

# Fossil and Recent molluscan types in the Auckland War Memorial Museum. Part 1: Bivalvia

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## Abstract

The Marine Department of Auckland War Memorial Museum has nearly 1800 primary types and a further 1770 paratypes and paralectotypes types in its collections. The majority are molluscan and this first part of a catalogue of these collections reviews the types for 316 bivalve species. It deals with 222 primary types and 242 secondary types, which are almost evenly split between Recent taxa (159) and fossil taxa (157). Type material is figured for the first time for the following taxa: *Nucula certisinus* Finlay, 1930; *Nucula gallinacea* Finlay, 1930; *Nucula rossiana* Finlay, 1930; *Poroleda pertubata* Iredale, 1924; *Notovola marwicki* Finlay, 1930; *Spissatella acculta* Finlay, 1926; *Spissatella clifdenensis* Finlay, 1926; *Maorimactra acuminella* Finlay, 1930; *Scalpomactra continua* Finlay, 1930; *Amphidesma forsteriana* Finlay, 1927; *Angulus(Peronidia) tumens* Laws, 1933; *Gari oamarutica* Finlay, 1930.

## Keywords

Auckland Museum, name-bearing types, Mollusca.

## INTRODUCTION

The Marine Department of Auckland War Memorial Museum (AWMM) holds nearly 1800 lots of name-bearing types, in the form of holotypes, neotypes, syntypes and lectotypes, and a further 1770 iconotypes, paratypes and paralectotypes. These are spread across several phyla, but the majority are Mollusca. They include terrestrial as well as marine species, and fossil as well as extant taxa.

Auckland Museum's first list of biological primary types, which included the molluscs, was published by Powell (1941) and he followed this with a supplement in 1949 (Powell, 1949). A catalogue of fossil and Recent molluscan types was started in the 1990s by Glenys Stace and Nick de Carteret, but never finished. The present publication is a much amended and expanded version of the 1990s catalogue, and covers only the Bivalvia as part 1 of a larger catalogue. It deals with 222 primary types and 242 secondary types representing 316 species. They are almost evenly split between Recent (159) and fossil (157) taxa. The majority are from New Zealand (302), but there are also nine from Australia, particularly South Australia but also Enderby Land and Norfolk Island, two from the Falkland Islands, one from Kerguelen Island, one from the Lord Howe Rise, and one from New Caledonia.

Auckland Museum's first organised molluscan collections were started by Thomas Frederic Cheeseman (Fig. 1a), who was appointed Secretary of the Auckland

Institute and Curator of the Auckland Museum in January 1874. Principally a botanist, he also collected and published widely on other areas of natural history. In 1878 he published the descriptions of three new species of opisthobranchiate seaslugs collected in or near Waitemata Harbour (Cheeseman, 1878). Although the species have been synonymised since, the paintings of these specimens are the earliest known marine types (iconotypes) held by Auckland Museum.

In 1929, when Auckland Museum moved to its present site in Auckland Domain, more staff positions became available. A.W.B. (Baden) Powell (Fig. 1b), who as a 15 year-old in 1916 had been made an honorary curator by T.F. Cheeseman (Cernohorsky, 1988), became the Museum's first paid conchology and palaeontology curator at that time and held the position until his retirement in 1968. During his more than half-century's association with the Museum he acquired a large number of shells for the collections from a variety of sources. In 1929, the Rev. W.H. Webster gave his collection of New Zealand and foreign Mollusca, which contained several type specimens. In 1936 the Museum bought the New Zealand Tertiary molluscan collections of C. R. (Charles) Laws, including 250 holotypes. Laws collected extensively, but specialised in micromolluscs (Fleming & Grant-Mackie, 1985), and his work on Pyramidellidae alone contributed more than 100 primary types to the Auckland Museum collections. The H.J. (Harold) Finlay private collection of Recent and fossil Mollusca, comprising 14,000 species lots

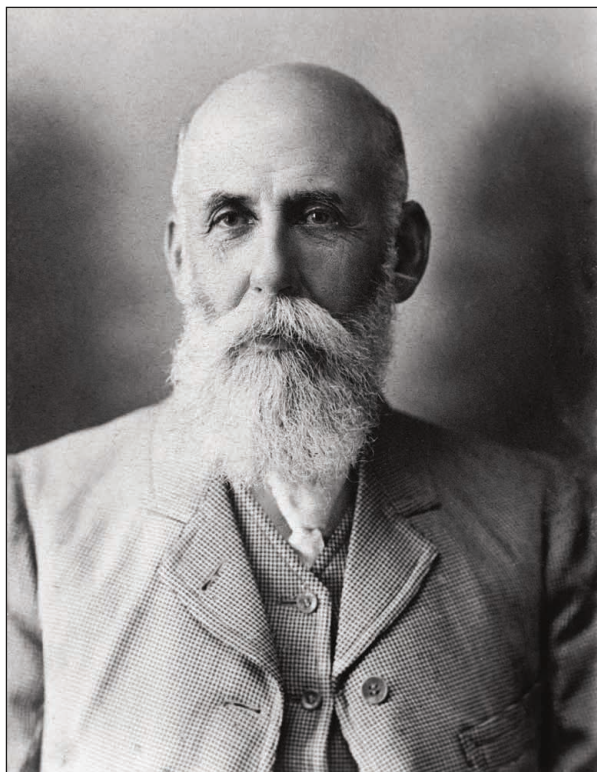


Figure 1a. Thomas Frederic Cheeseman was the sole Curator of Auckland Museum from 1874 until his death in 1923. He collected widely across all areas of natural history.

