSIIDAE
Propeamussium (*Parvamussium*) *clamosseum* (Marwick, 1953) E Kt-Kh
Propeamussium (*P.*) n.sp.* GNS Kh
RETROCERAMIDAE
Retroceramus (*Fractoceramus*) *inconditus* (Marwick, 1953) Kt
Retroceramus (*Retroceramus*) *brownei* (Marwick, 1953) EE Kt
Retroceramus (*R.*) *everesti* (Oppel, 1862) Op
Retroceramus (*R.*) n. sp. A aff. *everesti* (Oppel, 1862) Late Jur
Retroceramus (*R.*) *galoi* (Boehm, 1907) Kh
Retroceramus (*R.*) cf. *galoi* (Boehm, 1907) E Kh
Retroceramus (*R.*) *haasti* (Hochstetter, 1863) Ko
Retroceramus (*R.*) *marwicki* (Speden, 1970) Kt

Retroceramus (*R.*) cf. *patagonicus* (Philippi, 1899) Kt
Retroceramus (*R.*) *stehni* Damborenea, 1990 Kt
Retroceramus (*R.*) sp. C Hudson 1999 Kt
Retroceramus (*R.*) sp. D Hudson 1999 Kh
Retroceramus (*R.*) sp. Hudson 1999 Kt
Retroceramus (s. l.) n. sp. B aff. *gracilis* (Holdhaus, 1913) Late Jur
TERQUEMIIDAE
Placunopsis striatula Zittel, 1864 E Op
Placunopsis sp. Hudson 1999 Kt
Placunopsis? sp. Martin 1975 Hu

Subclass PALAEOHETERODONTA
Order UNIONOIDA
PACHYCARDIIDAE
'*Unionites* sp.* det. Hasibuan Hu
UNIONIDAE
'*Unio* sp.* AUG Op

Order TRIGONIOIDA
LAEVITRIGONIIDAE
Laevitrigonia (*Malagasitrigonia*) *macfarlani* Fleming, 1987 E Kt
MYOPHORELLIDAE
Myophorella (*Scaphogonia*) *hokonuiensis* Fleming, 1987 E Kt
Myophorella (*S.*) *macnaughti* Fleming, 1987 E Kh-Ko
Myophorella (*S.*) *purseri* Fleming, 1987 E Op
PSILOTRIGONIIDAE
Psilotrigonia zealandica Fleming, 1987 E Late Jur
TRIGONIIDAE
Trigonia (*Trigonia*) *signicollina* Fleming, 1987 E Kt
Trigonia (*T.*) cf. *signicollina* Fleming, 1987 Kt
VAUGONIIDAE
Vaugonia (*Hijitrigonia*) *kahuica* Fleming, 1987 E Kt
Vaugonia (*Orthotrigonia*) *waipahiensis* (Fleming, 1987) E Kt
Vaugonia (*Vaugonia*) *kawhiana* (Trechmann, 1923) E Kh
Vaugonia (*V.*) *spedeni* Fleming, 1987 E Kt
Vaugonia (*V.*) n. sp. A aff. *spedeni* Fleming, 1987 Kt
Vaugonia (*V.*) n. sp. B Fleming 1987 Op

Subclass HETERODONTA
Order VENEROIDA
ARCTICIDAE
Antarctica ampliforma Gardner, 2005 Kt
Pronoella? (s.l.) n. sp. Speden 1971 Kt
Venericyprina n. sp. A* Maxwell & Gardner in prep. Mid or Late Jur
ASTARTIDAE
'*Astarte* sp.* Ha
'*Astarte* sp.* Hu
Hemipelex flatilis (Gardner & Campbell, 2002) E Kt
Hemipelex latifalcata (Gardner & Campbell, 2002) E Kt
Neocrassina densicostata Gardner & Campbell, 2002 E Kt
Neocrassina faceta Gardner & Campbell, 2002 E Kt
Neocrassina fessicostata Gardner & Campbell, 2002 E Kt
Neocrassina aff. *sowerbyana* (Holdhaus, 1913)* det. Grant-Mackie; AUG Late Jur
cf. *Neocrassina* sp.* AUG Op
Nicaniella notipelagos Gardner & Campbell, 2002 E Mid-Late Jur
<u>*Notoastarte*</u> *crassicardinata* Gardner & Campbell, 2002 E Kt
Notoastarte variabilis Gardner & Campbell, 2002 E Kt
Notoastarte vinnula Gardner & Campbell, 2002 E Kt
?*Opis* sp.* GNS Op
Oxyeurax apatrida (Gardner & Campbell, 2002) E Late Jur
Oxyeurax cyphopleura (Gardner & Campbell, 2002) E Kt
Oxyeurax forticrista (Gardner & Campbell, 2002) E Late Jur
Oxyeurax laticardinata (Gardner & Campbell, 2002) E Kt
Oxyeurax laticostata (Gardner & Campbell, 2002) E Kt
Trigonopis anatona Gardner & Campbell, 2002 E Kh
Trigonopis morgani (Trechmann, 1923) E Kh
CARDIIDAE
Protocardia sp.* det. Grant-Mackie; AUG Op
CARDITIDAE
Tutcheria sp.* det. MacFarlan; OUG Ha
FIMBRIIDAE
<u>*Haastina*</u> *haastiana* (Wilckens, 1918) E Kt
Haastina n. sp. A Speden 1971 Kt
Sphaeriola leedae Marwick, 1953 E Ha
Sphaeriola sp. Hudson 1999 Hu
cf. *Sphaeriola* sp. Martin 1975 Ha
ISOCYPRINIDAE
<u>*Austrocyprina*</u> *excelsa* Gardner, 2005 Op E
LUCINIDAE
Lucinidae gen. et sp. indet. Hudson 1999 Hu
PERMOPHORIDAE
Kalentera flemingi Marwick, 1953 E Hu
Kalentera mackayi Marwick, 1953 Ha
Kalentera? sp. A* Ha
Kalentera? sp. B* Hu
TANCREDIIDAE
Tancredia allani Marwick, 1953 E Kt
Tancredia n. sp. A Speden 1971 Kt
VENERIDAE
Austrocardilanx gracilis Gardner, 2005 Kh E
Austrocardilanx provecta Gardner, 2005 Kh E
Eocallista austrofilia Gardner, 2005 Kt E
Gen. et sp. indet. Hudson 1999 Kt

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
CERATOMYIDAE
cf. *Gresslya* sp.* Kt
PHOLADOMYIDAE
Goniomya (*Goniomya*) sp. Kt-Kh
Homomya signicollina Marwick, 1953 E Kt
Mactromya? sp. Speden 1971 Hu
Osteomya sp. Hudson 1999 Kt
Pachymya? (*Arcomya*) sp.* GNS Kt
Pholadomya (<u>*Moewakamya*</u>) *hudsoni* Campbell & Grant-Mackie, 1995 E Kt-Kh
Pholadomya (*Pholadomya*) *beaumontensis* Campbell & Grant-Mackie, 1995 E Kt
Pholadomya (*P.*) *oretiensis* Campbell & Grant-Mackie, 1995 E Ha
Pholadomya (*P.*) sp. aff. *oretiensis* Campbell & Grant-Mackie, 1995 Kt
Pholadomya (*P.*) sp.* Kh
PLEUROMYIDAE
Pleuromya milleformis Marwick, 1953 Kt-Kh
Pleuromya urnula Marwick, 1953 EE Ha-Hu
Pleuromya sp. A Speden 1971 Kt
Pleuromya sp. B Speden 1971 Kt
Pleuromya sp. MacFarlan 1998 Ha
Pleuromya? sp. Hu
Tetorimya n. sp. det. Gardner Kt-Kh
THRACIIDAE
Thracia sp. A Hudson 1999 Kh
Thracia sp. B Hudson 1999 Kt
Thracia sp. C Hudson 1999 Kh
Thracia sp. Purser 1961 Op
Thraciidae gen. et sp.* Op

Class CEPHALOPODA
Subclass NAUTILOIDEA
Order NAUTILOIDA
CYMATOCERATIDAE
Paracymatoceras sp.* det. Grant-Mackie; AUG Op
NAUTILIDAE
Cenoceras sp. indet. A Kummel 1959 Ha
Cenoceras sp. Indet. B Kummel 1959 Ha

Subclass AMMONOIDEA
Order AMMONITIDA
Suborder PHYLLOCERATINA
PHYLLOCERATIDAE
Calliphylloceras empedoclis (Gemmellaro, 1872) Ko-Op
Calliphylloceras cf. *empedoclis* (Gemmellaro, 1872) Kt
Calliphylloceras sp. indet. Stevens, 1997 Kh
Holcophylloceras passati masoni Stevens, 1997 E Kt-Kh
Holcophylloceras polyolcum (Benecke, 1865) Kh-Op
Holcophylloceras sp. Hudson, 1999 Hu-Kt
Partschiceras cf. *grossicostatum* (Imlay, 1953)* det. Westermann Kt
Partschiceras otekense Stevens, 1997 E Ko
Partschiceras strigoceriforme Stevens, 1997 E Kh-Op
Partschiceras sp. Hudson, 1999 Hu
Phylloceras cf. *bakeri* Imlay, 1953* det. Westermann Kh
Phylloceras salima Krumbeck, 1905 Kt-Op
Phylloceras psilomorphum Neumayr 1879 Ha
Phylloceras sp. Hudson 1999 Kt
Phylloceras sp./spp. AUG Hu Kt
Ptychophylloceras sp. indet. Stevens 1997 Ko
JURAPHYLLITIDAE
Galaticeras? sp. Speden 1971 Hu
Juraphyllites aff. *diopsis* (Gemmellaro, 1884) Hu
Juraphyllites sp.* AUG Hu
Nevadaphyllites pounamuus Stevens 2004 E Ha

Order PSILOCERATIDA Housa 1965
Suborder PSILOCERATINA Housa 1965
ANALYTOCERATIDAE
Eolytoceras cf. *tasekoi* Frebold 1964 Ha
ECTOCENTRITIDAE
Alocolytoceras sp.* det. Hudson AUG Kt
Ectocentrites cf. *petersi* (Hauer 1856) Ha
LYTOCERATIDAE
Lytoceras taharoaense Stevens, 1985 E Kh
Lytoceras sp. indet. A cf. *taharoaense* Stevens, 1985 Kh
Lytoceras sp. indet. B Stevens, 1985 Kh
Lytoceras sp. indet. C Stevens, 1985 Op
Lytoceras sp.* AUG Hu
cf. Lytoceratinae indet. Stevens 1985 Op
NANNOLYTOCERATIDAE
Nannolytoceras gr. *pygmaeum* (d'Orbigny, 1846)/ *nicolizi* (Parona, 1846) Kt
Nannolytoceras sp.* indet. Grant-Mackie & Hudson AUG Kt
PSILOCERATIDAE
Macrogrammites cf. *grammicum* Buckman 1928 Ha
<u>*Murihikuites*</u> *mackellari* Stevens 2004 Ha E
Psiloceras cf. *pacificum* Guex 1980 Ha
Psiloceras cf. *plicatulum* (Quenstedt 1883) Ha
Storthoceras cf. *extracostatum* (Waehner 1882) Ha
Waehneroceras otapiriense Stevens 2004 Ha E
SCHLOTHEIMIIDAE
Angulaticeras flaghillense Stevens 2004 Ha E
Angulaticeras marmoreum (Oppel 1862) Ha
Angulaticeras cf. *ventricosum* (Sowerby 1831) Ha
Kammerkarites frigga (Waehner 1886) Ha
Kammerkites megastoma (Guembel 1861) Ha
Kammerkarites cf. *toxophorum* (Waehner 1886) Ha
Schlotheimia extranodosa (Waehner 1886) Ha

Suborder AMMONITINA
ARIETITIDAE
Arietitinae gen. et sp. indet. Stevens 2004 Ha
Arnioceras cf. *bodleyi* (J.Buckman 1844) Ha
Coroniceras campbelli Stevens 2004 Ha E
Metophioceras brevidorsale (Quenstedt 1883) Ha
Metophioceras marakopaense Stevens 2004 Ha E

Paracaloceras (Gyrophioceras) loraense Stevens 2004 Ha E
?Tipperoceras sp. indet. Stevens 2004 Ha
?Tmaegoceras sp.indet. Stevens 2004 Ha
ASPIDOCERATIDAE
Aspidoceras cf. *euomphaloides* Burckhardt, 1906 Kh
ATAXIOCERATIDAE
Aulacosphinctoides brownei (Marshall, 1909) E Op
Aulacosphinctoides sisyphi (Hector, 1886) E Op
Idoceras speighti (Marshall, 1924) E Kh
Idoceras? sp. indet. Stevens, 1997 Kh-Ko
Kawhiasphinctes antipodus Stevens, 1997 E Op
Kossmatia cf. *desmidoptycha* Uhlig, 1910 Ko
Kossmatia mairiensis Stevens, 1997 E Ko
Kossmatia pilicosta Stevens, 1997 E Ko-Op
Kossmatia cf. *santarosana* (Burckhardt, 1906) Ko
Pachysphinctes cf. *beyrichi* (Futterer, 1894) Kh-Ko
Paraboliceras flemingi Stevens, 1997 E Ko
Paraboliceras aff. *haugi* Uhlig, 1910 Ko
Paraboliceras macnaughti (Stevens, 1997) E Kh-Ko
Paraboliceras aff. *sabineanum* (Oppel, 1864) Ko
Paraboliceras subspitiense Stevens, 1997 E Ko
Paraboliceratoides grantmackiei Stevens, 1997 E Ko
Subdichotomoceras maraetaiense Stevens, 1997 E Op
Subplanites huriwaiensis Stevens, 1997 E Op
DACTYLIOCERATIDAE
Catacoeloceras grangei Stevens, 2008 Hu
Dactylioceras aff. *commune* (Sowerby, 1815) Hu
Dactylioceras aff. *timorense* (Boehm, 1908) Hu
Zugodactylites braunianus (d'Orbigny, 1845) det. M. K. Howarth; OUG Hu
HAMMATOCERATIDAE
Planammatoceros sp. * det. Grant-Mackie; AUG Kt
HILDOCERATIDAE
Harpoceras subplanatum (Oppel, 1856) Hu
Pseudolioceras sp.* det. Hudson AUG Kt
MORPHOCERATIDAE
Polysphinctites? sp. Speden 1971 Kt
OPPELIIDAE
Toxamblyites aff. *densicostatus* Sturani, 1971* Kt
Uhligites keyesi Stevens, 1997 E Ko
Uhligites motutaranus (Boehm, 1911) E Op
Oppeliinae gen. et sp. indet. Hudson 1999 Kt
Oppeliidae indet. aff. *Glochiceras* sp. Fleming & Kear 1960 Op
PERISPHINCTIDAE
Choffatia (Homoeoplanulites) ex gr. *furcula* (Neumayr, 1871)* Kt
Perisphinctes (Kranaosphinctes) sp.* det. Westermann; Waitomo Caves Museum Kh
'Perisphinctes' kawhiae Stevens, 1997 E Kh
Sulaites heteriensis (Stevens, 1997) E Kh
Sulaites cf. *heteriensis* (Stevens, 1997) Kh-Ko
PHYMATOCERATIDAE
Erycites? aff. *fallifax* Arkell, 1957* Kt
SPHAEROCERATIDAE
Eurycephalitinae
Araucanites awakino Westermann *in* Westermann et al., 2002 E Kh
Araucanites ponganui Westermann *in* Westermann et al., 2002 E Kt
Araucanites postawakino Westermann *in* Westermann et al., 2002 E Kt
Araucanites spellmani Westermann *in* Westermann et al., 2002 E Kh
Araucanites n. sp. E Westermann et al. in prep. E Kt
Eurycephalites? ex gr. *extremus* (Tornquists, 1898)* Kt
Iniskinites ex gr. *cepoides* (Whiteaves, 1884)* Kt
Iniskinites cf. *crassus* Riccardi & Westermann, 1991* Kt
Lilloettia cf./aff. *burckhardti* Riccardi & Westermann, 1991* Kt
Lilloettia cf./aff. *lilloetensis* Crickmay, 1930 Kt
Lilloettia marwicki (Stevens, 1997) ¶ E Kh
Lilloettia gr. *steinmanni* (Spath, 1928) Kt
Xenocephalites grantmackiei Westermann & Hudson, 1991 Kt
Xenocephalites cf. *stipanicici* Riccardi & Westermann, 1991* Kt
Sphaeroceratinae
Chondroceras (*Chondroceras*) gr. *evolvescens* (Waagen, 1867)* Kt
Chondroceras (*C.*) cf. *recticostatum* Westermann & Riccardi, 1979* Kt
Chondroceras (*Defonticeras*) cf. *oblatum* (Whiteaves, 1976)* Kt
Chondroceras (*Schmidtoceras*) *orbignyanum* (Wright, 1859)* Kt
Waikatoceratinae E
'Macrocephalites (n. gen.) *parki* (Wilckens, 1927) E Kt
Opouatia challinori Westermann, 2000 E Kt
Opouatia circularis Westermann, 2000 E Kt
Opouatia cf. *circularis* Westerman 2000 E Kt
Opouatia inflata Westermann, 2000 E Kt
Opouatia n. sp. A Westermann 2000 E Kt
Waikatoceras crassum Westermann, 2000 E Kt
Waikatoceras hudsoni Westermann, 2000 E Kt

STEPHANOCERATIDAE
Stephanoceras? (*Stephanoceras*) gr. *humphriesianum* (Sowerby, 1825)* Kt
Stephanoceras (*S.*) ?gr. *humphriesianum* (Sowerby, 1825)* det. Grebneff; OUG Kt
Teloceras gr. *banksi* (Sowerby, 1818)* Kt

SUBORDER ET FAMILY INDET.
Praestriaptychus sp.* det. Grant-Mackie; AUG Kh

Subclass COLEOIDEA
Order AULACOCERIDA
AULACOCERATIDAE
Aulacoceras sp. Bo-Ha
Prographularia n. sp. Jeletzky & Zapfe, 1967 Bo-Ha
XIPHOTEUTHIDIDAE
Atractites aratauraensis Challinor, 1996 E Ha

Subclass COLEOIDEA
Order BELEMNITIDA
Suborder BELEMNITINA
BELEMNITIDAE
Brevibelus zieteni (Werner, 1912) Kt
Belemnitidae? gen. et sp. indet. Hu-Kt
CYLINDROTEUTHIDAE
Cylindroteuthis sp. Stevens 1965 Kt
Cylindroteuthis? sp. Challinor 1991 Kt

Suborder BELEMNOPSEINA
BELEMNOPSEIDAE
Belemnopsis annae Challinor, 1979 E Kh
Belemnopsis aucklandica (Hochstetter, 1863) E Op
Belemnopsis deborahae Challinor, 1977 E Kt
Belemnopsis keari Stevens, 1965 E Kh
Belemnopsis mackayi Stevens, 1965 E Kt
Belemnopsis rarus Challinor, 1980 E Ko
Belemnopsis stevensi Challinor, 1974 E Ko
Belemnopsis trechmanni Stevens, 1965 E Ko
Belemnopsis n. sp. Stevens 1965 Kt
Belemnopsis sp. A Challinor 1979 Kh
Belemnopsis sp. B Challinor 1979 Kh
Belemnopsis sp. C Challinor 1979 Kh
Belemnopsis sp. D Challinor 1979 Kh
Belemnopsis sp. Challinor 1999 Op
Hibolithes arkelli Stevens, 1965 E Ko
Hibolithes catlinensis (Hector, 1878) E Kt
Hibolithes kaimangoensis Challinor, 1996 E Ko
Hibolithes mangaoraensis Stevens, 1965 E Op
Hibolithes marwicki Stevens, 1965 E Op
Hibolithes minor (Hauer, 1864) E Ko
Hibolithes otekensis Challinor, 1996 E Ko
Hibolithes spathi (Stevens, 1965) E Ko-Op
Hibolithes n. sp. Stevens 1965 Op
Hibolithes sp. Stevens 1965 Op
Hibolithes sp. A Hudson 1999 Kt
Hibolithes sp. A Challinor 1999 Op
Hibolithes sp. B Challinor 1999 Op
Hibolithes sp. C Challinor 1999 Op
DICOELITIDAE
Conodicoelites flemingi Stevens, 1965 E Kh
Conodicoelites aff. *flemingi* Stevens, 1965 Kt
Conodicoelites orakaensis Stevens, 1965 E Kh
Conodicoelites aff. *orakaensis* Stevens, 1965 Kt
Conodicoelites n. sp. Stevens 1965 Kh
Dicoelites kowhaiensis Challinor, 1980 E Ko

SUBORDER ET FAMILY INDET.
Onychites macnaughti Marwick, 1956 E Kh-Ko
Onychites sp. Hudson 1999 Kh
Onychites sp.* det. Grant-Mackie; AUG Op

Cretaceous Mollusca

Compiled by Jeffrey D. Stillwell, James Crampton, and Bob Henderson.

New Zealand (NZ and unless stated) and Chatham Islands (CI) local stage symbols used in this list are as follows (oldest to youngest): Korangan (Uk, late Aptian); Urutawan (Cu, early Albian); Motuan (Cm, late Albian); Ngaterian (Cn, Cenomanian); Arowhanan (Ra, latest Cenomanian-late Turonian); Mangaotanean (Rm, latest Turonian-earliest Coniacian); Teratan (Rt, late Coniacian); Piripauan (Mp, Santonian); and Haumurian (Mh, Campanian-Maastrichtian). E, endemic species and family-group taxa; endemic genera are underlined.

Phylum MOLLUSCA
Class BIVALVIA
Subclass PALEOTAXODONTA
Order NUCULOIDA
MALLETIIDAE
Australoneilo n. sp. Stilwell 1994 Mh
Neilo s.l. sp. Cm
Neilo (*Neiloides*) *cymbula* (Woods, 1917) Mp-Mh
Tindaria? n. sp. Stilwell 1994 Mh
NUCULANIDAE
Jupiteria sp. Speden 1975 Cu-Cn
Jupiteria sp. Speden 1975 Uk
Jupiteria n. sp. Stilwell 1994 Mh
Jupiteria? n. sp. Stilwell 1994 Mh
Nuculana s.l. sp. Uk
Nuculana sp. Moore & Speden 1984 Cm
Nuculana s.s. n. sp. A Stilwell 1994 Mh
Nuculana s.s. n. sp. B Stilwell 1994 Mh
Nuculana? *amuriensis* Woods, 1917 Mp-Mh
Pseudoportlandia? sp. Stilwell 1994 Mh
Saccella? n. sp. Stilwell 1994 Mh
Saccella s.l. sp. Fleming *in* Wellman 1959 Mp-Mh
Nuculanidae? gen. et sp. indet. Rm-Rt
NUCULIDAE
Acila sp. Cn?
Leionucula suboblonga (Wilckens, 1905) Mp-Mh
Leionucula sp. Speden 1975 Uk-Cu
Linucula n. sp. Stilwell 1994 Mh
Nucula spp. Wellman *in* Challis 1966 Cm-Cn
Nucula sp. Speden 1975 Cu
Nucula s.l. n. sp. A Stilwell 1994 Mh
Nucula s.l. n. sp. B Stilwell 1994 Mh
Nucula s.l. n. sp. C Stilwell 1994 Mh

Subclass CRYPTODONTA
Order SOLEMYOIDA
SOLEMYIDAE
Solemya sp. cf. *S. neocomiensis* (Haupt) [Moore & Speden 1984] Cu-Cm
Solemya n. sp. Stilwell 1994 Mh
Solemya sp. Cu
Subclass PTERIOMORPHA
Order ARCOIDA
ARCIDAE
Arca? spp. Speden 1975, Crampton 1988a Uk Mp?
Austrocucullaea n. sp. cf. *A. oliveroi* Zinsmeister & Macellari, 1988 [Stilwell 1994] probably Mh
Barbatia mackayi Woods, 1917 Mp-Mh?
Barbatia sp. cf. *B. marullensis* (d'Orbigny) [Fleming *in* Wellman 1959] Cn
Barbatia? sp. Cm
Cucullaea sp. cf. *C. antarctica* Wilckens, 1905 [Stilwell 1994] prob. Mh
Cucullaea (*Cucullastis*) *zealandica* (Woods, 1917) Mp-Mh (NZ & CI)
Cucullaea sp. Woods 1917 Mp-Mh?
Cucullaea s.l. (*Dicranodonta*?) spp. Speden 1975 Uk-Mh?
Grammatodon sp. Speden 1975 Uk-Cu
Indogrammatodon hectori (Woods, 1917) Mp-Mh?
Nordenskjoeldia woodsi Wilckens, 1920 Mh

GLYCYMERIDIDAE
Glycymerita selwynensis (Woods, 1917) Mp-Mh
Glycymerita sp. Woods 1917 Mp
Glycymerita sp. Stilwell 1998 Mh
LIMOPSIDAE
Limopsis? s.s. sp. Speden 1975, Moore & Speden 1984 Uk-Cm
Limopsis s.s. n. sp. Mp?-Mh

Order MYTILOIDA
INOCERAMIDAE
Actinoceramus? sp. Crampton 1996 Cm?-Ra?
Anopaea sp. Cu-Cm
Cremnoceramus bicorrugatus bicorrugatus (Marwick, 1926) [Crampton 1996] Rm
Cremnoceramus b. matamuus Crampton, 1996 Rm
Cremnoceramus moorei Crampton, 1996 Rm?
Cremnoceramus sp. A aff. *C. bicorrugatus* Crampton 1996 Ra?-Rt?
Cremnoceramus sp. B? aff. *C. bicorrugatus* Rm?-Rt?
Inoceramus australis Woods, 1917 [Crampton 1996] Mp
Inoceramus? *madagascariensis* (Heinz, 1933) [Crampton 1996]
Inoceramus opetius Wellman, 1959 [Crampton 1996] Rt
Inoceramus pacificus nanakius Crampton, 1996 Mp
Inoceramus p. pacificus Woods, 1917 [Crampton 1996] Mp
Inoceramus spedeni Crampton, 1996 Rm-Rt
Inoceramus tawhanus Wellman, 1959 Cn-Rt
Inoceramus ex. gr. *hakarius-fyfei* Wellman, 1959 Cn
Inoceramus ex. gr. *kapuus-ipuanus* Wellman, 1959 Cu-Cm
Inoceramus spp. (>3) C-R
Inoceramus? n. sp.? Stilwell 1994 Mh
Inoceramus? sp. B Crampton 1988b
Magadiceramus? *rangatira haroldi* Crampton, 1996 Ra
Magadiceramus? *r. rangatira* (Wellman, 1959) [Crampton 1996] Ra
MYTILIDAE
Aulacomya? sp. Stilwell 1994
Brachidontes sp. Speden 1975 Uk-Cu
Crenella n. sp. Stilwell 1998 Mh
Eyrena? sp. Speden 1975 Uk
Inoperna sp. aff. *I. flagellifera* (Forbes, 1846) [Stilwell 1994] Mp-Mh
Lithophaga? sp. Fleming *in* Wellman 1959 Mh
Lycettia sp. cf. *L. foaensis* Freneix, 1980 [Stilwell 1994] prob. Mh
Modiolus spp. Speden 1975, Crampton 1988a Uk-Cu, Rt-Mp
Modiolus sp. cf. *M. typicus* (Forbes, 1846) [Stilwell 1994] Mp-Mh
Modiolus kaikourensis Woods, 1917 Cn?-Ra
Mytilus sp. Speden 1975 Uk
Septifer? n. sp. Stilwell 1994 Mh
PINNIDAE
Pinna sp. [Woods 1917] Mp-Mh (NZ & CI)
Pinna spp. Fleming *in* Wellman 1959 Uk-Cu

Order PTERIOIDA
Suborder PTERIINA
ANOMIIDAE
Anomia n. sp.? Stilwell 1994 Mp-Mh
BAKEVELLIIDAE
Bakevelliidae gen. et sp. indet. J. Crampton pers. comm. *in* Stilwell 1994 Rt-Mh
BUCHIIDAE
Aucellina euglypha Woods, 1917 Uk-Cm
Aucellina sp. cf. *A. grypaeoides* (Sowerby, 1836) Cu
Aucellina sp. cf. *A. radiatostriata* Bonarelli, 1921 (*in* Bonarelli & Nágera) Uk
DIMYIDAE
Dimyodon n. sp. Stilwell 1998 Mh (CI)
ENTOLIIDAE
Entolium membranaceum (Nilsson, 1827) Mp-Mh (NZ & CI)
Entolium sp. cf. *E. orbiculare* (Sowerby, 1817) Cn
Entolium spp. Cu-Cm, Rm
ISOGNOMONIDAE
Isognomon (*Isognomon*) *rekohuensis* Crampton, 1988 Mh (CI)
Isognomon spp. Crampton 1988a Rt-Mh
OXYTOMIDAE
Maccoyella magnata Marwick, 1939 Uk
Maccoyella sp. cf. *M. reflecta* (Moore, 1870) [Speden 1975] Uk
Maccoyella spp. Speden 1975 Uk-Ra
Oxytoma? sp. Cn
Oxytomidae n. gen. et sp.? Crampton 1988a Mp-Mh
PECTINIDAE?
Aequipecten? spp. Cu-Mh
Amusium? Sp. Mp
Camptonectes selwynensis (Finlay, 1927) Mp-Mh?
Camptonectes n. sp. Stilwell 1994 Mh
Camptonectes n. sp. Crampton 1988, Stilwell 1998 Mh (NZ & CI)
Camptonectes spp. Speden 1975, unpubl. Uk-Cn
Chlamys (*Lyriochlamys*) n. sp. Stilwell 1994, 1998 Mp-Mh (NZ & CI)
Chlamys s.l. n. sp. Stilwell 1998 Mh (CI)
Chlamys s.l. spp. e.g. Crampton 1988 Uk-Mh
Eburneopecten freneixae Stilwell, 1998 Mh (CI)
Eopecten? sp. Cu
Mixtipecten amuriensis (Woods, 1917) Mp-Mh
Neithea grangei (Murdoch, 1924) Mh
Neithea? sp. Uk
Parvamussium spp. Speden 1975, unpubl. Cu, Mh?
Spondylus? sp. Mh (CI)
Spondylus sp. Uk-Cu
Spondylus sp. cf. *striatus* Sowerby, 1815 Cn
Variamussium sp. Uk-Cn
Plicatulidae
Plicatula? sp. Uk
Plicatula spp. Cm-Mh?
PTERIIDAE
Pteria s.l. sp. Speden 1975 Uk
TERQUEMIIDAE
Placunopsis? sp. Cu

Order LIMOIDA
LIMIDAE
Acesta n. sp. Stilwell 1994 Mh
Acesta sp. Uk
Acesta (*Plicacesta*) *marlburiensis* (Woods, 1917) Cn-Mp?
Acesta (*Plicacesta*) n. sp.? Mp
Ctenoides sp. Mp
Lima s. l. sp. Uk-Cu, Mh?
Limatula sp. indet. Fleming 1978 Mp
Limea (*Pseudolimea*) *woodsi* (Suter, 1921) Mp-Mh (NZ & CI)
Limea (*Pseudolimea*) n. sp. Uk
Limea (*Pseudolimea*) sp. cf. *echinata* Etheridge Cu-Cn?
Plagiostoma? sp. Uk-Mh?
Seymourtula sp. cf. *S. antarctica* (Wilckens, 1910) [Stilwell 1994] Mh

Order OSTREOIDA
Suborder OSTREINA
GRYPHAEIDAE
Amphidonte sp. cf. *A. conica* (Sowerby, 1813) [Stilwell 1998] Mh (CI)
Exogyra spp. Uk-Cu, Mh?
Planospirites sp. Stilwell 1994 Mh
Pycnodonte? sp. Stilwell 1998 Mh (CI)
OSTREIDAE
Ostrea sp. Uk-Cu
Crassostrea sp. Stilwell 1994 Mp-Mh
Pseudoperna lapillicola (Marwick, 1926) Mh
Ostreidae gen. et sp. indet. Mh (CI)

Order UNIONOIDA
UNIONIDAE
Hyridella spp. Reay 1993 Cn-M?

Subclass PALAEOHETERODONTA
Order TRIGONOIDA
TRIGONIIDAE
Eselaevitrigonia meridiana (Woods, 1917) [Fleming 1987] Cn
Eselaevitrigonia wellmani Fleming, 1987 Ra
Eselaevitrigonia sp. Campbell et al. 1993 Mh (CI)
Eselaevitrigonia? n. sp.? Aitchison et al. 1993 Mh
Iotrigonia glyptica (Woods, 1917) Cn-Ra
Iotrigonia leda Fleming, 1987 Mp
Iotrigonia lenseni Fleming, 1987 Mh
Nototrigonia (*Kupenga*) *coxi* Fleming, 1985 [Fleming 1987] Cn-Ra
Nototrigonia (*Nototrigonia*) *spedeni* Fleming, 1985 [Fleming 1987] Cm
Oistotrigonia ongleyi Fleming, 1987 Mh
Oistotrigonia piripauana Fleming, 1987 Mp
Oistotrigonia waiparensis (Woods, 1917) [Fleming 1987] Mh
Pacitrigonia hanetiana hanetiana (d'Orbigny, 1842) [Fleming 1987] Mp
Pacitrigonia h. hectori Fleming, 1987 Mp (NZ & CI)
Pacitrigonia h. woodsi Fleming, 1987 Mp
Pacitrigonia sylvesteri Marwick, 1932 [Fleming 1987] Mp-Mh
Pterotrigonia (*Pterotrigonia*) *pseudocaudata* (Hector, 1886) [Fleming 1987] Mp-Mh (NZ & CI?)
Pterotrigonia (*P.*) *waitangiensis* Fleming, 1987 Mh
Pterotrigonia (*P.*) n. sp. aff. *P. waitangiensis* Fleming, 1987 [Crampton 1988a] Mp
Pterotrigonia (*Ptilotrigonia*) *ultima* Fleming, 1987 Mh (NZ & CI)
Pterotrigonia (*Rinetrigonia*) *reayi* Fleming, 1987 Ra
Trigonia (*Trigonia*) *marwicki* Fleming, 1987 [Fleming, 1987] Uk-Cm
Trigonia n. sp. aff. *T. marwicki* Fleming, 1987 [Crampton 1988a] Mp

Subclass HETERODONTA
Order VENEROIDA
ASTARTIDAE
Astarte n. sp. Stilwell 1994 Mh
Astarte? spp. Uk-Cu, Cm?-Cn?
Dozyia? *lenticularis* (Goldfuss, 1840) Mh
Eriphyla (*Eriphyla*) *meridiana* Woods, 1917 Mp-Mh
Eriphyla n. sp. Cn
Astartidae gen. et sp. indet. Stilwell 1998 Mh (CI)
CARDIIDAE
Austrocardium acherontis Freneix & Grant-Mackie, 1978 Mp-Mh
Cardium (*Bucardium*?) sp. Mp
Granocardium (*Ethmocardium*) *woodsi* (Marwick, 1944) Mh
Granocardium? (*E.*) sp. indet. Mp-Mh?
Lahillia n. spp.? Stilwell 1994, 1998 Mp-Mh (NZ & CI)
Protocardia? spp. Speden 1975, Maxwell *in* Feldmann 1984] Uk-Cu, Mp?-Mh
Schedocardia? *waiparana* Freneix & Grant-Mackie, 1978 Mp-Mh
CARDITIDAE
Pleuromeris? sp. Mp?-Mh?
Purpurocardia n. sp. Stilwell 1998 Mh (CI)
Venericardia? sp. Mp?-Mh?
CORBICULIDAE
Corbicula? sp. Moore et al. 1988, Reay 1993 Cn-Mp?
Corbulina? sp. Cn
CRASSATELLIDAE
Anthonya elongata Woods, 1917 Mp-Mh
Anthonya sp. Cn?
DONACIDAE
Notodonax? sp. Maxwell *in* Feldmann 1984 Mp-Mh
ICANOTIIDAE
Tancretella? sp. Uk-Cu
LUCINIDAE
Lucina sp. Uk-Mh?
Miltha? sp. Stilwell 1994 Mp-Mh
Myrtea canterburiensis (Woods, 1917) Mp-Mh
Myrtea n. sp. Stilwell 1994 Mh
Pteromyrtea? sp. Stilwell 1994 Mp-Mh
Lucinidae gen. indet. n. sp. Ra
Myrteinae gen. et sp. indet. Cm
MACTRIDAE
Aeonona n. sp.? Stilwell 1994 Mh
Cymbophora n. sp. Stilwell 1994 Mp
Mactra sp. Cn Mp?
Raeta? n. sp. Stilwell 1994 Mh
Zenatia cretacea (Woods, 1917) Mp-Mh
MESODESMATIDAE
Ceroniola? sp. Mp-Mh
PERMOPHORIDAE
Myoconcha? sp. Speden 1975 Cu
PSAMMOBIIDAE
Gari s.l. n. sp. Stilwell 1994 Mh
Gari? sp. Speden 1975 Uk-Cu
TANCREDIIDAE
Tancredia n. sp. Mp?-Mh
Tancredia sp. Uk
Tancrediidae gen. et sp. indet. Cn
TELLINIDAE
Solyma flemingae Stilwell, 1998 Mh (CI)
Tellina spp. Uk Mp
THYASIRIDAE
Thyasira (*Conchocele*) n. sp. Stilwell 1994 Mh
Thyasira s.l. spp? Uk, Mh
Thyrasira? sp. Cm
TRAPEZIIDAE
Trapezium? sp. Speden 1975 Uk-Cu
VENERIDAE
Aphrodina (*Tikia*) *thomsoni* (Woods, 1917) Mh
Aphrodina (*T.*) *wilckensi* (Woods, 1917) Mp-Mh (NZ & CI)
Aphrodina s.l. n. sp? Uk Cn-Ra Mp-Mh
Callista spp? Uk-Cu Mh?
Costacallista? n. sp. Stilwell 1994 Mp-Mh
Cyclorismina woodsi Marwick, 1927 Mh
Dosiniopsis? sp. Speden 1975 Uk-Cn
Pectunculus? sp. Mh

Order MYOIDA
Suborder MYINA
CORBULIDAE
Caryocorbula sp. Mp-Mh
Corbula? sp. Mh
Surobula sp. cf. *S. nucleus* (Wilckens, 1910) Stilwell 1994 Mh
HIATELLIDAE
Cyrtodaria n. sp. Stilwell 1994 Mh
Panopea awaterensis Woods, 1917 Cn
Panopea clausa Wilckens, 1910 Mp-Mh
Panopea malvernensis Woods, 1917 Mp?-Mh (NZ & CI)
Panopea sp. Uk
MYIDAE
Mya spp? Uk-Cu, Mp

Suborder PHOLADINA
PHOLADIDAE
Clavipholas n. sp. Stilwell 1994 Mh
Martesia sp. Speden 1975 Uk-C
Opertochasma? sp. Mp-Mh
Pholadidea (*Hatasia*) *wiffenae* Crampton, 1990 Mp?-Mh?
TEREDINIDAE
Teredo spp. Moore & Speden 1984 Cm, Mp-Mh

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
CUSPIDARIIDAE
Cuspidaria n. sp. Stilwell 1994 Mh
PHOLADOMYIDAE
Pholadomya? sp. Mp-Mh
PLEUROMYIDAE
Pleuromya spp. Speden 1975 Uk-Cu, Rt?, Mh?
THRACIIDAE
Thracia haasti Woods, 1917 Mp-Mh
Thracia sp. Uk-Cu, Mh?

Class GASTROPODA
Subclass PROSOBRANCHIA
Suborder PLEUROTOMARIINA
PLEUROTOMARIIDAE
Bathrotomaria? Cu-Cm
Chelotia woodsi (Wilckens, 1922) Mp
Conotomaria? sp. Cn
Perotrochus maoriensis (Wilckens, 1922) Cn?,Mp-Mh
Perotrochus n. sp. Fleming *in* Wellman 1959 Ra

Order PATELLOGASTROPODA
Suborder ACMAEINA
FISSURELLIDAE
Fissurella? sp. Uk-Cu
LOTTIIDAE
Patelloida? n. sp. Stilwell 1994 Mh
NACELLIDAE
Cellana? n. sp. Stilwell 1994 Mh
PATELLIDAE
Patella? *amuritica* Wilckens, 1922 Mp-Mh
Patella? sp. Uk
Patellidae gen. et sp. indet A Cn
Patellidae gen. et sp. indet B Cn

Suborder TROCHINA
SKENEIDAE
Brookula s.l. n. subgen. et n. sp. Stilwell 1994, 1998 Mh (NZ & CI)
TROCHIDAE
Amberleya n. sp. Stilwell 1994 Mh
Calliomphalus s.l. n. sp. A Stilwell 1994 Mh
Calliomphalus s.l. n. sp. B [Stilwell, 1994, 1998] Mh

(CI)
Gen. nov. et n. sp. aff. *Calliomphalus* Stilwell 1994 Mh
Chrysostoma selwynensis Trechman, 1917 Mh
Calliostoma decapitatum Wilckens, 1922 Mp
Trochus antipodum, Wilckens, 1922 Cn?
Trochidae gen. et spp. indet. Stilwell 1994 Cn Rm?-Mp
TURBINIDAE
Angaria? sp. Stilwell 1994 Mp-Mh
Turbo sp. Mp?-Mh?