with 437 primary type specimens, was purchased by the Museum in 1937 (Powell *et al.*, 1967). Finlay, who spent most of his life in a wheelchair after contracting poliomyelitis at the age of 4, undertook all his molluscan work as a private individual. He received a DSc in 1927, but despite this spent much of the next 10 years unemployed and impoverished. He worked off and on for oil companies and at some time in the mid-1930s also received financial support from Auckland Museum to carry out his research (Hornibrook, 1971). When Finlay finally secured employment with the New Zealand Geological Survey in 1937 he switched to foraminiferal research after which Auckland Museum acquired much of his molluscan collections. Another significant section of the fossil types are the 64 primary types contributed through J. (Jack) Marwick's work on the Late Pliocene (Waipipian) Kaawa Formation which was found 25–30m below the surface in the newly dug Waitemata Brewery well, Otahuhu, Auckland. J. Healy of the New Zealand Geological Survey (now GNS Science) heard that the well would be dug and arranged with Morton Coutts, the general manager of the brewery, for collections to be made. Marwick, along with J.A. Bartrum, C.A. Fleming, A.W.B. Powell and C.R. Laws collected from the spoil dumped at the site between November 1945 and January 1946 (Marwick, 1948). The Laws and Finlay collections together with the Marwick types make the most important collection of fossil molluscan types in New Zealand next to that of the GNS Science.



Figure 1b. A.W.B (Baden) Powell amongst the mollusc storage cabinets. He made the wooden trays (Dell, 1987) and used many other cheap and readily available storage containers, such as lingerie and shoe boxes.

Powell himself also contributed a large amount of material from his numerous field trips around New Zealand and its offshore islands. By special arrangement with the Museum Council his private collection of 60,000 specimen lots of New Zealand and foreign Recent and fossil molluscs came to the Museum on his appointment (Powell *et al.*, 1967). These were eventually integrated with the Museum's collections. His material, which was mostly the result of his own fieldwork, contributed fossils from important Tertiary faunas at localities such as Waihi Stream, Cape Runaway, Motutara (the old name for the coast south of Muriwai), and Waiheke (Dell, 1987). He was a member of the "Discovery II" Expedition (1925); Auckland Museum's "Will Watch" Expedition (1934); the Danish "Galathea" Expedition (1950); and the "Gloria Maris" Expedition to New Guinea (1955). He also received molluscan material collected by the British, Australian, and New Zealand Antarctic Research Expedition (BANZARE, 1929-31).

Between 1960 and 1965, the American philanthropist W.B. Dixon Stroud sponsored molluscan research by Powell. This enabled field work to be carried out at the Three Kings and Poor Knights Islands, as well as other off-shore expeditions in Stroud's yacht. Powell named 1190 living and fossil Mollusca and two Crustacea (Cernohorsky, 1988) and the type specimens for most of these are lodged in Auckland Museum's collections.

In 1969 Walter Cernohorsky succeeded Powell as curator of malacology, until his retirement in 1989. He

specialized mostly in Indo-Pacific Mollusca and his taxonomic work contributed 31 primary type specimens deposited with Auckland Museum.

Both Powell and Cernohorsky kept all type specimens integrated taxonomically within the general collections, but in the early 1990s the primary types and paratypes were brought together into a separate types collection and fire-retardant cabinet. Although by now most of these have been located and extracted, even today the occasional type specimen is still rediscovered amongst the general collections.

## SPECIMEN REGISTRATION

Although the primary type specimens were stored together with the general collections they appear to have been numbered separately. Powell used two sequential numbering systems, one for the types held within the Museum's collections, and one for the types held within his own private collection. The latter numbers were prefixed with a P. He seems to have started this system after the publication of his 1941 and 1949 catalogues,

as he numbered the types by the alphabetical sequence in which they were listed in these publications. A record of the numbers was kept in both a card file and annotated copies of the catalogues (Fig. 2) and each type specimen also has labels bearing at least some if not all information. The recent rediscovery amongst the Marine Department's archives of a register of acquisitions, which also contains primary data for many of these specimens, has enabled the further verification and augmentation of many of our type records (Fig. 3).

A new alpha-numeric system, using the format AK12345, was introduced in the early 1990s with the first round of digitisation of records in the Marine Department. To keep type records separate from other records a block of numbers from AK70001–AK74999 was set aside for the primary types, paratypes and paralectotypes. Wherever possible, Powell's holotype numbers were retained within the new system. The Museum's specimens were allocated numbers starting from AK70001, i.e. Powell's 1 became AK70001 etc. Type specimens from Powell's own collection were allocated numbers starting with AK72, i.e. Powell's P1 became AK72001 etc.

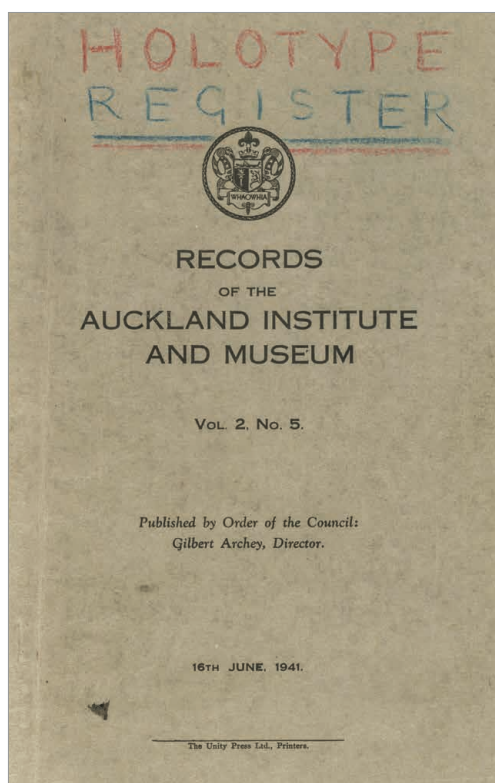
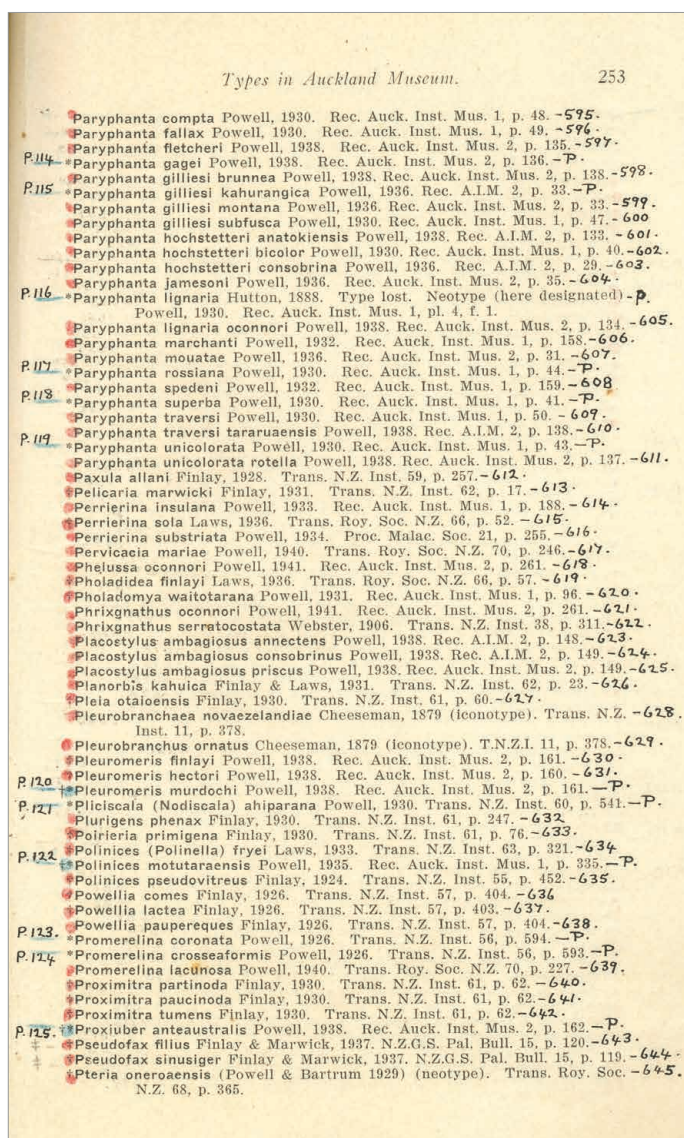


Figure 2. The front cover (above) of an off-print and one of the pages of the catalogue of biological primary types as held by Auckland War Memorial Museum in 1941. This particular one was used by A.W.B. Powell as the Holotype Register. Specimens marked with a red dot (right) were part of the Museum's collections, and those flanked by a number underlined in blue were part of A.W.B. Powell's own personal collection. Eventually both were amalgamated and are now held in the marine department of Auckland War Memorial Museum.