Order NERITOPSIDA
NERITOPSIDAE
Damesia? n. sp. Stilwell 1994 Mp
Neritopsis (*Hayamiella*?) sp. Stilwell 1994 Mh
Neritopsis s.l. sp. Rt?-Mh
Neritopsis? sp. Fleming *in* Wellman 1959 Rm
Protodolium speighti (Trechman, 1917) Mp-Mh
Protodolium pittensis Stilwell, 1994 Mh (CI)
Protodolium sp. cf. *pittensis* Stilwell, 1994 Mh
VIVIPARIDAE
Gen. n. sp. aff. ?Viviparidae Cn
Viviparidae gen. et spp. indet. Cn Mp?

Order NEOTAENIOGLOSSA
APORRHAIDAE
Arrhoges (*Latiala*) *suteri* (Trechmann, 1917) Mh
Perissoptera waiparaensis (Hector, 1886) Mp?-Mh
Struthioptera haastiana (Wilckens, 1922) Mp?-Mh
Struthioptera novoseelandica (Wilckens, 1922) Mp-Mh (NZ & CI)
Struthioptera sp. Wilckens 1922, Fleming *in* Wellman 1959 Uk Cu?-Cm Ra
Aporrhaidae gen. et sp. indet. Ra-Mh?
Gen. nov. et n. sp. aff. *Perissoptera* Rm
CALYPTRAEIDAE
Crepidula hochstetteriana Mp
Sigapatella? *solitaria* Mh
Calyptraeidae gen. et sp. indet. Cn
CAPULIDAE
Anisomyon? sp. Warren & Speden, 1978 Mh
Cf. *Capulus*? *sulcatus* Wilckens, 1910 [Stilwell 1994] Mh
Gigantocapulus n. sp. Crampton & Moore 1990 Mp-Mh
FOSSARIDAE?
Procancellaria parkiana Wilckens, 1922 Mp
Procancellaria sp. Cu-Cn?
LOXONEMATIDAE
Loxonema n. sp. R-M?
NATICIDAE
Amauropsona? n. sp. Stilwell 1994 Mh
Globularia sp. Cn-Ra
Euspira selwyniana (Wilckens, 1922) Mp-Mh (NZ & CI)
Euspira sp. Cu
Eunaticina? n. sp. Stilwell 1994 Mh
Naticidae gen. & sp. indet. Stilwell 1994 Mp
POTAMIDIDAE
Bittiscala inaequicostata (Wilckens, 1922) Mp?-Mh
PROCERITHIIDAE
Ageria? n. sp. Stilwell 1998 Mh (CI)
Bathraspira n. sp. Stilwell 1994 Mp
Gymnocerithium? sp. Stilwell 1994 Mh
STRUTHIOLARIIDAE
Conchothyra marshalli (Trechmann, 1917) Mh
Conchothyra parasitica Hutton, 1877 Mp-Mh
THIARIDAE
Melanoides? sp. Reay 1993 Cn-Mp?
Melanopsis sp. Moore et al. 1988 Mp
Pyrgulifera kahuitara Stilwell, 1998 Mh (CI)
TRICHOTROPIDAE
Trichotropis (*Cerithioderma*) n. sp. Stilwell 1994 Rm-Mp?
TURRITELLIDAE
Costacolpus solitaria (Wilckens, 1922) Mp?-Mh
VANIKORIDAE
Vanikoro? n. sp. Stilwell 1994 Mh
VERMETIDAE
Tubulostium sp. Mp-Mh
ZYGOPLEURIDAE
Zygopleura? *obliquestriata* (Trueman, 1924) Mh

Suborder PTENOGLOSSA
EPITONIIDAE
Acirsa (*Notacirsa*?) *pacifica* (Wilckens, 1922) Mp-Mh
Opalia n. sp. Stilwell 1994 Rm?-Mp

Order NEOGASTROPODA
BUCCINIDAE
Sycostoma n. sp. Stilwell 1994 Mh
TUDICLIDAE
Perissitys? sp. Stilwell 1994 Mh
Pseudoperissolax? *similis* (Wilckens, 1922) Rt?, Mp-Mh
Tudicla? n. sp. Fleming *in* Wellman 1959 Rm
Gen. nov.? et n. sp.? aff. *Pyropsis* Stilwell 1994 Rt?-Mh
TURBINELLIDAE
Cryptorhytis vulnerata Wilckens, 1922 Mh

Subclass OPISTHOBRANCHIA
Order CEPHALOSPIDEA
Suborder ACTEONINA
ACTEONELLIDAE
Tornatellaea n. sp. Stilwell 1994 Mh
APLUSTRIDAE?
Gen. nov. aff. *Aplustrum selwynensis* Trechmann, 1917 Mh
CYLICHNIDAE
Cylichnania thomsoniana (Wilckens, 1922) Mp-Mh
Cylichnania sp. Cu?
RINGICULIDAE
Cinulia sp. Cu
Eriptycha punamutica Wilckens, 1922 Mp-Mh (NZ & CI)
Eriptycha sp. Cu
Eriptycha? sp. Cn
Ringicula (*Ringicula*) n. sp. Stilwell 1994 Mh

Order HETEROSTROPHA
PYRAMIDELLIDAE
Odostomia? n. sp. Stilwell 1994 Mh

Class SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Antalis n. sp. Stilwell 1994 Mh
Dentalium s.l. sp. Uk-Cu, Mh?
LAEVIDENTALIIDAE
Laevidentalium morganianum Mp-Mh (NZ & CI)

Class CEPHALOPODA
Subclass NAUTILOIDEA
Order NAUTILIDA
Suborder NAUTILINA
CYMATOCERATIDAE
Procymatoceros sp. Mh
HERCOGLOSSIDAE
Cimomia zelandica Johnson, 1970 Cm-Cn
NAUTILIDAE
Eutrephoceras sp. Johnson 1970 Mp-Mh
Eutrephoceras sp. Stilwell & Grebneff 1996 Mh

Subclass AMMONOIDEA
Order AMMONITIDA
Suborder PHYLLOCERATINA
PHYLLOCERATIDAE
Neophylloceras marshalli Shimizu, 1935 Mp-Mh
Neophylloceras ramosum (Meek, 1857) Mp-Mh
Neophylloceras radiatum (Marshall, 1926) Mp-Mh
Neophylloceras seresitense Pervinquière, 1907 Cn
Neophylloceras sp. Henderson 1973 Cn
Phyllopachyceras forbesianum (d'Orbigny, 1846) Mp-Mh
Phyllopachyceras n. sp.? Henderson 1970 Cm

Suborder LYTOCERATINA
ANISOCERATIDAE
Anisoceras auberti (Pervinquière, 1907) Cn
Idiohamites sp. nov. Henderson, 1973 ?Cn
BACULITIDAE
Baculites rectus Marshall, 1926 Mp-Mh
Sciponoceras baculoide (Mantell, 1822) Cn
DIPLOMOCERATIDAE
Astreptoceras zelandicum (Marshall, 1926) Mp-Mh
Diplomoceras sp. Henderson, 1970 ?Mh
Glyptoxoceras wakanenei (Marshall, 1926) Mp-Mh
Glyptoxoceras n. sp.? Henderson 1970 Mp-Mh
Masonites biannulatus Henderson, 1970 Mp-Mh
HAMITIDAE
Hamites (*Hamites*) *kaiwhataensis* Henderson, 1973 ?Cm
LABECERATIDAE
Myloceras? sp. Henderson 1973 Cm
LYTOCERATIDAE
Ammoceratites (*Ammoceratites*) n. sp. Henderson 1973 ?Cm
NOSTOCERATIDAE
Hyphantoceras sp. Henderson 1973 Rm-Rt
Pseudoxybeloceras bicostatum Henderson, 1970 Mp-Mh
Pseudoxybeloceras compressum Henderson, 1970 ?Mp-Mh
Pseudoxybeloceras cf. *quadrinodosum* Jimbo, 1894 ?Rm-Mh
PTYCHOCERATIDAE
Ptychoceras sp. Vella, 1961 Cm
SCAPHITIDAE
Otoscaphites awanuiensis Wright, 1953 Cn
Scaphites equalis coverhamensis Henderson, 1973 Cn
Scaphites vellai Henderson, 1973 Cn
Scaphites wellmani Henderson, 1973 Cn
Scaphites sp. Henderson 1973 Cm-Cn
Worthoceras costatum Henderson, 1973 Cn
Worthoceras johnsoni Henderson, 1973 Cn
Worthoceras parvum Henderson, 1973 Cn
TETRAGONITIDAE
Anagaudryceras particostatum (Marshall, 1926) Mp-Mh
Anagaudryceras subsacya (Marshall, 1926) Mp-Mh
Anagaudryceras tennanti Henderson, 1970 Mp-Mh
Anagaudryceras woodsi Henderson, 1973 Cn
Anagaudryceras n. sp.? Henderson 1973 ?Cm-Cn
Gaudryceras cf. *denmanense* (Whiteaves, 1901) Mp
Gaudryceras propemite Marshall, 1926 Mp-Mh
Gaudryceras cf. *denmanense* (Whiteaves, 1901) Mp
Gaudryceras sp. Henderson 1973 Rt
Pseudophyllites latus (Marshall, 1926) Mp-Mh
Tetragonites marginatus Marshall, 1926 Mp-Mh
Tetragonites simplex Marshall, 1926 Mp-Mh
Tetragonites marshalli (Collignon, 1956) Mp-Mh
Tetragonites rectangularis Wiedmann, 1962 Cn
Vertebrites murdochi Marshall, 1926 Mp-Mh
Zelandites kaiparaensis Marshall, 1926 Mp-Mh
TURRILITIDAE
Hypoturrilites varians Henderson, 1973 Cn
Mariella (*Mariella*) *thomsoni* Henderson, 1973 Cn
Mariella (*M.*) sp. Henderson 1973 ?Cn
Turrilites (*Turrilites*) *exutus* Henderson, 1973 Cn
Suborder AMMONOTINA
DESMOCERATIDAE
Desmoceras (*Pseudouhligella*) *ezoanum* Matsumoto, 1942 Cn
Desmoceras (*P.*) *poroanicum* Yabe, 1904 Cn
Desmoceras sp. Henderson 1974 Ra
Kitchinites (*Kitchinites*) *brevicostatus* (Marshall, 1926)

Mp-Mh
Kitchinites (*K.*) *angustus* (Marshall, 1926) Mp-Mh
Mesopuzosia? sp. Henderson 1973 Rt
Pachydesmoceras sp. Henderson 1973 Cm
Puzosia (*Pusozia*) *bushgrovensis* Henderson, 1973 Cm
KOSSMOCERATIDAE
Gunnarites denticulatus (Marshall, 1926) Mp-Mh
Gunnarites spathi Henderson, 1970 Mp-Mh
Gunnarites varicostatus Henderson, 1970 Mp-Mh
Gunnarites zelandicus (Marshall, 1926) Mp-Mh
Gunnarites sp. Henderson 1970 Mp-Mh
Jacobites (*Jacobites*) *minimus* (Marshall, 1926) Mp-Mh
Jacobites (*J.*) *nodulosus* (Marshall, 1926) Mp-Mh
Jacobites (*J.*) *ultimus* (Marshall, 1926) Mp-Mh
Jacobites (*J.*) *whangaroaensis* (Marshall, 1926) Mp-Mh
Jacobites (*J.*) *angularis* (Marshall, 1926) Mp-Mh
Jacobites (*J.*) *flexicostatus* Henderson, 1970 Mp-Mh
Jacobites (*J.*) *maximus* Henderson, 1970 Mp-Mh
Jacobites (*J.*) *stevensi* Henderson, 1970 Mp-Mh
Jacobites (*J.*) *quadratus* Henderson, 1970 Mp-Mh
Jacobites (*J.*) *marwicki* Henderson, 1970 Mp-Mh
Jacobites (*J.*) n. sp. Henderson 1970 Mp-Mh
Jacobites (*Tainuia*) *aucklandicus* (Marshall, 1926) Mp-Mh
Kossmaticeras (*Kossmaticeras*) *haumuriensis* (Hector, 1886) Mp
Kossmaticeras (*Natalites*) *bensoni* Henderson, 1970 Mh
Kossmaticeras (*N.*) *multicostatum* (Marshall, 1926) Mp-Mh
Kossmaticeras (*N.*) *regularis* (Marshall, 1926) Mp-Mh
Kossmaticeras (*N.*) *sulcatum* (Marshall, 1926) Mp-Mh
Maorites angulocostatus Henderson, 1970 Mp-Mh
Maorites mackayi (Hector, 1886) Mp-Mh
Maorites multiconstrictus Henderson, 1970 Mp-Mh
Maorites tenuicostatus (Marshall, 1926) Mp-Mh
Marshallites? n. sp. Henderson 1973 ?Cn
Neograhamites transitorius Henderson, 1970 Mp-Mh
Wellmanites zelandicus Wright, 1957 Cm
PACHYDISCIDAE
Anapachydiscus n. sp.? Henderson 1970 Mp-Mh
Eupachydiscus depressus Henderson, 1970 Rm-Mh
Pachydiscus (*Pachydiscus*) *rogeri* (Marshall, 1926) Mp-Mh
Pachydiscus cf. *riccardi* Macellari, 1986 Mh
ENGONOCERATIDAE
Gen. et n. sp. Henderson 1973 Cn

Subclass COLEOIDEA
Order BELEMNITIDA
Suborder BELEMNOPSEINA
DIMITOBELIDAE
Dimitobelus hectori Stevens, 1965 Mh
Dimitobelus lindsayi (Hector, 1874) Mp
Dimitobelus macgregori (Glaessner, 1945) Cm-Cn
Dimitobelus? *ongleyi* Stevens, 1965 ?Rt
Dimitobelus superstes (Hector, 1886) Cm-Rm

Cenozoic Mollusca

Compiled by Philip Maxwell.

[The author died before this volume went to print and the checklist remains as submitted by him. – Editor]

This checklist includes all formally named species (except junior synonyms and homonyms) that have been described or recorded from the New Zealand Cenozoic. It does not include species in 'open' nomenclature, i.e. recorded as 'sp.', 'n. sp.', 'aff.' or 'cf.'. It also omits those Recent species for which the only fossil record is from the 'Holocene' – these are invariably land or freshwater snails recorded from swamps or caves and are typically only a few hundred or thousand years old. It does, however, include those species known only as 'subfossils', as these are presumed to be extinct. The present list is based on the one given by Beu & Maxwell (1990), in turn based on Fleming's (1966) checklist. During compilation, a few species inadvertently omitted from Beu & Maxwell's list were noted; in addition, it was found that several dates given in that publication are wrong, and that a few ages needed to be corrected. The most important changes, however, are:

- Additions to the list resulting from subsequent work – not only have many new fossil taxa been added but a considerable number of species formerly recorded only from the modern fauna are now known to have a fossil record. The present list also differs from the earlier ones in including Early Pleistocene species from the Kermadec Islands (Brook 1998) – these have been assigned a Nukumaruan age for the purposes of this compilation;
- Changes resulting from revisions at genus or family level, leading to some species names disappearing through synonymy or being transferred to other genus-group taxa;
- Major changes in the higher-level classification of Mollusca. The classification adopted in this checklist closely follows that in *Mollusca: The Southern Synthesis* (Beesley et al. 1998) down to family-group level; taxa below subfamily rank are listed in alphabetical order.

The present list includes numerous new combinations resulting from the application of recent genus- and family-level revisions to the local fauna, and from work in progress and unpublished studies of P. A. Maxwell. These are designated by the symbol ¶ and are listed at the end of the main checklist with brief justifications for the new generic placements. It also differs from previous lists, including that of Spencer & Willan (1996) in omitting subspecies. Although a case can be made for naming actually or potentially interbreeding populations that differ substantially in morphological or other characters, it is doubtful if anyone has ever demonstrated that the many putative 'subspecies' of New Zealand Recent marine molluscs are in fact capable of such interbreeding. The usual excuse for differentiating taxa at the subspecific rather than specific level is that the differences are 'relatively' minor, but in view of the widespread distribution of cryptic species with little or no morphological differences, this is clearly not a sufficiently rigorous criterion. Some 'subspecies' seem to be intraspecific morphological variants that are probably not worth naming at all (e.g. most of the Pleistocene and Recent Stiracolpus taxa), but others are probably best treated as species. It is hardly necessary to point out that the interbeeding test cannot be applied to extinct taxa.

The format used in this checklist is the same as that used by Fleming (1966) and by Beu & Maxwell (1990), i.e. the species name is followed by the age of the name-bearing type specimen (holotype, lectotype, or neotype). New Zealand Cenozoic stages are used and are denoted by the standard abbreviations first introduced as mapping symbols. An exception is the use of the symbol Dwl for the 'Wangaloan' Stage. Although the Wangaloan is not recognised by micropaleontologists and is currently subsumed into the Teurian Stage (which covers the entire Paleocene, a duration of about 10 million years), molluscan workers have found it useful to distinguish the early Teurian (Danian) fauna from younger Teurian assemblages. Fleming (1966) and Beu & Maxwell (1990) used the symbol Mw to avoid clashing with the symbol Dw for the Waipawan Stage; but including the Wangaloan in the Late Cretaceous Mata Series is clearly unsatisfactory, so the new symbol Dwl is introduced here. In nearly every instance, the age of the type locality is known sufficiently precisely to be able to assign a species to an individual stage. The age of the type is omitted for species originally described as fossils from outside the New Zealand region – this applies mainly to holoplanktic taxa, e.g. pteropods and cephalopods. The recorded stratigraphic range is given in brackets where this differs from the age of the type.

Where the generic (or subgeneric) location is uncertain, a query (?) is placed after the genus (or subgenus). A query before the genus indicates an uncertain familial or subfamilial assignment. If the genus is in quotation marks, this means the generic assignment is almost certainly incorrect and a new genus is probably required. In a few cases, there are quotation marks around the specific epithet and author's name. This means the name in question has been widely but incorrectly applied to the taxon, and that a new species name is required.

PHYLUM MOLLUSCA
CLASS POLYPLACOPHORA
Order NEOLORICATA
Suborder LEPIDOPLEURINA
LEPIDOPLEURIDAE
Lepidopleurinae
Leptochiton clifdenensis (Ashby, 1929) Pl E
Leptochiton finlayi (Ashby, 1929) R (Wm-R) E
Leptochiton inquinatus (Reeve, 1847) R (Wc-R) E
Leptochiton otagoensis (Iredale & Hull, 1929) R (Wq-R) E

Suborder ISCHNOCHITONINA
CHITONIDAE
Chitoninae
Chiton (*Amaurochiton*) *glaucus* Gray, 1828 R (Wq-R) E
Rhyssoplax aerea (Reeve, 1847) R (Wq-R)
Rhyssoplax allanthomsoni Mestayer, 1929 Ld E
Rhyssoplax canaliculata (Quoy & Gaimard, 1835) R (Wn-R) E
Rhyssoplax stangeri (Reeve, 1847) R (Wq-R) E
Sypharochiton pelliserpentis (Quoy & Gaimard, 1835) R (Wq-R) E
Tonicinae
Onithochiton neglectus Rochebrune, 1881 R (Wm-R) E
ISCHNOCHITONIDAE
Callochitoninae
Callochiton chattonensis Ashby, 1929 Ld E
Callochiton empleurus (Hutton, 1872) R (Wq-R) E
Eudoxochiton nobilis (Gray in Dieffenbach, 1843) R (Wq-R) E
Ischnochitoninae
Ischnochiton circumvallatus (Reeve, 1847) R (Wq-R) E
Ischnochiton maorianus Iredale, 1914 R (Wq-R) E
Ischnochiton vetustus Powell & Bartrum, 1929 Po E
MOPALIIDAE
Plaxiphora (*Plaxiphora*) *biramosa* (Quoy & Gaimard, 1835) R (Wq-R) E
Plaxiphora (*P.*) *caelata* (Reeve, 1847) R (Wq-R) E
Plaxiphora (*P.*) *obtecta* Carpenter in Pilsbry, 1893 R (Wq- R) E
Plaxiphora (*P.*) *tutamoensis* (Bucknill, 1928) Sc? E
Plaxiphora (*Frembleya*) *egregia* (H. Adams, 1866) R (Wq-R) E
SCHIZOCHITONIDAE
Lorica haurakiensis Mestayer, 1921 R (Wp-R) E

Suborder ACANTHOCHITONINA
ACANTHOCHITONIDAE
Acanthochitoninae
Acanthochitona (*Acanthochitona*) *flebilis* Laws, 1950 Wp E
Acanthochitona (*A.*) *zelandica* (Quoy & Gaimard, 1835) R (Wc-R) E
Acanthochitona (*Notoplax*) *ashbyi* (Laws, 1932) Ld E
Acanthochitona (*N.*) *mariae* (Webster, 1908) R Wn-R) E
Acanthochitona (*N.*) *rubiginosa* (Hutton, 1872) R (Wn-R) E
Cryptoconchus marwicki Bucknill, 1928 Wc E
Cryptoconchus porosus (Burrow, 1815) R (Wq-R) E

CLASS BIVALVIA
Subclass PALEOTAXODONTA
Order SOLEMYOIDA
Suborder NUCELLINA
MANZANELLOIDEA
NUCINELLIDAE
Nucinella maoriana (Hedley, 1904) R (Pl? -R) E

Suborder SOLEMYINA
SOLEMYIDAE
Solemyarina parkinsonii (E.A. Smith, 1874) R (Wn-R) E

Order NUCULOIDA
NUCULOIDEA
NUCULIDAE
Nuculinae
Deminucula bergmansi Maxwell, 1988 Sw E
Deminucula (?) *certisinus* (Finlay, 1930) R (Wq-R) E ¶
Deminucula (?) *ngatutura* (Laws, 1936) Wo (Wo-Wp) E ¶
Deminucula infrequens Maxwell, 1992 Ak E
Deminucula totangiensis (Marwick, 1931) Pl E
Deminucula (?) *vestigia* (Marwick, 1929) Ld E ¶
Lamellinucula ambrosia (Bartrum & Powell, 1928) Wo E
Lamellinucula (?) *dunedinensis* (Finlay, 1928) R (Wq-R) E
Linucula aptera (Laws, 1940) Wp (Wp-R?) E
Linucula delli Maxwell, 1988 Sw E
Linucula hartvigiana (Pfeiffer, 1864) R (Wn-R) E ¶
Linucula otamatea (Laws, 1939) Po (Po-Pl) E ¶
Linucula ruatakiensis (Marwick, 1926) Tt (Tt-Wp?) E
Linucula tutamoensis (Marwick, 1931) Sl (Sl-Tt) E
Linucula waiaotea (Laws, 1941) Pl (Po-Pl) E
Linucula waipaoa (Marwick, 1931) Pl (Pl-Wo?) E
Linucula wanganuica (Laws, 1940) Wn (Wm-Wn) E
Nucula nitidula A. Adams, 1856 R (Wo-R) E
Nucula tersior Marwick, 1929 Ld E
Varinucula crepida (Marwick, 1931) Sc (Sc-Sw) E
Varinucula gallinacea (Finlay, 1930) R (Wc? -R) E
Varinucula sagittata (Suter, 1917) Pl E
Nuculominae
Austronucula schencki Powell, 1939 R (Wp?, Wq-R) E
Ennucula grangei (Marwick, 1926) Tt E
Ennucula palaioanaxea (Stilwell, 1993) Dwl E ¶
Ennucula strangei (A. Adams, 1856) R (Wn-R) E
Ennucula (?) *waikuraensis* (Marwick, 1931) Sl E
Ennucula whatu Maxwell, 1992 Ak E
'*Ennucula*' *otamaringaensis* (Marwick, 1926) Tt (Tt-Wo) E

NUCULANOIDEA
MALLETIIDAE
Minormalletia simia Marwick, 1931 Sc (Pl-Wp) E
Minomalletia tenera (Marwick, 1926) Tt E
Neilo annectens Powell, 1931 Wp (Wo-R) E
Neilo awamoana Finlay, 1926 Pl (Po-Pl) E
Neilo australis (Quoy & Gaimard, 1835) R (Wn-R) E
Neilo funiculata (Hutton, 1887) Lwh E
Neilo jugifera Marwick, 1965 Wo (Tk-Wo) E
Neilo sinangula Finlay, 1926 Ld (Ld-Lw) E
Neilo sublaevis Marwick, 1926 Tt (Sc-Tt) E
Neilo wairoana Marwick, 1965 Wn E
Neilo waitaraensis Marwick, 1926 Tt E
Spineilo elongata (P. Marshall, 1917) Dwl E
NEILONELLIDAE
Austrotindaria aequata Marwick, 1965 Wn E
Austrotindaria benthicola Dell, 1956 R (Wc-R) E
Austrotindaria mawheraensis Maxwell, 1988 Sw E
Austrotindaria (?) *nasuta* (Marwick, 1931) Sl (Pl-Wo) E ¶
Pseudotindaria catillus Maxwell, 1988 Sw E
Pseudotindaria delli Maxwell, 1992 Ak E
Pseudotindaria (?) *ferrari* (Fleming, 1950) Ab E
Pseudiotindaria kapua (Marwick, 1931) Wo E
Pseudotindaria kouhaiensis (Marwick, 1931) Tt? (Tt-Tk?) E
Pseudotindaria nugax (Marwick, 1931) Tt (Pl-Wo?) E
Pseudotindaria (?) *provoluta* (Dell, 1950) Po E
NUCULANIDAE
Ledellinae
Comitileda brachyryncha Maxwell, 1992 Ak (Ab-Ak) E
Comitileda clifdenensis (Powell, 1935) Sc (Po-Sl) E
Comitileda longirostrata (Maxwell, 1969) Lw E
Ledella herdmanni Dell, 1956 R (Wn-R) E
Ledella pakaurangiensis Laws, 1941 Po-Pl (Po-Tt) E
Zealeda (?) *concentrica* Marwick, 1931 Sl (Sl-Tt?) E
Zealeda crassicostata Maxwell, 1988 Sw E
Zealeda hamata Marwick, 1924 Wp (Wo-Wp) E
Zealeda inflatella Marwick, 1931 Pl-Sc (Pl-Sc) E
Zealeda mutabilis Marwick, 1926 Tt (Tt-Tk) E
Nuculaninae
Jupiteria hampdenensis (Marwick, 1942) Ab (Ab-Ak?) E
Jupiteria leachi (Marwick, 1931) Sc E
Jupiteria parleachi (Laws, 1939) Po E
Jupiteria vadosa (Laws, 1939) Po (Po-Pl) E
Poroleda (?) *antiqua* Marwick, 1942 Ab E
Poroleda lanceolata (Hutton, 1885) R (Tk? -R) E
Propeleda (?) *trulliformis* Marwick, 1931 Tt (Sl-Tt) E
Pseudoportlandia ellisi (Marwick, 1926) Tt E
Pseudoportlandia (?) *fluvilutea* (Marwick, 1931) Sc E
Pseudoportlandia solenelloides (P. Marshall, 1919) Ab E
Pseudoportlandia tahuia (Marwick, 1942) Ak (Ak-Ar) E
Pseudoportlandia totangiensis (Marwick, 1931) Pl? E
Saccella andrewi (Marwick, 1931) Sl (Sl-Sw) E
Saccella arowhana (Marwick, 1931) Sc (Pl-Sc) E
Saccella ‘*bellula* (A. Adams, 1856)’ R (Wn-R) E
Saccella duplicarina (Laws, 1939) Po (Po-Pl) E
Saccella falcigera Marwick, 1965 Wo E
Saccella hedleyi (Fleming, 1951) R (Wc-R) E
Saccella motutaraensis (Powell, 1935) Pl E
Saccella onairoensis (Marwick, 1926) Tt (Tt-Tk) E
Saccella pahiensis (Fleming, 1950) Ab E
Saccella probellula (Marwick, 1929) Ld E
Saccella redunca (Dell, 1950) Po E
Saccella semiteres (Hutton, 1877) Ak? (Ab-Ak) E
Saccella tenellula (Bartrum & Powell, 1928) Wo E
Saccella waihiana (Powell, 1931) Wp E
Saccella waikohuensis (Marwick, 1931) Tt E
Saccella webbi Marwick, 1965 Wn E
Teretileda (?) *marwicki* Maxwell, 1969 Ld E
SAREPTIDAE
Sareptinae
Sarepta aucklandica P. Marshall, 1918 Pl? (Po-Pl) E
Sarepta constricta (Marwick, 1942) Ab (Ab-Ak?) E
Yoldiellinae
Ledina taioma (Finlay & Marwick, 1937) Dwl E
Yoldiella ardgowanica (Powell, 1935) Pl E
Yoldiella cuniculi (Marwick, 1965) Wn E
Yoldiella haasti Maxwell, 1992 Ak E
Yoldiella karaka (Marwick, 1931) Wo E
Yoldiella malletioides Maxwell, 1992 Ak E
Yoldiella mohakana (Marwick, 1965) Wn E
Yoldiella otekaikensis Maxwell, 1969 Lw E
Yoldiella powelli (Dell, 1950) R (Wn-R) E
Yoldiella stimulea (Marwick, 1931) Sc (Sc-Sw) E
Yoldiella uawa (Marwick, 1931) Sw-Tt? E

Subclass PTERIOMORPHIA
Order MYTILOIDA
MYTILOIDEA
MYTILIDAE
Crenellinae
Crenella radians (Suter, 1908) R (Wp-R) E
Dacrydiinae
Dacrydium simulator Laws, 1936 Wo E
Lithophaginae
Lithophaga nelsoniana Suter, 1917 Lwh E
<u>*Zelithophaga*</u> *truncata* (Gray, 1843) R (Wm?, Wn-R) E
Modiolinae
Amygdalum dolichum (Suter, 1917) P? (Ld-Pl) E
Amygdalum striatum (Hutton, 1873) Wc (Tk-Wc) E
Modiolus areolatus (Gould, 1850) R (Wo-R) E
<u>*Notobotula*</u> *molina* (Fleming, 1959) Wc E
Septifer bryanae Pilsbry, 1921 R (Wq-R)
Septifer huttoni (Cossmann, 1916) Ld E ¶
Septifer torquatus (P. Marshall, 1918) Pl? (Po-Pl, Sw?) E
Xenostrobus altijugatus (Marwick, 1931) Tt (Tt-Wo) E
Xenostrobus huttoni (Suter, 1914) Wp (Wp-Wc) E
Xenostrobus pulex (Lamarck, 1819) R (Wq-R)
Xenostrobus securis (Lamarck, 1819) R (Wq-R)
Musculinae
<u>*Modiolarca*</u> *impacta* (Hermann, 1782) R (Wp-R) E
Musculus (?) *elongatus* (Hutton, 1873) Ld E
Trichomusculus barbatus (Reeve, 1858) R (Wo?-R)
Trichomusculus lornensis Laws, 1932 Ak E
Mytilinae
Aulacomya maoriana Iredale, 1915 R (Wp-R) E
Hormomya (?) *willetsi* (Marwick, 1928) Dw E
Mytilus galloprovincialis Lamarck, 1819 R (Wc-R)
Perna canaliculus (Gmelin, 1791) R (Wo-R)
Perna tetleyi (Powell & Bartrum, 1929) Po

Order ARCOIDA
ARCOIDEA
ARCIDAE
Arcinae
Acar harringtoni Laws, 1947 Po E
Acar opuraensis (Bartrum & Powell, 1928) Wo (Wo-Wm?) E
Acar powelli Laws, 1950 Wp E
Acar sandersoni Powell, 1933 R (Wc?, Wq-R) E
Acar sociella (Brookes, 1926) R (Wq-R) E
Acar whangaensis (Marwick, 1928) Wn E
Arca chambersi Beu, 1973 Wp E
Arca cottoni Waghorn, 1926 Wm (Wo-Wc) E
Arca pittensis Marwick, 1928 Wp E
Arca subvelata Suter, 1917 Pl E
Arca tutamoensis (Marwick, 1931) Sl E
Arca waitemataensis (Powell & Bartrum, 1929) Po E
Arca wharekuriensis Maxwell, 1969 Ld E
Barbatia awamoana Finlay, 1930 Pl E
B. mundeformata (Laws, 1939) Po? (Po-Pl) E
B. novaezealandiae (E.A. Smith, 1915) R (Wp-R) E
Anadarinae
Anadara trapezia (Deshayes, 1839) R (Wc-Wq)
Bathyarca crenulifera (Marwick, 1931) Tt? (Sl?-Wm) E
Bathyarca cybaea Hedley, 1906 R (Wp-R) E
Bathyarca pectinata (Marwick, 1931) Sl (Pl?-Sw) E
‘*Bathyarca*’ *bellatula* Marwick, 1942 Ab (Ab-Ak) E
Bentharca waitakarensis Eagle, 2000 Pl E
Notogrammatodon inexpectata (Maxwell, 1966) Ak E
<u>*Pugilarca*</u> *barneaformis* (Marwick, 1928) Wp E
CUCULLAEIDAE
<u>*Cucullastis*</u> *barbara* (Finlay & Marwick, 1937) Dwl E
Cucullona inarata (Finlay & Marwick, 1937) Dwl E
Latiarca attenuata (Hutton, 1873) Ld E
Latiarca australis (Hutton, 1885) Pl E
Latiarca hamptoni (Marwick, 1965) Tt (Tt-Tk) E
Latiarca ponderosa (Hutton, 1873) Sl? (Sc-Sw) E
Latiarca singularis (Zittel, 1864) Lwh E
Latiarca waihaoensis (Allan, 1926) Ab E
Latiarca worthingtoni (Hutton, 1873) Lw E
NOETIIDAE
Quadrilatera januaria (Marwick, 1926) Ak (Dm?, Ak-Lwh) E
LIMOPSOIDEA
LIMOPSIDAE
Limopsis campa Allan, 1926 Ab E
Limopsis catenata Suter, 1917 Pl (Ld?, Pl -Sw?) E
Limopsis cooki Marwick, 1931 Tt E
Limopsis gisbornensis Maxwell, 1978 Sl (Sc?-Sl) E
Limopsis invalida Marwick, 1928 Wp E
Limopsis lawsi King, 1933 Tt (Sw? -Tt) E
Limopsis marwicki Powell, 1938 Wn E
Limopsis parma Marwick, 1929 Ld E
Limopsis peteri Beu, 1969 Wn E
Limopsis producta Finlay & McDowall, 1923 Sw E
Limopsis propeinvalida Laws, 1939 Po (Po-Pl) E
Limopsis waihaoensis Allan, 1926 Ak (Ab-Ar) E
Limopsis zealandica Hutton, 1873 Pl (Lw-Pl) E
Limopsis zitteli Ihering, 1907 Lwh E
Limopsista microps (Finlay & Marwick, 1937) Dwl E
<u>*Notolimopsis*</u> *caelata* Maxwell, 1969 Ld E
Notolimopsis hampdenensis (P. Marshall, 1919) Ab (Ab-Ak) E
Notolimopsis pulchra Maxwell, 1969 Lw E
Pectunculina aoteana Vella, 1954 Tt (Sw?-Tt) E
Pectunculina parvicostata Maxwell, 1992 Ak E
GLYCYMERIDIDAE
Glycymeridinae
Glycymeris (*Glycymeris*) *callaghani* Marwick, 1923 Tt E
Glycymeris (*G.*) *hunti* Marwick, 1928 Wp E
Glycymeris (*G.*) *mahiana* Marwick, 1931 Wo (Tk-Wp) E
Glycymeris (*G.*) *marshalli* Laws, 1930 Ld E
Glycymeris (*G.*) *shrimptoni* Marwick, 1923 Wn (Wm?-Wn) E
Glycymeris (*G.*) *trelissickensis* Marwick, 1923 Ld E
Glycymeris (*G.*) *waipipiensis* Marwick, 1923 Wp (Wp-Wm) E
Glycymeris (*G.*) *waitakiensis* Marwick, 1923 Ld? E
Glycymeris (<u>*Glycymerula*</u>) *modesta* (Angas, 1879) R (Wo-R) E
Glycymerita (*Glycymerita*) *concava* (P. Marshall, 1917) Dwl (Dwl-Dm?) E
Glycymerita (*G.*) *cordata* (Hutton, 1873) Lwh E
Glycymerita (*G.*) *organi* (King, 1934) Wp E
Glycymerita (*G.*) *rangatira* (King, 1934) Tt (Sc? -Wo) E
Glycymerita (*G.*) *rectidorsalis* (Marwick, 1931) Sc (Pl-Sc) E
Glycymerita (*G.*) *robusta* (Marwick, 1923) Pl (Pl-Sc) E
Glycymerita (*G.*) *subglobosa* (Suter, 1917) Ab E
Glycymerita (*G.*) *thomsoni* (Marwick, 1929) Ld E
Glycymerita (*G.*) *tohunga* (King, 1934) Wo (Tk-Wo) E
Glycymerita (<u>*Manaia*</u>) *hurupiensis* (Marwick, 1923) Tt (Sw-Tt) E
Glycymerita (*M.*) *huttoni* (Marwick, 1923) Tk? (Pl? -Tk) E
Glycymerita (*M.*) *kaawaensis* (Marwick, 1923) Wo E

Glycymerita (*M.*) *manaiaensis* (Marwick, 1923) Wp (Wp-Wn) E
Glycymerita (*M.*) *marwicki* (Matsukuma & Grant-Mackie, 1979) Sl E
Melaxaeinae
Tucetona aucklandica (Powell, 1938) Po E
Tucetona (?) *brachytona* (Suter, 1917) Wo? E
Tucetona chambersi (P. Marshall & Browne, 1909) Wo E
Tucetona finlayi (Laws, 1939) Sl (Pl-Sw) E
Tucetona laticostata (Quoy & Gaimard, 1835) R (Tt?-R) E
Tucetona lornensis (Marwick, 1923) Ak (Ak-Lwh) E
Tucetona monsadusta (Marwick, 1932) Sw E
Tucetona traversi (Hutton, 1873) Wp
Tucetona wairarapaensis (Powell, 1938) Wn E
PHILOBRYIDAE
Aupouria elongata Laws, 1940 Wo E
Aupouria (?) *pristina* Maxwell, 1969 Lw E
Aupouria rotunda Laws, 1940 Wo (Wo-Wn) E
Cosa awamoana (Laws, 1941) Pl E ¶
Cosa costata (Bernard, 1896) R (Wq-R) E
Cosa filholi (Bernard, 1897) R (Wq-R) E
Cosa kaawaensis Laws, 1936 Wo E
Cosa orbicula Laws, 1950 Wp E
Cosa separabilis Laws, 1940 Wo (Wo-Wp) E
Cosa trigonopsis (Hutton, 1885) Wn (Wp-Wc?) E
Cosa wanganuica Finlay, 1930 Wc E
Cratis miocenica Laws, 1936 Sw E
Cratis ovata Marwick, 1931 Sw-Tt (Po?-Tt?) E
Cratis pliocenica Laws, 1936 Wo (Wo-Wp) E
Lissarca fossilis Marwick, 1928 Wp E
Lissarca harrisonae Powell, 1927 R (Wq-R) E
Lissarca inusitata (Laws, 1944) Po E
Lissarca obsoleta (Laws, 1944) Po-Pl E
Lissarca stationis Fleming, 1948 R (Wn?-R) E
Lissarca trapezina (Bernard, 1897) R (Wq-R) E
Philobrya dupliradiata (Laws, 1941) Po E
Philobrya galerita Marwick, 1928 Wn E
Philobrya kaawa (Laws, 1936) Wo E
Philobrya meleagrina (Bernard, 1896) R (Wc-R) E
Philobrya modiolus Suter, 1913 R (Wp-R) E
Philobrya pinctada (Finlay, 1930) R (Wp-R) E
Philobrya pinctagrina (Laws, 1936) Wo (Wo-Wp) E
Philobrya tela (Laws, 1936) Wo E
Philobrya waitotara (Laws, 1940) Wm E
Philobrya zearanea (Laws, 1941) Po E
Verticipronus mytilus Hedley, 1904 R (Wp?, Wq-R) E
Verticipronus stirps Laws, 1936 Wo (Wo-Wp) E

Order PTERIOIDA
PTERIOIDEA
BAKEVELLIIDAE
'*Panis*' *zealandica* (Hutton *in* Suter, 1917) Wn (Wp-Wn) E
ISOGNOMONIDAE
Isognomon fortissimus (King, 1933) Tt E
Isognomon wellmani Crampton, 1988 Dt E
PTERIIDAE
Electroma intecta Finlay & Marwick, 1937 Dwl E
Electroma rectangula Finlay & Marwick, 1937 Dw-Dm? E
Pteria oneroaensis (Powell & Bartrum, 1929) Po E
PINNOIDEA
PINNIDAE
Atrina zelandica (Gray, 1835) R (Tk?-R) E
Pinna distans Hutton, 1873 Po-Pl E
Pinna lata Hutton, 1873 Lwh? (Ar-Lwh) E

Order LIMOIDA
LIMOIDEA
LIMIDAE
Acesta imitata (Suter, 1917) Lw E
Acesta levitesta (Finlay, 1927) Lw E
Acesta regia (Suter, 1917) Lwh? E
Ctenoides gracilissimus Beu, 1967 Wm-Wn E
Ctenoides naufragus Marwick, 1928 Wp E
Divarilima aucklandensis (Laws, 1950) Wp E
Lima becki Fleming, 1955 Tk E
Lima colorata Hutton, 1873 Pl (Po-Sw?) E
Lima paleata Hutton, 1873 Lw (Lwh-Lw) E
Lima robini Fleming, 1950 Wo E
Lima vasis Marwick, 1928 Wp E
Lima waipipiensis P. Marshall & Murdoch, 1919 Wp (Tk?-Wp) E
Lima watersi Marwick, 1926 Tt E
Lima zealandica G.B. Sowerby III, 1876 R (Wn?-R) E
Limaria orientalis (A. Adams & Reeve, 1850) R (Pl?, Wn-R) E
Limatula (*Limatula*) *arcis* Fleming, 1978 Ld (Ld-Lw?)
Limatula (*L.*) *craigensis* Fleming, 1955 Tk (Lw-Tk) E
Limatula (*L.*) *maoria* Finlay, 1926 Wc (Wp-R) E
Limatula (*L.*) *pontis* Fleming, 1978 Ak E
Limatula (*L.*) *suteri* (Dall, 1908) R (Lw-R) E
Limatula (*L.*) *trulla* Marwick, 1926 Ak (Ak-Lwh) E
Limatula (*L.*) *vigilis* Fleming, 1978 R (Wn?-R) E
Limatula (*Limatuletta*) *delli* Fleming, 1798 R (Wo-R) E
Limatula (*L.*) *morioria* Marwick, 1928 Wo E
Limatula (*L.*) *waitahana* Fleming, 1978 Ak Dw-Lwh) E
Limatula (*Stabilima*) *exulans* Fleming, 1978 Pl E
Limatula (*S.*) *gagei* Fleming, 1978 Sc E
Limatula (*S.*) *maxwelli* Fleming, 1978 Sw E
Limatula (*S.*) *waiaotea* Laws, 1944 Po E
Limatula (*S.*) *waipipiensis* Fleming, 1978 Wp (Wp-Wm?) E
Limea (*Escalima*?) *chathamensis* Marwick, 1928 Wo E
Limea (*Limea*) *riparia* Maxwell, 1992 Ak E
Limea (?) *inconspicua* (Marwick, 1926) Ak E
Notolimea broccha Marwick, 1931 Sl E

Order OSTREOIDA
Suborder OSTREINA
OSTREOIDEA
GRYPHAEIDAE
Pycnodonteinae
Crenostrea cannoni (Marwick, 1928) Dw E
Crenostrea gittosina (Powell & Bartrum, 1929) Po E
Crenostrea wuellerstorfi (Zittel, 1864) Ld-Lw E
Pycnodonte (*Notostrea*) *mackayi* (Suter, 1917) Ab E
Pycnodonte (*N.*) *subdentata* (Hutton, 1873) Lwh E
Pycnodonte (*N.*) *tarda* (Hutton, 1873) Dw (Dt?-Dw) E
OSTREIDAE
Ostreinae
Crassostrea ingens (Zittel, 1864) Wm (Tt?-Wn) E
Crassostrea (?) *nelsoniana* (Zittel, 1864) Po E
Cubitostrea gudexi (Suter, 1917) Ab (Dm?-Ab) E
Flemingostrea (?) *suteri* (Ihering, 1907) ?Ld-Lw E
Flemingostrea wollastoni (Finlay, 1927) Lw-Po (Ld-Lw) E
Ostrea arcula Marwick, 1928 Wo E
Ostrea chilensis Philippi in Kuster, 1844 R (Tk?-R)
Ostrea (?) *waitangiensis* Marwick, 1928 Dw E
Saccostrea glomerata (Gould, 1850) R (Wq-R)
DIMYOIDEA
DIMYIDAE
Dimya kaiparaensis Laws, 1944 Po? (Po-Pl) E
Dimya westonensis Maxwell, 1978 Ar E

Suborder PECTININA
PECTINOIDEA
PECTINIDAE
Chlamydinae
Athlopecten athleta (Zittel, 1864) Lw (Ld-Lw) E
Austrohinnites trailli (Hutton, 1873) Pl E
Austrohinnites marwicki (Allan, 1946) Sw (Sl-Sw) E
Chlamys (?) *coruscans* (Hinds, 1845) R (Wn-R)
Chlamys (?) *mercuria* Marwick, 1928 Dw E
'*Chlamys*' *hailesensis* (Eagle, 2000) Lw? E ¶
Duplipecten devinctus (Suter, 1917) Ab? E
Duplipecten parki (Marwick, 1942) Ab (Ab-Ak) E
Duplipecten waihaoensis (Suter, 1917) Ab E
Eburneopecten (?) *imperfectus* (Marwick, 1928) Dw E
Kaparachlamys hectori (Hutton, 1873) Wp E
Lentipecten hochstetteri (Zittel, 1864) Ld-Lw E
Lentipecten polemicus (Marwick, 1928) Lwh E
Lentipecten subteres (Marwick, 1943) Ld E
Lentipecten uttleyi (Marwick, 1924) Lwh (Ar?-Lwh) E
Mimachlamys chathamensis (Hutton, 1873) Ld E
Mimachlamys williamsoni (Zittel, 1864) Lwh E
Phialopecten marwicki (Beu, 1970) Wp (Wo-Wp) E
Phialopecten thomsoni Marwick, 1965 Wm (Wm-Wn) E
Phialopecten tolagaensis (Marwick, 1931) Tk E
Phialopecten triphooki (Zittel, 1864) Wn E
Psychrochlamys delicatula (Hutton, 1873) Wn (Wn-R) E
Psychrochlamys seymouri (Marwick, 1928) Wo E
Psychrochlamys whenuataruensis Jonkers, 2003 Wp E
Sectipecten allani Marwick, 1928 Wo (Wo-Wm, Wn?) E
Sectipecten diffluxus (Hutton, 1873) Sw E
Sectipecten grangei Boreham, 1961 Tt E
Sectipecten wollastoni (Finlay, 1927) Tk E
Serripecten enfieldensis (Marwick, 1926) Ak (Ak-Ar?) E
Serripecten hutchinsoni (Hutton, 1873) Pl (Pl-Tt)
Serripecten marwicki Maxwell, 1992 Ab E
Serripecten tahuianus Laws, 1935 Ab E
Serripecten tiorioriensis Marwick, 1928 Dw E
Serripecten venosus (Hutton, 1873) Ar E
Talochlamys (?) *araroaensis* Beu, 1970 Tk E
Talochlamys (?) *fischeri* (Zittel, 1864) Po E
Talochlamys gemmulata (Reeve, 1853) R (Tt?-R) E
Talochlamys (?) *scandula* (Hutton, 1873) Wo? E
Talochlamys zelandiae (Gray, 1843) R (Wn-R) E
Towaipecten katiae Beu, 1995 Wm (Wm-Wn) E
Towaipecten mariae (Finlay, 1927) Wn E
Towaipecten ongleyi (Marwick, 1965) Wo (Wo-Wp) E
pectininae
Mesopeplum (*Borehamia*) *crawfordi* (Hutton, 1873) Wp (Wo-Wp) E
Mesopeplum '(*Borehamia*)' *hilli* (Hutton, 1873) Wm? (Wo-Wn) E
Mesopeplum '(*Borehamia*)' *toaense* (Marwick, 1928) Wo (Tk?-Wo) E
Mesopeplum (*Mesopeplum*) *burnetti* (Zittel, 1864) Lw (Ak?, Lw-Tk, Wo?) E
Mesopeplum (*M.*) *convexum* (Quoy & Gaimard, 1835) R (Wn-R) E
Mesopeplum (*M.*) *costatostriatum* (P. Marshall, 1918) Po-Pl (Po-Pl) E
Mesopeplum (*M.*) *dendyi* (Hutton, 1902) Wo E
Mesopeplum (*M.*) *kaiparaense* (Finlay, 1924) Po-Pl (Po-Pl) E
Mesopeplum (*M.*) *polymorphoides* (Zittel, 1864) Ld? E
Mesopeplum (*M.*) *syagrus* (Marwick, 1924) Pl? (Pl?-Wp) E
Mesopeplum (*M.*) *waikohuense* (Marwick, 1931) Wo (Wo-Wn) E
Pecten kupei Fleming, 1957 Wc E
Pecten marwicki (Finlay, 1930) Wc (Wc-Wq) E
Pecten novaezelandiae Reeve, 1853 R (Wc-R) E
Pecten tainui (Finlay, 1930) Wc (Wc-Wq) E
PROPEAMUSSIIDAE
Cyclochlamys aupouria (Powell, 1937) R (Wp-R) E
Cyclochlamys shepherdi (Laws, 1939) Po (Po-Pl) E
Cyclochlamys transenna (Suter, 1913) R (Wn-R) E
Parvamussium aucklandicum (Zittel, 1864) Po (Po-Pl) E
Parvamussium maorium Dell, 1956 R (Tt?, Wm-R) E
Parvamussium mata Maxwell, 1992 Ak E
Parvamussium paradoxum (Maxwell, 1969) Ld E

Parvamussium vafer (Marwick, 1931) Sl E
Propeamussium papakurense (Clarke, 1905) Po E
Propeamussium zitteli (Hutton, 1873) Lwh (Lwh-Tt?) E
SPONDYLIDAE
Spondylus aucklandicus P. Marshall, 1918 Po-Pl (Po-Sc) E
ANOMIOIDEA
ANOMIIDAE
Anomiinae
Anomia trigonopsis Hutton, 1877 Pl (Ab?-R) E
Patro undatus (Hutton, 1885) Wn (Tk?-Wn) E
Placunanomiinae
Pododesmus (*Pododesmus*) *incisurus* Hutton,, 1873) Pl? (Lw-Pl) E
Pododesmus (*P.*) *maxwelli* Beu, 1967 Ld (Lwh?-Ld) E
Pododesmus (*P.*) *paucicostatus* Beu, 1967 Sc (Sc-Sw) E
Pododesmus (*Monia*) *zelandicus* (Gray, 1843) R (Tk?-R) E

Subclass PALEOHETERODONTA
Order UNIONOIDA
UNIONOIDEA
UNIONIDAE
Hyriinae
Hyridella (*Velesunio*?) *huttoni* (McMichael, 1956) Lwh E
Hyridella (*Velesunio*) *menziesii* (Gray, 1843) R (Wq?-R) E
Unioninae
Cucumerunio websteri (Simpson, 1902) R (Wq?-R) E

Subclass HETERODONTA
Order VENEROIDA
CHAMOIDEA
CHAMIDAE
Chama hunua Eagle, 2000 Po (Po-Pl) E
Chama huttoni Hector, 1886 Wn E
Chama pittensis Marwick, 1928 Wp E
LUCINOIDEA
LUCINIDAE
Anodontia waharoaensis Eagle, 1992 Pl E
Dilora lorea Marwick, 1948 Wp E
Divalucina huttoniana (Vanatta, 1901) R (Ab?, Ld-R) E
Eophysema (?) *arapaoa* (Fleming, 1950) Ab E
Gonimytrea alta Marwick, 1965 Wo E
Gonimytrea bucculenta Marwick, 1929 Ld (Ld-Lw) E
Gonimytrea concinna (Hutton, 1885) Wc (Wo-R) E
Gonimytrea discus Marwick, 1943 Pl E
Lucinoma galathea Marwick, 1953 R (Wo-R) E
Lucinoma taylori (Powell, 1935) Pl E
Miltha agilis Finlay & Marwick, 1937 Dwl E
M. neozelanica P. Marshall & Murdoch, 1921 Wp (Lw-Wp) E
Milthona glomerosa Marwick, 1931 Tt? E
Myrtea haurangiensis Vella, 1954 Tt E
Myrtea maoria Powell, 1935 Pl E
Myrtea microlirata (Finlay & Marwick, 1937) Dwl E
Myrtea papatikiensis Marwick, 1926 Tt (Sw-Tt) E
Myrtea sera Marwick, 1965 Wo E
Myrtea staminifera (Marwick, 1929) Ld E
Myrtea supraflexa (Marwick, 1931) Sc E
Myrtea valdesculpta Marwick, 1943 Pl E
Pteromyrtea auriculata (Bartrum, 1919) Po-Pl (Po-Pl) E
Pteromyrtea cristata Marwick, 1931 Tt E
Pteromyrtea dispar (Hutton, 1873) Wo (Wo-Wn) E
Pteromyrtea disparilis Laws, 1944 Pl (Po-Pl) E
Pteromyrtea exilis Marwick, 1943 Pl E
Pteromyrtea laminata (Hutton, 1885) Pl E
Pteromyrtea motutaraensis Powell, 1935 Pl E
Pteromyrtea obesa Finlay & Marwick, 1937 Dwl E
Pteromyrtea tirangiensis (Marwick, 1926) Tt E
THYASIRIDAE
Genaxinus cookianus Fleming, 1950 R (Wc-R) E
Maorithyas marama Fleming, 1950 R Wq-R)
Parathyasira flemingi Maxwell, 1992 Ak E
Thyasira bartrumi Powell, 1935 Pl E
Thyasira motutaraensis Powell, 1935 Pl E
Thyasira peregrina (Iredale, 1930) R (Wp-R) E
Thyasira planata Marwick, 1926 Tt E
Thyasira waikanae Fleming, 1950 R (Wc-R) E
UNGULINIDAE
Diplodonta (*Zemysina*) *densisculpta* Marwick, 1960 Dw-Dm E
Diplodonta (*Z.*) *globus* (Finlay, 1926) R (Pl?-R) E
Diplodonta (*Z.*) *striatula* (Finlay, 1926) R (Wc-R) E
Felaniella (*Zemysia*) *ampla* (Hutton, 1885) Wc E
Felaniella (*Z.*) *infrequens* (Marwick, 1926) Ak E
Felaniella (*Z.*) *zelandica* (Gray, 1835) R (Sw-R) E
GALEOMMATOIDEA
GALEOMMATIDAE
Scintillona zelandica (Odhner, 1924) R (Wp-R) E
KELLIIDAE
Kellia (*Kellia*) *antiqua* Marwick, 1926 Ak E
Kellia (*K.*) *cycladiformis* (Deshayes, 1834) R (Wo-R) E
Kellia (*K.*) *inchoata* Marwick, 1931 Pl E
Kellia (*Kanehoa*) *minima* Ponder, 1971 R (Wq-R) E
LASAEIDAE
Ericininae
Arthritica ambotruncata Laws, 1944 Po E
Arthritica bifurca (Webster, 1908) R (Wo-R) E
Arthritica crassitesta Laws, 1950 Wp E
Arthritica dispar Laws, 1940 Wo (Wo-Wn) E
Arthritica elongata Laws, 1936 Wo E
Arthritica finlayi Laws, 1950 Wp E
Arthritica perfragilis Laws, 1950 Wp E
Borniola bidentifera (Powell, 1933) R (Wq-R) E
Borniola brevitas (Laws, 1944) Po-Pl (Po-Pl) E
Borniola decapitata (Powell, 1939) R (Wq-R) E
Borniola kaawaensis (Bartrum & Powell, 1928) Wo (Wo-Wp) E
Borniola reniformis (Suter, 1908) R (Wo-R) E
Erycina (*Hemilepton*?) *aotea* Maxwell, 1992 Ak E
Melliteryx angulata Laws, 1936 Wo E
Melliteryx effosa (Hutton, 1885) Wn E
Melliteryx furtiva Laws, 1950 Wp E
Melliteryx mirifica Powell & Bartrum, 1929 Po (Po-Sc?) E
Melliteryx 'parva (Deshayes, 1856)' R (Wp-R) E
Semeloidea (?) *abdiplex* (Marwick, 1931) Pl? E
Semeloidea donaciformis Bartrum & Powell, 1928 Wo E
Semeloidea miocenica Laws, 1932 Pl E
Lasaeinae
Lasaea dingleyi Laws, 1950 Wp E
Lasaea hinemoa Finlay, 1928 R (Wq-R) E
Myllitinae
Myllita (*Zemyllita*) *bartrumi* (Laws, 1940) Wo E
Myllita (*Z.*) *praecursor* (Laws, 1940) Wo E
Myllita (*Z.*) *stowei* (Hutton, 1873) R (Wq-R) E
Myllitella finlayi (Marwick, 1924) Wn (Wp-Wn) E
Myllitella fragilis Laws, 1936 Wo (Wo-Wp) E
Myllitella pinguis Marwick, 1928 Wn (Wn-R) E
Myllitella vivens Finlay, 1926 R (Wq-R) E
LEPTONIDAE
Lepton neozelanicum Laws, 1950 Wp E
MONTACUTIDAE
Mysellinae
Mysella apudalpha Laws, 1944 Po (Po-Pl) E
Mysella hounselli (Powell, 1931) Wc (Wn-R) E
Mysella larochei Powell, 1940 R (Wq-R) E
Mysella putealis Laws, 1950 Wp (Wo-Wp) E
Mysella tellinula (Odhner, 1924) R (Wo?-R) E
Mysella unidentata Odhner, 1924 R (Wq-R) E
CYAMIOIDEA
CYAMIIDAE
Cyamiinae
Cyamiomactra problematica Bernard, 1897 R (Wn-R) E
Kidderia (*Kidderia*) *fiordlandica* Fleming, 1948 R (Wq-R) E
Kidderia (*Costokidderia*) *costata* Odhner, 1924 R (Wq-R) E
Perrierina bensoni King, 1933 Wn E
Perrierina ovata Marwick, 1928 Wn E
Perrierina sola Laws, 1936 Wo E
Gaimardiinae
Gaimardia asinuata Laws, 1940 Wn E
Gaimardia forsteriana Finlay, 1926 R (Wq-R) E
Neogaimardia elegantula Marwick, 1928 Wn E
NEOLEPTONIDAE
Neolepton antipodum (Filhol, 1880) R (Po?, Wo-R) E
Neolepton subobliquum (Powell, 1937) R (Wc-R) E
Pachykellya bernardi Powell, 1927 R (Wc?-R) E
Pachykellya concentrica Powell, 1927 R (Wm-R) E
Pachykellya edwardsi Bernard, 1897 R (Wp-R) E
Pachykellya rotunda Powell, 1927 R (Wm-R) E
Puyseguria (?) *crenulifera* Maxwell, 1969 Lw E
Puyseguria cuneata Powell, 1927 R (Wq?-R) E
Puyseguria tani Powell, 1939 R (Wq?-R) E
Puyseguria wanganuica Powell, 1931 Wc (Wm-R) E
SPORTELLIDAE
Tahunanuia alata Powell, 1952 R (Wp?, Wq-R) E
CARDITOIDEA
CARDITIDAE
Carditinae
Cardita aoteana Finlay, 1926 R (Wo-R) E
Cardita brookesei Finlay, 1926 R (Wq-R) E
Cardita marwicki Laws, 1944 Po-Pl E
Cardita northcrofti Marwick, 1928 Wp E
Venericardiinae
'*Cyclocardia' awamoensis* (Harris, 1897) Pl (Ld?-Pl) E
'*Cyclocardia' christiei* Marwick, 1929 Ld E
'*Cyclocardia' marama* (Maxwell, 1969) Lw E
'*Cyclocardia' pseutella* (Marwick, 1929) Ld E
Glyptoactis (*Fasciculicardia*) *acanthodes* (Suter, 1917) Ab E
Glyptoactis (*Fasciculicardia*?) *allophyla* Maxwell, 1992 Ab (Ab-Ak) E
Glyptoactis (*F.*) *bartrumi* (Fleming, 1950) Ab E
Glyptoactis (*F.*) *benhami* (Thomson, 1908) Lwh E
Glyptoactis (*F.*) *faceta* (Suter, 1917) Ld E
Glyptoactis (*F.*) *healyi* (Fleming, 1950) Ab E
Glyptoactis (*F.*) *nuntia* (Marwick, 1928) Dw E
Glyptoactis (*F.*) *subintermedia* (Suter, 1917) Po-Pl (Po-Pl) E
Hamacuna gibbosa (Powell, 1937) R (Wc?-R) E
Hamacuna kaawa (Laws, 1936) Wo (Wo-Wp) E
Hamacuna nukumaruensis (Laws, 1940) Wn (Wm-Wn) E
Hamacuna otagoensis (Powell, 1927) R (Wc?-R) E
Megacardita ponderosa (Suter, 1913) Ld E
Megacardita squadronensis (Powell, 1938) Po E
Pleuromeris finlayi Powell, 1938 Wn (Wm-R) E
Pleuromeris hectori Powell, 1938 Wn (Wm?-R) E
Pleuromeris instata Laws, 1944 Pl (Pl-Sc) E
Pleuromeris kapuaensis (Marwick, 1931) Wo (Tt-Wo) E
Pleuromeris koruahinensis (Bartrum & Powell, 1928) Wo E
Pleuromeris marshalli (Marwick, 1924) R (Wm-R) E
Pleuromeris miniscula (Bartrum & Powell, 1928) Wo (Wo-Wp) E
Pleuromeris murdochi Powell, 1938 Wn E
Pleuromeris otamateaensis Laws, 1944 Po E
Pleuromeris paucicostata Laws, 1940 Wn (Wn-R) E
Pleuromeris prolutea (Marwick, 1929) Ld E
Pleuromeris waitotarana Laws, 1940 Wo E
Pleuromeris zelandica (Deshayes, 1854) R (Wm?-R) E
Pteromeris (?) *minima* (Marwick, 1924) Wn E
Purpurocardia beata (Marwick, 1928) Wp (Tk?-Wp) E
Purpurocardia (?) *fyfei* (Finlay & Marwick, 1937)

Dwl E
Purpurocardia haskelli (Fleming, 1950) Wo E
Purpurocardia lilliei (Fleming, 1943) Wm? (Wo?-Wm?) E
Purpurocardia penerectangularis (Bartrum & Powell, 1928) Wo (Wo-Wp) E
Purpurocardia perscrupulosa (Marwick, 1932) Pl (Pl-Sw) E
Purpurocardia purpurata (Deshayes, 1854) R (Wo?, Wp-R) E
Purpurocardia southlandica (Fleming, 1955) Tk E
Purpurocardia titirangiensis (Marwick, 1943) Wn E
Purpurocardia urutiensis (Marwick, 1926) Tt E
Purpurocardia waikohuensis (Marwick, 1931) Wo (Tk-Wo) E
CONDYLOCARDIIDAE
Condylocardiinae
<u>*Benthocardiella*</u> *orbicula* Powell, 1930 R (Wo-R) E
Benthocardiella pusilla Powell, 1930 R (Wc-R) E
Condylocardia crassicosta Bernard, 1896 R (Wq-R) E
Condylocuna concentrica (Bernard, 1897) R (Wn?-R) E
Condylocuna dupliora (Laws, 1940) Wn (Wo-Wn) E
Condylocuna flemingi Maxwell, 1969 Ld (Ld-Lw) E
Condylocuna subequilateralis (Maxwell, 1966) Ak E
Condylocuna torquata (Marwick, 1928) Wn (Wn-R) E
Cuninae
Cuna crassicardo Laws, 1936 Wo E
Cuna morator Laws, 1940 Wp E
Volupicuna antiqua (Marwick, 1928) Wp E
Volupicuna awheaensis (Beu, 1970) Tt E
Volupicuna caerulea (Fleming, 1955) Tk E
Volupicuna carditelloides (Suter, 1911) R (Wc-R) E
Volupicuna (?) *cerussata* (Bartrum & Powell, 1928) Wo (Wo-Wp) E
Volupicuna fictilia (Laws, 1936) Wo E
Volupicuna firma (Marwick, 1928) Wn E
Volupicuna kaipara (Laws, 1944) Po E
Volupicuna laqueus (Finlay, 1926) R (Wm-R) E
Volupicuna mayi (Powell, 1930) R (Wc-R) E
Volupicuna ngatutura (Laws, 1940) Wo (Wo-Wp) E
Volupicuna otahuica (Laws, 1950) Wp E
Volupicuna tuta (Marwick, 1931) Sl (Pl?-Sl) E
CRASSATELLOIDEA
CRASSATELLIDAE
<u>*Chattonia*</u> *animula* Marwick, 1929 Ld E
Eucrassatella ampla (Zittel, 1864) Po (Ld-Tt) E
Eucrassatella australis (Hutton, 1873) Ab (Ab-Ak?) E
Eucrassatella concisa (Finlay, 1926) Pl E
Eucrassatella marshalli Powell, 1931 Wp (Tk-Wp) E
Eucrassatella scopalveus (Finlay, 1926) Pl E
Salaputium tinopaica Laws, 1939 Po-Pl (Po-Pl) E
Spissatella acculta Finlay, 1926 Lwh E
Spissatella clifdenensis Finlay, 1926 Pl (Pl-Sc) E
Spissatella (?) *cordiformis* (Suter, 1917) Lwh E
Spissatella discrepans Finlay, 1926 Ld-Lw E
Spissatella luteophila Marwick, 1931 Sc E
Spissatella media (Marwick, 1926) Ak E
Spissatella poroleda Finlay, 1926 Ld E
Spissatella subobesa (P. Marshall & Murdoch, 1919) Ld (Ld-Lw) E
Spissatella trailli (Hutton, 1873) Pl (Po-Pl) E
Talabrica nummaria Powell, 1931 Wn E
Talabrica inornata Wild & King, 1932 Wn E
Talabrica iredalei (Powell, 1958) R (Wn-R) E
Talabrica senecta Powell, 1931 Wn (Wm-Wn) E
CARDIOIDEA
CARDIIDAE
Cardiinae
Maoricardium (?) *coxi* (Hector, 1886) Lw? E
Maoricardium gudexi (Laws, 1933) Pl (Pl-Sl) E
Maoricardium oneroaense (Powell, 1938) Po E
Maoricardium spatiosum (Hutton, 1873) Wm (Sl-Wm) E
Maoricardium strangi (Laws, 1930) Ld E
Laevicardiinae
Nemocardium (*Nemocardium*) *bechei* (Reeve, 1840) R (Wn-R) E
Nemocardium (*N.*) *carteri* Maxwell, 1992 Ab E
Nemocardium (<u>*Varicardium*</u>) *patulum* (Hutton, 1873) Pl (Pl-Sw) E
Nemocardium (*V.*) *serum* (Hutton, 1873) Ld E
Pratulum catinus (Maxwell, 1992) Ak E
Pratulum finlayi (Bartrum & Powell, 1928) Wo (Tk-Wp) E
Pratulum marwicki (Beu & Maxwell, 1990) Dw E
Pratulum modicum (Marwick, 1944) Dwl E
Pratulum pulchellum (Gray, 1843) R (Wm-R) E
Pratulum quinarium (Marwick, 1944) Wo (Tt-Wp) E
Pratulum semitectum (Marwick, 1926) Ak (Ak-Ar) E
Lahilliinae
Lahillia neozelanica P. Marshall & Murdoch, 1923 Dwl E
Orthocardiinae
Hedecardium (*Hedecardium*) *brunneri* (Hector, 1886) Ak (Ab?-Ak) E
Hedecardium (*H.*) *collinsi* Marwick, 1960 Dw-Dm E
Hedecardium (*H.*) *olssoni* Marwick, 1944 Ld E
Hedecardium (*H.*) *subcordatum* (Suter, 1917) Ld (Ld-Lw) E
Hedecardium (*H.*) *waitakiense* (Suter, 1917) Ld E
Hedecardium (<u>*Titanocardium*</u>) *cantuariense* (Laws, 1933) Pl E
Hedecardium (*T.*) *greyi* (Hutton, 1873) Po (Lw-Po) E
Hedecardium (*T.*) *marwicki* Maxwell, 1978 Sl E
Trachycardiinae
Acrosterigma delectabile (Maxwell, 1978) Sc (Pl-Sc) E
Trachycardium (<u>*Ovicardium*</u>) *rossi* Marwick, 1944 Wp (Tk-Wn?) E
MACTROIDEA
MACTRIDAE
Lutrariinae
Lutraria bruuni Powell, 1958 R (Wn-R) E
Lutraria solida Hutton, 1873 Wp (Wo-Wn) E
Lutraria trapezoidalis Powell & Bartrum, 1929 Po (Po-Pl) E
Mactrinae
<u>*Crassula*</u> *aequilatera* (Deshayes in Reeve, 1854) R (Tk?-R) E
Crassula gilberti (Bartrum, 1919) Wo E
<u>*Cyclomactra*</u> (?) *altilunula* (Marwick, 1927) Sl (Sl-Sw) E
Cyclomactra ovata (Gray, 1843) R (Wp?-R) E
Cyclomactra rudis (Hutton, 1873) Wc (Wn-Wc) E
Cyclomactra tristis (Reeve, 1854) R (Wn?-R) E
Cyclomactra williamsi (Marwick, 1948) Wp E
Mactra discors Gray, 1837 R (Wo-R) E
Mactra murchisoni Reeve, 1854 R (Tt?, Wn-R) E
Mactrona mula (Marwick, 1948) Wp (Wp-Wn) E
<u>*Maorimactra*</u> *acuminella* Finlay, 1930 Pl E
Maorimactra chrydaea (Suter, 1911) Wo (Tk-Wp) E
Maorimactra ordinaria (E.A. Smith, 1898) R (Wo?-R) E
Oxyperas (*Pseudoxyperas*) *elongata* (Quoy & Gaimard, 1835) R (Wn?-R) E
Oxyperas (*P.*) *exensis* Maxwell, 1978 Lw E
Oxyperas (*P.*) *flemingi* (Marwick, 1960) Dw-Dm E
Oxyperas (*P.*) *komakoensis* (Carter, 1972) Wn (Wp?, Wm-Wn) E
Oxyperas (*P.*) *leda* (Finlay, 1924) Ld E
<u>*Scalpomactra*</u> *biconvexa* Powell & Bartrum, 1929 Po E
Scalpomactra continua Finlay, 1930 Pl (Ld-Pl) E
Scalpomactra scalpellum (Reeve, 1854) R (Tt?-R) E
Spisula (<u>*Spisulona*</u>) *couttsi* Marwick, 1948 Wp E
Spisula (*S.*) *crassitesta* (Finlay, 1927) Wn E
Resaniinae
<u>*Resania*</u> *elongata* Beu, 1966 Tt (Sl?-Wo) E
R. exoptata Bartrum & Powell, 1928 Wo (Tt-Wm) E
R. lanceolata Gray, 1853 R Wn-R) E
Zenatiinae
Zenatia (<u>*Zenatia*</u>) *acinaces* (Quoy & Gaimard, 1835) R Tt?-R) E
Zenatia (*Z.*) *'cretacea* (Woods, 1917)*'* (Ld-Sw) E
Zenatia (*Z.*) *flemingi* Marwick, 1948 Wp E
Zenatia (*Z.*) *tepikiensis* Beu, 1966 Wq E
Zenatia (<u>*Zenatraria*</u>) *vellai* Beu, 1966 Wn E
Zenatia (*Z.*) *waipipiana* Beu, 1966 Wp E
MESODESMATOIDEA
MESODESMATIDAE
Paphies anteaustralis (Dell, 1950) Po E
Paphies australis (Gmelin, 1791) R Wm-R) E
Paphies crassiformis (P. Marshall & Murdoch, 1920) Wn E
Paphies donacina (Spengler, 1793) R (Wm?, Wq-R) E
Paphies otaiana Eagle, 2000 Po E
Paphies porrecta (Marwick, 1928) Wn E
Paphies subtriangulata (Gray in Wood, 1828) R (Wo?, Wn-R) E
Paphies ventricosa (Gray, 1843) R (Wc-R) E
TELLINOIDEA
DONACIDAE
Donax (*Paradonax*) *parengarengaensis* Eagle, 2000 Pl E
PSAMMOBIIDAE
Gari (*Gobraeus*) *stangeri* (Gray, 1843) R (Wo-R) E
Gari (*Psammobia*) *aucklandica* Marwick, 1948 Wp E
Gari (*P.*) *cacuminata* Finlay & Marwick, 1937 Dw-Dm? E
Gari (*P.*) *convexa* (Reeve, 1857) R (Wc?-R) E
Gari (*P.*) *lineolata* (Gray, 1835) R (Wo-R) E
Gari (*P.*) *oamarutica* Finlay, 1930 Pl E
Hiatula nitida (Gray, 1843) R (Wc?-R) E
Hiatula siliquens (Willan, 1993) R (Wc?-R) E
Hiatula waitemata (Marwick, 1948) Wp E
SEMELIDAE
Abra inflata (Laws, 1939) Po E
Abra (?) *fragosa* (Marwick, 1931) Tt E ¶
Abra (?) *marshalli* (Finlay, 1927) Po? (Po-Pl) E
Leptomya breviformis Laws, 1950 Wp (Wo-Wp) E
Leptomya concentrica Marwick, 1928 Wp E
Leptomya retiaria (Hutton, 1885) Wc (Wo-R) E
Leptomya simplex Marwick, 1926 Tt E
Leptomya waitemataensis Powell & Bartrum, 1929 Po E
SOLECURTIDAE
Solecurtus bensoni Finlay, 1924 Pl (Pl-Sl) E
Solecurtus chattonensis Finlay, 1924 Ld E
Solecurtus evolutus Finlay, 1924 Pl E
TELLINIDAE
Macominae
<u>*Bartrumia*</u> *oneroaensis* (Powell & Bartrum, 1929) Po E
Bartrumia tenuiplicata (Bartrum, 1919) Sl? (Pl-Tt) E
Telllininae
Arcopagia (?) *praeobtusa* (Finlay & Marwick, 1937) Dwl E ¶
<u>*Barytellina*</u> *crassidens* Marwick, 1924 Wn (Wp?-Wq) E
Barytellina tertia Fleming, 1943 Wn (Wp?-Wn) E
Elliptotellina donaciformis (Marwick, 1928) Dw E
Elliptotellina protensa (Powell, 1935) Pl E
Elliptotellina urinatoria (Suter, 1913) R (Wo-R) E
Eurytellina (?) *solitaria* Powell, 1931 Wp E
<u>*Finlayella*</u> *imbellica* (Marwick, 1929) Ld E
Finlayella (?) *marshalli* Fleming, 1950 Ab E
Finlayella sinuaris Laws, 1933 Pl E
Finlayella subtriquetra (Bartrum & Powell, 1928) Wo E
Macomona liliana (Iredale, 1915) R (Wn-R) E
Macomona williamsi Laws, 1950 Wp E
Moerella huttoni (E.A. Smith, 1885) R (Wo-R) E
Moerella securiclata Maxwell, 1992 Ab E
Peronaea gaimardi (Iredale, 1915) R (Wo-R) E
Peronaea (?) *pahiensis* (Fleming, 1950) Ab E
Peronaea robini (Finlay, 1924) Lw (Lw-Po?) E ¶
'Peronaea' spenceri (Suter, 1907) R (Wo-R) E ¶
Pseudarcopagia disculus (Deshayes, 1855) R (Wq-R) E

Serratina charlottae (E.A. Smith, 1885) R (Wc-R) E
Serratina eugonia (Suter, 1913) Wc (Wc-R) E
Serratina ferrari (Marwick, 1931) Pl? (Po-Pl) E
'Tellina' decisa (Marwick, 1931) Tt E
'Tellina' hesterna (Powell & Bartrum, 1928) Po E
Tellinota arta (Laws, 1933) Pl E
Tellinota edgari (Iredale, 1915) R (Tt?-R) E
Tellinota tumens (Laws, 1933) Pl E
VENEROIDEA
VENERIDAE
CHIONINAE
Austrovenus crassitesta (Finlay, 1924) Wc (Wm?, Wn-Wq) E
Austrovenus northlandica Eagle, 2000 Po E
Austrovenus stutchburyi (Gray in Wood, 1828) R (Wo?-R) E
Austrovenus tamakiensis (Marwick, 1948) Wp E
Bassina (*Callanaitis*) *katherinae* Marwick, 1948 Wp (Wp-Wm?) E
Bassina (*C.*) *lawsi* Fleming, 1971 Wo E
Bassina (*C.*) *macclurgi* (Marwick, 1928) Wn E
Bassina (*C.*) *parva* Marwick, 1927 Wn (Wm-Wn) E
Bassina (*C.*) *southlandica* Fleming, 1962 Wo E
Bassina (*C.*) *speighti* (Suter, 1913) Sw (Ld-Tt) E
Bassina (*C.*) *yatei* (Gray, 1835) R (Wo-R) E
Hinemoana acuminata (Hutton, 1873) Ld? E
Placamen morgani (Marwick, 1924) Ld E
Protothaca crassicosta (Deshayes, 1835) R (Wc-R) E
DOSINIINAE
Austrodosinia anus (Philippi, 1848) R (Wc?-R) E
Austrodosinia horrida (Marwick, 1927) Wn E
Austrodosinia kaawaensis (Marwick, 1927) Wo (Wo-Wn) E
Austrodosinia magna (Hutton, 1873) Pl (Pl-Sw?) E
Austrodosinia sodalis (Marwick, 1929) Ld E
Austrodosinia waitakiensis (Marwick, 1927) Lw E
Fallartemis(?) *lambata* (Gould, 1850) R (Ld?, Pl-R) E ¶
Dosinobia ongleyi (Marwick, 1927) Dwl E
Dosinobia perplexa (Marwick, 1927) Dwl E
Kakahuia suteri (Marwick, 1927) Ab E
Kereia (?) *castigata* (Marwick, 1960) Dw-Dm E
Kereia chathamensis (Marwick, 1928) Wp (Tk-Wp) E
Kereia cottoni (Marwick, 1927) Tt (Sw?-Tt) E
Kereia densicosta (Marwick, 1927) Pl E
Kereia greyi (Zittel, 1864) Wp? (Tk-R) E
Kereia mackayi (Marwick, 1927) Ab E
Kereia macroptera (Fleming, 1943) Tt? E
Kereia waiparaensis (Marwick, 1927) Wm-Wn E
Pectunculus maorianus (Oliver, 1923) R (Wc-R) E ¶
Phacosoma subrosea (Gray, 1835) R (Wp-R) E
Raina bartrumi (Laws, 1930) Wo E
Raina benereparata (Laws, 1930) Ld E
Raina bensoni (Marwick, 1927) Pl (Pl-Sw) E
Raina imperiosa (Marwick, 1929) Ld E
Raina nukumaruensis (Marwick, 1927) Wn (Wp-Wn) E
Raina paparoaensis (Marwick, 1927) Sw E
Raina powelli (Marwick, 1948) Wp E
Raina waipipiensis (Marwick, 1927) Wp E
PITARINAE
Costacallista hectori (Finlay & Marwick, 1937) Dw-Dm? E
Marwickia parthiana (Marwick, 1927) Dwl E
Notocallista (*Fossacallista*) *parki* (Marwick, 1927) Pl (Po-Pl) E
Notocallista (*F.*) *tecta* Marwick, 1938 Ld E
Notocallista (*F.*) *tersa* Marwick, 1938 Pl E
Notocallista (*F.*) *watti* Marwick, 1938 Lw E
Notocallista (*Striacallista*) *kapitea* Beu, 1970 Tk (Tt?-Tk) E
Notocallista (*S.*) *makoensis* (Marwick, 1931) Wo (Tt-Wo) E
Notocallista (*S.*) *multistriata* (G.B Sowerby II, 1851) R (Wp-R) E
Pitar (*Hyphantosoma*) *sculpturata* (P. Marshall, 1918) Po-Pl (Po-Pl) E
Rohea trigonalis (Marwick, 1927) Pl (Pl-Sl) E
TAPETINAE
Atamarcia (*Atamarcia*) *benhami* (Marwick, 1927) Wp (Wo?-Wn) E
Atamarcia (*A.*) *crassa* (Marwick, 1927) Lwh E
Atamarcia (*A.*) *crassatelliformis* (Marwick, 1927) Tk E
Atamarcia (*A.*) *curta* (Hutton, 1873) Pl E
Atamarcia (*A.*) *enysi* (Hutton, 1873) Sw? (Pl-Sw) E
Atamarcia (*A.*) *sulcifera* (Marwick, 1927) Pl E
Atamarcia (*A.*) *summersae* (Beu, 1970) Wn E
Atamarcia (*A.*) *thomsoni* (Marwick, 1927) Tt (Sl-Tt) E
Atamarcia (*Opimarcia*) *healyi* (Marwick, 1948) Wp E
Eumarcia awateria Beu, 1970 Tk E
Eumarcia kaawaensis Marwick, 1927 Wo (Wo-Wp) E
Eumarcia pareoraensis (Suter, 1917) Pl E
Eumarcia plana Marwick, 1927 Wn (Wp-Wn) E
Gomphina (*Gomphinella*) *maorum* E.A. Smith, 1903 R (Wo-R) E
Irus (*Notirus*) *caudex* (Laws, 1936) Wo E
Irus (*N.*) *reflexus* (Gray, 1843) R (Wq-R) E
Irus (*Notopaphia*) *elegans* (Deshayes, 1854) R (Wq-R) E
Katelysia (?) *lunulata* Marwick, 1931 Sl E
Paphia (*Callistotapes*) *finlayi* Marwick, 1927 Sl (Sl-Tt) E
Ruditapes largillierti (Philippi, 1847) R (Wp?-R) E
Tapes parki (P. Marshall & Murdoch, 1923) Ld E
VENERINAE
Dosina crebra (Hutton, 1873) R (Wo-R) E
Dosina firmocosta (Marwick, 1927) Pl (Pl-Sl) E
Dosina marwicki (Laws, 1936) Wo E
Dosina (?) *morgani* (Suter, 1917) Tt E
Dosina suboblonga (Marwick, 1927) Pl E
Dosina uttleyi (Marwick, 1927) Lw E
Dosina zelandica Gray, 1835 R (Wn-R) E
Globivenus neozelanica Marwick, 1965 Wp E
Globivenus toreuma (Gould, 1850) R (Wn-R)
Kuia fausta (Marwick, 1960) Dw-Dm E ¶
Kuia macdowelli Marwick, 1927 Sw (Sw-Tt) E
Kuia vellicata (Hutton, 1873) Pl (Ak?, Lw-Pl) E
Marama (*Hina*) *hendersoni* Marwick, 1927 Sl (Sc-Sl) E
Marama (*H.*) *mackenziei* Marwick, 1927 Pl E
Marama (*H.*) *pinguis* Marwick, 1927 Po-Pl (Po-Pl) E
Marama (*H.*) *singularis* (Marwick, 1927) Tk E
Marama (*Hina*?) *tumida* (P. Marshall, 1918) Po-Pl (Po-Pl) E
Marama (*H.*) *vaga* Marwick, 1927 Ak E
Marama (*H.*) *williamsi* Marwick, 1927 Pl E
Marama (*Marama*) *elegans* (Hutton, 1873) Tk? E
Marama (*M.*) *hurupiensis* Marwick, 1927 Tt E
Marama (*M.*) *murdochi* Marwick, 1927 Wp (Tk-Wn) E
Marama (*M.*) *ovata* Marwick, 1927 Pl E
Marama (*M.*) *pristina* Marwick, 1927 Ab-Ak E
Plurigens (?) *carri* (Marwick, 1927) Tt E
Plurigens fusidens Beu, 1970 Wo E
Proxichione darraghi Maxwell, 1978 Ld E
Proxichione otiakensis Maxwell, 1978 Lw E
Tawera assimilis (Hutton, 1873) Wn E
Tawera bartrumi Marwick, 1927 Wo E
Tawera bollonsi Powell, 1932 R (Wq?-R) E
Tawera duobrunnea Marwick, 1948 Wp E
Tawera errans Marwick, 1927 Wp E
Tawera marshalli Marwick, 1927 Pl (Po-Pl) E
Tawera marthae Marwick, 1928 Wn E
Tawera spissa (Deshayes, 1835) R (Wn-R) E
Tawera subsulcata (Suter, 1905) Wn (Wn-Wq?) E
Tawera wanganuiensis Marwick, 1927 Wc E
Turia bortonensis Marwick, 1927 Ab E
Turia chattonensis Marwick, 1927 Ld E
Turia pukeuriensis Marwick, 1927 Pl E
Turia waiauensis Marwick, 1927 Sw (Sl-Sw, Tt?) E