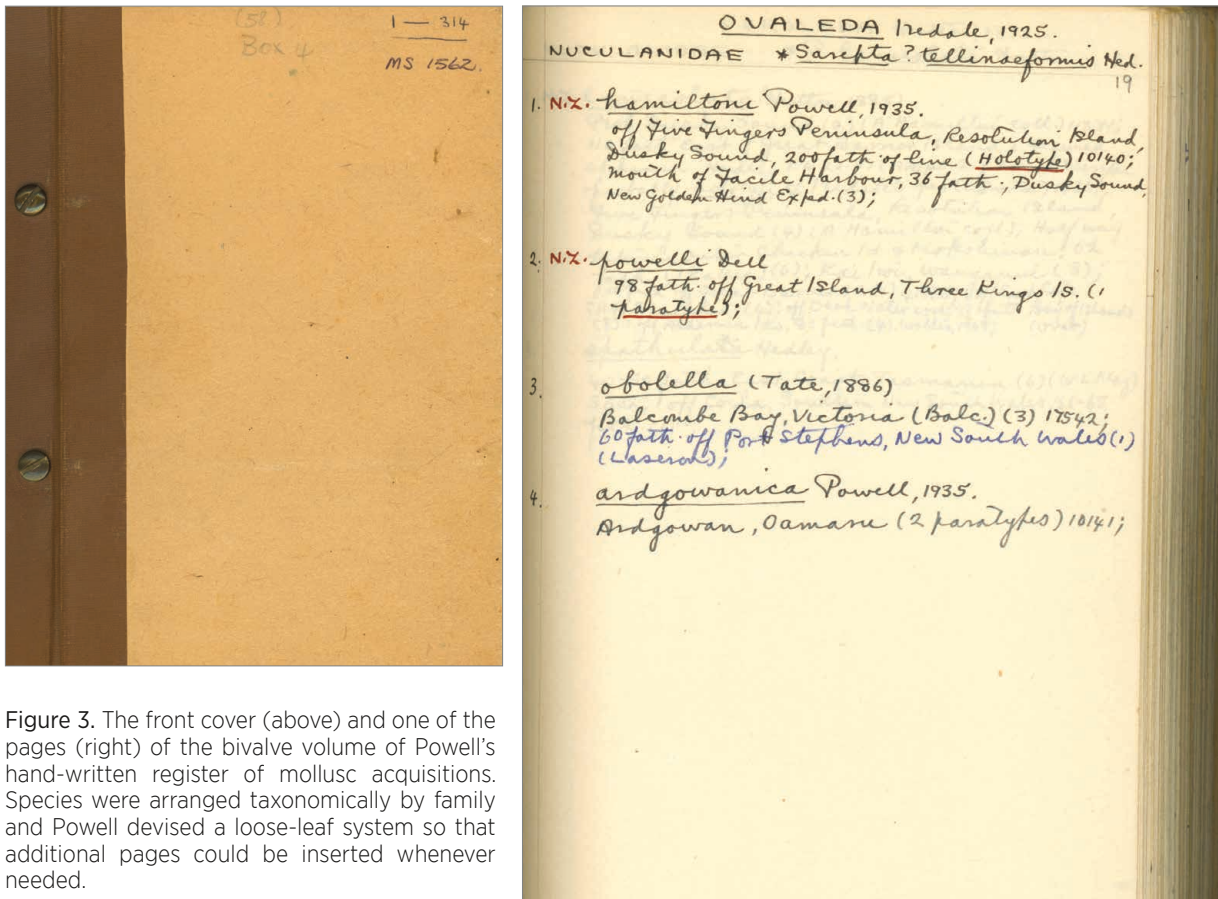


Figure 3. The front cover (above) and one of the pages (right) of the bivalve volume of Powell's hand-written register of mollusc acquisitions. Species were arranged taxonomically by family and Powell devised a loose-leaf system so that additional pages could be inserted whenever needed.

In the late 1990s with a move to the present collections management system and the integration of all departmental databases to a single one, the AK prefix was replaced by the MA prefix, with AK being retained for botanical specimens.

### Methods

Within the currently accepted family placement, taxa are here listed alphabetically under their original name first by genus and then by species.

For most of the Recent New Zealand species the *Checklist of the Recent Mollusca recorded from the New Zealand Exclusive Economic Zone* (Spencer *et al.*, 2016) was used for the taxonomic order, family placements and current names. However, for some family placements the World Register of Marine Species (WoRMS Editorial Board, 2015) was preferred. For Recent Australian species the Australian Faunal Directory (ABRS, 2009) was used and for the remaining world species the World Register of Marine Species (WoRMS Editorial Board, 2015) was the major reference. Taxonomic placement, current names and ages for New Zealand Cenozoic fossil taxa are almost exclusively taken from Maxwell (in Spencer *et al.*, 2009), Beu & Maxwell (1990) and Beu & Raine (2009).