Order MYOIDA
Suborder MYINA
MYOIDEA
CORBULIDAE
CAESTOCORBULINAE
Caestocorbula (?) *anceps* Maxwell, 1992 Ak E
Caestocorbula praeviator Maxwell, 1992 Ak (Ab-Ak) E
Notocorbula humerosa (Hutton, 1885) Pl (Ld-Tk) E
Notocorbula illecta Laws, 1941 Pl (Pl-Sc) E
Notocorbula (?) *innerans* Laws, 1941 Pl (Po-Sw) E
Notocorbula (?) *pumila* (Hutton, 1885) Pl E
CORBULINAE
Caryocorbula howesi (Marwick, 1928) Wp E
Caryocorbula kaiparaensis (Suter, 1917) Po-Pl (Po-Pl) E
Caryocorbula nitens (P. Marshall, 1918) Po-Pl (Po-Pl) E
Caryocorbula tophina (Marwick, 1928) Dw E
Caryocorbula waihaoensis Finlay & Marwick, 1937 Dw-Dm E
Caryocorbula zelandica (Quoy & Gaimard, 1835) R (Wo-R) E
HIATELLOIDEA
HIATELLIDAE
Hiatella 'arctica (Linnaeus, 1767)' R (Pl?-R)
Panopea smithae Powell, 1950 R (Wq-R) E
Panopea wanganuica Powell, 1952 Wc (Wp?-Wc) E
Panopea worthingtoni Hutton, 1873 Lw? (Dm?, Ld-Tt) E
Panopea zelandica Quoy & Gaimard, 1835 R (Tk?-R) E
PHOLADOIDEA
PHOLADIDAE
MARTESIINAE
Parapholas aucklandica Powell, 1938 Po E
Pholadidea finlayi Laws, 1936 Wo E
Pholadidea suteri Lamy, 1926 R (Wc-R) E
Pholadidea thomsoni Suter, 1917 Lw? E
Pholadidea tridens (Gray, 1843) R (Wc-R) E
PHOLADINAE
Barnea (*Anchomasa*) *similis* (Gray, 1835) R (Wn-R) E
Zirlona concentrica (Suter, 1917) Ld E
TEREDINIDAE
Bankia (?) *aemula* Laws, 1944 Po E
Bankia (?) *cupedia* Laws, 1944 Po E
Bankia turneri Powell & Bartrum, 1929 Po E
'Teredo' directa (Hutton, 1877) Ak? E
'Teredo' heaphyi Zittel, 1864 Po E

Subclass ANOMALODESMATA
Order PHOLADOMYOIDA
PHOLADOMYOIDEA
PARILIMYIDAE
'Parilimya' neozelanica (Suter, 1914) Wc (Wc-R) E
'Parilimya' waitotarana (Powell, 1931) Wp (Wo-Wp) E
'Parilimya' warrenae (Dell, 1952) Tt E
Procardia dolicha (Suter, 1917) Lwh-Ld (Ak-Pl?) E
PHOLADOMYIDAE
Pholadomya neozelanica Hutton, 1885 L-P? (Pl–Tt?) E
THRACIOIDEA
CLEIDOTHAERIDAE
Cleidothaerus albidus (Lamarck, 1819) R (Lw-R)
MYOCHAMIDAE
Hunkydora novozelandica (Reeve, 1859) R (Wn-R) E
Myadora antipodum E.A. Smith, 1880 R (Wn-R) E
Myadora boltoni E.A. Smith, 1880 R (Wn-R) E
Myadora delta Marwick, 1929 Ld (Ld-Pl) E
Myadora kaiiwiensis Powell, 1931 Wc (Wn?-Wc) E
Myadora novaezelandiae E.A. Smith, 1880 R (Wn-R) E
Myadora stephaniae Carter, 1972 Wm-Wn (Wm-Wn) E
Myadora striata (Quoy & Gaimard, 1835) R (Wn-R) E

Myadora subrostrata E.A. Smith, 1880 R (Wm-R) E
Myadora waitotarana Powell, 1931 Wp (Wo-Wp) E
THRACIIDAE
Asthenothaerus matauensis (Finlay & Marwick, 1937) Dw-Dm E
Asthenothaerus maxwelli B. Marshall, 2002 R (Wq-R) E
Asthenothaerus pusillior (Laws, 1936) Wo E
Parvithracia suteri Finlay, 1926 R (Wq-R) E
Thracia (*Odoncineta*) *magna* P. Marshall & Murdoch, 1921 Wp (Wp-Wn) E ¶
Thracia (*O.*) *vitrea* (Hutton, 1873) R (Wq-R) E
Thracia (*Thracia*) *vegrandis* P. Marshall & Murdoch, 1919 Wq (Wc-R) E
PERIPLOMATOIDEA
LATERNULIDAE
Laternula synthetica Marwick, 1948 Wp E
PERIPLOMATIDAE
Offadesma angasi (Crosse & Fischer, 1864) R (Pl?-R)
Offadesma marwicki Fleming, 1950 Ab E
Periploma (?) *macphersoni* Marwick, 1931 Sw (Pl-Tk?) E
CLAVAGELLOIDEA
CLAVAGELLIDAE
Clavagella oamarutica Maxwell, 1978 Pl (Pl-Sw?) E
VERTICORDIOIDEA
EUCIROIDAE
Euciroa maoriana Eagle, 2000 Pl E
Euciroa ulrichi Fleming, 1970 Pl E
VERTICORDIIDAE
Haliris (*Setaliris*) *setosa* (Hedley, 1907) R (Wp-R) E
Kurinuia areolata (P. Marshall, 1919) Ab E
Pecchiolia bensoni (Marwick, 1942) Ar E
'*Verticordia*' *densicostata* P. Marshall, 1919 Ab E
'*Verticordia*' *neozelanica* (Suter, 1915) Ab E
LYONSIELLIDAE
Lyonsiella otamatea (Laws, 1939) Po E ¶
POROMYOIDEA
POROMYIDAE
Poromya laevis Smith, 1884 R (Wp-R) E
CUSPIDARIOIDEA
CUSPIDARIIDAE
Austroneaera hornibrooki Marwick, 1965 Wo (Wo-Wn) E
Cardiomya stenhousei (Marwick, 1931) Pl E
Cuspidaria beneansata Marwick, 1931 Sl-Tt (Sc-Tt?) E
Cuspidaria fairchildi Suter, 1908 R (Ak?-R) E
Cuspidaria (?) *kirki* (Hutton, 1873) Lwh E
Cuspidaria morioria Dell, 1956 R (Wp?-R) E
Cuspidaria trailli (Hutton, 1873) R (Pl?-R) E
Cuspidaria willetti Fleming, 1948 R (Wc-R) E

CLASS SCAPHOPODA
Order DENTALIIDA
DENTALIIDAE
Dentalium centenniale Marwick, 1942 Ab E
Dentalium ihungia Marwick, 1931 Sc E
Dentalium irregulare Hutton, 1873 Tk-Wp? E
Dentalium nanum Hutton, 1873 Wc (Pl?, Wc-R) E
Dentalium otamaringaense Marwick, 1926 Tt E
Fissidentalium (?) *mantelli* (Zittel, 1864) Lwh E
Fissidentalium pukaea Maxwell, 1992 Ak E
Fissidentalium (?) *rei* Maxwell, 1992 Ak E
Fissidentalium solidum (Hutton, 1873) Tt? E
Fissidentalium zelandicum (Sowerby, 1860) R (Tk-R) E
Graptacme multistricta (Finlay & Marwick, 1937) Dwl E ¶
Graptacme pareorensis (Pilsbry & Sharp, 1897) Tk-Wp E ¶
FUSTIARIIDAE
Fustiaria maoria Maxwell, 1992 Ak (Ab?-Ak) E
GADILINIDAE
Gadilina masoni Maxwell, 1992 Ak E
LAEVIDENTALIIDAE
Laevidentalium fodinense Maxwell, 1988 Sw E
Laevidentalium waihoraense Emerson, 1954 Pl-Sc E

Order GADILIDA
Suborder ENTALIMORPHA
ENTALINIDAE
Entaliinae
Entalina emersoni Maxwell, 1992 Ak E

Suborder GADILIMORPHA
GADILIDAE
Gadilinae
'*Cadulus*' *atavus* Finlay & Marwick, 1937 Dw-Dm E
'*Cadulus*' *hurupiensis* Dell, 1952 Tt E
'*Cadulus*' *teliger* Finlay, 1926 R (Wc-R) E
Gadila zecaninus (Laws, 1939) Po-Pl E
Siphonodentaliinae
Polyschides arnoensis Maxwell, 1992 Ak E
Polyschides kapuaensis Maxwell, 1992 Ak E
Siphonodentalium (?) *delicatulum* (Suter, 1913) R (Pl?-R) E
Striocadulus delli (Marwick, 1965) Wn E
Striocadulus prosperus (Marwick, 1931) Tt (Pl?-Wo) E

Class GASTROPODA
Subclass EOGASTROPODA
Order PATELLOGASTROPODA
Suborder PATELLINA
PATELLOIDEA
PATELLIDAE
Scutellastra aurorae (Fleming, 1973) Ld-w E
Scutellastra cooperi Powell, 1938 Po E
Scutellastra kermadecensis (Pilsbry, 1894) R (Wn-R) E

Suborder NACELLINA
NACELLOIDEA
NACELLIDAE
Cellana cophina Powell, 1973 Po E
Cellana denticulata (Martyn, 1784) R (Wq-R) E
Cellana flava (Hutton, 1873) R (Wq-R) E
Cellana ornata (Dillwyn, 1817) R (Wn-R) E
Cellana radians (Gmelin, 1791) R (Wc-R) E
Cellana stellifera (Gmelin, 1791) R (Wq-R) E
Cellana strigilis (Hombron & Jacquinot, 1841) R (Wn-R) E
Cellana taberna Powell, 1973 Lw E
Cellana thomsoni Powell & Bartrum, 1929 Po E
ACMAEOIDEA
ACMAEIDAE
Pectinodontinae
Pectinodonta coniformis (Marwick, 1931) Pl-Sc E
Pectinodonta komitica B. Marshall, 1985 Po E
Pectinodonta waitemata B. Marshall, 1985 Po E
LOTTIIDAE
Asteracmea oliveri Laws, 1950 Wp E
Asteracmea suteri (Iredale, 1915) R (Wq-R) E
Atalacmea elata Marwick, 1928 Wn E
Atalacmea fragilis (Sowerby, 1828) R (Wq-R) E
Notoacmea chattonensis Laws, 1932 Ld E
Notoacmea daedala (Suter, 1907) R (Wq-R) E
Notoacmea elongata (Quoy & Gaimard, 1834) R (Wq-R) E
Notoacmea helmsi (E.A. Smith, 1894) R (Wc-R) E
Notoacmea nukumaruensis Oliver, 1926 Wn E
Notoacmea otahuhuensis Laws, 1950 Wp E
Notoacmea parviconoidea (Suter, 1907) R (Wn?-R) E
Notoacmea subtilis (Suter, 1907) R (Wq-R) E
Patelloida corticata (Hutton, 1880) R (Wc-R) E
Radiacmea inconspicua (Gray, 1843) R (Wq-R) E

Subclass ORTHOGASTROPODA
Superorder COCCULINIFORMIA
COCCULINOIDEA
COCCULINIDAE
Coccopigya compuncta (Marwick, 1931) Pl-Sc? E
Coccopigya komitica B. Marshall, 1986 Po E
Coccopigya otaiana B. Marshall, 1986 Po E
Paracocculina pristina (B. Marshall, 1986) Po E
LEPETELLOIDEA
LEPETELLIDAE
Lepetella clypidellaeformis (Suter, 1908) R (Wc?-R) E
Lepetella parallela (Laws, 1950) Wp E
PSEUDOCOCCULINIDAE
Kaiparapelta singularis B. Marshall, 1986 Po E
Notocrater craticulata (Suter, 1908) R (Wp-R) E
Notocrater maxwelli B. Marshall, 1986 Po E

Superorder VETIGASTROPODA
PLEUROTOMARIOIDEA
ANATOMIDAE
Anatoma gephyra Maxwell, 1992 Ak E
A. miocenica (Laws, 1939) Po (Po-Pl) E
HALIOTIDAE
Euhaliotis mathesonensis (Eagle, 1996) Po E
Marinauris hokianga (Eagle, 2002) Po E
Notohaliotis waitemataensis (Powell, 1938) Po (Lw?-Po) E
Padollus australis (Gmelin, 1791) R (Wq-R) E
Padollus flemingi (Powell, 1938) Po E
Padollus matihetihensis (Eagle, 1999) Po E
Padollus powelli (Fleming, 1952) Wc (Wn?-Wc) E
Paua iris (Gmelin, 1791) R (Wo?-R) E
Paua (?) *virginea* (Gmelin, 1791) R (Wq-R) E
PLEUROTOMARIIDAE
Bayerotrochus masoni (Maxwell, 1978) Lw E ¶
Perotrochus allani Marwick, 1928 Dw? E
Perotrochus marwicki Fleming, 1970 Pl E
SCISSURELLIDAE
Scissurellinae
Incisura fossilis (Laws, 1940) Wn (Wm-Wn) E
Incisura lytteltonensis (E.A. Smith, 1894) R (Wn?-R) E
Scissurella apudornata Laws, 1935 Pl E
Scissurella condita Laws, 1939 Po E
Scissurella geoffreyi Laws, 1940 Wo E
Scissurella prendrevillei Powell, 1933 R (Wc-R) E
Sinezona brevis (Hedley, 1904) R (Wq-R) E
Sinezona finlayi (Laws, 1948) Po E
Sinezona iota (Finlay, 1926) R (Wq-R) E
Sinezona koruahina (Laws, 1936) Wo E
Sinezona laquea (Finlay, 1926) R (Wq-R) E
Sinezona levigata (Iredale, 1908) R (Wq-R) E
Sinezona tertia (Laws, 1940) Wo (Wo-Wp) E
Sukashitrochus kaiparaensis (Laws, 1941) Po-Pl E
Sukashitrochus lyallensis (Finlay, 1926) R (Wq-R) E
Sukashitrochus ngatutura (Laws, 1936) Wo E
FISSURELLOIDEA
FISSURELLIDAE
Emarginula galeriformis Marwick, 1928 Wp E
Emarginula haweraensis Powell, 1931 Wp (Wp-Wn) E
Emarginula kaiparica Laws, 1939 Po-Pl E
Emarginula komitica Laws, 1939 Po E
Emarginula paucicostata Laws, 1936 Wo E
Emarginula pittensis Marwick, 1928 Wp E
Emarginula striatula Quoy & Gaimard, 1834 R (Wo-R) E
Monodilepas (?) *annulata* (Suter, 1917) Ld E
Monodilepas monilifera (Hutton, 1873) R (Wn-R) E
Montfortula kaawaensis (Bartrum, 1919) Wo E
Puncturella pseudanaloga Powell, 1957 R (Wp?-R) E
Scutus breviculus (Blainville, 1817) R (Wq-R) E
Scutus (?) *petrafixus* Finlay, 1930 Ar? Lwh? E
Tugali aranea Marwick, 1928 Wp E
Tugali elata (Suter, 1917) Lw E
Tugali elegans Gray, 1843 R (Wq?-R) E
Tugali kumeroa Fleming, 1943 Wn (Wp? Wm-Wn) E
Tugali opuraensis Bartrum & Powell, 1928 Wo (Wo-Wp) E
Tugali navicula Finlay, 1926 Pl E
Tugali pliocenica Finlay, 1926 Wc (Wn-Wc) E

Tugali superba Powell, 1934 Wq E
Tugali suteri (Thiele, 1916) R (Wo-R) E
TROCHOIDEA
CALLIOSTOMATIDAE
'*Astele' boileaui* Marwick, 1931 Tt E
'*Benthastelena' muta* (Finlay, 1924) Ld? E
'*Benthastelena' susanae* Maxwell, 1992 Ak E
'*Benthastelena' transenna* (Suter, 1917) Pl E
Calliostoma (*Maurea*) *acutangulum* Suter, 1917 Ld E
Calliostoma (*M.*) *barbara* (Marwick, 1942) Ab E
Calliostoma (*M.*) *blacki* (Powell, 1950) R (Wn-R) E
Calliostoma (*M.*) *correlatum* (Fleming, 1943) Wo E
Calliostoma (*Maurea*?) *filiferum* Suter, 1917 Ld E
Calliostoma (*M.*) *finlayi* (Marwick, 1928) Wp E
Calliostoma (*M.*) *foveauxanum* (Dell, 1950) R (Wq-R) E
Calliostoma (*M.*) *fragile* Finlay, 1923 Pl E
Calliostoma (*Maurea*?) *gracile* P. Marshall, 1918 Pl E
Calliostoma (*M.*) *granti* (Powell, 1931) Wp (Wp-R) E
Calliostoma (*M.*) *maui* B. Marshall, 1995 R (Wq?-R) E
Calliostoma (*M.*) *nukumaruense* (Laws, 1930) Wn (Wn-Wc?) E
Calliostoma (*M.*) *osbornei* Powell, 1926 R (Wp-R) E
Calliostoma (*M.*) *pellucidum* (Valenciennes, 1846) R (Wc-R) E
Calliostoma (*M.*) *punctulatum* (Martyn, 1784) R (Wn-R) E
Calliostoma (*M.*) *selectum* (Dillwyn, 1817) R (Wm?Wn-R) E
Calliostoma (*M.*) *suteri* Finlay, 1923 Pl E
Calliostoma (*M.*) *tigris* (Gmelin, 1791) R (Wc-R) E
Calliostoma (*M.*) *waiareka* (Laws, 1935) Ak E
Calliostoma (*M.*) *waikanae* Oliver, 1926 R (Wn?Wc-R) E
Calliostoma (*M.*) *waiparaense* Suter, 1917 Wp E
'*Fautor' marwicki* (Finlay, 1923) Pl E
'*Fautor' temporemutatus* (Finlay, 1924) Pl E
SKENEIDAE
Cirsonella aedicula Laws, 1936 Wo E
Cirsonella amplector Laws, 1944 Po E
Cirsonella maoria (Powell, 1937) R (Wp-R) E
Cirsonella parvula Powell, 1926 R (Wq?-R)
Cirsonella propelaxa Dell, 1956 R (Wp-R) E
Cirsonella waimamakuica Laws, 1948 Po E
Cirsonella zeornata Laws, 1948 Po E
'*Cirsonella' congrua* (Laws, 1941) Po (Po-Pl) E
'*Cirsonella' proava* (Marwick, 1931) Sl E
Crosseola emilyae Laws, 1950 Wp E
Crosseola henryi Laws, 1950 Wp E
Crosseola intertexta Powell, 1937 R (Wq-R) E
Crosseola munditia Laws, 1936 Wo E
Crosseola proerrata Finlay, 1930 Pl E
Crosseola sinemacula Laws, 1939 Po E
Crosseola sultan Finlay, 1930 Pl E
Crosseola tenuisculpta Laws, 1936 Wo E
Crosseola waitotara Laws, 1940 Wm E
Lissotesta beta Laws, 1939 Po-Pl E
Lissotesta errata Finlay, 1926 R (Wc?-R) E
Lissotesta exigua (Suter, 1917) Pl E
Lissotestella alpha (Laws, 1939) Po E
Lissotestella basispiralis Maxwell, 1992 Ak E
Lissotestella waimamakuensis Laws, 1948 Po E
'*Lodderia' eumorpha* (Suter, 1908) R (Wq-R) E
'*Lodderia' kaiparaensis* Laws, 1939 Po-Pl E
'*Lodderia' supralaevis* Laws, 1941 Po-Pl E
Putilla neozelanica (Suter, 1898) R (Wp-R) E
Putilla ponderi (Maxwell, 1992) Ak E
Putilla tantilla (Laws, 1936) Wo (Wo-Wp) E
Zalipais probenthicola Laws, 1940 Wo E
Zalipais lissa (Suter, 1908) R (Wn-R) E
TROCHACLIDIDAE
Acremodontina maxwelli B. Marshall, 1995 Po E
Acremodontina varicosa B. Marshall, 1995 R (Wp-R) E
<u>*Levella*</u> *exaggerata* (Marwick, 1965) Wo E
Levella tersa Marwick, 1943 Pl E
Trochaclis atypica (Laws, 1939) Po E
Trochaclis bucina (Laws, 1941) Po E
Trochaclis kaiparica B. Marshall, 1995 Po E
TURBINIDAE
COLLONIINAE
Argalista aequor Laws, 1941 Po E
Argalista arta Marwick, 1928 Wp E
Argalista effusa Marwick, 1928 Wp E
Argalista fluctuata (Hutton, 1883) R (Wm-R) E
Argalista kaiparaensis Finlay, 1930 Po-Pl (Po-Pl) E
Argalista kingi Powell, 1938 Wn E
Argalista leniumbilicata Laws, 1935 Ar (Ak?-Ar) E
Argalista promicans Laws, 1936 Wo (Wo-Wp) E
Argalista proumbilicata Finlay, 1930 Pl E
Argalista provariecostata Laws, 1948 Po E
Argalista sola Laws, 1940 Wo E
Cirsochilus (*Cirsochilus*) *priscus* (Powell, 1935) Pl E
Cirsochilus (*C.*) *tricarinatus* (Laws, 1939) Po E
Cirsochilus (<u>*Tipua*</u>) *tricincta* (P. Marshall, 1919) Ab E
Eutinochilus impervius (Finlay, 1930) Pl E ¶
Eutinochilus proimpervius (Laws, 1935) Ar (Ak-Ar) E
<u>*Rangimata*</u> *pervia* Marwick, 1928 Wn (Wp-Wn) E
EUCYCLINAE
Brookula (<u>*Aequispirella*</u>) *bifurcata* Maxwell, 1992 Ak E
Brookula (*A.*) *corula* (Hutton, 1885) Wc (Wm-R) E
Brookula (*A.*) *finlayi* Powell, 1933 R (Wm?-R) E
Brookula (*A.*) *iredalei* Finlay, 1924 Pl E
Brookula (*A.*) *kaawaensis* Laws, 1940 Wo E
Brookula (*A.*) *tenuilirata* Finlay, 1924 Pl E
Brookula (*Brookula*) *endodonta* Finlay, 1924 Pl E
Brookula (*B.*) *fossilis* Finlay, 1924 Wc E
Brookula (*B.*) *funiculata* Finlay, 1924 Wc (Wn-Wc) E
Brookula (*B.*) *pukeuriensis* Finlay, 1924 Pl E
Brookula (<u>*Liotella*</u>) *polypleura* (Hedley, 1904) R (Wo-R) E
Brookula (*L.*) *rotula* (Suter, 1908) R (Wp-R) E
Calliotropis (*Calliotropis*) *fenestrata* (Suter, 1917) Ar E
Calliotropis (*C.*) *hutchinsoniana* (Laws, 1939) Po E
Calliotropis (*C.*) *motutaraensis* Powell, 1935 Pl E
Calliotropis (*C.*) *tophina* Maxwell, 1992 Ak E
Calliotropis (*Solaricida*) *wakefieldi* Hayward, 1981 Pl E
Danilia neozelanica Laws, 1935 Ar E
Herpetopoma alacerrima Dell, 1956 R (Wq-R) E
Herpetopoma bella (Hutton, 1873) R (Wq-R) E
Herpetopoma foveolata (A. Adams, 1851) R (Wn-R) E
Herpetopoma komitica (Laws, 1939) Po E
Herpetopoma larochei (Powell, 1926) R (Wq-R) E
Herpetopoma parvumbilicata (Laws, 1939) Po-Pl E
LIOTININAE
Liotina turua Maxwell, 1978 Dm E
Lodderena formosa Powell, 1930 R (Wo-R) E
<u>*Munditia*</u> *proavita* Laws, 1936 Wo E
MARGARITINAE
<u>*Kaiparathina*</u> *praecellens* Laws, 1941 Po E
Kaiparathina senex B. Marshall, 1995 Dt E
SOLARIELLINAE
<u>*Conominolia*</u> *aflexura* Laws, 1941 Pl E
Conominolia conica (P. Marshall, 1917) Dwl E
Conominolia cowei Beu, 1969 Wm E
Conominolia sulcatina (Suter, 1917) Lwh E
Conominolia vixincisa (Marwick, 1929) Ld E
Conominolia woodsi Laws, 1933 Pl E
'*Monilea' grantmackiei* Hayward, 1981 Pl E
Solariella carinata (Laws, 1935) Pl E ¶
Solariella fossa (Laws, 1932) Ld E ¶
Solariella lenis (Marwick, 1928) Wp E ¶
Solariella marshalli (Maxwell, 1992) Ak E ¶
Solariella ordo (Laws, 1941) Pl E ¶
Solariella susanae Maxwell, 1988 Sw E
Solariella tryphenensis (Powell, 1930) R (Wq-R) E
Solariella venusta (Maxwell, 1969) Lw E ¶
Zetela awamoana Laws, 1939 Pl E
Zetela castigata (Marwick, 1931) Sl E
Zetela praetextilis (Suter, 1917) Ld E
TROCHINAE
Bankivia fasciata (Menke, 1830) R (Wc) E
Cantharidella tesselata (A. Adams, 1853) R (Wn-R) E
<u>*Cantharidus* (*Cantharidus*)</u> *opalus* (Martyn, 1784) R (Wq-R) E
Cantharidus (<u>*Mawhero*</u>) *purpureus* (Gmelin, 1791) R (Wq-R) E
Clanculus (<u>*Paraclanculus*</u>) *adesus* (Marwick, 1931) Sl? E
Diloma (*Diloma*) *arida* (Finlay, 1926) R (Wc-R) E
Diloma (*D.*) *nigerrima* (Gmelin, 1791 R (Wq-R) E
Diloma (*Cavodiloma*) *coracina* (Philippi, 1851) R (Wq-R) E
Diloma (*Fractarmilla*) *bicanaliculata* (Dunker, 1844) R (Wq-R) E
Diloma (*F.*) *subrostrata* (Gray, 1835) R (Wn-R) E
Diloma (*F.*) *zelandica* (Quoy & Gaimard, 1834) R (Wc?-R) E
Fossarina rimata (Hutton, 1884) R (Wq-R) E
Margarella (?) *runcinata* Marwick, 1928 Dw E
Melagraphia aethiops (Gmelin, 1791) R (Wn-R) E
Micrelenchus (*Micrelenchus*) *huttonii* (E.A. Smith, 1876) R (Wc-R) E
Micrelenchus (*M.*) *sanguineus* (Gray, 1843) R (Wm?-R) E
Micrelenchus (*M.*) *tenebrosus* (A. Adams, 1853) R (Wn-R) E
Micrelenchus (*Plumbelenchus*) *caelatus* (Hutton, 1884) R (Wn-R) E
Micrelenchus (*P.*) *dilatatus* (Sowerby, 1870) R (Wq-R) E
Micrelenchus (*P.*) *rufozona* (A. Adams, 1853) R (Wn-R) E
<u>*Miofractarmilla*</u> *bartrumi* Laws, 1948 Po E
<u>*Pachydontella*</u> *etiampicta* Marwick, 1948 Wp E
Thoristella chathamensis (Hutton, 1873) R (Wn-R) E
Thoristella gracilis Laws, 1936 Wo (Wo-Wp) E
Thoristella oppressa (Hutton, 1878) R (Wq-R) E
Trochus (*Coelotrochus*) *avarus* Suter, 1917 Ld E
Trochus (*C.*) *bibaphus* Bartrum & Powell, 1928 Wo E
Trochus (*C.*) *browni* (Fleming, 1943) Wn E
Trochus (*C.*) *fossilis* (Finlay, 1926) Pl E
Trochus (*C.*) *tiaratus* Quoy & Gaimard, 1834 R (Wm-R) E
Trochus (*Thorista*) *viridis* Gmelin, 1791 R (Wc-R) E
TURBININAE
<u>*Astraea*</u> *bicarinata* Suter, 1917 Pl E
Astraea heliotropium (Martyn, 1784) R (Tt-R) E
Astraea stirps Laws, 1932 Sl (Pl-Sl) E
Bolma (*Ormastralium*) *marshalli* (Thomson, 1908) Lwh E
Cookia kawauensis Powell, 1938 Po E
Cookia sulcata (Gmelin, 1791) R (Tt?-R) E
Guildfordia (<u>*Opella*</u>) *hendersoni* (Marwick, 1934) Pl E
Guildfordia (O.) subfimbriata (Suter, 1917) Po-Pl (Po-Pl) E
Guildfordia (<u>*Fractopella*</u>) *megapex* (Beu, 1970) Tk? E
<u>*Modelia*</u> *granosa* (Martyn, 1784) R (Tt? –R) E
<u>*Sarmaturbo*</u> *colini* (King, 1931) Tt E
Sarmaturbo superbus (Zittel, 1864) Po E
Turbo argyrostoma Linnaeus, 1758 R (Wn-R) E
Turbo (?) *oryctus* (Suter, 1917) Ld E
Turbo (*Marmarostoma*) *moorei* Hayward, 1981 Pl E
Turbo (s.l.) *smaragdus* Gmelin, 1791 R (Tt?, Wc-R) E
UMBONIINAE
<u>*Antisolarium*</u> *conominolium* Laws, 1936 Wo E
Antisolarium egenum (Gould, 1849) R (Wn-R) E
Antisolarium stoliczkai (Zittel, 1864) Wp E
Antisolarium spectandrum Laws, 1950 Wp E
<u>*Zethalia*</u> *coronata* Marwick, 1948 Wp (Wp-Wm) E
Zethalia russelli Marwick, 1965 Wo E
Zethalia zelandica (Hombron & Jacquinot, 1854) R (Wn-R) E
SEGUENZIOIDEA
SEGUENZIIDAE

Calliobasis eos B. Marshall, 1983 Ar E
Fluxinella maxwelli B. Marshall, 1983 Po E
Seguenzia glabella B. Marshall, 1983 Po E
Seguenzia prisca B. Marshall, 1983 Po E
Seguenzia serrata B. Marshall, 1983 Sc E

Superorder NERITOPSINA
NERITOIDEA
NERITIDAE
Nerita (*Melanerita*) *atramentosa* Reeve, 1855 R (Wo-R) E
Neritoplica (?) *pomahakaensis* (Finlay, 1924) Ld? E

Superorder CAENOGASTROPODA
Order SORBEOCONCHA
CERITHIOIDEA
BATILLARIIDAE
Batillaria hectori (Harris, 1897) Pl E
Batillaria pomahakensis Harris, 1897 Ld? E
Zeacumantus delicatus Laws, 1950 Wp E
Zeacumantus lutulentus (Kiener, 1842) R (Wm-R) E
Zeacumantus perplexus (P. Marshall & Murdoch, 1919) Wn E
Zeacumantus subcarinatus (Sowerby, 1835) R (Wq-R) E
Zeacumantus tirangiensis (Marwick, 1926) Tt E
CERITHIIDAE
Bittiinae
<u>*Zebittium*</u> *exile* (Hutton, 1873) R (Wp-R) E
Zebittium tenuicordatum Laws, 1940 Wo E
Zebittium vicinum Laws, 1941 Pl E
Cerithiinae
<u>*Taxonia*</u> *gudrenae* Wells, 1986 Tt E
Taxonia suteri (Marwick, 1924) Wn (Wm-Wn) E
Taxonia tesserata Marwick, 1948 Wp E
<u>*Zefallacia*</u> *australis* (Suter, 1919) Pl E
Zefallacia benesulcata Powell & Bartrum, 1929 Po E
Zefallacia chattonensis Marwick, 1929 Ld E
Zefallacia lawsi Marwick, 1948 Wp E
Zefallacia ruamahunga Wells, 1986 Tt E
DIALIDAE
Diala basispiralis (Grant-Mackie & Chapman-Smith, 1971) Wq
DIASTOMATIDAE
Keilostoma malingi Marwick, 1942 Ab E
LITIOPIDAE
Dalliella neozelanica Laws, 1944 Po E
MELANOPSIDAE
<u>*Zemelanopsis*</u> *trifasciata* (Gray, 1843) R (Wo-R) E
Stilospirula (?) *pomahaka* (Hutton, 1873) Ld? E
POTAMIDIDAE
Bittiscala communis Finlay & Marwick, 1937 Dwl E
Bittiscala simplex (P. Marshall, 1917) Dwl E
Pyrazus consobrinus Powell & Bartrum, 1929 Po E
Pyrazus sutherlandi Marwick, 1929 Ld E
Pyrazus waitemataensis Powell & Bartrum, 1929 Po E
SILIQUARIIDAE
Stephopoma rosea (Quoy & Gaimard, 1834) R (Pl?-R) E
Tenagodus weldii (Tenison Woods, 1876) R (Pl?-R) E
TURRITELLIDAE
Pareorinae
<u>*Batillona*</u> *amara* Finlay, 1927 Ld? E
Pareora incincta Marwick, 1931 Sc (Pl-Sl) E
Pareora pinguis Laws, 1941 Po (Po-Pl) E
Pareora striolata (Hutton, 1885) Pl (Pl-Wo?) E
Pareora sublaevis Maxwell, 1966 Ak (Ab-Ar) E
Turritellinae
<u>*Amplicolpus*</u> *cavershamensis* (Harris, 1897) Pl (Po-Pl) E
Amplicolpus gittosinus (Bartrum & Powell, 1929) Po (Lw-Po) E
Amplicolpus healyi (Marwick, 1971) Ld E
Amplicolpus matauensis (Finlay & Marwick, 1937) Dw-Dm E
Amplicolpus ruakiwiensis (Marwick, 1971) Lwh E
Amplicolpus wellmani (Marwick, 1971) Ab E
Colposigma (?) *gairi* Marwick, 1960 Dw-Dm E
Colposigma imparicincta Finlay & Marwick, 1937 Dw-Dm E
Colposigma mesalia Finlay & Marwick, 1937 Dwl E
Colposigma plebeia Marwick, 1960 Dw-Dm (Dm-Ab?) E
Gazameda grindleyi (Marwick, 1971) Ld E
<u>*Leptocolpus*</u> *semiconcavus* (Suter, 1917) Dwl E
Maoricolpus doni Marwick, 1971 Lw E
Maoricolpus horni Marwick, 1971 Pl (Pl-Sw) E
Maoricolpus ongleyi Marwick, 1931 Sl (Po?, Pl-Tk) E
Maoricolpus roseus (Quoy & Gaimard, 1834) R (Wo-R) E
Maoricolpus solomoni (Marwick, 1928) Wp E
Maoricolpus waitemataensis Powell & Bartrum, 1929 Po E
Spirocolpus carsoni Finlay & Marwick, 1937 Dw-Dm E
Spirocolpus rudis (Marshall, 1919) Ab E
Spirocolpus tophinus (Marwick, 1926) Ak (Ak-Ar, Ld?) E
Spirocolpus waihaoensis (Marwick, 1924) Ak E
Stiracolpus blacki (Marwick, 1957) R (Wc?-R) E
Stiracolpus delli (Marwick, 1957) R (Wc?-R) E
Stiracolpus granti (Marwick, 1957) Wc E
Stiracolpus hurunuiensis (Marwick, 1957) Wp? E
Stiracolpus huttoni (Cossmann, 1912) Wo-Wp (Wo-Wn) E
Stiracolpus kaawaensis Laws, 1936 Wo E
Stiracolpus murdochi (Marwick, 1957) Wc E
Stiracolpus nanulus (Marwick, 1957) Wn E
Stiracolpus ohopeus (Marwick, 1957) Wc E
Stiracolpus pagoda (Reeve, 1849) R (Wc-R) E
Stiracolpus procellosus (Marwick, 1931) Wo E
Stiracolpus propagoda (Laws, 1940) Wp E
Stiracolpus quennelli (Marwick, 1957) Wm E
Stiracolpus robinae (Marwick, 1957) Wc E
Stiracolpus ruahinensis (Marwick, 1957) Wn E
Stiracolpus shepherdi (Marwick, 1957) Wc E
Stiracolpus symmetricus (Hutton, 1873) R (Wn-R) E
Stiracolpus uttleyi (Marwick, 1957) Wn (Wn-Wc) E
Stiracolpus vellai (Marwick, 1957) Wn E
Stiracolpus vigilax (Marwick, 1957) Wq (Wc?-Wq) E
Stiracolpus waikopiroensis (Suter, 1917) Wn (Wn-Wc) E
Stiracolpus wiltoni (Marwick, 1957) Wo (Wo-Wn) E
<u>*Tropicolpus*</u> *abscisus* (Suter, 1917) Pl E
Tropicolpus brycei Marwick, 1971 Ld E
Tropicolpus chattonensis (Marwick, 1929) Ld E
Tropicolpus harringtoni Marwick, 1971 Ld E
Tropicolpus hornibrooki Marwick, 1971 Lw? E
Tropicolpus mackellari Marwick, 1971 Lw E
Tropicolpus milleri Marwick, 1931 Pl (Pl-Tt) E
Tropicolpus tetleyi (Powell & Bartrum, 1929) Po E
Zeacolpus awamoaensis Marwick, 1971 Pl E
Zeacolpus flemingi Marwick, 1971 Lw E
Zeacolpus fyfei Marwick, 1931 Sl-Sw (Sl-Sw) E
Zeacolpus gagei Marwick, 1971 Ab E
Zeacolpus greggi Marwick, 1971 Lw E
Zeacolpus kanieriensis (Harris, 1897) Tk (Tk-Wp?) E
Zeacolpus keari Marwick, 1971Ld (Lwh?-Ld) E
Zeacolpus lawsi Marwick, 1971 Pl? (Po-Pl) E
Zeacolpus lornensis (Marwick, 1926) Ak (Ak-Ar Lwh?) E
Zeacolpus luteolapis (Marwick, 1931) Sc (Pl?-Sc) E
Zeacolpus nisseni Marwick, 1971 Sw E
Zeacolpus opoitius Marwick, 1965 Wo E
Zeacolpus peteri Marwick, 1971 Tt (Tt-Tk) E
Zeacolpus pukeuriensis Marwick, 1934 Pl (Pl-Sl) E
Zeacolpus takapauensis Marwick, 1965 Wp E
Zeacolpus taranakiensis Marwick, 1965 Tt (Sw?-Tt) E
Zeacolpus vittatus (Hutton, 1873) R (Wo?-R) E
Zeacolpus wharekuriensis Marwick, 1971 Ld (Lwh-Ld) E
Zeacolpus willetti Marwick, 1971 Sc (Sc-Sw) E
Zeacolpus woodhouseae Marwick, 1971 Po (Lw-Po) E

Suborder HYPSOGASTROPODA
Infraorder LITTORINIMORPHA
LITTORINOIDEA
LITTORINIDAE
Lacuninae
Risellopsis varia (Hutton, 1873) R (Wq-R) E
Littorininae
Austrolittorina cincta (Quoy & Gaimard, 1833) R (Wq-R) E
Austrolittorina antipodum (Philippi, 1847) R (Wn?-R) E
Bembicium hokianga (Laws, 1948) Po E
Bembicium priscum Powell & Bartrum, 1929 Po E
ZEROTULIDAE
Zerotula hedleyi (Mestayer, 1916) R (Wp-R) E
CINGULOPSOIDEA
CINGULOPSIDAE
Eatonina (*Eatonina*) *atomaria* Powell, 1933 R (Wp-R) E
Eatonina (<u>*Otatara*</u>) *subflavescens* (Iredale, 1915) R (Wc-R) E
Tubbreva exigua Ponder, 1965 R (Wq-R) E
EATONIELLIDAE
Eatoniella (*Eatoniella*) *atervisceralis* Ponder, 1965 R (Wq-R) E
Eatoniella (*E.*) *flammulata* (Hutton, 1878) R (Wq-R) E
Eatoniella (*E.*) *insueta* (Laws, 1950) Wp E
Eatoniella (*E.*) *laevicordata* (Laws, 1940) Wn E
Eatoniella (*E.*) *limbata* (Hutton, 1883) R (Wn-R) E
Eatoniella (*E.*) *lutea* (Suter, 1908) R (Wq-R) E
Eatoniella (*E.*) *notolabia* (Ponder, 1965) R (Wq-R) E
Eatoniella (*E.*) *olivacea* (Hutton, 1882) R (Wm-R) E
Eatoniella (*E.*) *praecursor* (Laws, 1939) Po-Pl E
Eatoniella (*E.*) *rivertonensis* (Finlay, 1924) Pl? E
Eatoniella (*E.*) *roseocincta* (Suter, 1908) R (Wq-R) E
Eatoniella (*E.*) *roseola* (Iredale, 1915) R (Wq-R) E
Eatoniella (*E.*) *sedicula* (Laws, 1941) Po-Pl E
Eatoniella (*E.*) *stewartiana* Ponder, 1965 R (Wq-R) E
Eatoniella (*E.*) *subexcavata* (Laws, 1941) Po E
Eatoniella (<u>*Albosabula*</u>) *lampra* (Suter, 1908) R (Wq-R) E
Eatoniella (*A.*) *rakiura* Ponder, 1965 R (Wq-R) E
<u>*Pupatonia*</u> *minutula* (Powell, 1933) R (Wc-R) E
RISSOOIDEA
ANABATHRIDAE
Amphithalamus (*Amphithalamus*) *semen* (Odhner, 1924) R (Wq-R) E
Amphithalamus (*Notoscrobs*) *semiornatus* (Laws, 1948) Po E
Amphithalamus (*N.*) *waitemata* (Laws, 1950) Wp E
Anabathron (*Scrobs*) *bartrumi* (Laws, 1950) Wp E
Anabathron (*S.*) *chattonensis* (Laws, 1948) Ld E
Anabathron (*S.*) *hedleyi* (Suter, 1908) R (Wq-R) E
Anabathron (*S.*) *kaawaensis* (Laws, 1936) Wo (Wo-Wn) E
Anabathron (*S.*) *latoscrobis* (Laws, 1948) Po E
Anabathron (*S.*) *ovatus* (Powell, 1927) R (Wc?-R) E
Anabathron (*S.*) *praeco* (Laws, 1941) Pl E
Anabathron (*S.*) *quartus* (Laws, 1950) Wp E
Anabathron (*S.*) *scrobis* (Laws, 1950) Wp E
Microdryas prostriatus (Laws, 1950) Wp E
Pisinna angustata (Powell, 1927) R (Wp? Wm-R) E
Pisinna asymmetrica (Laws, 1941) Po-Pl (Po-R?) E
Pisinna cadus (Laws, 1950) Wp E
Pisinna impressa (Hutton, 1885) Wn (Po?, Wo-R) E
Pisinna insulana (Marwick, 1928) Wn E
Pisinna jocosa (Laws, 1940) Wm E
Pisinna koruahina (Laws, 1940) Wo E
Pisinna micronema (Suter, 1898) R (Wn-R) E
Pisinna minor (Suter, 1898) R (Wq-R) E
Pisinna missile (Laws, 1940) Wm (Wm-Wn) E

Pisinna ngatutura (Laws, 1940) Wo E
Pisinna polysulcata (Finlay, 1924) Wn E
Pisinna rekohuana (Powell, 1933) R (Wq-R) E
Pisinna rekominor (Laws, 1940) Wn (Wp-Wn) E
Pisinna rufoapicata (Suter, 1908) R (Wn?-R) E
Pisinna rugosa (Hutton, 1885) Wn (Wm-Wc?) E
Pisinna semiplicata (Powell, 1927) R (Wp-R) E
Pisinna semisulcata (Hutton, 1885) Wc (Wo-R) E
Pisinna subfusca (Hutton, 1873) R (Wq-R) E
Pisinna subtilicosta (Marwick, 1928) Wn E
Pisinna verticostata (Powell & Bartrum, 1929) Po E
Pisinna zosterophila (Webster, 1905) R (Wq-R) E
ASSIMINEIDAE
Assiminea waitemata Laws, 1950 Wp E
Suterilla neozelanica (Murdoch, 1899) R (Wq-R) E
BARLEEIDAE
Fictonoba carnosa (Webster, 1905) R (Wq-R) E
Fictonoba similis (Laws, 1950) Wp E
CAECIDAE
Brochina digitulum (Hedley, 1904) R (Wm-R) E
Brochina pertenuis (Laws, 1941) Po E ¶
Strebloceras hinemoa Finlay, 1931 Pl (Pl-Sw?) E
ELACHISINIDAE
Dolicrossea awamoana Finlay, 1930 Pl E
Dolicrossea clifdenensis Finlay, 1930 Sc (Po-Sc) E
Dolicrossea vesca Finlay, 1926 R (Wo-R) E
HYDROBIIDAE
TATEINAE
Potamopyrgus antipodarum (Gray, 1843) R (Wp-R) E
IRAVADIIDAE
Chevallieria (?) *fossilis* (Finlay, 1924) Pl E
Chevallieria pakaurangia (Laws, 1944) Po-Pl E
Chevallieria waitotarana (Laws, 1940) Wo E
Nozeba candida Finlay, 1924 Pl (Po-Sc) E
Nozeba couttsi Laws, 1950 Wp E
Nozeba emarginata (Hutton, 1885) Wn-Wc (Wm-R) E
Nozeba mica Finlay, 1930 R (Wq-R) E
Nozeba perpava Laws, 1939 Po E
Nozeba plana Laws, 1940 Wo E
RISSOIDAE
RISSOINAE
Alvania (*Linemera*) *awamoaensis* (Finlay, 1924) Pl E
Alvania (L.) kaawaensis (Laws, 1940) Wo E
Alvania (L.) interrupta (Finlay, 1924) Wn-Wc (Wn-Wc) E
Alvania (L.) minuta (Finlay, 1924) Pl E
Alvania (L.) pukeuriensis (Finlay, 1924) Pl E
Alvania (L.) solitaria (Dell, 1956) R (Wn-R) E
Alvania (L.) waimamakuensis (Laws, 1948 Po E
Attenuata admiranda Richardson, 1997 Wq E
Attenuata charassa (Finlay, 1924) Wn (Tt-Wn) E
Attenuata eocenica Maxwell, 1992 Ak E
Attenuata inflata (Laws, 1939) Po-Pl (Po-Pl) E
Attenuata manawatawhia (Powell, 1937) R (Wc?-R) E
Attenuata orientalis (Dell, 1956) R (Wp-R) E
Attenuata polyvincta (Finlay, 1924) Pl E
Ihungia acantha Marwick, 1965 Wo E
Ihungia aequalis Laws, 1941 Po E
Ihungia amberleya Marwick, 1931 Sc E
Ihungia bicarina Marwick, 1931 Sl E
Ihungia infulata Marwick, 1943 Pl E
Ihungia luteophila Marwick, 1931 Sc E
Ihungia moniliata Marwick, 1965 Wn E
Ihungia ponderi Maxwell, 1988 Sw E
Merelina avita Marwick, 1928 Wp E
Merelina effodita Laws, 1950 Wp E
Merelina gemmata Powell, 1927 R (Wn-R) E
Merelina kaawaensis Laws, 1936 Wo (Wo-Wp) E
Merelina lyalliana (Suter, 1898) R (Wq-R) E
Merelina maoriana Powell, 1939 R (Wq-R) E
Merelina saginata Laws, 1939 Po (Po-Pl) E
Merelina waiotemarama Laws, 1948 Po E
Microstelma obliquecostata (P. Marshall & Murdoch, 1920) Ab (Ab-Ak?) E
Onoba (*Onoba*) *cryptolira* (Laws, 1950) Wp E
Onoba (*O.*) *candidissima* (Webster, 1905) R (Wq-R) E
Onoba (*O.*) *foveauxiana* (Suter, 1898) R (Wq-R) E
Onoba (*O.*) *fumata* (Suter, 1898) R (Wq?-R) E
Onoba (*O.*) *insculpta* (Murdoch, 1905) R (Wq-R) E
Onoba (*Onoba*?) *perplexa* (Finlay, 1924) Pl E ¶
Onoba (*Ovirissoa*) *biangulata* (Laws, 1936) Wo E ¶
Onoba (O.) gibbera (Laws, 1950) Wp E
Onoba (O.) lactea (Finlay, 1926) Pl E
Onoba (O.) zebina (Finlay, 1930) Lw E
Powellisetia comes (Finlay, 1926) Pl E
Powellisetia epulata (Laws, 1941) Po-Pl E
Powellisetia paroeca (Finlay, 1924) Pl (Pl-Sc) E
Powellisetia porcellana (Suter, 1908) R (Wq-R) E
Powellisetia prisca (Finlay, 1924) Pl? E
Powellisetia subtenuis (Powell, 1937) R (Wc? Wq-R) E
Pusillina (*Haurakia*) *buccella* (Marwick, 1931) Sc? E
Pusillina (*H.*) *chemnitzia* (Laws, 1948) Po E
Pusillina (*H.*) *hamiltoni* (Suter, 1898) R (Wo?, Wc-R) E
Pusillina (*H.*) *huttoni* (Suter, 1898) R (Wq-R) E
Pusillina (*H.*) *infecta* (Suter, 1908) R (Wc-R) E
Pusillina (*H.*) *marshalli* (Grant-Mackie & Chapman-Smith, 1971) Wq E
Pusillina (*H.*) *oamarutica* (Finlay, 1924) Pl E
Pusillina (*H.*) *onerata* (Laws, 1939) Po-Pl (Po-Pl) E
Pusillina (*H.*) *otagoensis* (Dell, 1956) R (Wc?-R) E
Pusillina (*H.*) *sodalis* (Laws, 1939) Po-Pl (Po-Pl) E
Pusillina (*H.*) *subsuturalis* (Dell, 1956) R (Wp?-R) E
Pusillina (*H.*) *tenuisculpta* (Laws, 1950) Wp E
Striatestea powelli Laws, 1950 Wp E
RISSOININAE
Rissoina chathamensis (Hutton, 1873) R (Wo?-R) E
Rissoina emilyae Laws, 1948 Po E
Rissoina fictor Finlay, 1930 R (Wn?-R) E
Rissoina heterolira Laws, 1941 Pl? E
Rissoina koruahina Laws, 1940 Wo E
Rissoina ngatutura Laws, 1940 Wo (Wo-Wp) E
Rissoina obesa (Grant-Mackie & Chapman-Smith, 1971) Wq E
TORNIDAE
Naricava huttoni (Marwick, 1924) Pl E
VITRINELLIDAE
Circulus duplicarina (Marwick, 1929) Ld E
Circulus (?) *edomitus* (Marwick, 1931) Sl E
Circulus helicoides (Hutton, 1885) Pl E
Circulus inornatus P. Marshall, 1919 Ab E
Circulus politus Suter, 1917 Pl E
'*Cochliolepis*' *albiceratus* Ponder, 1966 R (Wq-R) E
Conjectura glabella (Murdoch, 1905) R (Wq-R) E
Cyclostremiscus (?) *anceps* (Laws, 1941) Po E ¶
Elachorbis albolapis Laws, 1930 Pl E
Elachorbis (?) *subedomita* Laws, 1936 Wo (Wo-Wp) E
Elachorbis subtatei (Suter, 1907) R (Wc? Wq-R) E
Elachorbis unicarina Laws, 1940 Wm (Wm-Wn) E
Pterolabrella cingulata (Bartrum, 1919) Wo E
Pterolabrella (?) *hawera* (Laws, 1940) Wp E
Pterolabrella gliscens (Marwick, 1965) Wp-Wm E
Pterolabrella lirata Maxwell, 1969 Ld E
Scrupus sinuatus Laws, 1940 Wo E
Scrupus tumidus Laws, 1948 Po E
Sigaretornus (?) *imperfectus* (Suter, 1917) Pl E ¶
STROMBOIDEA
APORRHAIDAE
'*Dicroloma*' *zelandica* P. Marshall, 1919 Ab (Ab-Ak) E
Drepanochilus (*Tulochilus*) *bensoni* Finlay & Marwick, 1937 Dwl E
Hemichenopus thomsoni (Allan, 1926) Ab E
Struthioptera osiris Finlay & Marwick, 1937 Dwl E
STRUTHIOLARIIDAE
Conchothyra australis (P. Marshall, 1916) Dwl E
Monalaria concinna (Suter, 1917) Ab E
Monalaria filata Marwick, 1960 Dw-Dm E
Monalaria gracilis Finlay & Marwick, 1937 Dw-Dm E
Monalaria poliveta Stilwell, 2002 Dw-Dm E
Perissodonta minor (P. Marshall, 1917) Dwl E
Perissodonta mortoni Marwick, 1960 Dw-Dm E
Pelicaria acuminata (Marwick, 1924) Wn (Wm-Wn) E
Pelicaria canaliculata (Zittel, 1864) Wp E
Pelicaria cestata Marwick, 1965 Wp E
Pelicaria clarki (Neef, 1970) Wm E
Pelicaria convexa (Marwick, 1924) Wn E
Pelicaria flemingi (Neef, 1970) R (Wc-R) E
Pelicaria fossa (Marwick, 1924) Wn E
Pelicaria incrassata (Powell, 1931) Wp E
Pelicaria lacera (Marwick, 1931) Tk E
Pelicaria marima (Neef, 1970) Wm E
Pelicaria monilifera (Suter, 1914) Wp E
Pelicaria nana (Marwick, 1926) Tt E
Pelicaria parva (Suter, 1915) Wo E
Pelicaria procanalis Beu, 1970 Wo (Tk?-Wo) E
Pelicaria pseudovermis (Bartrum & Powell, 1928) Wo E
Pelicaria rugosa (Marwick, 1924) Wn E
Pelicaria vermis (Martyn, 1784) R (Wc-R) E
Pelicaria zelandiae (P. Marshall & Murdoch, 1920) Wp (Wo?-Wp) E
Struthiolaria (*Callusaria*) *arthritica* Bartrum & Powell, 1928 Wo (Tk?-Wo) E
Struthiolaria (*C.*) *callosa* Marwick, 1924 Tt (Sc-Tt) E
Struthiolaria (*C.*) *obesa* Hutton, 1885 Wo? (up.Tt? Tk-Wo) E
Struthiolaria (*C.*) *otaioica* Laws, 1935 Po E
Struthiolaria (*C.*) *spinifera* Marwick, 1924 Pl E
Struthiolaria (*C.*) *spinosa* Hector, 1886 Pl (Pl-Sw) E
Struthiolaria (*C.*) *tuberculata* Hutton, 1873 Pl E
Struthiolaria (*Struthiolaria*) *calcar* Hutton, 1886 Pl (Ld? Lw-Sc Sw?) E
Struthiolaria (*S.*) *cincta* Hutton, 1873 Tk? (Tt?-Tk) E
Struthiolaria (*S.*) *cingulata* Zittel, 1864 Wo? (Tk?-Wo?) E
Struthiolaria (*S.*) *dolorosa* King, 1934 Wo E
Struthiolaria (*S.*) *errata* Marwick, 1924 W? E
Struthiolaria (*S.*) *firthi* Marwick, 1948 Wp E
Struthiolaria (*S.*) *frazeri* Hector, 1885 Wn E
Struthiolaria (*S.*) *illepida* Bartrum & Powell, 1928 Wo E
Struthiolaria (*S.*) *lawsi* Powell & Bartrum, 1929 Po E
Struthiolaria (*S.*) *nexa* Marwick, 1931 Tk E
Struthiolaria (*S.*) *papulosa* (Martyn, 1784) R (Wn-R) E
Struthiolaria (*S.*) *praenuntia* Marwick, 1926 Tt E
Struthiolaria (*S.*) *prior* Finlay, 1926 Ld E
VANIKOROIDEA
HIPPONICIDAE
Antisabia centrifugalis (Marwick, 1931) Sl (Pl-Sl) E ¶
Cheilea janitrix Maxwell, 1966 Ak E
Cheilea plumea Laws, 1932 Sl E
Cheilea postera Laws, 1936 Wo (Wo-Wp) E
Leptonotis perplexus (Suter, 1907) R (Sw-R)
Leptonotis wharekuriensis (Laws, 1935) Ld E
'*Leptonotis*' *kaawaensis* (Bartrum & Powell, 1928) Wo (Sw-Wp) E
Malluvium calcareum (Suter, 1909) R (Wc-R) E
VANIKORIDAE
Kaawatina turneri Bartrum & Powell, 1928 Wo E
Korovina accelerans Marwick, 1928 Wp E
Korovina dupliangulata Laws, 1940 Wo E
Micreschara (?) *esculenta* (Laws, 1944) Po E
Micreschara (*Naridista*) *jocelynae* (Laws, 1939) Po-Pl E
Radinista concinna (P. Marshall & Murdoch, 1921) Pl E
Radinista exilis (Murdoch, 1900) Wc E
Radinista vivienneae (Laws, 1939) Po E
Zeradina aculeata Laws, 1939 Po E
Zeradina costellata (Hutton, 1885) Wc E

Zeradina odhneri Powell, 1927 R (Wc-R) E
CALYPTRAEOIDEA
CALYPTRAEIDAE
Grandicrepidula densistria (Suter, 1917) Pl E
Grandicrepidula salebrosa (Marwick, 1929) Ld (Ld-Lw) E
Maoricrypta costata (G.B. Sowerby I, 1824) R (Wc-R) E
Maoricrypta (?) *haliotoidea* (Marwick, 1926) Tt E
Maoricrypta (?) *opuraensis* (Bartrum & Powell, 1928) Wo E
Maoricrypta profunda (Hutton, 1873) Wp? E
Maoricrypta radiata (Hutton, 1873) Tk? (Tt?-Wc?) E
Maoricrypta sodalis B. Marshall, 2003 R (Wq-R) E
Maoricrypta turnialis (Bartrum & Powell, 1928) Wo (Wo-Wn?) E
Maoricrypta wilckensi (Finlay, 1924) T E
Maoricrypta youngi Powell, 1940 R (Wc-R) E
Sigapatella (*Sigapatella*) *giganteus* (Beu, 1970) Tt E
Sigapatella (*S.*) *maccoyi* (Suter, 1917) Pl E
Sigapatella (*S.*) *mapalia* Marwick, 1929 Ld E
Sigapatella (*S.*) *novaezelandiae* (Lesson, 1830) R (Wn-R) E
Sigapatella (*S.*) *nukumaruana* B. Marshall, 2003 Wn E
Sigapatella (*S.*) *ohopeana* B. Marshall, 2003 Wc E
Sigapatella (*S.*) *otamatea* Laws, 1944 Pl (Po-Pl) E
Sigapatella (*S.*) *patulosa* Powell & Bartrum, 1929 Po E
Sigapatella (*S.*) *peramplus* (Powell & Bartrum, 1929) Po E
Sigapatella (*S.*) *spadicea* Boshier, 1961 R (Wn-R) E
Sigapatella (*S.*) *tenuis* (Gray, 1867) R (Wn-R) E
Sigapatella (*S.*) *terraenovae* Peile, 1924 R (Wn-R) E
Sigapatella (*S.*) *subvaricosa* Powell & Bartrum, 1929 Po E
Sigapatella (*S.*) *vertex* Marwick, 1926 Ak E
Sigapatella (*Spirogalerus*) *lamellaria* (Finlay & Marwick, 1937) Dwl E
CAPULOIDEA
CAPULIDAE
Capulus uncinatus (Hutton, 1873) Wq E
Trichosirius (<u>*Eosirius*</u>) *admeteformis* (Maxwell, 1966) Ak E
Trichosirius (<u>*Miplioderma*</u>) *finlayi* Laws, 1935 Lw E
Trichosirius (*M.*) *reticulatus* (Suter, 1917) Po-Pl E
Trichosirius (*M.*) *mangawera* (Laws, 1940) Wm (Wp-Wm) E
Trichosirius (*M.*) *waihuanus* (Marwick, 1965) Wp E
Trichosirius (<u>*Trichosirius*</u>) *cavatocarinatus* (Laws, 1940) R (Wm-R) E
Trichosirius (*T.*) *inornatus* (Hutton, 1873) R (Wn-R) E
Trichosirius (*T.*) *octocarinatus* Powell, 1931 R (Wq-R) E
<u>*Zelippistes*</u> *perornatus* (P. Marshall & Murdoch, 1923) Wc E
XENOPHOROIDEA
XENOPHORIDAE
Xenophora flemingi Beu, 1977 Pl (Po-Sl?) E
Xenophora neozelanica Suter, 1908 R (Wo-R) E
Xenophora prognata (Finlay, 1926) Ld (Ak?-Sl) E
VERMETOIDEA
VERMETIDAE
Agathirses senex (Marwick, 1926) Ak E
Serpulorbis lornensis Marwick, 1926 Ak E
Serpulorbis ophiodes (P. Marshall & Murdoch, 1921) Pl (Ld?-Pl) E
Serpulorbis zelandicus (Quoy & Gaimard, 1834) R (Pl?-R) E
CYPRAEOIDEA
CYPRAEIDAE
Bernaya chathamensis Cernohorsky, 1971 Dt-Dw E
Bernaya zoiloides Schilder, 1958 Ab E
Cypraea cernica Sowerby, 1870 R (Wn-R)
Cypraea (?) *ficoides* (Hutton, 1873) Ar-Lwh E
Cypraea (*Notadusta*) *clifdenensis* (Cernohorsky, 1971) Pl (Po-Tk) E
Cypraea (*Notadusta*) *trelissickensis* Suter, 1917 Ld E
Palaeocypraea (?) *eripnides* Darragh, 2002 Dt-Dw E
OVULIDAE
Eocypraea novaezelandiae (Schilder, 1941) Ab E
VELUTINOIDEA
TRIVIIDAE
Eratoinae
Archierato accola (Laws, 1935) Ak E
Archierato antiqua (P. Marshall, 1919) Ab (Ab-Ak) E
Archierato (?) *aucklandica* (Dell, 1950) Po E
Archierato simulacrum Laws, 1939 Po (Po-Pl) E
Archierato zepyrulata Laws, 1939 Po (Po-Pl) E
<u>*Bellerato*</u> *pukeuriensis* (Laws, 1935) Pl E
Bellerato sepositum (Laws, 1935) Ak E
Bellerato tenuilabrum (Laws, 1935) Sc (Pl-Sc) E
Bellerato zevitellina (Laws, 1941) Po (Po-Pl) E
Erato (*Lachryma*) *clifdenensis* Laws, 1935 Sl E
Erato (*L.*) *marshalli* Marwick, 1929 Ld E
Erato (*L.*) *senecta* Murdoch, 1924 Pl E
Erato (*L.*) *submorosa* Laws, 1935 Pl E
Erato (*L.*) *vulcania* Marwick, 1926 Ak (Ak-Ar) E
Erato (*L.*) *waitakiensis* Laws, 1935 Lw E
<u>*Proterato*</u> (?) *awamoana* Schilder, 1933 Pl E
Proterato (?) *dubia* (Hutton, 1873) Ld E
Proterato neozelanica (Suter, 1917) Pl (Lw-Pl) E
Proterato (?) *pliocenica* Fleming, 1943 Wo (Wo-Wp) E
Proterato waiauensis (Laws, 1935) Sc (Pl-Sl) E
Willungia erro (Laws, 1941) Po E
Willungia fracta (Tomlin, 1916) Ld E
Willungia maoria Powell, 1938 Pl (Po-Sc) E
Triviinae
Trivia aequiflora Laws, 1941 Po E
Trivia flora Marwick, 1928 Wp E
Trivia kaiparaensis (Laws, 1939) Po E
Trivia merces (Iredale, 1924) R (Wn-R)
Trivia pinguior Marwick, 1926 Ak E
Trivia zealandica Kirk, 1882 Wn (Wn-Wc) E
VELUTINIDAE
Lamellariinae
Lamellaria ophione Gray, 1850 R (Wq-R) E
NATICOIDEA
AMPULLOSPIRIDAE
Amauropsona major (P. Marshall, 1917) Dwl E
Amauropsona teres (Marwick, 1924) Dwl E
NATICIDAE
Naticinae
Carinacca allani (Marwick, 1924) Ab (Ab-Ak?) E
Carinacca waihaoensis (Suter, 1917) Ak (Ab-Ak) E
Friginatica compressa (Marwick, 1924) Sl? E
Friginatica conjuncta Dell, 1953 R (Wn-R) E
Friginatica marshalli Marwick, 1931 Wp (Tk-Wp) E
Friginatica marwicki Beu, 1970 Tt E
Friginatica prisca (Marwick, 1924) Ab E
Friginatica suturalis (Hutton, 1877) Ak? (Ak) E
Friginatica vaughani (Marwick, 1924) Pl (Ld-Tt) E
Magnatica (<u>*Magnatica*</u>) *approximata* (Suter, 1917) Lwh? E
Magnatica (*M.*) *fons* Finlay, 1930 Ab E
Magnatica (*M.*) *nuda* (Marwick, 1924) Tt E
Magnatica (*M.*) *planispira* (Suter, 1917) Po (Ld-Pl) E
Magnatica (<u>*Spelaenacca*</u>) *clifdenensis* Finlay, 1926 Pl E
Magnatica (*S.*) *firma* (Marwick, 1924) Dwl E
Magnatica (*S.*) *harrisensis* (Marwick, 1924) Pl E
Magnatica (*S.*) *parilis* Finlay, 1930 Ak E
Magnatica (*S.*) *procera* Finlay & Marwick, 1937 Dwl E
Magnatica (*S.*) *rectilatera* Finlay, 1926 Pl E
Magnatica (*S.*) *sutherlandi* (Marwick, 1924) Ld E
Magnatica (*S.*) *waitemataensis* Powell, 1938 Po E
<u>*Proxiuber*</u> *anteaustrale* Powell, 1938 Wn (Wo-Wn) E
Proxiuber astrictum Marwick, 1965 Wo E
Proxiuber australe (Hutton, 1878) R (Wn-R) E
Proxiuber kaawaense (Marwick, 1924) Wo E
Proxiuber (?) *platamodes* Finlay & Marwick, 1937 Dw-Dm E
Tanea consortis (Finlay, 1924) Pl (Pl-Wo) E
Tanea inexpectata (Finlay, 1924) Sl E
Tanea pittensis (Marwick, 1928) Wp E
Tanea praeconsors (Finlay, 1924) Ak (Dm?-Ak) E
Tanea sublata (Marwick, 1924) Pl E
Tanea zelandica (Quoy & Gaimard, 1832) R (Wn-R) E
Taniella (*Taniella*) *bacca* (Marwick, 1924) Ab E
Taniella (*T.*) *intermedia* Maxwell, 1992 Ak E
Taniella (*T.*) *mima* Maxwell, 1988 Sw E
Taniella (*T.*) *motutaraensis* (Powell, 1935) Pl E
Taniella (*T.*) *notocenica* (Finlay, 1924) Pl (Ld-Wo) E
Taniella (*T.*) *planisuturalis* (Marwick, 1924) Wn (Wo-Wc)
Taniella (*T.*) *poliniciformis* Beu, 1970 Tt E
Taniella (*T.*) *tantilla* Marwick, 1960 Dw-Dm E
Taniella (<u>*Pristinacca*</u>) *senisculus* Finlay & Marwick, 1937 Dwl E
Poliniceinae
Eunaticina auriforme (Marwick, 1924) Dwl E
Eunaticina fornicatum (Suter, 1917) Ab? (Dw?-Ab) E
Eunaticina linnaeana (Recluz, 1843) R (Wq-R?)
Euspira elegans (Suter, 1917) Ak? (Ab-Ak) E ¶
Euspira fyfei (Marwick, 1924) Dwl E ¶
Euspira lateaperta (Marwick, 1924) Dwl E ¶
Falsilunatia ambigua (Suter, 1913) Wn (Wn-R) E
Neverita pontis (Marwick, 1924) Ak E
Pliconacca cicatricella (Marwick, 1965) Wo (Wo-Wm) E ¶
Pliconacca cicatrix (Marwick, 1931) Sc? (Po-Tt Tk?) E
Pliconacca denticulifera (Marwick, 1924) Wc (Wn-R) E
Pliconacca scalpta (Marwick, 1924) Tt (Sw-Tt Tk?) E ¶
<u>*Polinella*</u> *blaesa* (Marwick, 1929) Ld E
Polinella (?) *creper* (Marwick, 1965) Tt E
Polinella esdailei (Marwick, 1924) Ar (Ak-Ar) E
Polinella finlayi (Marwick, 1924) Dwl E
Polinella fryei (Laws, 1933) Pl E
Polinella gradisuturalis (Marwick, 1932) Sw (Sl-Sw) E
Polinella incerta (Marwick, 1924) Pl E
Polinella modesta (Marwick, 1924) Pl E
Polinella obstructa (Marwick, 1924) Tk-Wo? (Pl-Wp) E
Polinices chattonensis (Marwick, 1924) Ld E
Polinices huttoni Ihering, 1907 Pl (Pl-Sl?) E
Polinices intracrassus Finlay, 1924 Sw-Tt? (Sl-Sw, Tt?) E
Polinices laxus (Finlay, 1926) Sw E
Polinices lobatus (Marwick, 1924) Pl (Lw-Pl) E
Polinices mackayi Marwick, 1931 Tk? (Sw?-Wo) E
Polinices mucronatus (Marwick, 1924) Tt (Sl?-Wo) E
Polinices oneroaensis Powell & Bartrum, 1929 Po E
Polinices otaioensis Marwick, 1960 Dw-Dm E
Polinices parki Finlay & Marwick, 1937 Dwl E
Polinices propeovatus (Marwick, 1924) Tt (Sw-Wo) E
Polinices sagenus Suter, 1917 Pl E
Polinices unisulcatus (Marwick, 1924) Tt E
Polinices waipaensis (Marwick, 1924) Lwh-Ld E
Polinices waipipiensis (Marwick, 1924) Wp (Wo?-Wm) E
<u>*Tahunacca*</u> *acerva* (Laws, 1933) Po E
Tahunacca haasti (Marwick, 1924) Ak (Ab-Ak) E
<u>*Uberella*</u> *barrierensis* (Marwick, 1924) R (Wo-R) E
Uberella keyesi Marwick, 1965 Wn E
Uberella maesta (Marwick, 1924) Tt E
Uberella marwicki Powell, 1935 Pl E
Uberella pseudovitrea (Finlay, 1924) Pl E
Uberella pukeuriensis (Marwick, 1924) Pl E
Uberella vitrea (Huton, 1873) R (Wc-R) E
Sininae
Globisinum crassiliratum Finlay, 1926 Lw Ld-Lw) E
Globisinum drewi (Murdoch, 1899) Wc (Wo-R) E

Globisinum miocaenicum (Suter, 1917) Pl (Lw-Pl) E
Globisinum spirale (P. Marshall, 1917) Dwl E
Sinum infirmum Marwick, 1924 Pl E
Sinum marwicki Laws, 1930 Pl E
FICOIDEA
FICIDAE
Ficus imperfecta P. Marshall & Murdoch, 1919 Pl E
Ficus parva Suter, 1917 Ar? (Ak-Lwh?) E
Priscoficus alectodens Marwick, 1942 Ab E
Priscoficus allani Marwick, 1960 Dw-m E
Priscoficus obtusa (P. Marshall, 1917) Dwl E
TONNOIDEA
BURSIDAE
Bursa granularis (Röding, 1798) R Wn-R)
CASSIDAE
Cassinae
Galeodea (*Galeodea*) *apodemetes* Marwick, 1934 Pl (Ld?-Pl) E
Galeodea (*G.*) *geniculosa* Marwick, 1942 Ab (Ab-Ak?) E
Galeodea (*G.*) *modesta* (Suter, 1917) Ab E
Galeodea (*G.*) *triganceae* Dell, 1956 R (Wp-R) E
Galeodea (*Galeoocorys*) *flemingi* Beu & Maxwell, 1990 Tk E
Galeodea (*G.*) *sulcata* (Hutton, 1873) Wp (Tk-Wp Wc-R?) E
Galeodea (*G.*) *wylliei* Marwick, 1931 Pl? E
Galeodea (<u>*Taieria*</u>) *allani* (Finlay & Marwick, 1937) Dwl E
Phaliinae
Echinophoria emilyae (Laws, 1932) Pl E
Echinophoria grangei (Marwick, 1926) Tt E
Echinophoria oconnori (Dell, 1952) Tt E
Echinophoria oneroaensis (Powell, 1938) Po E
Echinophoria pollens (Finlay, 1926) Pl (Po-Sc) E
Echinophoria (?) *senex* (Hutton, 1873) L? E
Echinophoria toreuma (Powell, 1928) Pl (Pl-Sw) E
Semicassis (*Semicassis*) *labiata* (Perry, 1811) R (Wq-R)
Semicassis (*S.*) *pyrum* (Lamarck, 1822) R (Wn-R)
Semicassis (*Kahua*) *fibrata* (P. Marshall & Murdoch, 1920) Wp (Wo-Wm) E
Semicassis (*K.*) *kaawaensis* (Bartrum & Powell, 1928) Wo (Tk-Wo) E
Semicassis (*K.*) *lilliei* (Fleming, 1943) Wn E
Semicassis (*K.*) *marwicki* (Fleming, 1943) Wm? (Wp?-Wn?) E
Semicassis (*K.*) *skinneri* (Marwick, 1928) Wp (Wo-Wp) E
PERSONIDAE
<u>*Kotakaia*</u> *simplex* Beu, 1988 Dt E
Personopsis beui (Maxwell, 1968) Ak E
PISANIANURIDAE
Pisanianura spiralis (P. Marshall, 1918) Po-Pl E
RANELLIDAE
Neptunellinae
Cabestana manawatuna Fleming, 1943 Wn (Tt-Wn) E
Cabestana spengleri (Perry, 1811) R (Wc-R)
Cabestana tabulata (Menke, 1843) R (Tk? Wn-R)
Cabestana tetleyi (Powell & Bartrum, 1929) Po (Lw-Po) E
Charonia lampas (Linnaeus, 1758) R (Tk? Wq-R)
Cymatium (*Linatella*) *caudatum* (Gmelin, 1791) R (Wo-R)
Cymatium (*Monoplex*) *exaratum* (Reeve, 1844) R (Wq-R)
Cymatium (*M.*) *parthenopeum* (Salis, 1793) R (Wc?-R)
Sassia (*Sassia*) *arthritica* (Powell & Bartrum, 1929) Po (Lw-Po) E
Sassia (*S.*) *cyphoides* (Finlay, 1924) Ak Ak-Ar) E
Sassia (*S.*) *decagonia* (Finlay, 1924) Ab E
Sassia (*S.*) *jobbernsi* (King, 1933) Wm E
Sassia (*S.*) *maoria* (Finlay, 1924) Pl (Ld-Pl) E
Sassia (*S.*) *minima* (Hutton, 1873) Ld (Ld-Lw) E
Sassia (*S.*) *neozelanica* (P. Marshall & Murdoch, 1923) Pl (Pl-Sl?) E
Sassia (*S.*) *pahaoensis* (Vella, 1954) Tt (Sc-Tt) E
Sassia (*S.*) *palmeri* (Powell, 1976) R (Tt-R) E
Sassia (*S.*) *parkinsonia* (Perry, 1811) R (Wq-R)
Sassia (*S.*) *pusulosa* (Marwick, 1965) Wp (Wo-Wn) E
Sassia (*S.*) *tortirostris* (Tate, 1888) (Po? Pl-Sw)
Sassia (*S.*) *zealta* (Laws, 1939) Po-Pl (Po-Sc) E
Sassia (<u>*Haurokoa*</u>) *bartrumi* (Powell, 1938) Po (Ld?-Po) E
Sassia (*H.*) *marwicki* (Finlay, 1924) Ak (Ak-Ar) E
Sassia (*H.*) *woodi* (Fleming, 1955) Tk (Sw-Wo) E
Ranellininae
Argobuccinum tumidum (Dunker, 1862) R (Wq-R)
Fusitriton laudandus Finlay, 1926 R (Wq-R) E
Ranella australasia (Perry, 1811) R (Tt?-R)
Ranella kaiparaensis (Finlay, 1924) Po E
TONNIDAE
Eudolium aoteanum Beu, 1970 Pl (Po-Pl) E
Tonna olearium (Linnaeus, 1758) R (Wn-R)