All specimens listed here were sighted and cross-checked against original publications, apart from one holotype and three paratype lots, which are missing. In addition, 17 taxa were affected by glass-disease, with

four holotypes being so severely damaged they are no longer useable.

Fossils are indicated by a dagger (†) and for fossil taxa their ages have been included as international periods followed by the equivalent New Zealand stage in parentheses. Geochronological subdivisions used in original papers have in many cases been superseded by new nomenclature and their boundaries revised. For the currently accepted New Zealand timescale see Raine *et al.* (2015). Likewise formatting follows Raine *et al.* (2015).

Type definitions are those used by the International Code of Zoological Nomenclature (ICZN, 2015).

Paratypes and paralectotypes have been included in this catalogue, because in some instances the name-bearing type is not readily available (for example, because it is missing, affected by glass disease, or held outside New Zealand). It is therefore useful to know that some of the type series is available within New Zealand.

Of the bivalve species reviewed here 15 were not originally figured. Of these, the holotype of *Escalima regularis* is missing. Auckland Museum holds the primary types for a further 12 of these unfigured species, and for these high resolution images, created with automontage focus stacking techniques, are provided here. Similarly high resolution images for many of the other primary types are available through the Museum's Collections Online (<http://www.aucklandmuseum.com/collections-research/collections>).

**Class BIVALVIA**  
**Subclass PROTOBRANCHIA**  
**Order NUCULIDA**  
**NUCULIDAE**

***Austronucula schencki* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [220, 221], pl. 48, fig. 5 (holotype).

**Holotype:** MA70076, articulated specimen, collected by Mrs R.H. Harrison from shell sand from Rosa Island, Port Pegasus, Stewart Island, New Zealand.

**Remarks:** Also the type for the genus. Valves show damage from glass-disease.

**Current name:** *Austronucula schencki* Powell, 1939 – Powell (1979: 358); Spencer *et al.* (2016).

***Nucula certisinus* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [243], not figured.

**Lectotype:** MA70551, Figure 4 a, b, left valve, dredged from 22m (12 fathoms), Doubtless Bay, Northland, New Zealand.

**Paralectotype:** MA73328, left valve from the type locality.

**Remarks:** Finlay (1930) reported ‘one perfect specimen and a single valve’ for the type material and older labels, presumed to be A.W.B. Powell’s, have ‘Holotype & Paratype’. However, the box contained 2 capsules, each with a left valve. One capsule was labelled ‘L’ and was matched with a hand-written label from Museum of New Zealand, Te Papa Tongarewa, stating: “Lectotype (Dell, 1956). Capsule marked ‘L’. B Marshall, 4/10/2000.” Dell (1956) figured the ‘type specimen’ (figs 5, 7), thus designating it as the name-bearing type. He did not mention whether the right valve of the ‘perfect’ specimen was already lost at that time. The second left valve, here designated a paralectotype, has been removed and given its own registration number, MA73328.

**Current name:** *Nucula certisinus* Finlay, 1930 – Powell (1979: 355); Spencer *et al.* (2016).

***Nucula dunedinensis* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [262, 263], pl. 38, figs 1, 2 (holotype), pl. 40, figs 43, 44 (paratype).

**Holotype:** MA70552, 1 articulated specimen dredged from 5.5m from Dunedin Harbour, Otago, New Zealand.

**Paratypes:** MA72962, 1 articulated specimen and 2 left valves; MA72563, 2 articulated specimens, 3 right valves and 4 unrelated left valves dredged from 5.5m from Dunedin Harbour, Otago, New Zealand.

**Remarks:** Finlay (1928) did not explicitly state the number of, or localities for, the paratypes, and there are no original labels with these.

**Current name:** *Nucula (Lamellinucula) dunedinensis* Finlay, 1928 – Powell (1979: 355, 356); Spencer *et al.* (2016).

***Nucula gallinacea* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [243], not figured.

**Syntypes:** MA70553, Figure 5 a-h, 2 specimens (valves separate) and 1 left valve, dredged from 46m (25 fathoms), off Hen and Chickens Islands, northern Hauraki Gulf, New Zealand.

**Remarks:** Finlay (1930) stated that there are ‘4 examples’ from the type locality. However, the AWMM type material contains 5 valves from 3 different individuals. In addition to original labels, there is a small note in A.W.B. Powell’s handwriting, stating ‘In the type-material of *Nucula gallinacea* are a pair of valves which are a new species of *Linucula*. According to P.A. Maxwell in a letter 29–7–1974.’ In Powell (1979: 356) the taxon is named as *Nucula (Linucula) gallinacea*. The original type material needs re-examination.

**Current name:** *Varinucula gallinacea* (Finlay, 1930) – Maxwell in: Spencer *et al.* (2009: 233); Spencer *et al.* (2016).

**†*Nucula ngatutura* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [45], pl. 9, figs 1, 4 (holotype).

**Holotype:** MA70554, a single right valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Pronucula ngatutura* (Laws, 1936) – Beu & Maxwell (1990: 392).