Infraorder PTENOGLOSSA
TRIPHOROIDEA
CERITHIOPSIDAE
Ataxocerithium huttoni (Cossmann, 1895) Wc (Wc-R) E
Ataxocerithium kaawaense Laws, 1936 Wo E
Ataxocerithium pyramidale Finlay, 1924 Pl E
Ataxocerithium scitulum Maxwell, 1992 Ak E
Ataxocerithium simplex Marwick, 1928 Wn (Wm-Wn) E
Ataxocerithium (?) *singulare* Maxwell, 1992 Ak E
Ataxocerithium tricingulatum Marwick, 1924 Wn (Wn-Wc?) E
Cerithiella (?) *infelix* (Marwick, 1931) Pl-Sc E
Cerithiella (?) *paroaensis* Maxwell, 1988 Sw E
Cerithiella (?) *propria* (Laws, 1941) Po E
Cerithiella (*Cerithiella*) *thomsoni* Maxwell, 1992 Ak E
Cerithiella (*C.*) *tricincta* P. Marshall, 1919 Ab (Ab-Ak) E
Cerithiella (*Miopila*) *fidicula* Suter, 1917 Pl E
Cerithiopsis powelli B. Marshall, 1978 R (Wq-R) E
'*Cerithiopsis*' *aequicincta* Suter, 1917 Pl E
'*Cerithiopsis*' *mucro* (Laws, 1939) Po E
'*Cerithiopsis*' *saepta* (Marwick, 1931) Pl E
'*Cerithiopsis*' *simulator* (Laws, 1939) Po E
'*Cerithiopsis*' *temperans* (Marwick, 1931) Sl E
Horologica violator (Laws, 1944) Po E
Joculator decapitatus Grant-Mackie & Chapman-Smith, 1971 Wq E
<u>*Gothicispira*</u> *marshalli* Maxwell, 1988 Sw E
'*Mendax*' *disparilis* Maxwell, 1992 Ak E
Seila (s.l.) *attenuissima* P. Marshall & Murdoch, 1920 Ab (Ab-Ak) E
Seila (*Hebeseila*) *bulbosa* Suter, 1908 R (Wc-R) E
Seila (*Lyroseila*) *cincta* (Hutton, 1886) Wn? (Wm-R) E
Seila (*Notoseila*) *clifdenensis* (Laws, 1941) Pl E
Seila (*Notoseila*) *kaiparaensis* (Laws, 1941) Po E
Seila (*Notoseila*) *terebelloides* (Hutton, 1873) R (Wn-R) E
Seila (s.l.) *gagei* Maxwell, 1992 Ak E
Spinoseila bicincta Maxwell, 1992 Ak E
Retilaskeya zelandica B. Marshall, 1978 R (Wc-R) E
Socienna maoria Finlay, 1930 R (Wn-R) E
Specula retifera (Suter, 1908) R (Wm-R) E
Specula styliformis (Suter, 1908) R (Wn-R) E
Zaclys sarissa (Murdoch, 1905) R (Wn-R) E
Zaclys spiculum Laws, 1940 Wo (Wo-Wp) E
TRIFORIDAE
Triforis (s.l.) *neozelanica* (Laws, 1939) Po-Pl E
T. (s.l.) *zecollata* (Laws, 1941) Po E
TRIPHORIDAE
Triphorinae
Bouchetriphora pallida (Pease, 1870) R (Wo-R)
Bouchetriphora (?) *tepikiensis* (Powell, 1934) Wq E
<u>*Cautotriphora*</u> *simulans* Laws, 1940 Wn (Wm-Wn) E
Inella aoteaensis (P. Marshall & Murdoch, 1920) Ab (Ab-Ak) E
Inella zeattenuata Beu, 1970 Tt E
Inella zespina (Laws, 1939) Po E
Monophorus fascelinus (Suter, 1908) R (Wc?-R) E
Monophorus (?) *insertus* (Marwick, 1928) Wp E
Nototriphora kaawaensis (Laws, 1940) Wo E
Sagenotriphora ampulla (Hedley, 1902) R (Wq-R)
'*Tetraphora*' *granifera* (Brazier, 1894) R (Wq)
JANTHINOIDEA
ACLIDIDAE
Aclis planostoma (Hutton, 1885) Wn-Wc (Wo? Wn-Wc) E
Austrorissopsis (?) *castlecliffensis* (Finlay, 1930) Wc E
Austrorissopsis fricta (Finlay, 1930) Pl E
Austrorissopsis ponderi Grant-Mackie & Chapman-Smith, 1971 Wq E
<u>*Awanuia*</u> *dilatata* Powell, 1927 R (Wo-R) E
Awanuia tenuis Laws, 1936 Wo E
Graphis (*Graphis*) *neozelanica* Laws, 1939 Po E
Graphis (*G.*) *problanda* Laws, 1944 Po E
Graphis (<u>*Itiscala*</u>) *exilis* (Maxwell, 1992) Ak E ¶
Graphis (*I.*) *sodalis* (Maxwell, 1992) Ak E ¶
<u>*Manawatawhia*</u> (?) *aedicula* Laws, 1940 Wm E
<u>*Scalaronoba*</u> *chemnitzia* Laws, 1944 Po E
Scalaronoba costata Powell, 1927 R (Wo-R) E
Scalaronoba pristina Laws, 1941 Po E
EPITONIIDAE
Acirsinae
<u>*Notacirsa*</u> *awamoaensis* (P. Marshall & Murdoch, 1921) Pl E
Notacirsa oamarutica (Suter, 1917) Pl E
Notacirsa prisca (Suter, 1917) Po E
Notacirsa subnodulosa Maxwell, 1988 Sw E
Notacirsa vetusta Maxwell, 1992 Ak E
Epitoniinae
Amaea (?) *gracillima* (Suter, 1917) Ld E ¶
Cirsotrema (*Cirsotrema*) *angulatum* Marwick, 1926 Tt (Sc-Tt) E
Cirsotrema (*C.*) *caelicola* Finlay, 1926 Pl E
Cirsotrema (*C.*) *chathamense* Marwick, 1928 Wo E
Cirsotrema (*C.*) *firmatum* Laws, 1939 Po-Pl E
Cirsotrema (*C.*) *gagei* Maxwell, 1978 Lwh E
Cirsotrema (*C.*) *kuriense* Marwick, 1942 Ab E
Cirsotrema (*C.*) *lyratum* (Zittel, 1864) Ld (Lwh-Ld Lw?) E
Cirsotrema (*C.*) *parvulum* Marwick, 1928 Wo E
Cirsotrema (*C.*) *propelyratum* Marwick, 1928 Wo E
Cirsotrema (*C.*) *zelebori* (Dunker, 1866) R (Wo-R) E
Cirsotrema (*C.*) *zitteli* Maxwell, 1992 Ak E
Cirsotrema (<u>*Tioria*</u>) *youngi* Marwick, 1928 Dw E
'*Cirsotrema*' *marshalli* Laws, 1935 Ab E
Clathroscala derelicta Marwick, 1965 Wo E
Clathroscala kaokao Maxwell, 1992 Ak E
Clathroscala tricincta (P. Marshall, 1918) Pl? E
Claviscala marginata (Hutton, 1885) Lw E ¶
Cylindriscala elata (Suter, 1917) Po E
Cylindriscala kaiparaensis (Laws, 1944) Pl E
Cylindriscala lawsi Maxwell, 1992 Ak E
Cylindriscala suteri Maxwell, 1992 Ak E
E. (*Hyaloscala*) *bucknilli* Powell, 1924 R (Wq-R) E
E. (*Hyaloscala*) *jukesianum* (Forbes, 1852) R (Wc-R)
E. (*Hyaloscala*) *muricatum* (Laws, 1933) Pl E
E. (*Papyriscala*) *tenellum* (Hutton, 1885) R (Wq-R)
Epitonium (s.l.) *mackayi* (Marwick, 1943) Lw E
Funiscala (?) *nympha* (Hutton, 1885) Wn (Wm-Wn) E
<u>*Goniscala*</u> *diurna* Marwick, 1943 Pl E
Gregorioiscala (?) *huttoni* Maxwell, 1992 Ak E
<u>*Kapua*</u> *powelli* (Marwick, 1931) Wo E
Opalia mackayi Maxwell, 1992 Ak E
Opalia tenuispiralis (P. Marshall, 1919) Ab E
Pliciscala komitica Laws, 1944 Po-Pl E
Pliciscala waikakahiensis Maxwell, 1992 Ak E
Proscala (?) *parvicostata* (P. Marshall, 1917) Dwl E

Turriscala (*Turriscala*) *finlayi* Maxwell, 1992 Ak E
Turriscala (?) *discors* (Maxwell, 1988) Sw E ¶
'*Turriscala*' *cylindrella* (Suter, 1917) Ld E
'*Turriscala*' *kaiparaensis* Laws, 1939 Po E
JANTHINIDAE
Hartungia chavani Ludbrook, 1978 (Wm-Wn)
Hartungia typica Bronn, 1861 (Tk-Wp)
Janthina exigua Lamarck, 1822 R (Wq-R)
EULIMOIDEA
EULIMIDAE
Bulimeulima lentocontracta (Laws, 1941) Po E
Bulimeulima rhopaloides Maxwell, 1992 Ak E
Curveulima titahica (Suter, 1908) R Wq-R) E
Eulima (s.l.) *aoteaensis* P. Marshall & Murdoch, 1921 Pl E
Eulima (s.l.) *hampdenensis* Laws, 1935 Ab E
Eulima (s.l.) *incondita* Marwick, 1931 Pl? E
Eulima (s.l.) *obliqua* (Hutton, 1885) Wn E
Eulima (s.l.) *treadwelli* Hutton, 1885 Wc E
Fusceulima murdochi (Hedley, 1904) R (Wq-R) E
Hypermastus bulbula (Murdoch & Suter, 1906) R (Wq-R) E
Margineulima christyi (Marwick, 1924) Wn (Wm-Wc?) E
Margineulima otaioensis (Laws, 1933) Po E
Margineulima waihaoensis (Allan, 1926) Ak (Ak-Ar) E
Melanella badenia (Laws, 1939) Po Po-Pl) E
Melanella collator (Laws, 1944) Po (Po-Pl) E
Melanella geoffreyi (Laws, 1936) Wo E
Melanella kaiparaensis (Laws, 1939) Po-Pl E
Melanella (?) *lautoides* Finlay & Marwick, 1937 Dwl E
Melanella patutahiensis Marwick, 1931 Sl E
Melanella pontilis Maxwell, 1992 Ak E
Melanella tutamoensis Marwick, 1931 Sl E
Melanella waikomitica (Laws, 1939) Po (Po-Pl) E
Melanella waiaotea (Laws, 1941) Po E
Niso basiglobosa Marwick, 1942 Ab E
Niso neozelanica Suter, 1917 Ld (Ak-Ld) E
Niso putata Finlay & Marwick, 1937 Dw-Dm E
Pelseneeria bountyensis (Powell, 1933) R (Wq-R) E

Infraorder NEOGASTROPODA
MURICOIDEA
BUCCINIDAE
Aeneator (*Aeneator*) *attenuatus* Powell, 1927 R (Wc-R) E
Aeneator (*A.*) *comptus* (Finlay, 1924) R (Wn?-R) E
Aeneator (*A.*) *delicatulus* Powell, 1929 Wc E
Aeneator (*A.*) *elegans* (Suter, 1917) Wn (Wn-R) E
Aeneator (*A.*) *huttoni* Finlay, 1930 Tk E
Aeneator (*A.*) *imperator* King, 1933 Wn (Wm?-Wn) E
Aeneator (*A.*) *marshalli* (Murdoch, 1924) Wc (Wn-R?) E
Aeneator (*A.*) *nothopanax* Fleming, 1954 Wn? E
Aeneator (?) *problematicus* Fleming, 1943 Wp E
Aeneator (*A.*) *thomsoni* (Marwick, 1924) Wn E
Aeneator (*Ellicea*) *antorbitus* (Fleming, 1955) Tk E
Aeneator (*E.*) *conformatus* (Marwick, 1931) Tt? E
Aeneator (*E.*) *henchmani* (Marwick, 1926) Tt E
Aeneator (*E.*) *orbitus* (Hutton, 1885) Wm-Wn (Wm-R?) E
Aeneator (*E.*) *perobtusus* (Fleming, 1943) Wo E
Aeneator (*E.*) *validus* (Marwick, 1928) Wp E
Aeneator (*E.*) *wairoanus* Marwick, 1965 Wn E
Aeneator (*E.*) *willetti* (Fleming, 1955) Tk (Tt-Tk) E
Austrofusus (*Austrofusus*) *acuticostatus* (1917) Ab E
Austrofusus (*A.*) *affiliatus* Finlay, 1926 Lw E
Austrofusus (*A.*) *allani* King, 1934 Wp E
Austrofusus (*A.*) *bicarinatus* (Suter, 1917) Lwh (Ak-Lwh) E
Austrofusus (*A.*) *chathamensis* Finlay, 1928 R (Wn?-R) E
Austrofusus (*A.*) *claviculus* King, 1933 Wm E
Austrofusus (*A.*) *coerulescens* (Finlay, 1930) Tk E
Austrofusus (*A.*) *conoideus* (Zittel, 1864) Tk E
Austrofusus (*A.*) *cottoni* King, 1933 Wn E
Austrofusus (*A.*) *glans* (Röding, 1798) R (Wc-R) E
Austrofusus (*A.*) *magnificus* Finlay, 1926 Sc (Pl-Sc) E
Austrofusus (*A.*) *marshalli* King, 1933 Wn E
Austrofusus (*A.*) *pagoda* (Finlay, 1924) Wp? (Wo-Wm) E
Austrofusus (*A.*) *pliocenicus* (Powell, 1931) Wp (Wo-Wm) E
Austrofusus (*A.*) *precursor* Finlay, 1926 Ld E
Austrofusus (*A.*) *separabilis* Maxwell, 1992 Ak E
Austrofusus (*A.*) *solitarius* Dell, 1950 Po E
Austrofusus (*A.*) *spiniferus* (Finlay & McDowall, 1923) Pl E
Austrofusus (*A.*) *taitae* (Marwick, 1924) Wn E
Austrofusus (*A.*) *valedictus* King, 1935 Tt (Sw-Tk) E
Austrofusus (*Neocola*) *alpha* Finlay, 1926 Pl E
Austrofusus (*N.*) *apudalpha* Finlay, 1926 Lw (Lw-Po) E
Austrofusus (*N.*) *beta* Finlay, 1926 Pl E
Austrofusus (*N.*) *cliftonensis* (Marwick, 1926) Tt E
Austrofusus (*N.*) *demissus* Marwick, 1931 Sw (Sl-Sw) E
Austrofusus (*N.*) *flexuosus* (P. Marshall, 1918) Pl? (Po-Pl) E
Austrofusus (*N.*) *gamma* Finlay, 1926 Sc (Sc-Sl, Tt?) E
Austrofusus (*N.*) *marwicki* King, 1933 Tt E
Austrofusus (*N.*) *ngatuturaensis* Bartrum & Powell, 1928 Wo E
Austrofusus (*N.*) *oneroaensis* Powell & Bartrum, 1929 Po E
Austrofusus (*Neocola*?) *zitteli* (Suter, 1914) Lwh E
Buccinulum caudatum Powell, 1929 Wc E
Buccinulum colensoi (Suter, 1908) R (Wq-R) E
Buccinulum compactum (Suter, 1917) Pl E
Buccinulum finlayi Powell, 1929 R (Wn-R) E
Buccinulum flexicostatum Dell, 1956 R (Wm-R) E
Buccinulum grindleyi Marwick, 1965 Wm E
Buccinulum linea (Martyn, 1784) R (Wn-R) E
Buccinulum littorinoides (Reeve, 1846) R (Wq-R) E
Buccinulum longicolle Powell, 1929 Pl E
Buccinulum medium (Hutton, 1885) W? E
Buccinulum pallidum Finlay, 1928 R (Wc?-R) E
Buccinulum (?) *pangoides* Beu, 1973 Wp E
Buccinulum pansum Marwick, 1965 Wm E
Buccinulum pertinax (Martens, 1878) R (Wq?-R) E
Buccinulum powelli Ponder, 1971 R (Wc?-R) E
Buccinulum protensum Powell, 1929 Pl E
Buccinulum rigidum Powell, 1929 Lw E
Buccinulum tepikiensis Grant-Mackie & Chapman-Smith, 1971 Wq E
Buccinulum tetleyi Powell & Bartrum, 1929 Po E
Buccinulum tuberculatum Powell, 1929 Pl E
Buccinulum vittatum (Quoy & Gaimard, 1833) R (Wm? Wq-R) E
Buccinulum wairarapaensis Powell, 1938 Wn E
Cantharus (*Zeapollia*) *acuticingulatus* (Suter, 1917) Pl E
Colubraria neozelanica Maxwell, 1966 Ak E
Colubraria sutherlandi Beu, 1973 Lw (Lw-Po) E
Cominella (*Cominella*) *adspersa* (Bruguière, 1789) R (Wc-R) E
Cominella (*C.*) *crassinodosa* Marwick, 1931 Sl (Pl-Tt) E
Cominella (*C.*) *dingleyi* Marwick, 1948 Wp E
Cominella (*C.*) *errata* Finlay, 1924 Pl E
Cominella (*C.*) *excoriata* (Finlay, 1926) Wn E
Cominella (*C.*) *facinerosa* Bartrum & Powell, 1928 Wo E
Cominella (*C.*) *hendersoni* Marwick, 1926 Tt (Pl?-Tt) E
Cominella (*C.*) *kereruensis* Laws, 1932 Wn (Wm-Wn) E
Cominella (*C.*) *maculosa* (Martyn, 1784) R (Wn?-R) E
Cominella (*C.*) *ridicula* (Finlay, 1926) Sc (Sc-Sl) E
Cominella (*C.*) *scirrifer* Laws, 1933 Pl E
Cominella (*Eucominia*) *alertae* (Dell, 1956) R (Wn-R) E
Cominella (*E.*) *bauckei* Marwick, 1928 Wp E
Cominella (*E.*) *cantuariensis* (Dell, 1951) R (Wn-R) E
Cominella (*E.*) *cingulata* (Hutton, 1885) Wm? E
Cominella (*E.*) *elegantula* (Finlay, 1926) Wc (Wn?-R?) E
Cominella (*E.*) *ellisoni* Marwick, 1928 Wn E
Cominella (*E.*) *hamiltoni* (Hutton, 1885) Wn E
Cominella (*E.*) *intermedia* (Suter, 1917) Pl E
Cominella (*E.*) *incisa* (Hutton, 1885) Wm? E
Cominella (*E.*) *marshalli* (Laws, 1932) Po E
Cominella (*E.*) *nana* (Finlay, 1926) Lw E
Cominella (*E.*) *onokeana* (King, 1933) Wn? (Wm?-Wn) E
Cominella (*E.*) *otakauica* Powell, 1946 R (Wm? Wn-R) E
Cominella (*E.*) *powelli* (Fleming, 1948) R (Wc?-R) E
Cominella (*E.*) *purchasi* (Suter, 1917) Wn? E
Cominella (*E.*) *tuturewa* (Fleming, 1943) Wo E
Cominella (*Josepha*) *acuminata* Hutton, 1885 Wc (Wc-R) E
Cominella (*J.*) *altispira* Marwick, 1948 Wp E
Cominella (*J.*) *chattonensis* (Finlay, 1926) Ld E
Cominella (*J.*) *chorista* Dell, 1952 Tt E
Cominella (*J.*) *compacta* Marwick, 1926 Tt E
Cominella (*J.*) *glandiformis* (Reeve, 1847) R (Wn-R) E
Cominella (*J.*) *graemei* Wells, 1986 Tt E
Cominella (*J.*) *obsoleta* (Finlay, 1926) Wn E
Cominella (*J.*) *putangirua* (King, 1933) Tt E
Cominella (*J.*) *quoyana* A. Adams, 1855 R (Wq-R) E
Cominella (*J.*) *virgata* H. & A. Adams, 1853 R (Wm-R) E
Cominella (*Procominula*) *denselirata* (Finlay, 1926) Lw E
Cominella (*P.*) *exsculpta* (Suter, 1917) Po-Pl E
Cominella (*P.*) *praecox* (Finlay, 1926) Ld E
Cominella (*P.*) *propinqua* (Finlay, 1926) Ld E
Cominella (*P.*) *pukeuriensis* (Finlay, 1926) Pl E
Cominella (*P.*) *pulchra* (Suter, 1917) Po E
Egotistica scirrhoma Marwick, 1934 Po E
Euthrenopsis otagoensis Powell, 1929 R (Wn-R) E
Euthrenopsis venusta Powell, 1929 R (Wm?-R) E
Iredalula striata (Hutton, 1873) Wc (Wm?-R) E
Iredalula venusta Powell, 1929 R (Wm?-R) E
Nassaria (*Microfusus*) *incerta* (King, 1933) Wm-Wn E
Nassicola (?) *cingulifera* (Marwick, 1931) Sc E
Nassicola (?) *compacta* (Suter, 1917) Pl E
Nassicola contracta (Finlay, 1926) Sl (Sl-Sw) E
Nassicola finlayi Beu & Maxwell, 1990 Pl E
Nassicola nassa (Finlay, 1926) Pl E
Nassicola speighti (Marwick, 1932) Sw E
Nassicola (?) *sublurida* (P. Marshall, 1917) Dwl E
Nassicola ultima Beu, 1973 Wp (Tt-Wp) E
(?) *Pangoa mira* Marwick, 1931 Sl E
Paracominia ferrari (Marwick, 1934) Po E
Paracominia finlayi (Powell & Bartrum, 1929) Po E
Paracominia lignaria (Powell & Bartrum, 1929) P (Lw-Po) E
Paracominia macphersoni (Marwick, 1931) Po? E
Penion affixus (Finlay, 1930) Sc (Pl-Sc) E
Penion asper (Marwick, 1928) Wp E
Penion bartrumi (Laws, 1941) Pl E
Penion benthicolus Dell, 1956 R (Wn-R) E
Penion brazieri Fleming, 1955 Tk E
Penion clifdenensis (Finlay, 1930) Sc (Pl-Sl) E
Penion crawfordi (Hutton, 1873) Tt (Sc? Sl-Tt) E
Penion cuvierianus (Powell, 1927) R (Wn-R) E
Penion exoptatus (Powell & Bartrum, 1929) Po E
Penion fairfieldae (Powell, 1947) R (Wn-R) E
Penion finlayi (Laws, 1930) Po E
Penion gauli (Marwick, 1948) Wp E
Penion haweraensis (Powell, 1931) Wp E

Penion hiatulus (Powell, 1947) Wo E
Penion huttoni (King, 1934) Tk?-Wo E
Penion imperfectus (Powell, 1947) Pl E
Penion interjunctus (Finlay, 1930) Sw (Sl-Sw) E
Penion koruahinensis (Bartrum & Powell, 1928) Wo E
Penion marwicki (Finlay, 1930) Pl E
Penion parans (Finlay, 1930) Pl (Pl-Sl?) E
Penion proavitus (Finlay & Marwick, 1937) Dwl E
Penion sulcatus (Lamarck, 1816) R (Wm-R) E
Penion winthropi Marwick, 1965 Wp E
Pomahakia aberrans Finlay, 1927 Ld? E
Pseudofax filius Finlay & Marwick, 1937 Dw-Dm E
Pseudofax ordinaria (P. Marshall, 1917) Dwl E
Pseudofax sinusigera Finlay & Marwick, 1937 Dw-Dm E
Zelandiella (?) *cancellaria* Finlay & Marwick, 1937 Dwl E
Zelandiella calcarata Marwick, 1931 Tt (Sl-Tt) E
Zelandiella fatua Finlay, 1926 Sw (Sw-Tt?) E
Zelandiella(?) *imitatrix* Finlay & Marwick, 1937 Dwl E
Zelandiella propenodosa (Bartrum, 1919) Wo E
Zelandiella robinsoni (Zittel, 1864) Lwh E
Zelandiella subnodosa (Hutton, 1877) Pl (Pl-Sw?) E
COLUMBELLIDAE
Anachis (*Costoanachis*) *problematica* Laws, 1944 Po E
Antizafra cancellaria (Hutton, 1885) Wn E
Antizafra (?) *obsoleta* Fleming, 1943 Wn E
Antizafra (?) *obtusa* Fleming, 1943 Wn E
Antizafra pisanopsis (Hutton, 1885) Wn (Wn-Wc?) E
Antizafra (?) *speighti* (Marwick, 1924) Wn E
Antizafra (?) *wairarapa* King, 1933 Tt E
Aoteatilia substriata (Suter, 1899) R (Wq-R) E
Bastropia mackayi (Suter, 1917) Ab? (Ab-Ak) E
Liratilia angulata (Suter, 1908) R (Wc?-R) E
Liratilia compta Powell, 1930 R (Wq-R) E
Liratilia conquisita (Suter, 1907) R (Wc-R) E
Liratilia pulchella Maxwell, 1992 Ak E
Macrozafra (?) *formosa* Marwick, 1943 Pl E
Macrozafra nodicincta (Suter, 1899) R (Wq-R) E
Macrozafra pliocenica Fleming, 1943 Wn E
Mitrella inconspicua P. Marshall, 1918 Po-Pl (Lw-Pl) E
Paxula leptalea (Suter, 1908) R (Wn-R) E
Paxula transitans (Murdoch, 1905) R (Wc?-R) E
Retizafra toreuma Maxwell, 1988 Sw E
Zafra impedita Laws, 1940 Wm (Wp?-Wc?) E
Zafra opihiensis Laws, 1933 Pl E
Zemitrella choava (Reeve, 1859) R (Wn-R) E
Zemitrella contigua Powell, 1934 Wq E
Zemitrella elongata Beu, 1970 Wm E
Zemitrella haroldi Laws, 1935 Pl E
Zemitrella mahoenuica Laws, 1935 Po E
Zemitrella pseudomarginata (Suter, 1908) R (Wq-R) E
Zemitrella rosea (Hutton, 1873) R (Wn?-R) E
Zemitrella stephanophora (Suter, 1908) R (Wn?-R) E
Zemitrella subsuturalis Fleming, 1943 Wn E
Zemitrella sulcata (Hutton, 1873) R (Wn-R) E
Zemitrella websteri (Suter, 1913) R (Wm?-R) E
COSTELLARIIDAE
Austromitra ambulacrum (Marwick, 1926) Tt E
Austromitra angulata (Suter, 1908) R (Wc?-R) E
Austromitra planata (Hutton, 1885) Wc (Wm?-Wc) E
Austromitra rubiginosa (Hutton, 1873) R (Wn-R) E
Costellaria (?) *caudata* (Marwick, 1931) Wo E
Costellaria elatior (Finlay, 1924) Sc E
Costellaria etremoides (Finlay, 1924) Pl E
Costellaria eusulcata (Finlay, 1924) Pl E
Costellaria neozelanica (Laws, 1939) Po E
FASCIOLARIIDAE
Falsicolus allani Finlay, 1930 Ld E
Falsicolus kaiparaensis (Suter, 1917) Po-Pl (Po-Pl) E
Falsicolus obruta Finlay, 1930 Ak E
Falsicolus teuriensis Fleming, 1943 Sl E
Fractolatirus (?) *optatus* (P. Marshall & Murdoch, 1923) Ak E
Fusinus altus P. Marshall, 1919 Ab E
Fusinus bensoni Allan, 1926 Ab E
Fusinus eoaffinis (Finlay, 1930) Pl E
Fusinus excellens (Finlay, 1930) Sc E
Fusinus levatus Finlay, 1930 Lw (Ld-Po) E
Fusinus orientalis Marwick, 1931 Tk E
Fusinus semilevigatus (Laws, 1932) Pl E
Fusinus solidus Suter, 1917 Ak E
Fusinus tangituensis (Marwick, 1926) Tt (Sw-Tt) E
Fusinus waihaoicus Laws, 1935 Ak E
Gemmocolus ectypa (Marwick, 1931) Sl E
Gemmocolus gemmata (Powell, 1935 Pl E
Glaphyrina caudata (Quoy & Gaimard, 1833) R (Wc?-R) E
Glaphyrina excelsa (Suter, 1917) Pl E
Glaphyrina paucispiralis Beu, 1967 Wn (Wm?-Wn) E
Glaphyrina progenitor Finlay, 1926 Wc E
Glaphyrina plicata Powell, 1929 R (Wn-R) E
Latirogona ornata (P. Marshall, 1918) Pl E
Latirulus (?) *fraudator* Maxwell, 1992 Ak E
'*Pleia*' *cryptocarinata* Dell, 1956 R (Wm?-R) E
'*Pleia*' *otaioensis* Finlay, 1930 Po (Lw?-Po) E
Taron dubius (Hutton, 1878) R (Wc-R) E
Taron scottae (Marwick, 1965) Wo E

HARPIDAE
Eocithara (*Marwickara*) *waihaoensis* Laws, 1935 Ab E
Morum (*Oniscidia*) *finlayi* (Laws, 1932) Sl (Po? Pl-Sl) E
Morum (*O.*) *harpaforme* Powell & Bartrum, 1929 Po E
MARGINELLIDAE
MARGINELLINAE
Alaginella fraudulenta (Suter, 1917) Pl E
Alaginella labinensis (Maxwell, 1988) Sw E
Alaginella parvisinus (Maxwell, 1992) Ak E
Alaginella totangiensis (Marwick, 1931) Tt? E ¶
Alaginella waikohuensis (Marwick, 1931) Tt E
Dentimargo amoenus (Suter, 1908) R (Wc-R) E
Dentimargo aveniformis (P. Marshall, 1919) Ab (Ab-Ak) E ¶
Dentimargo cairomus (Brookes, 1924 R (Wq-R) E
Dentimargo (?) *floralis* (Marwick, 1928) Wp E ¶
Dentimargo fusula (Murdoch & Suter, 1906) R (Wc?-R) E
Dentimargo hakataramea (Maxwell, 1969) Lw E ¶
Dentimargo subfusula (Powell, 1932) R (Wn-R) E
Hiwia amplificata (Marwick, 1931) Pl-Sc (Po-Tt) E
Mesoginella (?) *coxi* (Marwick, 1928) Wp E ¶
Mesoginella harrisi (Cossmann, 1899) Pl (Lw-Pl) E ¶
Mesoginella hesterna (Bartrum & Powell, 1928) Wo E ¶
Mesoginella megalabra Beu, 1979 Wn E
Mesoginella pygmaea (Sowerby, 1846) R (Wn-R)
Protoginella (?) *bellensis* (Beu, 1970) Tt (Tt-Wo?) E
Protoginella bembix Maxwell, 1988 Sw E
Protoginella cenodoxa Maxwell, 1992 Ak E
Protoginella conica (Harris, 1897) Pl E
Protoginella (?) *opoitia* (Marwick, 1965) Wo (Wo-Wn?) E
Protoginella (?) *whitecliffensis* (Marwick, 1931) Tt E
Serrata albescens (Hutton, 1873) R (Wq-R) E
Serrata flemingi Maxwell, 1988 Sw E
Serrata hectori (Kirk, 1882) Wn E ¶
Serrata kirki (Marwick, 1924) Wn E
Serrata maoriana (Powell, 1932) R (Wq?-R) E
Serrata marwicki (Finlay, 1927) Wn E ¶
Serrata mustellina (Angas, 1871) R (Wq-R)
MITRIDAE
Clifdenia (?) *calcar* (P. Marshall, 1918) Po-Pl E ¶
Clifdenia inflata Grant-Mackie, 1965 Pl E
Clifdenia turneri Laws, 1932 Pl (Pl-Sl) E
Eumitra nitens (P. Marshall, 1918) Po-Pl (Lw-Pl) E
Eumitra waitemataensis (Powell & Bartrum, 1929) Po E
Fusimitra hectori (Hutton, 1905) Ab? (Ab-Ak) E
MURICIDAE
CORALLIOPHILINAE
Coralliophila bulbiformis (Conrad, 1837) R (Wn-R)
Coralliophila kaiparaensis (P. Marshall, 1918) Po-Pl E
Coralliophila lividorupis (Laws, 1935) Po E
Coralliophila sertata (Hedley, 1903) R (Wq-R)
Coralliophila turneri Laws, 1941 Po-Pl E
HAUSTRINAE
Bedeva bartrumi (Marwick, 1948) Wp (Wp-Wc?) E
Cronia tengawaica Laws, 1933 Pl E
Haustrum haustorium (Gmelin, 1791) R (Wq-R) E
Lepsiella intermedia Powell & Bartrum, 1929 Po (Lw-Po) E
Lepsiella maxima Powell & Bartrum, 1929 Po (Po-Tk?) E
Lepsiella scobina (Quoy & Gaimard, 1833) R (Wn-R) E
Lepsithais lacunosus (Bruguiere, 1789) R (Wn-R) E
MURICINAE
Chicoreus (*Triplex*) *komiticus* (Suter, 1917) Pl? E
Chicoreus (*T.*) *lawsi* (Maxwell, 1971) Po? E
Chicoreus (*T.*) *syngenes* Finlay, 1930 Sc (Pl-Sc) E
Poirieria delli Maxwell, 1971 Pl (Lw?-Pl) E
Poirieria denticulifera Maxwell, 1971 Ak (Ab-Ak, Lwh?) E
Poirieria parva Maxwell, 1971 Pl (Po-Pl) E
Poirieria primigena Finlay, 1930 Lw (Ld-Wo) E
Poirieria syrinx B. Marshall & Houart, 1995 R (Wn-R) E
Poirieria zelandica (Quoy & Gaimard, 1833) R (Wo-R) E
Ponderia zealandica (Hutton, 1873) Wc (Wc-R) E
Prototyphis allani (Maxwell, 1971) Po (Lw?-Po) E
Prototyphis awamoanus (Finlay, 1930) Pl E
Prototyphis powelli (Fleming, 1962) Wc (Wn?-R?) E
Prototyphis tahuensis (Maxwell, 1971) Ak E
Pterynotus flemingi Beu, 1967 Wm? (Wm?-R) E
Pterynotus kaiparaensis Fleming, 1962 Po? (Po) E
Pterynotus laetificus Finlay, 1930 Sw (Lw-Tk) E
Pterynotus waiareka (Beu, 1970) Ak E
E
Uttleya arcana Marwick, 1934 Wc (Wn-R) E
MURICOPSINAE
Murexsul clifdenensis Finlay, 1930 Sc E
Murexsul dilucidus Marwick, 1931 Wo E
Murexsul echinophorus Powell & Bartrum, 1929 Po E
Murexsul espinosus (Hutton, 1886) Wn (Wm-Wn) E
Murexsul mariae Finlay, 1930 R (Wq-R) E
Murexsul marwicki Maxwell, 1971 Pl (Pl-Sw?) E
Murexsul octogonus (Quoy & Gaimard, 1833) R (Wn-R) E
Murexsul praegressus Finlay, 1930 Pl E
Murexsul pregenitor Laws, 1935 Pl E
Murexsul proavita Laws, 1935 Pl E
Murexsul scobina Finlay, 1930 Pl E
'TROPHONINAE'
Comptella coronata Dell, 1956 R (Wn-R) E
Comptella crassa Beu, 1967 Wm-Wn (Wm?-R?) E
Comptella curta (Murdoch, 1905) R (Wq-R) E
Comptella devia (Suter, 1908) R (Wc?-R) E
Pagodula delli (Beu, 1970) Wm-Wn (Wm?-R?) E
Pagodula vegrandis P. Marshall & Murdoch, 1923 Pl E
Pagodula waitemataensis (Powell & Bartrum, 1929) Po E
Paratrophon cheesemani (Hutton, 1882) R (Wm-R) E
Paratrophon exsculptus Powell, 1933 R (Wq-R) E
Paratrophon patens (Hombron & Jacquinot, 1854) R (Wp?, Wn-R) E
Paratrophon quoyi (Reeve, 1846) R (Wn-R) E
Peritrophon decoratus Marwick, 1931 Sc E
Terefundus cuvierensis (Mestayer, 1919) R (Wq-R) E
Terefundus lamelliferus Maxwell, 1988 Sw E
Terefundus quadricinctus (Suter, 1908) R (Wc?-R) E

'Terefundus' murdochi (Marwick, 1924) Wn (Wm?-R) E
Trophon (?) *munitus* Marwick, 1934 Wm
Vesanula chaskanon Finlay, 1926 Pl E
Vesanula tegens (Hutton, 1877) Pl E
Xymene ambiguus (Philippi, 1844) R (Wm-R) E
Xymene aucklandicus (E.A. Smith, 1902) R (Wm-R) E
Xymene bonneti (Cossmann, 1903) Wc (Wn-Wc) E
Xymene caudatinus (Finlay, 1930) R (Wm-R) E
Xymene convexus (Suter, 1909) Wn (Wn-R) E
Xymene expansus (Hutton, 1883) Wc (Wn-Wc) E
Xymene huttoni (Murdoch, 1900) Wc (Wc-R) E
Xymene lassus (Marwick, 1928) Wp (Pl-Wn) E
Xymene lepida (Suter, 1917) Pl E
Xymene moniliferus (Hutton, 1885) Wo? (Sw-Wn) E
Xymene murrayae (Fleming, 1943) Wn E
Xymene plebeius (Hutton, 1873) R Wc-R) E
Xymene traversi (Hutton, 1873) R (Wn?-R) E
Xymenella apipagoda (Ponder, 1972) Ak E
Xymenella asperula Powell & Bartrum, 1929 Po E
Xymenella chattonensis (Ponder, 1972) Ld (Ld-Pl) E
Xymenella comes (Maxwell, 1992) Ak E
Xymenella inambitiosa Marwick, 1929 Ld E
Xymenella minutissima (Suter, 1917) Pl E
Xymenella perornata Marwick, 1931 Sl? E
Xymenella protocarinata Laws, 1941 Po (Po-Sw?) E
Xymenella pusilla (Suter, 1907) R Wm? Wn-R) E
RAPANINAE
Agnewia kempae Powell, 1934 Wq E
Agnewia tritoniformis (Blainville, 1833) R (Wq-R)
Dicathais orbita (Gmelin, 1791) R (Wo-R)
Edithais pehuensis (Marwick, 1926) Tt E
Neothais lassa Marwick, 1948 Wp E
TYPHINAE
Hirtotyphis aoteanus (Vella, 1961) Tt E
Hirtotyphis panoplus (Maxwell, 1971) Lw E
Levityphis tepungai (Fleming, 1943) Wp (Wo-Wp) E
Rugotyphis francescae (Finlay, 1924) Pl E
Rugotyphis secundus Vella, 1961 Pl (Pl-Sl?) E
Rugotyphis vellai (Maxwell, 1971) Pl E
Typhis aculeatus Vella, 1961 Sc? (Pl-Sl) E
Typhis adventus Vella, 1961 Lw (Ld-Po) E
Typhis chattonensis Maxwell, 1971 Ld E
Typhis clifdenensis Vella, 1961 Pl E
Typhis hebetatus Hutton, 1877 Pl (Lw-Pl) E
Typhis planus Vella, 1961 Pl E
NASSARIIDAE
Alectrion aoteanus (Finlay, 1926) R (Wq-R) E
Hima karoroensis (Maxwell, 1988) Sw E
Hima separabilis Laws, 1939 Po (Po-Pl?) E
Hima socialis (Hutton, 1886) Pl E
Nassarius (s.l.) *latecostatus* (Suter, 1917) Pl E

OLIVIDAE
ANCILLINAE
Alocospira cuppedia (Olson, 1956) Lw E
Alocospira electa (Marwick, 1929) Ld E
Alocospira hebera (Hutton, 1873) Pl E
Alocospira komata (Maxwell, 1992) Ak E
Alocospira paeroa (Fleming, 1943) Wo (Wo-Wp?) E
Alocospira subhebera (Marwick, 1926) Tt (Tt-Wp?) E
Amalda (*Baryspira*) *australis* (Sowerby, 1830) R (Wn-R) E
Amalda (*B.*) *depressa* (Sowerby, 1859) R (Wn-R) E
Amalda (*B.*) *gulosa* (Fleming, 1943) Wo E
Amalda (*B.*) *macbeathi* (Vella, 1954) Tt E
Amalda (*B.*) *mucronata* (Sowerby, 1830) R (Wo-R) E
Amalda (*B.*) *olsoni* Beu, 1970 Wn E
Amalda (*B.*) *opima* (Marwick, 1924) Wn E
Amalda (*B.*) *oraria* (Olson, 1956) Wp E
Amalda (*B.*) *ovalis* Beu, 1970 Pl? E
Amalda (*B.*) *platycephala* (Powell & Bartrum, 1929) Po E
Amalda (*B.*) *pristina* (Olson, 1956) Ld E
Amalda (*B.*) *robusta* (Marwick, 1924) Pl (Ld? Lw-Pl) E
Amalda (*B.*) *tirangiensis* (Marwick, 1926) Tt E
Amalda (*B.*) *tholiculus* (Marwick, 1931) Sl (Sl-Tk?) E
Amalda (*B.*) *waikaiaensis* (Finlay, 1926) Ld E
Amalda (*Spinaspira*) *cincta* (P. Marshall, 1918) Po-Pl E
Amalda (*S.*) *cingulata* (Olson, 1956) Pl (Pl-Sl) E
Amalda (*S.*) *pakaurangiensis* (Olson, 1956) Po-Pl (Po-Pl) E
Amalda (*S.*) *spinigera* (P. Marshall, 1918) Po-Pl (Po-Pl) E
Amalda (*S.*) *stortha* (Olson, 1956) Pl (Pl-Sw) E
Ancillina kakano Maxwell, 1978 Ab E
Ancillina wellmani Maxwell, 1978 Sc E
Ancillus olsoni Maxwell, 1992 Ak E
Gracilispira allani (Olson, 1956) Dw-Dm E
Gracilispira brevicula (Marwick, 1931) Sc E
Gracilispira exsputa (Bartrum & Powell, 1928) Wo E
Gracilispira morgani (Allan, 1926) Ak (Ab-Ar) E
Gracilispira novaezelandiae (Sowerby, 1859) R (Wo-R) E
Gracilispira rimuensis (Olson, 1956) Wm E
Gracilispira wairarapaensis (Olson, 1956) Tt E
Micrancilla gigartoides (Olson, 1956) Pl E
Micrancilla granum (Maxwell, 1992) Ak E
OLIVINAE
Lamprodomina neozelanica (Hutton, 1885) Wp (Sl-Wn) E SPEIGHTIIDAE
Speightia spinosa (Suter, 1917) Ab E
TAIOMIDAE
Taioma tricarinata Finlay & Marwick, 1937 Dwl E
TURBINELLIDAE
COLUMBARIINAE
Columbarium (s.l.) *pataka* Maxwell, 1978 Ab E
Columbarium vulneratum (Finlay & Marwick, 1937) Dwl E
Coluzea climacota (Suter, 1917) Ak? (Ab-Ak) E
Coluzea dentata (Hutton, 1877) Pl (Po-Pl) E
Coluzea kiosk Finlay, 1930 Pl (Pl-Sc) E
Coluzea macrior Finlay, 1930 Pl E
Coluzea maoria (P. Marshall & Murdoch, 1919) Ld E
Coluzea mariae Powell, 1952 R (Wp-R) E
Coluzea paucispinosa Finlay, 1930 Lw E
Coluzea spectabilis Powell, 1931 Wp (Wp-Wm) E
Coluzea spiralis (A. Adams, 1856) R (Wn? Wc-R) E
Lepidocolus corrugata (Marshall, 1918) Pl? (Po-Pl) E
Lepidocolus inurbana (Laws, 1932) Sc (Pl-Sl) E
PTYCHATRACTINAE
Egestas fenestrata (Suter, 1917) Pl E
Egestas (?) *tricordata* (Beu, 1970) Tt E
Exilia crassicostata Suter, 1917 Ak? E
Exilia dalli Suter, 1907 Po (Lw-Po) E
Exilia hampdenensis (Marwick, 1942) Ab E
Exilia leachi (Marwick, 1931) Sl E
Exilia nodulifera (Marwick, 1931) Sl E
Exilia vixcostata (Finlay & Marwick, 1937) Dwl E
Exilia waihaoensis Suter, 1917 Ak E
Exilia wellmani Maxwell, 1988 Sw E
Exilia (?) *zelandica* (P. Marshall, 1918) Po-Pl E
Metzgeria problematica (Ponder, 1968) R (Wn?-R) E
Paleopsephaea neozelanica Finlay & Marwick, 1937 Dwl E
STREPSIDURINAE
Fascioplex (?) *browni* (Marwick, 1942) Ab E
Fascioplex liraecostatus (Suter, 1917) Ab E
Fascioplex neozelanicus (Suter, 1917) Ab E
TUDICLINAE
Fyfea lirata Finlay & Marwick, 1937 Dwl E
Fyfea tuberculata Finlay & Marwick, 1937 Dwl E
Microfulgur longirostris (P. Marshall, 1917) Dwl E
Pyropsis (?) *zelandica* (P. Marshall, 1917) Dwl E
Pyropsis zinsmeisteri Stilwell, 1993 Dwl E
Tudiclana simulator Finlay & Marwick, 1937 Dwl E
VOLUTIDAE
ATHLETINAE
Athleta lata (Marwick, 1926) Dw-Dm E
Athleta marwicki Maxwell, 2003 Ab E
Athleta mimica Maxwell, 2003 Ab E
Athleta necopinata Suter, 1917 Ab E
Athleta taikoensis Maxwell, 2003 Dp (Dm?, Dp-Ab?) E
CALLIOTECTINAE
Calliotectum waitaraense (Marwick, 1926) Tt (Sc?-Tt) E
VOLUTINAE
Lyria zelandica Finlay, 1924 Pl E
ZIDONIINAE
Alcithoe (*Alcithoe*) *arabica* (Gmelin, 1791) R (Wn-R) E
Alcithoe (*A.*) *arabicula* Marwick, 1926 Wo E
Alcithoe (*A.*) *bartrumi* (King, 1933) Wn (Wm-Wn) E
Alcithoe (*A.*) *bulbus* (Marwick, 1931) Wo (Wo-Wp) E
Alcithoe (*A.*) *callaghani* (King, 1931) Tk? E
Alcithoe (*A.*) *chesteri* (Marwick, 1931) Sl? E
Alcithoe (*A.*) *cylindrica* Marwick, 1926 Pl E
Alcithoe (*A.*) *dilatata* Marwick, 1926 Tt E
Alcithoe (*A.*) *familiaris* Marwick, 1926 Pl E
Alcithoe (*A.*) *firma* (Marwick, 1926) Pl E
Alcithoe (*A.*) *haweraensis* Marwick, 1926 Wp (Wo-Wp) E
Alcithoe (*A.*) *hurupiensis* Marwick, 1926 Tt E
Alcithoe (*A.*) *huttoni* (Suter, 1914) Pl E
Alcithoe (*A.*) *irregularis* Marwick, 1926 Tk? E
Alcithoe (*A.*) *marlburiana* King, 1934 Tk E
Alcithoe (*A.*) *oliveri* Marwick, 1926 Sw E
Alcithoe (*A.*) *parva* Marwick, 1926 Wo E
Alcithoe (*A.*) *pinguella* (Marwick, 1931) Tk? E
Alcithoe (*A.*) *powelli* (Laws, 1936) Wo E
Alcithoe (*A.*) *regularis* Finlay, 1926 Sw E
Alcithoe (*A.*) *renwicki* (Marwick, 1928) Wp E
Alcithoe (*A.*) *speighti* (Marwick, 1926) Pl E
Alcithoe (*A.*) *turrita* (Suter, 1917) Po E
Alcithoe (*A.*) *uptonensis* King, 1934 Tk E
Alcithoe (*A.*) *washburnei* (Marwick, 1931) Sl (Sl-Tt) E
Alcithoe (*A.*) *whakinoensis* Marwick, 1926 Wp E
Alcithoe (*Leporemax*) *bathgatei* Finlay, 1926 Pl E
Alcithoe (*L.*) *bacchanalia* King, 1934 Tk (Tt-Tk) E
Alcithoe (*L.*) *brevis* Marwick, 1926 Wn (Wm?-Wn) E
Alcithoe (*L.*) *concisa* Marwick, 1931 Wo E
Alcithoe (*L.*) *dyscrita* Finlay, 1926 Sc E
Alcithoe (*L.*) *exigua* Marwick, 1926 Wn E
Alcithoe (*L.*) *finlayi* Marwick, 1926 Pl E
Alcithoe (*L.*) *fusus* (Quoy & Gaimard, 1833) R (Wn?-R) E
Alcithoe (*L.*) *gatesi* Marwick, 1926 Wp (Wp-Wm?) E
Alcithoe (*L.*) *gravicostata* King, 1931 Tk E
Alcithoe (*L.*) *hedleyi* (Murdoch & Suter, 1906) R (Wc?-R) E
Alcithoe (*L.*) *lepida* Marwick, 1926 Pl (Po-Pl) E
Alcithoe (*Leporemax?*) *murdochi* (Marwick, 1926) Pl E
Alcithoe (*L.*) *nodulifera* (Laws, 1935) Ld E
Alcithoe (*L.*) *phymatias* Finlay, 1926 Pl (Pl-Sc?) E
Alcithoe (*L.*) *resolutionis* Fleming, 1954 Wn? E
Alcithoe (*L.*) *rugosa* (Marwick, 1926) Tt E
Alcithoe (*L.*) *scitula* (Marwick, 1926) Pl E
Alcithoe (*L.*) *scopi* Marwick, 1926 Pl E
Alcithoe (*L.*) *solida* Marwick, 1926 Tt (Tt-Tk) E
Mauira angusta (Suter, 1917) Ab E
Mauira biconica (Suter, 1917) Ab E
Mauira maoriana (Suter, 1917) Ab E
Mauira waihaoensis (Laws, 1935) Ab E
Mauithoe insignis (Marwick, 1926) Sw E
Mauithoe strongi (Marwick, 1931) Tt E
Metamelon clifdenensis (Finlay, 1926) Pl (Pl-Sl) E
Metamelon inermis (Finlay, 1926) Lw (Ld?-Lw) E
Metamelon informis Laws, 1932 Pl E
Metamelon marshalli Marwick, 1926 Ld E
Metamelon minima Marwick, 1926 Pl (Lw-Pl) E
Metamelon patruelis Laws, 1932 Pl E
Metamelon prominima Laws, 1932 Pl E
Metamelon reverta (Finlay, 1926) Pl E
Pachymelon amoriaformis (Marwick, 1926) Pl E

Provocator mirabilis (Finlay, 1926) R (Wm?-R) E
Spinomelon (?) *aculeata* (Hutton, 1885) D? E
Spinomelon allani (Marwick, 1926) Ak E
Spinomelon awaterensis King, 1934 Wp E
Spinomelon benitens (Finlay, 1926) Lw (Lw-Pl) E
Spinomelon confusa (Marwick, 1926) Ab E
Spinomelon elimatus Marwick, 1931 Wo E
Spinomelon enysi Marwick, 1926 Ld E
Spinomelon formosa (Laws, 1935) Ar E
Spinomelon henryi Laws, 1933 Pl E
Spinomelon kingi Marwick, 1965 Wp E
Spinomelon mira Marwick, 1926 Po (Po-Pl) E
Spinomelon parki (Suter, 1907) Po (Po-Pl) E
Spinomelon residua (Finlay, 1926) Lw E
Spinomelon (?) *superstes* (Marwick, 1926) Pl E
Spinomelon suteri (Marwick, 1926) Ab E
Spinomelon thomsoni (Marwick, 1926) Ab E
Teremelon cognata (Finlay, 1926) Pl E
Teremelon elegantissima (Suter, 1917) Pl E
Teremelon knoxi Dell, 1956 R (Tt?-R) E
Teremelon pretiosa (Finlay, 1926) Pl (Pl-Sc) E
Teremelon striata (Laws, 1935) Ab E
Teremelon tumidior (Finlay, 1926) Lw (Ld-Pl) E
Teremelon waitakiensis (Marwick, 1926) Ld E
VOLUTOMITRIDAE
Microvoluta balteata (Marwick, 1931) Pl-Sc? E
Microvoluta fracta (Marwick, 1926) Tt E
Microvoluta marginata (Hutton, 1885) Wc (Wo-R) E
Microvoluta marwicki (Vella, 1954) Tt E
Microvoluta nodulata Maxwell, 1988 Sw E
Microvoluta wainuioruensis (Vella, 1954) Tt E
Microvoluta vetusta Laws, 1936 Wo E
Peculator clifdenensis (Finlay, 1930) Sl E
Peculator hedleyi (Murdoch, 1905) R (Wo-R) E
Peculator paucinoda (Finlay, 1930) Po E
Peculator plicatellus (P. Marshall & Murdoch, 1923) Ak E
Peculator pliciferus (Marwick, 1928) Wp E
Peculator pukeuriensis (Finlay, 1930) Pl E
Proximitra apicalis (Hutton, 1873) Pl E
Proximitra costulosa Marwick, 1965 Wo E
Proximitra enavata Marwick, 1931 Wo E
Proximitra enysi (Hutton, 1873) Ld E
Proximitra parki (Allan, 1926) Ak E
Proximitra partinoda Finlay, 1930 Po E
Proximitra rutidoloma (Suter, 1917) Po (Po-Pl) E
Volutomitra amplexa (Finlay, 1930) Ab E
Volutomitra banksi (Dell, 1951) R (Sw-R) E
Volutomitra incisa (Marwick, 1942) Ab E
Volutomitra inconspicua (Hutton, 1885) Ak E
Volutomitra lornensis (Marwick, 1926) Ak E
Volutomitra othoniana (Finlay, 1924) Pl E
Volutomitra transilis (Finlay, 1930) Lw E
CANCELLARIOIDEA
CANCELLARIIDAE
Admetinae
Antepepta nasuta Finlay & Marwick, 1937 Dwl E
Bonellitia (*Admetula*) *hampdenensis* P. Marshall & Murdoch, 1923 Ab E
Bonellitia (*A.*) *ovalis* (P. Marshall, 1918) Po-Pl E
Bonellitia (*Bonellitia*) *fundata* Marwick, 1931 Wo (Wo-Wn) E
Bonellitia (*B.*) *lacunosa* (Hutton, 1885) Wn E
Coptostomella pupa Finlay & Marwick, 1937 Dwl E
Cancellariinae
Aphera scopalveus Finlay, 1926 Pl E
Brocchinia anomala (P. Marshall & Murdoch, 1920) Ab E
Brocchinia culminata (Beu, 1970) Tt E
Brocchinia explicata (Laws, 1935) Po (Po-Pl?) E
Brocchinia finlayi (Marwick, 1931) Pl E
Brocchinia lamellifera Maxwell, 1992 Ak E
Brocchinia nucleosa (Marwick, 1931) Sl (Sl-Sw?) E
Brocchinia petiti Maxwell, 1992 Ak E
Brocchinia serrata (Laws, 1935) Po E
Brocchinia tuberculifera (Laws, 1935) Sl (Sc-Sl) E
Fusiaphera jenkinsi Maxwell, 1992 Ak E
Fusiaphera marshalli (Allan, 1926) Ak E
Fusiaphera naroniformis (Finlay, 1930) Pl E
Inglisella ampla Laws, 1935 Po (Po-Pl) E
Inglisella awakinoensis Laws, 1935 Po E
Inglisella cincta (Hutton, 1885) Pl E
Inglisella disticha Marwick, 1965 Wo E
Inglisella hirta Laws, 1936 Wo E
Inglisella jocosa Maxwell, 1988 Sw E
Inglisella laterinensis Maxwell, 1988 Sw E
Inglisella marshalli (Vignal, 1921) Ab E
Inglisella parva Laws, 1935 Pl (Pl-Sw) E
Inglisella pukeuriensis (Suter, 1917) Pl E
Inglisella (?) *staffordensis* Maxwell, 1992 Ak E
'*Inglisella*' *allophyla* Maxwell, 1988 Sw E
'*Inglisella*' *delli* (Beu, 1970) Tt E
'*Inglisella*' *marwicki* (Dell, 1956) R (Wm?-R) E
'*Inglisella*' *ventricosa* Maxwell, 1992 Ak E
Maorivetia brevirostris (Hutton, 1877) Pl E
Oamaruia cancellosa Marwick, 1965 Wo E
Oamaruia gemmata Maxwell, 1969 Ld E
Oamaruia suteri (P. Marshall & Murdoch, 1920) Pl E
Plesiocerithium salax Maxwell, 1992 Ak E
Pristimerica dolioides Finlay & Marwick, 1937 Dwl E
Scalptia (?) *christiei* (Finlay, 1924) Ld E
Scalptia haweraensis (Laws, 1940) Wp E
Scalptia kaiparaensis (Laws, 1939) Po E
Scalptia maoria (P. Marshall & Murdoch, 1921) Pl E
Scalptia pukeuriensis (Finlay, 1930) Pl E
Scalptia (?) *waikaiaensis* (Finlay, 1924) Ld E
Tatara flemingi Beu & Maxwell, 1987 Lwh (Ar-Lwh) E
Tatara pahiensis (P. Marshall & Murdoch, 1921) Ab E
Tatara revoluta (Finlay, 1924) Ak E
Tatara transenna (Suter, 1917) Lw (Lw-Sc?) E
Waipaoa affectata Marwick, 1931 Sl? E
Waipaoa cristata (Marwick, 1926) Tt E
Waipaoa grata Marwick, 1931 Pl-Sc E
Zeadmete araeostyla (Maxwell, 1988) Sw E
Zeadmete kumeroa Fleming, 1943 Wn E
Zeadmete miocenica Finlay, 1930 Pl E
Zeadmete nodus (Finlay, 1930) Lw E
Zeadmete pliocenica Finlay, 1930 Wc E
Zeadmete teres (Laws, 1940) Wn E
Zeadmete trailli (Hutton, 1873) R (Wq-R) E
'*Zeadmete*' *concava* (Marwick, 1931) Wo E
'*Zeadmete*' *elegantula* (Beu, 1970) Tt E
'*Zeadmete*' *gibbera* (Marwick, 1931) Sl E
'*Zeadmete*' *major* (Marwick, 1965) Wo E
Plesiotritoninae
Kapuatriton kaitarus Beu & Maxwell, 1987 Ak E
Turehua crassispiralis Beu & Maxwell, 1987 Ak E
Turehua dubia (P. Marshall, 1918) Ab E
Turehua lividorupis Beu & Maxwell, 1987 Po (Lw-Po) E
Turehua ponscuspidis Beu & Maxwell, 1987 Ar E
Turehua tenuispiralis Beu & Maxwell, 1987 Ld E
CONOIDEA
CONIDAE
Clathurellinae
Awateria defossa Powell, 1942 Tt E
Awateria echinata Powell, 1942 Wo? E
Awateria evanida Suter, 1917 Wp E
Awateria karakaensis Marwick, 1931 Wo? E
Awateria marwicki Powell, 1942 Tt E
Awateria miocenica Vella, 1954 Tt E
Awateria retiolata King, 1933 Wm-Wn (Wm-R) E
Awateria streptophora Suter, 1917 Wp (Wp-Wm) E
Awateria striata Vella, 1954 Tt E
Awateria thomsoni Powell, 1942 Wp E
Awateria wairoaensis Powell, 1942 Wn E
Bathytoma (*Bathytoma*) *bartrumi* Laws, 1939 Po (Po-Pl) E
Bathytoma (*B.*) *coweorum* Beu, 1970 Tt E
Bathytoma (*B.*) *finlayi* Laws, 1939 Sc (Pl-Sl) E
Bathytoma (*B.*) *haasti* (Hutton, 1877) Pl (Po-Pl) E
Bathytoma (*B.*) *hokianga* Laws, 1947 Po E
Bathytoma (*B.*) *mitchelsoni* Powell, 1935 Pl E
Bathytoma (*B.*) *wairarapaensis* Vella, 1954 Sc-Sl E
Bathytoma (*Micantapex*) *discors* Powell, 1942 Wn (Tt?-Wn) E
Bathytoma (*M.*) *filaris* (Marwick, 1931) Sl (Sl-Tt?) E
Bathytoma (*M.*) *fortinodosa* (Marwick, 1931) Wo (Tt-Wo) E
Bathytoma (*M.*) *hawera* Laws, 1940 Wp E
Bathytoma (*M.*) *media* (Marwick, 1931) Pl (Pl-Tk) E
Bathytoma (*M.*) *murdochi* (Finlay, 1930) Wn (Wm?-Wn) E
Bathytoma (*M.*) *ngatapa* (Marwick, 1931) Sl (Pl-Tk?) E
Bathytoma (*M.*) *paucispiralis* (Powell, 1942) Wn E
Bathytoma (*M.*) *pergracilis* (Marwick, 1931) Pl-Sc (Pl ?-Sl) E
Bathytoma (*M.*) *praecisa* (Marwick, 1931) Pl-Sc (Pl ?-Sc) E
Bathytoma (*M.*) *prior* (Vella, 1954) Wn E
Bathytoma (*M.*) *proavita* (Powell, 1942) Wp E
Bathytoma (*M.*) *tenuineta* (Marwick, 1931) Tt (Tt-Wo) E
Borsonella sinelirata Marwick, 1931 Tt E
Borsonia clifdenensis Powell, 1942 Sc E
Borsonia crassiaxialis Maxwell, 1992 Ak E
Borsonia mitromorphoides Suter, 1917 Ld E
Borsonia zelandica (P. Marshall, 1919) Ab E
Cordieria huttoni Finlay, 1930 Ak E
Cordieria rudis (Hutton, 1885) Ak E
Drilliola annosa (Powell, 1942) Lw (Ld-Lw) E ¶
Drilliola maoria (Powell, 1942) Sl (Sl-Sw) E ¶
Drilliola mangaoparia (Beu, 1970) Tt E ¶
Drilliola pukeuriensis (Powell, 1942) Pl E ¶
Drilliola rupta (Marwick, 1931) Sl E ¶
Drilliola sola (Powell, 1942) Po (Po-Pl?) E ¶
Etrema kaipara Powell, 1942 Pl E
Etremopsis aequisculpta Powell, 1942 Pl E
Etremopsis carinapex Powell, 1942 Pl E
Etremopsis clifdenica Powell, 1942 Sc (Sc-Sw) E
Etremopsis compta Powell, 1942 Sc-Sl E
Etremopsis disposita Laws, 1944 Pl (Po-Pl) E
Etremopsis duospiralis Laws, 1944 Pl (Po-Pl) E
Etremopsis elata Powell, 1942 Pl E
Etremopsis erecta Powell, 1942 Sc (Sc-Sw) E
Etremopsis haroldi Powell, 1942 Pl E
Etremopsis imperfecta (Suter, 1917) Pl E
Etremopsis latiapex Powell, 1942 Pl E
Etremopsis oamarutica Powell, 1942 Pl E
Etremopsis quadrispiralis Powell, 1942 Pl E
Itia clatrata Marwick, 1931 Sl E
Mangaoparia powelli Vella, 1954 Tt E
Maoricrassus carinatus Vella, 1954 Tt E
Microdrillia pakaurangia Powell, 1942 Po E
Mitrellatoma angustata (Hutton, 1885) Wn E
Mitrolumna brachyspira (Suter, 1917) Pl E
Mitrolumna formosa (Marwick, 1931) Wo E
Mitrolumna granum (Marwick, 1928) Wp E
Mitrolumna (?) *sutherlandica* (Powell, 1942) Pl E
Mitrolumna waitakiensis (Powell, 1942) Lw E
Parasyngenochilus longi Maxwell, 1992 Ak E
Phenatoma decessor Marwick, 1928 Wp E
Phenatoma lawsi Powell, 1942 Pl E
Phenatoma perlata (Suter, 1917) Pl E
Phenatoma precursor Powell, 1942 Wn (Wm-Wn) E
Phenatoma rosea (Quoy & Gaimard, 1833) R (Wm? Wn-R) E
Phenatoma zealandica (E.A. Smith, 1877) R (Wc-R) E
Scrinium blandiatum (Suter, 1917) Lw E
Scrinium callimorphum (Suter, 1917) Ld E
Scrinium finlayi Powell, 1942 Pl E
Scrinium limbatum Maxwell, 1992 Ak E
Scrinium ordinatum (Hutton, 1877) Pl E
Scrinium stirophorum (Suter, 1917) Pl E
Scrinium strongi Marwick, 1931 Tt? (Sl?-Tt) E

Scrinium thomsoni Powell, 1942 Wp E
Tomopleura (*Tomopleura*) *clifdenica* Powell, 1942 Sc E
Tomopleura (*T.*) *crassispiralis* (Marwick, 1929) Ld E
Tomopleura (*T.*) *excavata* (Hutton, 1877) Pl E
Tomopleura (*T.*) *finlayi* Powell, 1942 Pl E
Tomopleura (*T.*) *striata* (P. Marshall, 1917) Dwl E
Tomopleura (*T.*) *transenna* (Suter, 1917) Pl (Po-Pl) E
Tomopleura (*T.*) *waiauensis* Powell, 1942 Sw E
Tomopleura (*Maoritomella*) *moderata* (Marwick, 1965) Wo E
Tomopleura (*M.*) *pagodula* (Powell, 1942) Wp (Wo-Wp) E
Tomopleura (*M.*) *robusta* (Powell, 1942) Wn E
Tomopleura (*M.*) *studiosorum* (King, 1933) Wm E
Tomopleura (*M.*) *subalbula* (Murdoch, 1900) Wc (Wn-Wc) E
Tomopleura (*M.*) *torquatella* (Marwick, 1931) Wo (Wo- Wp) E
Vexithara magna Maxwell, 1969 Lw E
Vexithara nodosolirata (Suter, 1917) Po E
Vexithara vexilliformis (P. Marshall & Murdoch, 1923) Pl E
Mangelliinae
Antiguraleus abnormis (Hutton, 1885) Wn (Wm?-Wn) E
Antiguraleus deceptus Powell, 1942 Wn E
Antiguraleus (?) *depressispirus* (Beu, 1969) Wm-Wn E
Antiguraleus fusiformis Dell, 1956 R (Wn-R) E
Antiguraleus makaraensis Vella, 1954 Wn E
Antiguraleus otagoensis Powell, 1942 R (Wc-R) E
Antiguraleus rishworthi Vella, 1954 Tt E
Antiguraleus rossianus Powell, 1942 R (Wn-R) E
Antiguraleus subtruncatus Powell, 1942 R (Wn-R) E
Antiguraleus taranakiensis (Marwick, 1926) Tt E
Fusiguraleus angustatus (Powell, 1942) Sw E
Fusiguraleus exsculptus (Powell, 1942) Sc E
Fusiguraleus flexicostatus (Powell, 1942) Po E
Fusiguraleus gracilentus (Suter, 1917) Pl E
Fusiguraleus gracilicostatus (Beu, 1979) Wn E
Fusiguraleus granulatus (Powell, 1942) Pl E
Fusiguraleus lawsi (Powell, 1942) Pl E
Fusiguraleus leptosoma (Hutton, 1885) Pl E
Fusiguraleus major (Powell, 1942) Pl E
Fusiguraleus mancus (Powell, 1942) Pl E
Fusiguraleus marwicki (Powell, 1942) Sl E
Fusiguraleus nutans (Powell, 1942) Lw E
Fusiguraleus platycostatus (Powell, 1942) Sc E
Fusiguraleus plenecomptus (Grant-Mackie & Chapman-Smith, 1971) Wq E
Fusiguraleus porrectus (Powell, 1942) Pl E
Fusiguraleus powelli (Marwick, 1965) Wp E
Fusiguraleus raricostatus (Powell, 1942) Pl E
Fusiguraleus rigidus (Powell, 1942) Sc E
Fusiguraleus satanicus (Beu, 1965) Wn E
Fusiguraleus satus (Laws, 1936) Wo (Wo-Wp) E
Fusiguraleus subobsoletus (Powell, 1942) Pl E
Fusiguraleus sutherlandicus (Powell, 1942) Pl E
Guraleus (?) *dubius* Maxwell, 1992 Ak E
Heterocithara laterculus Marwick, 1931 Wo E
Heterocithara marwicki Maxwell, 1988 Sw E
Liracraea dictyota (Hutton, 1885) Wn E
Liracraea odhneri Powell, 1942 R (Wc-R) E
Liracraea opimacosta Richardson, 1997 Wq E
Liracraea titirangiensis Marwick, 1928 Wn E
Neoguraleus amoenus (Smith, 1884) R (Wc-R) E
Neoguraleus benthicolus Powell, 1942 R (Wq-R) E
Neoguraleus deceptus Powell, 1942 Pl E
Neoguraleus finlayi Powell, 1942 R (Wc-R) E
Neoguraleus hautotaraensis Vella, 1954 Wn E
Neoguraleus interruptus Powell, 1942 R (Wc?-R) E
Neoguraleus lineatus (Marwick, 1928) Wp E
Neoguraleus lyallensis (Murdoch, 1905) R (Wn?-R) E
Neoguraleus morgani (Marwick, 1924) Wn E
Neoguraleus murdochi (Finlay, 1924) Wc (Wn-R) E
Neoguraleus ngatuturaensis (Bartrum & Powell, 1928) Wo E
Neoguraleus nukumaruensis Powell, 1942 Wn E
Neoguraleus protensus (Hutton, 1885) Wn (Wn-Wc) E
Neoguraleus sinclairi (Smith, 1884) R (Wo? Wn-R) E
Neoguraleus tenebrosus (Powell, 1926) R (Wq-R) E
Neoguraleus waihuaensis Powell, 1942 Wp E
Vexiguraleus clifdenensis Powell, 1942 Pl (Pl-Sl?) E
Raphitominae
Clinura (?) *generosa* (Marwick, 1931) Pl? E
Cryptodaphne pseudodrillia Powell, 1942 Po E
Cryptodaphne semilirata (Powell, 1942) Ld E
Eubela awakinoensis Powell, 1942 Po (Po-Sw?) E
Eubela monile Marwick, 1931 Sc? (Pl-Sc) E
Gymnobela (?) *carinaria* (Powell, 1935) Pl E ¶
Gymnobela (?) *pusula* (Laws, 1947) Po E ¶
Hokianga nodulata Laws, 1947 Po E
Maoridaphne clifdenica (Laws, 1939) Sl (Pl-Sl) E
Maoridaphne haroldi Powell, 1942 Pl E
'*Maoridaphne' kaiparica* (Laws, 1939) Po (Po-Pl) E
Mioawateria aitanga Grant-Mackie & Chapman-Smith, 1971 Wq E
Mioawateria expalliata (Laws, 1947) Po E
Mioawateria personata (Powell, 1942) Wo (Sw-Wo) E
Mioawateria (?) *sinusigera* (Powell, 1942) Pl E ¶
Nepotilla bartrumi Laws, 1939 Po (Po-Pl) E
Puha fulgida Marwick, 1931 Pl-Sc E
Puha hebes (Hutton, 1873) Pl? E
Taranis alienus (Marwick, 1965) Wo E
Taranis bicarinatus (Suter, 1915) Wc? (Wc?-R) E
Taranis gratiosus (Suter, 1908) R (Wc-R) E
Taranis nexilis (Hutton, 1885) Wc (Wn-Wc) E
Thatcheria liratula (Powell, 1942) Wo E
Thatcheria pagodula (Powell, 1942) Tt E
Thatcheria waitaraensis (Marwick, 1926) Tt E
Zenepos lacunosa (Hutton, 1885) Wc E
Coninae
Conilithes brockenensis (Vella, 1954) Sc-Sl E
Conilithes lyratus (P. Marshall, 1918) Po-Pl E
Conilithes oliveri (Marwick, 1931) Sc E
Conilithes rivertonensis (Finlay, 1926) Pl? E
Conilithes suteri (Cossmann, 1918) Sw? E
Conilithes tahuensis (Allan, 1926) Ak E
Conilithes wollastoni Maxwell, 1978 Pl E
'*Conus' abruptus* P. Marshall, 1918 Po-Pl E
'*Conus' armoricus* Suter, 1917 Po-Pl (Po-Pl) E
'*Conus' fusellinus* Suter, 1917 Sw? E
'*Conus' hendersoni* Marwick, 1931 Tk (Tt-Tk) E
'*Conus' huttoni* (Tate, 1890) Pl E
'*Conus' pseudoarmoricus* P. Marshall & Murdoch, 1920 Ab (Ab-Ak) E
'*Conus' thorae* Finlay, 1927 Po-Pl E
'*Conus' trigonicus* Tomlin, 1937 Ak (Ak-Ar) E
DRILLIIDAE
Austroclavus awakinoensis Powell, 1942 Po E
Austroclavus clifdenensis Powell, 1942 Sc (Pl-Sc) E
Austroclavus famelica (Marwick, 1931) Sc E
Austroclavus finlayi Powell, 1942 Sc (Pl-Sc) E
Austroclavus kaipara (Laws, 1939) Po (Po-Pl) E
Austroclavus marshalli Powell, 1942 Pl (Po-Pl) E
Austroclavus nitens (P. Marshall, 1918) Pl? E
Austroclavus nodulatus Laws, 1948 Po E
Austroclavus tenuispiralis (P. Marshall, 1918) Pl E
Hauturua bijuga (Marwick, 1931) Pl? (Pl-Sc) E
Hauturua exiguescens (Marwick, 1931) Sl E
Hauturua laevella (Marwick, 1931) Sc? (Pl?-Tt) E
Hauturua vellai (Beu, 1970) Tt (Sw-Tt) E
Splendrillia aequistriata (Hutton, 1886) Wn E
Splendrillia afflicta (Marwick, 1931) Wo E
Splendrillia annectens Powell, 1942 Wc E
Splendrillia anomala Powell, 1942 Wc E
Splendrillia aoteana Finlay, 1930 R (Wo-R) E
Splendrillia armata Powell, 1942 Wn (Wn-R) E
Splendrillia clava Powell, 1942 Wp (Wo-Wp) E
Splendrillia clifdenensis Powell, 1942 Sl E
Splendrillia cristata Powell, 1942 Wn E
Splendrillia debilis Finlay, 1927 R (Wn?-R) E
Splendrillia edita Powell, 1942 Wn (Wn-Wq) E
Splendrillia elongata Beu, 1970 Tt E
Splendrillia filiculosa (Marwick, 1931) Sc (Sc-Tt?) E
Splendrillia kingmai Marwick, 1965 Wn (Wm-R?) E
Splendrillia koruahinensis (Bartrum & Powell, 1928) Wo (Wo-Wp) E
Splendrillia lincta Powell, 1942 Wo E
Splendrillia powelli (King, 1934) Wp E
Splendrillia whangaimoana Vella, 1954 Wm E
'*Splendrillia' majorina* Beu, 1979 Wn (Wn-R) E
'*Splendrillia' zeobliqua* Beu, 1979 Wn (Wn-R) E
Syntomodrillia waiauensis Powell, 1942 Sc E
Wairarapa rebecca Vella, 1954 Tt E
TEREBRIDAE
Pervicaciinae
Pervicacia angulifera Marwick, 1931 Sl E
Pervicacia benesulcata (Bartrum, 1919) Wo E
Pervicacia omahuensis (Marwick, 1926) Tt E
Pervicacia timida Marwick, 1931 Sc E
Pervicacia tristis (Deshayes, 1859) R (Wo-R) E
Terebrinae
Gemmaterebra bicorona (Hutton, 1885) ? (Sc?,Wp-Wm?) E
Kaweka bartrumi Laws. 1936 Wo E
Kaweka exilis Marwick, 1931 Tt? E
Kaweka fulta Marwick, 1931 Wo E
Zeacuminia biplex (Hutton, 1885) Po E
Zeacuminia cantuariensis Laws, 1933 Pl E
Zeacuminia fluctuosa Laws, 1941 Po (Po-Pl) E
Zeacuminia murdochi Powell, 1931 Wp (Wo-Wm) E
Zeacuminia orycta (Suter, 1913) Sw (Pl-Tt) E
Zeacuminia pareoraensis (Suter, 1917) Pl E
Zeacuminia parva Laws, 1936 Wo E
Zeacuminia planitas Laws, 1940 Wp (Wo-Wn?) E
Zeacuminia subtilissima (Bartrum & Powell, 1928) Wo E
Zeacuminia suteri (Marwick, 1929) Ld E
Zeacuminia tahuia Finlay, 1930 Ab (Ab-Ak) E
Zeacuminia tantula Marwick, 1931 Sc E
Zeacuminia transitorsa (Marwick, 1929) Ld E
Zeacuminia turpicula Marwick, 1931 Sl E
Zeacuminia viapollentia Maxwell, 1988 Sw E
TURRIDAE
Pseudotominae
Austrotoma ampla Powell, 1942 Wp E
Austrotoma clifdenica Powell, 1942 Pl (Pl-Sc) E
Austrotoma cryptoconoidea Powell, 1942 Sc-Sl E
Austrotoma deducta Marwick, 1931 Tt? E
Austrotoma echinata Powell, 1942 Sc (Sc-Sl) E
Austrotoma excavata (Suter, 1917) Pl? (Po-Pl) E
Austrotoma eximia (Suter, 1917) Lw E
Austrotoma finlayi Powell, 1938 Po E
Austrotoma gemmulata Powell, 1942 Sl E
Austrotoma gracilicostata (Zittel, 1864) Lwh E
Austrotoma hurupiensis Dell, 1952 Tt E
Austrotoma inaequabilis Marwick, 1929 Ld E
Austrotoma (?) *indiscreta* Finlay & Marwick, 1937 Dwl E
Austrotoma kaiparaensis Powell, 1942 Po-Pl (Po-Pl) E
Austrotoma lawsi Powell, 1942 Po E
Austrotoma minor (Finlay, 1924) Pl E
Austrotoma molinei Marwick, 1931 Sc (Pl-Sl) E
Austrotoma neozelanica (Suter, 1913) Sw E
Austrotoma nervosa Powell, 1942 Pl (Po?-Pl) E
Austrotoma obsoleta Finlay, 1926 Sw E
Austrotoma prolixa Laws, 1940 Wp E
Austrotoma suteri (Cossmann, 1916) Pl E
Austrotoma toreuma Marwick, 1929 Ld E
(?) *Eothesbia microtomoides* Finlay & Marwick, 1937 Dwl E
Marshallaria decipiens Maxwell, 1992 Ak E
Marshallaria multicincta (P. Marshall, 1917) Dwl E
Marshallaria senilis (P. Marshall & Murdoch, 1920) Ab E
Marshallaria senta Powell, 1942 Pl E

Marshallaria serotina (Suter, 1917) Ab E
Marshallaria spiralis (Allan, 1926) Ak E
Marshallaria uttleyi (Allan, 1926) Dw-Dm E
Marshallaria waitakiensis Powell, 1942 Lw E
Marshallena curtata (Marwick, 1926) Tt E
Marshallena neozelanica (Suter, 1917) Ak (Ab-Ak) E
Surculites (*Notogenota*) *finlayi* (Powell, 1942) Ak E
Surculites (*N.*) *goniodes* (Suter, 1917) Ab E
Surculites (*N.*) *gravida* (P. Marshall, 1918) Ab E ¶
Surculites (*N.*) *pahiensis* (Powell, 1942) Ab E
Tahuia esdailei (Marwick, 1926) Ak E
Tahuia formosa (Allan, 1926) Ak E
Zeatoma allani Maxwell, 1992 Ak E
Zeatoma anomala (Powell, 1942) Pl E
Zeatoma austrotomoides (Powell, 1931) Wp E
Zeatoma celsa (Marwick, 1931) Tt E
Zeatoma decens (Marwick, 1931) Wo E
Zeatoma impar (Powell, 1942) Wp E
TURRINAE
Antimelatoma buchanani (Hutton, 1873) Wc (Wn-Wc) E
Antimelatoma maorum (E. A. Smith, 1877) R (Wq-R) E
Apiotoma (?) *zelandica* Beu, 1970 Tt E
Campylacrum debile Finlay & Marwick, 1937 Dwl E
Campylacrum sanum Finlay & Marwick, 1937 Dwl E
Cochlespira maorum (P. Marshall & Murdoch, 1923) Ak E
Comitas allani Powell, 1942 Wn (Wo-Wn) E
Comitas abnormis King, 1933 Tt E
Comitas bilix Marwick, 1931 Wo? (Wo-Wp) E
Comitas declivis Powell, 1931 Wp (Wo-Wn) E
Comitas fusiformis (Hutton, 1877) Pl (Lw? Po-Pl) E
Comitas gagei Maxwell, 1988 Sw E
Comitas imperfecta King, 1933 Tt E
Comitas kaipara Laws, 1939 Po-Pl (Po-Pl) E
Comitas kenneti Beu, 1970 Tk E
Comitas latescens (Hutton, 1873) Pl E
Comitas latiaxialis (P. Marshall, 1918) Pl? E
Comitas nana Maxwell, 1988 Sw E
Comitas onokeana King, 1933 Wm? (Wm-Wn) E
Comitas. subcarinapex Powell, 1942 Sc (Pl-Sc) E
Comitas terrisae Vella, 1954 Tt E
Comitas trailli (Hutton, 1973) R (Wq-R) E
Comitas (?) *waihaoensis* (Powell, 1942) Ak E
Comitas williamsi Marwick, 1965 Wo E
Cosmasyrinx (*Cosmasyrinx*) *ardua* Marwick, 1931 Sl E
Cosmasyrinx (*C.*) *latior* Marwick, 1931 Sl E
Cosmasyrinx (*C.*) *marwicki* Beu, 1970 Tt E
Cosmasyrinx (*C.*) *monilifera* Marwick, 1931 Pl-Sc E
Cosmasyrinx (*C.*) *tereumera* Marwick, 1931 Pl-Sc E
Cosmasyrinx (*Tholitoma*) *dolorosa* (Finlay & Marwick, 1937) Dwl E
Echinoturris finlayi (Powell, 1935) Pl E
Eoscobinella tahuia Powell, 1942 Ak E
Eoscobinella (?) *secunda* Beu, 1970 Tt E
Eoturris complicata (Suter, 1917) Ak (Ab-Ak) E
Eoturris multicincta (P. Marshall, 1917) Dw-Dm E
Eoturris uttleyi (Suter, 1917) Lw E
Gemmula bimarginata (Suter, 1917) Ak E
Gemmula clifdenensis Powell, 1942 Sc (Pl-Sc) E
Gemmula disjuncta Laws, 1936 Wo E
Gemmula duplex (Suter, 1917) Ak E
Gemmula kaiparaensis (P. Marshall, 1918) Po-Pl (Po-Pl) E
Gemmula lawsi Powell, 1942 Po E
Gemmula longwoodensis Powell, 1942 Ld E
Gemmula margaritata (P. Marshall, 1919 Ab E
Gemmula orba Marwick, 1931 Tt? E
Gemmula ornata (P. Marshall, 1918) Po-Pl (Po-Pl) E
Gemmula peraspera Marwick, 1931 Tt? (Tt-Wo) E
Gemmula polita (Marwick, 1919) Ab E
Gemmula (?) *powelli* (Maxwell, 1988) Sw E
Gemmula reticulata (P. Marshall, 1919) Ab E
Gemmula waihaoensis (Finlay, 1924) Ak E
Hemisurcula (?) *oborni* (Marwick, 1960) Dw-Dm E ¶
Insolentia elegantula Powell, 1942 Pl E
Insolentia inaequalis Marwick, 1931 Sc E
Insolentia pareoraensis (Suter, 1907) Pl E
Insolentia powelli Beu, 1970 Sc E
Insolentia (?) *seminuda* (Suter, 1917) Lwh? E
'*Insolentia*' *sertula* (Suter, 1917) Ab E
'*Insolentia*' *solitaria* King, 1933 Wm E
Leucosyrinx climoi Maxwell, 1988 Sc (Sc-Sw) E
'*Lucerapex*' *angustatus* (Powell, 1940) R (Wn-R) E
'*Lucerapex*' *pulcherrimus* (Vella, 1954) Tt E
Orthosurcula beui Maxwell, 1992 Ak E
Paracomitas (*Paracomitas*) *gemmea* (Murdoch, 1900) Wc E
Paracomitas (*P.*) *protransenna* (P. Marshall & Murdoch, 1923) Wn E
Paracomitas (*Macrosinus*) *beui* Maxwell, 1988 Sw E
Paracomitas (*M.*) *flemingi* (Beu, 1970) Tt E
Paracomitas (*M.*) *haumuria* Beu, 1979 Wn (Wn-R) E
Parasyrinx alta (Harris, 1897) Pl E
Parasyrinx anomala (Powell, 1942) Ld E
Parasyrinx subalta (P. Marshall & Murdoch, 1919) Ld (Ld-Lw) E
Zemacies armata Powell, 1942 Ab E
Zemacies awakinoensis Powell, 1942 Po E
Zemacies elatior Finlay, 1926 Pl (Pl-Sc) E
Zemacies immatura Finlay & Marwick, 1937 Dwl E
Zemacies lividorupis Laws, 1935 Po E
Zemacies marginalis (P. Marshall, 1919) Ab (Ab-Ak) E
Zemacies ordinaria (P. Marshall, 1918) Pl? (Po-Pl) E
Zemacies prendrevillei Marwick, 1928 Wp (Wo-Wp) E
Zemacies simulacrum Laws, 1935 Sl (Sc-Sl) E
Zemacies torticostata (P. Marshall, 1919) Ab E
'*Zemacies*' *climacota* (Suter, 1917) Pl? E
'*Zemacies*' *hamiltoni* (Hutton, 1905) Ab E
'*Zemacies*' *laciniata* (Suter, 1917) Ab E ¶
CRASSISPIRINAE
Anacithara axialis (P. Marshall, 1918) Pl E
Anacithara clifdenica Powell, 1942 Pl E
Anacithara errabunda Powell, 1942 Sc? E
Anacithara finlayi Powell, 1942 Sl E
Anacithara nana Powell, 1942 Sl E
Aoteadrillia alpha (King, 1933) Wn (Wp?-Wn) E
Aoteadrillia apicarinata (P. Marshall & Murdoch, 1923) Wn E
Aoteadrillia asper (Marwick, 1931) Tt E
Aoteadrillia callimorpha (Suter, 1917) Pl E
Aoteadrillia chordata (Suter, 1908) R (Wn?-R) E
Aoteadrillia consequens (Laws, 1936) Wo E
Aoteadrillia exigua (Marwick, 1931) Sc? (Pl-Sc?) E
Aoteadrillia finlayi Powell, 1942 Wn E
Aoteadrillia ihungia (Marwick, 1931) Sc E
Aoteadrillia thomsoni Powell, 1942 Wp E
Aoteadrillia trifida Powell, 1942 Wn E
Aoteadrillia waihuaensis Powell, 1942 Wp E
Aoteadrillia wanganuiensis (Hutton, 1873) Wc (Wn-R?) E
Awheaturris echinata Beu, 1970 Tt E
Awheaturris (?) *experta* (Laws, 1947) Po E
Awheaturris pahaoensis (Vella, 1954) Tt E
Clavatoma pulchra Powell, 1942 Wp (Wo-Wm) E
Inquisitor awamoaensis (Hutton, 1873) Pl E
Inquisitor flemingi (Vella, 1954) Tt E
Inquisitor (?) *fraudator* Finlay & Marwick, 1937 Dw-Dm E
Inquisitor hebes Marwick, 1931 Pl-Sc E
Inquisitor komiticus Laws, 1939 Po-Pl (Po-Pl) E
Inquisitor powelli (Dell, 1950) Po E
Inquisitor waihoraensis Marwick, 1931 Pl-Sc E
Mauidrillia (?) *acuta* (Marwick, 1928) Wp E
Mauidrillia angustata Powell, 1942 Pl E
Mauidrillia browni Marwick, 1943 Pl E
Mauidrillia cinctuta (Marwick, 1929) Ld E
Mauidrillia clavicula Powell, 1942 Pl E
Mauidrillia costifer (Suter, 1917) Pl E
Mauidrillia fimbriata Laws, 1947 Po E
Mauidrillia imparilirata Powell, 1942 Po E
Mauidrillia inaequalis Powell, 1942 Lw E
Mauidrillia incerta Beu, 1970 Tt E
Mauidrillia occidentalis Maxwell, 1988 Sw E
Mauidrillia praecophinodes (Suter, 1917) Pl E
Mauidrillia supralaevis Powell, 1942 Pl E
Mauidrillia unilirata Powell, 1942 Pl E
Rugobela canaliculata (Suter, 1917) Pl E
Rugobela humerosa (Marwick, 1926) Ak (Ak-Ar)
Rugobela infelix (Suter, 1917) Pl E
Rugobela nodulosa Powell, 1942 Pl E
Rugobela semilaevigata Laws, 1935 Lw E
Rugobela sepelibilis (Powell & Bartrum, 1929) Po E
Rugobela tenuicostata Laws, 1935 Po E
Rugobela tenuilirata (Suter, 1917) Pl E
'*Rugobela*' *tersa* (Marwick, 1931) Sl-Sw E
Tahudrillia simplex Powell, 1942 Ak E