***Nucula nitidulaformis* Powell, 1971**

Powell, A.W.B., 1971. New Zealand molluscan systematics with descriptions of new species: part 7. *Records of the Auckland Institute and Museum* 8: 209–228 [227, 228], figs 27, 28 (holotype).

**Holotype:** MA71327, an articulated specimen from east of Aldermen Islands, Coromandel, New Zealand.

**Paratypes:** MA71467, 4 articulated specimens from the type locality; MA73330, a single articulated specimen, assumed to be from the type locality.

**Remarks:** MA71467 contained 2 vials, one with 1 articulated specimen, and one with 4 articulated specimens, and a label hand-written by Powell giving type locality details. Powell (1971) mentioned a ‘Holotype and paratype presented to Auckland Museum by Mr C. Wormald’, but made no mention of a further 4 paratype specimens. It is assumed that the 4 specimens are from the type series and were donated at a later date and that the single specimen (now MA73330) is the original Powell (1971) paratype, which, according to the label, was originally kept together with the holotype specimen.

**Current name:** *Nucula nitidulaformis* Powell, 1971 – Spencer *et al.* (2016).

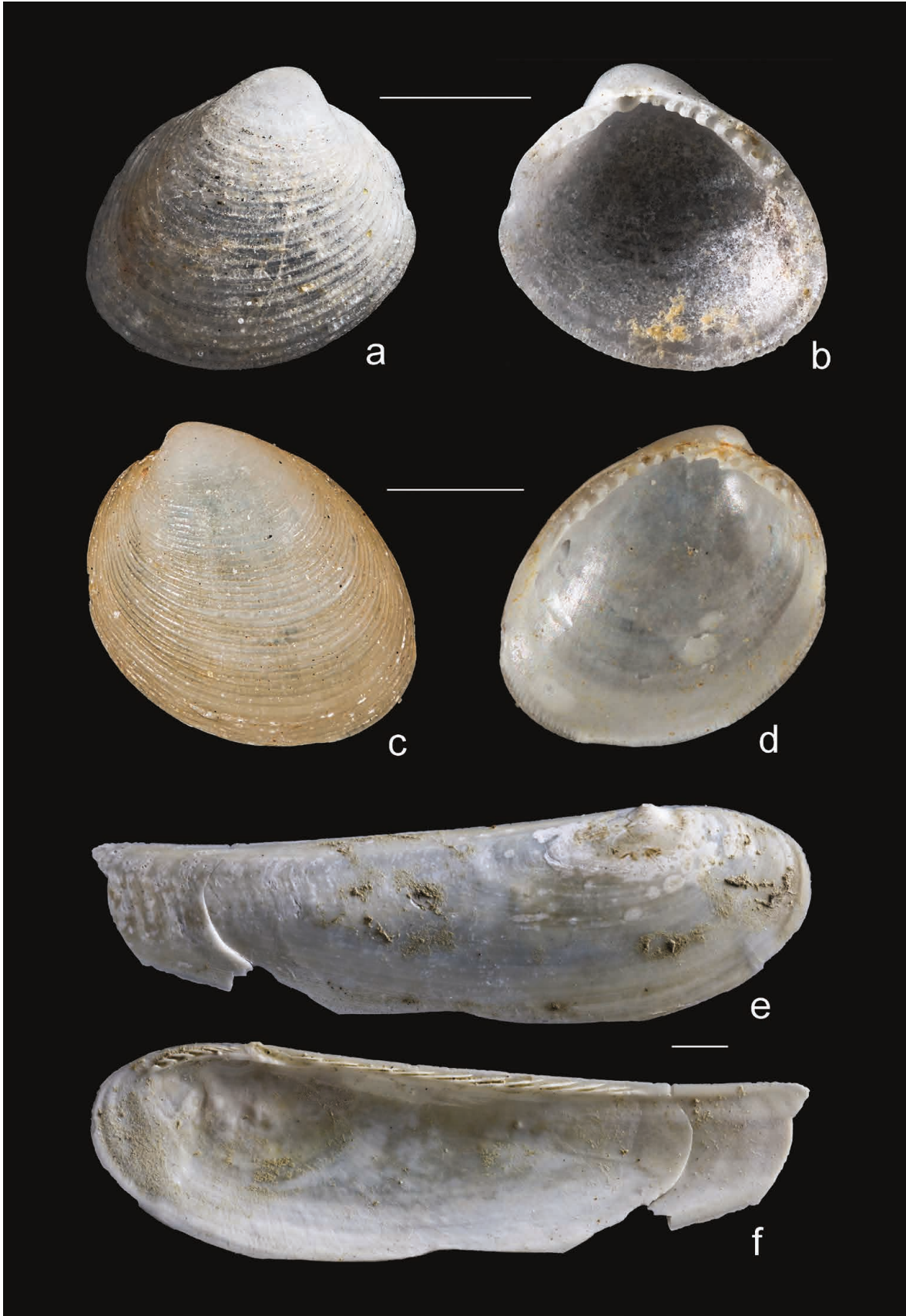


Figure 4. *Nucula certisinus* Finlay, 1930, lectotype, left valve exterior and interior views (a, b); *Nucula rossiana* Finlay, 1930, holotype, right valve exterior and interior views (c, d); *Poroleda pertubata* Iredale, 1924, holotype, right valve exterior and interior views (e, f). Scale bar 1mm.

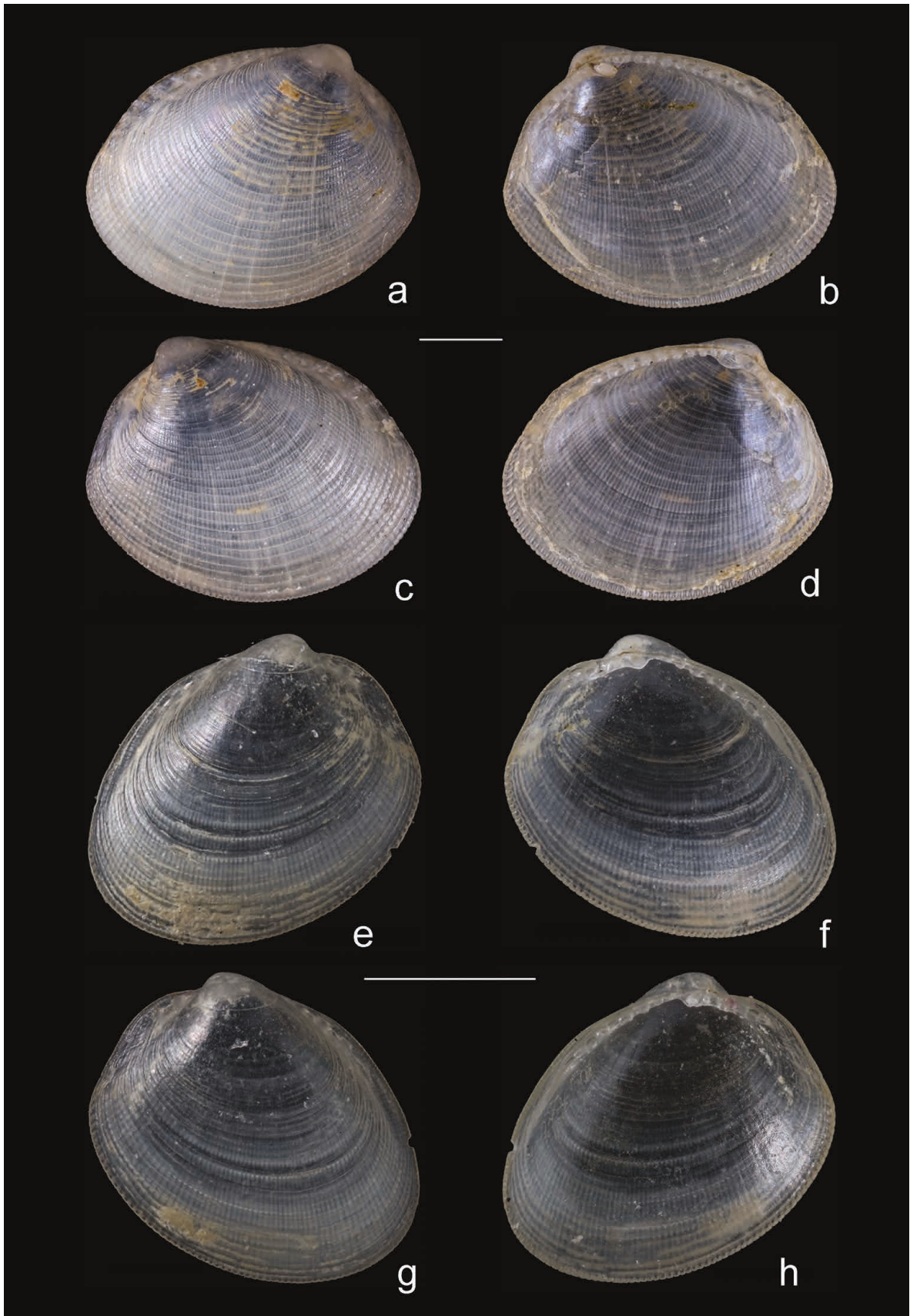


Figure 5. *Nucula gallinacea* Finlay, 1930, syntypes consisting of the exterior and interior views of the left and right valves of 2 specimens (*a-d* and *e-h*). The syntype consisting of the single left valve is not shown. Scale bar 1mm.

***Nucula rossiana* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [242, 243], not figured.

**Holotype:** MA70555, Figure 4 c, d, single right valve from shell sand, Faith Harbour, Auckland Islands, New Zealand.

**Paratypes:** MA72591, 1 articulated specimen and 1 left valve, assumed to be from the type locality; MA73086, unrelated left and right valves from the type locality.