Superorder HETEROBRANCHIA
VALVATOIDEA
ORBITESTELLIDAE
Orbitestella hinemoa Mestayer, 1919 R (Wq-R) E
Orbitestella praehinemoa Laws, 1939 Po E
Orbitestella praetoreuma Laws, 1939 Po E
ARCHITECTONICOIDEA
AMPHITOMARIIDAE
Neamphitomaria asculpturata (Maxwell, 1966) Ak ¶
ARCHITECTONICIDAE
'*Architectonica*' *spinogula* Laws, 1941 Po (Po-Pl) E
Discotectonica hokianga (Vella, 1954) Po (Po-Pl) E
Discotectonica platyplagia (Dell, 1952) Tt E
Discotectonica seniscula (Marwick, 1931) Sc (Pl-Sl) E
Granosolarium lawsi Maxwell, 1969 Lw E
Granosolarium marwicki (Allan, 1926) Ab E
Heliacus (*Torinista*) *implexus* (Mighels, 1845) R (Wq-R)
Philippia lutea (Lamarck, 1822) R (Wn-R)
Spirolaxis copaerentia Laws, 1944 Po E
Wangaloa aucklandica (P. Marshall, 1918) Po-Pl E
Wangaloa ngaparaensis (Suter, 1917) Ak (Ab-Ak) E
Wangaloa plana (P. Marshall, 1917) Dwl E
MATHILDIDAE
Brookesena duplicincta Laws, 1939 Po E
Brookesena neozelanica (Suter, 1908) R (Wq-R) E
Brookesena succincta (Suter, 1908) R (Wo-R) E
Eomathilda paxilla Finlay & Marwick, 1937 Dwl E
Fimbriatella kaiparaensis (Laws, 1941) Po (Po-Pl) E
Fimbriatella marwicki Maxwell, 1966 Ak E
Fimbriatella nathani Maxwell, 1988 Sw E
Fimbriatella prima (Laws, 1935) Ab E
'*Mathilda*' *allani* (Maxwell, 1966) Ak E ¶
Tuba hendersoni (Finlay & Marwick, 1937) Dwl E ¶
Tuba olsoni (Maxwell, 1969) Lw (Ab?-Po) E ¶
Tuba viola (Marwick, 1943) Pl E ¶
Veterator quadricinctus (Marwick, 1931) Sl (Po-Sl) E
RISSOELLOIDEA
RISSOELLIDAE
Rissoella (*Zelaxitas*) *micra* (Finlay, 1924) R (Wq?-R) E
PYRAMIDELLOIDEA
AMATHINIDAE
Leucotina ambigua (Hutton, 1885) Wc (Wn-Hol, R?)
Leucotina granulocostata Laws, 1939 Po? (Po-Pl) E
Leucotina ovalis (Hutton, 1885) Pl E
Leucotina praecursoria (Suter, 1917) Pl E
ODOSTOMIIDAE
CHRYSALLIDINAE
Bartrumella kaawaensis Laws, 1940 Wo E
Bartrumella waitakereensis Hayward, 1981 Pl E
Besla lawsi Grant-Mackie & Chapman-Smith, 1971 Wq E
Besla otahua Laws, 1950 Wp E
Besla vaga Laws, 1941 Wc (Wc-R) E

Chrysallida (?) *curvicostata* (Grant-Mackie & Chapman-Smith, 1971) Wq E
Chrysallida zecarinata Laws, 1948 Po E
Egila arcuata Laws, 1941 Pl E
Elodiamea eocenica Laws, 1941 Ak E
Levipyrgulina marginata Laws, 1941 Pl E
Levipyrgulina sulcata Laws, 1941 Pl (Pl-Sl) E
Linopyrga junior Laws, 1941 Sc (Sc-Sl) E
Linopyrga parva Laws, 1941 R (Wc-R) E
Linopyrga pseudorugata (P. Marshall & Murdoch, 1921) Pl E
Linopyrga rugata (Hutton, 1885) Wc (Wo-R) E
Linopyrga sanguis Laws, 1941 Sl (Sl-Sw) E
Pukeuria anaglypta Laws, 1941 Pl E
Pyrgulina latocorrugata Laws, 1941 Pl E
Rissopsetia (?) *nukumaruensis* (Laws, 1940) Wn E
Waikura circumdata Laws, 1941 Pl E
Waikura clivosa Marwick, 1931 Pl-Sc E
Waikura davidi Marwick, 1943 Pl E
Waikura elevata Maxwell, 1988 Sw E
Waikura finlayi Laws, 1941 Wn (Wm-Wn) E
Waikura hawera Laws, 1941 Wp E
Waikura teres Marwick, 1965 Wo E
Waikura torques Marwick, 1931 Sl (Pl?-Sl) E
Odostomiinae
Evalea huttoni (Suter, 1908) Wc (Wn-Wc) E
Evalea liricincta (Suter, 1907) R (Wm?-R) E
Evalea obsoleta (Murdoch, 1900) Wc (Wn-Wq) E
Evalea sabulosa (Suter, 1908) R (Wq-R) E
Gumina dolichostoma (Suter, 1908) R (Wn-R) E
G. minor Laws, 1940 Wm (Wm-R) E
Megastomia doliella (Laws, 1940) Sl (Sc-Sw) E ¶
Megastomia kaawa (Laws, 1940) Wo E ¶
Megastomia marginalis (Laws, 1940) Wo (Pl-Wo) E ¶
Megastomia sinemacula (Laws, 1940) Ld E ¶
Megastomia venustas (Laws, 1940) Sc (Pl-Sw) E
Obexomia denselirata (Suter, 1908) R (Wq?-R) E
Obexomia granum (Laws, 1940) Wo E
Odostomia acutangula Suter, 1908 R (Wq?-R) E
Odostomia ancisa (Marwick, 1931) Sl (Sl-Tt) E
Odostomia arowhana (Marwick, 1931) Sl E
Odostomia awatumida Laws, 1939 Pl E
Odostomia bartrumi Laws, 1939 Wo E
Odostomia biangulata Laws, 1939 Pl E
Odostomia castlecliffensis Laws, 1939 Wc (Wm-Wq) E
Odostomia chattonensis Laws, 1939 Ld E
Odostomia chordata Suter, 1907 R (Wn-R) E
Odostomia gorensis Laws, 1939 Ld E
Odostomia graviapicalis Laws, 1939 Pl E
Odostomia incidata Suter, 1908 R (Wn-R) E
Odostomia iota Maxwell, 1992 Ak E
Odostomia mahoenuica Laws, 1939 Po E
Odostomia murdochi Suter, 1913 R (Wq?-R) E
Odostomia obstinata Laws, 1939 Pl (Ld-Sw) E
Odostomia ototarana Laws, 1939 Ld E
Odostomia pervaga Laws, 1939 R (Wn-R) E
Odostomia sherriffi Hutton, 1883 Wc (Wn-Wq) E
Odostomia taumakiensis Suter, 1908 R (Wn-R) E
Odostomia turneri Laws, 1939 Wc (Wo-R) E
Odostomia vaga Laws, 1939 R (Wn-R) E
Odostomia vestalis Murdoch, 1905 R (Wq?-R) E
Odostomia vixornata (Marwick, 1931) Sc E
Odostomia waihaoensis Maxwell, 1992 Ak E
Odostomia waipaoa (Marwick, 1931) Sc E
Odostomia waitakiensis Laws, 1939 Lw E
Odostomia whangaparaoa Grant-Mackie & Chapman-Smith, 1971 Wq E
Odostomia zecorpulenta Laws, 1939 Wn (Wm?-Wn) E
Sinuatodostomia neozelanica Laws, 1940 Wo E
Sinuatodostomia sublimis Maxwell, 1992 Ak E
Striodostomia kaawa Laws, 1940 Wo E
Striodostomia locuples Laws, 1940 Wn E
Striodostomia orewa Laws, 1940 R (Wq-R) E
Striodostomia waikaia Laws, 1940 Ld E
SYRNOLIDAE
Syrnolinae
Agatha alexanderi (Marwick, 1929) Ld E
Agatha georgiana (Hutton, 1885) Wc (Wn-R) E
Agatha otaioensis Laws, 1940 Po E
Agatha pittensis (Marwick, 1928) Wp E
Costosyrnola ngatapa (Marwick, 1931) Sl E
Costosyrnola paleogenica (Corgan, 1969) Ak E
Costosyrnola solitaria Laws, 1937 Pl E
Costosyrnola tabulata Laws, 1937 Pl E
Costosyrnola waikaia Laws, 1937 Ld E
Costosyrnola zesulcata (Maxwell, 1988) Sw E
Paradostomia southlandica (Laws, 1940) Sc (Pl-Sc) E
Puposyrnola stirps Laws, 1937 Sc E
P. tenuispiralis Maxwell, 1992 Ak E
Syrnola aclyformis Marwick, 1929 Ld E
Syrnola angulifera (Laws, 1937) Sc (Po-Sc) E
Syrnola finlayi (Laws, 1937) Pl E
Syrnola irrevocata Laws, 1937 Wn E
Syrnola otaioensis (Laws, 1937) Po E
Syrnola riddollsi Maxwell, 1992 Ak E
Syrnola rodata (Laws, 1940) Wo E
Syrnola sculptilis Laws, 1937 Pl (Pl-Sw) E
Syrnola sulcifera Laws, 1937 Sw (Pl-Sw) E
Syrnola waiauica (Laws, 1937) Pl (Pl-Sw) E
Syrnola wallacei Marwick, 1929 Ld E
Terelimella huata Maxwell, 1992 Ak E
Terelimella hutchinsoniana Laws, 1938 Pl E
Terelimella kaawa Laws, 1940 Wo E
Terelimella larochei Laws, 1938 R (Wc-R) E
Terelimella leviangulata Laws, 1950 Wp E
Terelimella monstrosa Laws, 1950 Wp E
Terelimella ototarana Laws, 1938 Ld E
'*Terelimella*' *pravitas* Laws, 1941 Po E
Tibersyrnola inexpectata Laws, 1937 Pl E
Tibersyrnola lawsi (Powell, 1934) Wq E
Tibersyrnola pupaformis Grant-Mackie & Chapman-Smith, 1971 Wq E
Tibersyrnola semiconcava (P. Marshall & Murdoch, 1923) Pl E
Tibersyrnola tepikiensis (Powell, 1934) Wq E
TURBONILLIDAE
Eulimellinae
Eulimella alpha Laws, 1938 Ab E
Eulimella (?) *awamoaensis* P. Marshall & Murdoch, 1921 Pl E
Eulimella beta Laws, 1938 Ab E
Eulimella coxi Laws, 1938 Pl E
Eulimella deplexa Hutton, 1885 Wc (Wm-Wq?) E
Eulimella imitator Laws, 1939 Po (Po-Pl) E
Eulimella kaawaensis Laws, 1940 Wo E
Eulimella kempi Grant-Mackie & Chapman-Smith, 1971 Wq E
Eulimella komitica Laws, 1939 Po E
Eulimella larga Laws, 1938 Pl E
Eulimella levilirata Murdoch & Suter, 1906 R (Wm-R) E
Eulimella media (Hutton, 1885) Wc E
Eulimella mestayerae (Marwick, 1931) Pl? (Pl?-Sc) E
Eulimella parlimbata Laws, 1939 Po (Po-Pl) E
Eulimella waihoraensis (Marwick, 1931) Pl-Sc
Turbonillinae
Gispyrella finlayi Laws, 1937 Pl E
Gispyrella hemiorycta Laws, 1937 Pl E
Gispyrella spatha Laws, 1937 Pl E
Mormulasta awakinoensis (Laws, 1937) Po E
Mormulasta laevigata (Laws, 1937) Pl E
Mormulasta locuples (Laws, 1937) Pl (Po-Pl) E
Mormulasta tahuensis (Laws, 1937) Ak E
Mormulasta tutamoensis (Laws, 1937) Sl E
Planpyrgiscus disparilis Laws, 1940 Wo E
Planpyrgiscus extenuatus (Marwick, 1931) Sl E
Pyrgiscilla adeps Laws, 1937 Ab E
Pyrgiscilla chattonensis (Marwick, 1929) Ld E
Pyrgiscilla festiva Marwick, 1943 Pl E
Pyrgiscilla hampdenensis (Allan, 1926) Ab E
Pyrgiscilla otoconsors Laws, 1937 Ld E
Pyrgiscilla waihaoica Maxwell, 1992 Ak E
Pyrgiscus abjunctus Laws, 1937 Pl (Pl-Sl) E
Pyrgiscus intextus (Marwick, 1931) Sc E
Pyrgiscus macphersoni (Marwick, 1931) Sl E
Pyrgolampros albolapis Laws, 1937 Pl E
Pyrgolampros evelynae Laws, 1937 Sl (Pl-Sl) E
Pyrgolampros pakaurangiensis Laws, 1939 Po E
Pyrgolampros semilaevigata Laws, 1937 Pl E
Strioturbonilla (?) *flexicostata* (Maxwell, 1992) Ak E ¶
Turbonilla arcana Laws, 1937 Ab E
Turbonilla asperedolata Laws, 1940 Wo E
Turbonilla awamoana Laws, 1937 Pl E
Turbonilla awasimulans Laws, 1937 Pl E
Turbonilla bexleyana Laws, 1937 Po E
Turbonilla clifdenica Laws, 1937 Sc E
Turbonilla comitas Laws, 1937 Pl E
Turbonilla crebricostata Marwick, 1931 Pl-Sc E
Turbonilla duplicaria Marwick, 1931 Wo? (Wo-Wn) E
Turbonilla eques Laws, 1937 R (Wq-R) E
Turbonilla erratica Laws, 1937 Pl E
Turbonilla komitica Laws, 1937 Po-Pl E
Turbonilla koruahina Laws, 1937 Wo E
Turbonilla macies Laws, 1937 Pl E
Turbonilla natales Laws, 1937 Sc (Sc-Sl) E
Turbonilla oamarua Laws, 1937 Pl E
Turbonilla praegravata Laws, 1940 Wo E
Turbonilla pukeuriensis Laws, 1937 Pl E
Turbonilla separabilis Laws, 1937 Pl E
Turbonilla speighti Laws, 1937 Po E
Turbonilla stoneleighana Laws, 1937 Wn (Wm?-Wn) E
Turbonilla waikura Marwick, 1931 Sl E
'*Turbonilla*' *brevisutura* (Laws, 1937) Po (Po-Pl) E ¶
'*Turbonilla*' *eruita* (Laws, 1950) Wp E ¶
'*Turbonilla*' *granti* (Laws, 1937) Pl (Po-Pl) E ¶
'*Turbonilla*' *haugrandis* Marwick, 1931 Sl E
'*Turbonilla*' *jactura* (Laws, 1937) R (Wq-R) E ¶
'*Turbonilla*' *kaawa* (Laws, 1937) Wo E ¶
'*Turbonilla*' *kereruensis* (Laws, 1937) Wn E ¶
'*Turbonilla*' *ngatutura* (Laws, 1940) Wo E ¶
'*Turbonilla*' *petaneana* (Laws, 1937) Wn (Wm?-Wc) E ¶
'*Turbonilla*' *pliocenica* (Laws, 1937) Wq (Wc-Wq) E ¶
'*Turbonilla*' *quadruplator* (Laws, 1940) Wo E ¶
'*Turbonilla*' *raptor* (Laws, 1937) Wc E ¶
'*Turbonilla*' *sycophanta* (Laws, 1937) Sl? E ¶
'*Turbonilla*' *zealandica* (Hutton, 1873) R (Wc-R) E ¶

Subclass OPISTHOBRANCHIA
Order CEPHALASPIDEA
ACTEONOIDEA
ACTEONIDAE
Acteon (*Maxacteon*) *crateriiculatus* Hedley, 1906 R (Wc-R) E
Acteon (*Maxacteon*?) *pahaka* Maxwell, 1992 Ak E
Acteon (*M.*) *procratericulatus* Laws, 1939 Po (Po-Pl) E
Acteon (s.l.) *articulatus* Marwick, 1931 Sc E
Acteon (s.l.) *chattonensis* Marwick, 1929 Ld E
Acteon (s.l.) *infulatus* Marwick, 1931 Sc E
Acteon (s.l.) *oneroaensis* Powell & Bartrum, 1929 Po E
Acteon (s.l.) *otamateaensis* Laws, 1941 Po-Pl (Po-Pl) E
Acteon (s.l.) *semispiralis* P. Marshall, 1917 Dwl E
Acteon (s.l.) *wangaloa* Finlay & Marwick, 1937 Dwl E
Crenilabium starboroughense (King, 1934) Wp (Wo-Wm?) E
Crenilabium zelandicum P. Marshall, 1918 Pl? (Pl) E
Ongleya tholispira Finlay & Marwick, 1937 Dwl E
Pupa alba (Hutton, 1873) R (Wq-R) E
Tornatellaea incompta Finlay & Marwick, 1937 Dwl E
Tornatellaea morbosa Finlay & Marwick, 1937 Dwl E
Tornatellaea saucia Finlay & Marwick, 1937 Dwl E
Tornatellaea subovalis (P. Marshall, 1917) Dwl E
Triploca waihaoensis P. Marshall & Murdoch, 1923 Ak E
Wangacteon grebneffi Stilwell, 1993 Dwl E

HYDATINIDAE
Hydatina physis (Linnaeus, 1758) R (Wq-R)
RINGICULOIDEA
RINGICULIDAE
Ringicula castigata Marwick, 1929 Ld E
Ringicula marwicki Powell, 1935 Pl E
Ringicula torquata Marwick, 1926 Tt E
Ringicula uniplicata Hutton, 1885 Wn E
Ringicula zecorpulenta Laws, 1939 Po E
Ringiculina altocanalis (Dell, 1952) Tt E
Ringiculina ngatapa (Marwick, 1931) Sl (Sl-Sw) E
Ringiculina (?) *obesior* (Marwick, 1931) Sl E
Ringiculina tenuilabrum (Maxwell, 1992) Ak E
Ringiculina tutamoensis (Marwick, 1931) Sl E
Superstes curtus (P. Marshall, 1916) Dw-Dm E
Superstes innominandus Finlay & Marwick, 1937 Dw-Dm E
Superstes marshalli Finlay & Marwick, 1937 Ab (Ab-Ak) E
Superstes paucistriatus (P. Marshall, 1916) Dw-Dm E
Superstes phoenix Finlay & Marwick, 1937 Ak E
DIAPHANOIDEA
DIAPHANIDAE
Diaphaninae
Diaphana brazieri Angas, 1877 R (Wq-R)
PHILINOIDEA
CYLICHNIDAE
Cylichna thetidis Hedley, 1903 R (Wo?-R) E
<u>*Cylichnania*</u> *bartrumi* Marwick, 1931 Pl? (Po-Pl) E
Cylichnania circumscripta Marwick, 1931 Sl E
Cylichnania impar Finlay & Marwick, 1937 Dwl E
Cylichnania plana Laws, 1939 Po-Pl (Po-Pl) E
Cylichnania putealis Finlay & Marwick, 1937 Dw-Dm E
Cylichnania sublaevis Maxwell, 1992 Ak E
Cylichnina enucleata Powell & Bartrum, 1929 Po E
Cylichnina otahuhuensis Laws, 1950 Wp E
Cylichnina segnis Laws, 1940 Wo E
Cylichnina soror (Suter, 1917) Pl E
Cylichnina striata (Hutton, 1873) R (Wq-R) E
Kaitoa haroldi Marwick, 1931 Pl E
K. islandica Marwick, 1931 Sl E
K. recta Laws, 1939 Po-Pl (Po-Pl) E
<u>*Maoriscaphander*</u> *manukauensis* Dell, 1950 Po E
Priscaphander cingulatus (P. Marshall, 1917) Dwl E
Roxania alpha (Mestayer, 1921) Po E
Scaphander (?) *enysi* (Hutton, 1873) Ld E
Scaphander flemingi Marwick, 1965 Wn E
Scaphander hiulcus Laws, 1936 Wo E
Scaphander komiticus Laws, 1939 Po (Po-Pl) E
Scaphander malleatus Marwick, 1931 Sc E
Scaphander miriamae Dell, 1952 Tt E
Scaphander scapha Laws, 1933 Pl E
Scaphander toringa Dell, 1952 Tt E
<u>*Taita*</u> *callosa* Laws, 1948 Po E
Taita clatrellata (Marwick, 1931) Sl E
Taita lawsi Maxwell, 1988 Sw E
PHILINIDAE
Philine angasi Crosse & Fischer, 1865 R (Wq-R) E
Philine auriformis Suter, 1909 R (Wc-R) E
Philine powelli Rudman, 1970 R (Wc-R) E
Philine tepikia Rudman, 1970 Wq E
Philine umbilicata Murdoch & Suter, 1906 R (Wq-R) E
RETUSIDAE
Pyrunculus improcerus (Marwick, 1931) Sc E
Retusa oruaensis (Webster, 1908) R (Wn-R) E
Retusa pressa Marwick, 1928 Wp E
Volvulella fulmeniculum (Marwick, 1931) Sc (Pl-Sc) E
Volvulella marwicki (Bartrum & Powell, 1928) Wo E
Volvulella reflexa (Hutton, 1885) Pl E
BULLOIDEA
BULLIDAE
Bulla quoyi Gray, 1843 R (Wq-R)
HAMINOEIDAE
Atys maorinus Marwick, 1931 Pl-Sc E
Haminoea zelandiae (Gray, 1843) R (Wp-R) E
Limulatys lacrimula (Laws, 1939) Po-Pl E

Order ANASPIDEA
AKEROIDEA
AKERIDAE
Akera soluta (Gmelin, 1791) R (Wq)

Order THECOSOMATA
CAVOLINIIDAE
Cavoliniinae
Cavolinia grandis (Bellardi, 1873) (Wo-Wp)
Cavolinia tridentata (Niebuhr, 1775) R (Wc-R)
Vaginella depressa Daudin, 1800 (Pl)
Clioinae
Praehyalocylis annulata (Tate, 1887) (Ab-Ar)
Cuvierininae
Cuvierina torpedo (P. Marshall, 1918) Po-Pl (Po-Pl)
Ireneia (?) *aucklandica* (Clarke, 1905) Po E
Ireneia urenuiensis (Suter, 1917) P? E
LIMACINIDAE
Limacina (*Altaspiratella*) *bearnensis* (Curry, 1982) (Dm)
Limacina (*Limacina*) *atypica* (Laws, 1944) Po (Po-Pl) E
Limacina (*L.*) *dilatata* (Koenen, 1892) (Ak-Ar)
Limacina (*L.*) *ferax* (Laws, 1944) Po (Po-Pl)
Limacina (*L.*) *limata* (Marwick, 1926) Ak (Dw? Ak-Ar) E
Limacina (*L.*) *sculptilis* (Maxwell, 1992) Ak E
Skaptotion bearnensis Curry, 1982 (Dm)
SPHAEROCINIDAE
Sphaerocina formai (Audenino, 1897) (Po-Pl)

Subclass PULMONATA
Order BASOMMATOPHORA
AMPHIBOLOIDEA
AMPHIBOLIDAE
Amphibola crenata (Gmelin, 1791) R (Wn-R) E
Salinator neozelanica Laws, 1950 Wp E
SIPHONARIOIDEA
SIPHONARIIDAE
Benhamina obliquata (G.B. Sowerby I, 1825) R (Wq-R) E
Siphonaria australis Quoy & Gaimard, 1833 R (Wq-R) E
Siphonaria propria Jenkins, 1983 R (Wq-R) E
TRIMUSCULIDAE
Gadinia conica Angas, 1847 R (Wq-R) E
Williamia maxwelli B. Marshall, 1981 Ld-Lw (Ld?-Po) E
Williamia nutata (Hedley, 1908) R (Wn-R)
LYMNAEOIDEA
LYMNAEIDAE
Austropeplea hamiltoni (Dell, 1956) Hol E
Austropeplea tomentosa (Pfeiffer, 1855) R (Wq?-R) E
PLANORBIDAE
Glyptophysa oconnori (Cumber, 1941) Hol E

Order EUPULMONATA
Suborder ACTOPHILA
ELLOBIOIDEA
ELLOBIIDAE
Pedipedinae
Leuconopsis obsoleta (Hutton, 1878) R (Wq-R) E
Leuconopsis putealis Laws, 1950 Wp E
Marinula filholi Hutton, 1878 R (Wq-R) E
Pythinae
Ophicardelus costellaris (H. & A. Adams, 1854) R (Wq-R) E

Suborder STYLOMMATOPHORA
Infraorder SIGMURETHRA
RHYTIDOIDEA
RHYTIDIDAE
Paryphantinae
Paryphanta watti Powell, 1946 R (Wq?-R) E
Schizoglossa major Powell, 1938 Hol E
Rhytininae
Rhytida greenwoodi (Gray, 1850) R (Wn?-R) E
BULIMULOIDEA
BULIMULIDAE
Placostylinae
Placostylus (*Maoristylus*) *gardneri* Powell, 1951 Hol E
Placostylus (*M.*) *hinemoa* Powell, 1947 Hol E
Placostylus (*M.*) *priscus* Powell, 1938 Hol E
Placostylus (*M.*) *spiritus* Powell, 1947 Hol E
Placostylus (*M.*) *worthyi* Powell, 1947 Hol E
ARIONOIDEA
CHAROPIDAE
Charopinae
Damonita geminoropiformis Climo, 1981 Hol E
Huonodon microundulata (Suter, 1890) R (Wn?-R) E
Mocella elliottae (Climo, 1969) Hol E
Mocella spelaeus (Climo, 1971) Hol E
Phenacohelicinae
Serpho kivi (Gray, 1843) R (Wq?-R) E
Therasia decidua (Pfeiffer, 1867) R (Wn?-R) E
PUNCTIDAE
Paralaoma thomsoni (Suter, 1917) Wq? (Wq?-R) E

CLASS CEPHALOPODA
Subclass NAUTILOIDEA
ATURIIDAE
Aturia coxi Miller, 1947 (Sc-Tt)
Aturia cubaensis (Lea, 1841) (Po-Tk)
Aturia mackayi Fleming, 1945 Dw-m (Dt? Dw-Ab) E
HERCOGLOSSIDAE
Cimomia zelandica Johnston, 1970 Up. Cret. (Up. Cret-Lwh?) E
Hercoglossa innominanda Fleming, 1945 Ab E
NAUTILIDAE
Eutrephoceras allani (Fleming, 1945) Dw (Dwl?-Dw) E

Subclass COLEOIDEA
Order OCTOPODA
ARGONAUTIDAE
Argonauta oweri Fleming, 1945 Wo-Wp E
Izumonauta lata Kobayashi, 1954 (Tk)

New combinations for Cenozoic Mollusca proposed in checklist

Original generic locations are in square brackets. The list does not include changes resulting from elevation of subgenera to genera.

Deminucula (?) *certisinus* (Finlay, 1930) [*Nucula*]
D. (?) *ngatutura* (Laws, 1936) [*Nucula*]
D. (?) *vestigia* (Marwick, 1929) [*Nucula*]
Small shell size, and small resilifer that scarcely projects below hinge indicate *Deminucula*, though prominent sculpture is anomalous.

Linucula hartvigiana (Dohrn, 1864) [*Nucula*]
L. otamatea (Laws, 1939) [*Nucula*]
The presence of fine crenulations on dorsal margins indicates assignment to *Linucula*, rather than *Nucula*.

Ennucula palaioanaxea (Stilwell, 1993) [*Leionucula*]
Leionucula is a Cretaceous genus not known from the New Zealand Cenozoic. This species is closely related to other *Ennucula* species.

Austrotindaria (?) *nasuta* (Marwick, 1931) [*Minormalletia*]
Externally very similar to *A. mawheraensis* Maxwell, 1988, but hinge characters imperfectly known.
'*Chlamys*' *hailesensis* (Eagle, 1999) [*Ambonychia*]
This was described from a float boulder that was assumed to be Mount Arthur Marble (Ordovician) (Eagle 1999), but the lithology is that of Takaka Limestone (Waitakian) (pers. comm. C. Jones, R. E. Fordyce, pers. obs.). The species seems to be based on a fragment of a pectinid, but the assignment to '*Chlamys*' is purely pragmatic.

Septifer huttoni (Cossmann, 1915) [*Mytilus*]
The shape, size, divergent sculpture and presence of umbonal septum indicate close relationship to *Septifer torquatus* (Marshall, 1918).

Cosa awamoana (Laws, 1941) [*Hochstetteria*]
The subquadrate shape, marginal crenulations and commarginal grooves are more characteristic of *Cosa* than *Philobrya*.

Arcopagia (?) *praeobtusa* (Finlay & Marwick, 1937) [*Lahillia* (*Lahilleona* ?)]
Not a cardiid. The produced anterior end, deep, steeply ascending pallial sinus and external ligament indicate a position in the Tellinidae, possibly near *Arcopagia*.

Peronaea robini (Finlay, 1924) [*Macoma*]
Ovate-trigonal shape and fine commarginal sculpture indicate close relationship to *P. gaimardi* (Iredale, 1915).

P. (?) *spenceri* (Suter, 1907) [*Tellina* (*Angulus*)]
Referred to *Rexithaerus* by Beu & Maxwell (1990) but not particularly close to the type species. The presence of an anterior gape suggests relationship with *Peronaea* species, but it probably requires a new genus.

Moerella (?) *fragosa* (Marwick, 1931) [*Maoritellina*]
Marwick compared this species with *Maoritomella huttoni* (E.A. Smith), which is now referred to *Moerella*, but it could be a semelid near *Abra*.

Kuia fausta (Marwick, 1960) [*Turia*]
The presence of a left anterior cardinal tooth rules out assignment to *Turia*, but the dentition, sculpture and pallial sinus suggest this is a small *Kuia*.

Fallartemis (?) *lambata* (Gould, 1850) [*Arthemis*]
Previously referred to either *Dosinia* (s.str.) or subgenus *Asa*, but closer in dentition and other significant shell characters to the type species of *Fallartemis*, differing mainly in having much weaker radial sculpture.

Pectunculus maorianus Oliver, 1923 [*Dosinia*]
Long assigned to *Phacosoma*, but the orbicular shape, weakly defined escutcheon and more steeply ascending dorsal limb of the pallial sinus rule out referral there, and are consistent with a location in *Pectunculus*.

Thracia (*Odoncineta*) *magna* P. Marshall & Murdoch, 1921.
Referred to subgenus *Odoncineta* because of its close similarity to *T. vitrea* (Hutton, 1873), which was assigned here by Marshall (2002).

Lyonsiella otamatea (Laws, 1939) [*Kidderia*]
Referred to *Lyonsiella* because of its subrectangular shell with anteriorly placed umbones, edentulous hinge, and sculpture of minute papillae.

Graptacme multistricta (Finlay & Marwick, 1937) [*Laevidentalium*]
G. pareorensis (Pilsbry & Sharp, 1897) [*Dentalium*]
The presence of very fine longitudinal sculpture in these species indicates a location in *Graptacme*.

Bayerotrochus masoni (Maxwell, 1978) [*Perotrochus*]
Referred here because of its gently convex whorls, fine spiral sculpture and shallow labral slit.

Solariella carinata (Laws, 1935) [*Zeminolia*]
S. fossa (Laws, 1932) [*Zeminolia*]
S. lenis (Marwick, 1928) [*Zeminolia*]
S. ordo (Laws, 1941) [*Zeminolia*]
S. marshalli (Maxwell, 1992) [*Spectamen*]
S. venusta (Maxwell, 1969) [*Zeminolia*]
Follows from recent synonymising of *Zeminolia* with *Solariella* (Marshall 1999).

Onoba (?) *perplexa* (Finlay, 1924) [*Rissoina*]
The small size, prominent axial costae and absence of spiral sculpture makes it unlikely this is a *Rissoina*, but assignment to *Onoba* is only provisional.

O. (*Ovirissoa*) *biangulata* (Laws, 1936) [*Badenia*]
Follows from synonymy of *Badenia* with *Ovirissoa*. Species inadvertently omitted from Beu & Maxwell (1990).

Cyclostremiscus ? *anceps* (Laws, 1941) [*Lodderena*]
Lacks prominent spiral sculpture and strongly prosocline, variciform peristome of typical *Lodderena*. Referral to *Cyclostremiscus* is provisional.

Brochina pertenuis (Laws, 1941) [*Caecum*]
Similar to, and probably closely related to *B. digitulum* Hedley, 1904.

Antisabia centrifugalis (Marwick, 1931) [*Hipponix*]
The prominent, closely spaced concentric ridges crenulated by radial ribs indicate closer relationship to modern *Antisabia* species than to *Hipponix*.

Euspira (?) *elegans* (Suter, 1917) [*Sinum* (*Eunaticina*)]
E. fyfei (Marwick, 1924) [*Lunatia*]
E. lateaperta (Marwick, 1924) [*Lunatia*]
Follows from synonymising of *Lunatia* with *Euspira* by Kabat (1991).

Pliconacca cicatricella (Marwick, 1965) [*Uberella*]
Referred to *Pliconacca* as it is probably a descendant or sister species of *P. cicatrix*.

P. scalpta (Marwick, 1924) [*Uber*]
The presence of sharp transverse ridges on the umbilical callus of young shells distinguishes this species from typical *Polinices* or *Polinella*, but indicates possible affinity with *Pliconacca* species.

Amaea (?) *gracillima* (Suter, 1917) [*Epitonium* (*Acrilla*)]
Currently placed in *Notacirsa*, but herein tentatively included in *Amaea* because of its finely reticulate sculpture.

Claviscala (?) *marginata* (Hutton, 1885) [*Scalaria*]
The only known specimen is incomplete, but the relatively large size, weakly convex whorls, distant axial ribs and prominent peribasal keel suggest close relationship with the type species of *Claviscala*.

Turriscala (?) *discors* (Maxwell, 1988) [*Pyrgiscilla*]
Almost certainly an epitoniid rather than a pyramidellid, but assignment to *Turriscala* is tentative.

Graphis (*Itiscala*) *exilis* (Maxwell, 1992) [*Itiscala*]
G. (*Itiscala*) *sodalis* (Maxwell, 1992) [*Itiscala*]
Itiscala is not an epitoniid, but an aclidid closely related to *Graphis* (P. Bouchet pers. comm.) It is here ranked as a subgenus of *Graphis*.

Dentimargo aveniformis (P. Marshall, 1919) [*Marginella*]
D. (?) *floralis* (Marwick, 1928) [*Marginella*]
D. hakataramea (Maxwell, 1969) [*Longinella*]

Mesoginella (?) *coxi* (Marwick, 1928) [*Marginella*]
M. harrisi (Cossmann, 1899) [*Marginella*]
M. hesterna (Bartrum & Powell, 1928) [*Marginella*]

Serrata hectori (Kirk, 1882) [*Marginella*]
S. marwicki (Finlay, 1927) [*Marginella*]
Reassignment of these marginellids follows from synonymising of *Carinaginella* with *Alaginella; Volvarinella* with *Dentimargo; Deviginella* and *Sinuginella* with *Mesoginella;* and *Haloginella* with *Serrata* (Coovert & Coovert 1995).

Clifdenia (?) *calcar* (P. Marshall, 1917) [*Cymbiola*]
Previously referred to *Eumitra*, but the holotype more closely resembles subadult *Clifdenia* species in shape, siphonal canal and spiral sculpture. Probably an earlier name for *Clifdenia inflata* Grant-Mackie, 1965 from the same general locality.

Hemisurcula (?) *oborni* (Marwick, 1960) [*Rugobela*]
The deep anal sinus precludes *Rugobela*, and its shape and position suggests inclusion in Turrinae, but assignment to *Hemisurcula* is tentative.

Surculites (*Notogenota*) *gravida* (P. Marshall, 1918) [*Surcula*]

The shallow arcuate anal sinus rules out assignment to *Zemacies*, where it has been placed. Close to other *Notogenota* species.

'*Zemacies' laciniata* (Suter, 1917) [*Surcula*]
Long assigned to *Insolentia*, but differing from the type species in its much larger size, in the nature of the sculpture and the shape of the anal sinus. Assignment to *Zemacies* is provisional, as it is not a typical member of that genus either.

Drilliola annosa (Powell, 1942) [*Maoritomella*]
D. maoria (Powell, 1942) [*Turridrupa*]
D. mangaoparia (Beu, 1970) [*Turridrupa*]
D. pukeuriensis (Powell, 1942) [*Maoritomella*]
D. rupta (Marwick, 1931) [*Filodrillia*]
D. sola (Powell, 1942) [*Maoritomella*]
The absence of an anterior notch and associated fasciole indicates referral to *Drilliola* rather than *Maoritomella* where these species are currently placed.

Gymnobela (?) *carinaria* (Powell, 1935) [*Marshallena*]
Presence of traces of decussate sculpture on the protoconch of topotypes indicates assignment to Conidae: Raphitominae. Location in *Gymnobela* is tentative.

Mioawateria (?) *sinusigera* (Powell, 1942) [*Puha*]
Biconic shape and strongly shouldered whorls are more characteristic of *Mioawateria* than *Puha*.

'*Mathilda' allani* (Maxwell, 1966) [*Mathildona*]
Bieler (1995) has synonymised *Mathildona* with *Mathilda*, but *M. allani* is not a typical species of the genus, and its assignment is provisional.

Tuba hendersoni (Finlay & Marwick, 1937) [*Kaitangata*]
T. olsoni (Maxwell, 1969) [*Tubena*]
T. viola (Marwick, 1943) [*Gegania* (*Tubena*)]
Follows from synonymising of *Gegania* with *Tuba* (Bieler 1995).

Neamphitomaria asculpturata (Maxwell, 1966) [*Pseudomalaxis*]
Referred here because of its close similarity to *Orbis rotella* Lea, 1833 (Middle Eocene, Alabama) which was assigned to *Neamphitomaria* by Bandel (1988).

Laws (1937) assigned New Zealand turbonillines without spiral sculpture to two genera, *Chemnitzia* d'Orbigny, 1839 in which the intercostal grooves terminate abruptly, and *Turbonilla* Risso, 1826, in which the grooves gradually evanesce. According to Schander et al. (1999) these taxa are objective synonyms. Pending a critical assessment of turbonilline taxonomy, the New Zealand species included by Laws in *Chemnitzia* are listed here as '*Turbonilla.*'