**Current name:** *Nucula rossiana* Finlay, 1930 – Spencer *et al.* (2016).

***Pronucula bollonsi* Powell, 1955**

Powell, A.W.B., 1955. Mollusca of the southern islands of New Zealand. *Cape Expedition Series Bulletin* 15, DSIR, Wellington, 151 pp. [19], pl. 1, fig. 3 (holotype).

**Holotype:** MA72203, right valve collected from 174 m (95 fathoms), 22.5 km (14 miles) north of the Auckland Islands, New Zealand.

**Paratypes:** MA71973, 5 articulated individuals from the type locality.

**Current name:** *Pronucula bollonsi* Powell, 1955 – Spencer *et al.* (2016).

***Pronucula maoria* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [163], pl. 45, fig. 8 (holotype).

**Paratypes:** MA72208, 6 left valves, and 2 right valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off Three Kings Islands, New Zealand.

**Current name:** *Pronucula maoria* Powell, 1937 – Spencer *et al.* (2016).

***Pronucula tenuis* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [119, 120], pl. 22, figs 1, 2 (holotype).

**Paratype:** MA72347, single right valve, dredged by a private scientific party in December 1908, from the steamer 'Rakiura' in 311m (170 fathoms), off Puysegur Point, Southland, New Zealand.

**Remarks:** In Powell (1927) 2 specimens were mentioned as follows: 'Holotype (1 left valve) from 100 fathoms. A single worn left valve from 170 fathoms.' As the holotype specimen was lodged in the Canterbury Museum, Christchurch (CM M853), the second specimen is here treated as the paratype. Powell (1927) referred to 2 left valves, but the figured specimen, presumed to be the holotype, is a right valve. The paratype specimen is also a right valve. It is likely that at the time of writing it was not recognised that the Nuculidae are opisthogyrate, i.e. the umbo is posteriorly directed, and so the valves were misidentified.

**Current name:** *Pronucula tenuis* Powell, 1927 – Spencer *et al.* (2016).

**Order NUCULANIDA  
NUCULANIDAE****†*Ledella clifdenensis* Powell, 1935**

Powell, A.W.B., 1935. New Recent and Tertiary Nuculanidae from New Zealand. *Proceedings of the Malacological Society* 21(4): 252–255 [254, 255], pl. 27, fig. 7 (holotype).

**Holotype:** MA70390, 1 articulated specimen collected from Middle Miocene (Clifdenian) Slip Point Siltstone [Finlay's bed 6C (for correlation see Fleming *et al.*, 1969)] at Clifden, Southland, New Zealand.

**Paratype:** MA72421, 1 right valve and 2 left valves collected from the type locality.

**Remarks:** The holotype specimen lot consisted of 2 left valves and 1 articulated specimen. As the articulated specimen matched the original holotype illustration the 2 left valves were combined with the existing paratype specimen, MA72421.

**Current name:** *Ledella clifdenensis* Powell, 1935 – Beu & Maxwell (1990: 393).

***Ledella finlayi* Powell, 1935**

Powell, A.W.B., 1935. New Recent and Tertiary Nuculanidae from New Zealand. *Proceedings of the Malacological Society* 21(4): 252–255 [254], pl. 27, figs 5, 6 (holotype).

**Holotype:** MA70391, left valve collected from 137m (75 fathoms) water depth off North Cape, Northland, New Zealand.

**Paratypes:** MA72435, 7 right valves and 4 left valves collected from the type locality.

**Current name:** *Ledella finlayi* Powell, 1935 – Spencer *et al.* (2016).

***Nuculana (Jupiteria) manawatawhia* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [164], pl. 45, fig. 9 (holotype).

**Paratypes:** MA71876, 3 worn right valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Jupiteria manawatawhia* (Powell, 1937) – Powell (1979: 359); Spencer *et al.* (2016).

**†*Nuculana (Saccella) motutaraensis* Powell, 1935**

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [330], pl. 76, fig. 1 (holotype).

**Holotype:** MA72107, left valve collected from large fallen blocks of Early Miocene (Altonian) Nihotupu Formation, southern end of Maori Bay, south of Muriwai Beach, west Auckland, New Zealand.

**Paratypes:** MA71385, 2 right valves and 1 left valve collected from the type locality.

**Current name:** *Saccella motutaraensis* (Powell, 1935) – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).



†*Nuculana (Saccella) waihiana* Powell, 1931

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [91, 92], pl. 11, fig. 15 (holotype).

**Holotype:** MA70556, right valve with damaged ventral margin collected by A.W.B. Powell in January 1931 from Late Pliocene (Waipipian) Tangahoe Formation, on the coast near the mouth of Waihi Stream, Hawera, New Zealand.

**Paratypes:** MA71645, 2 damaged left valves from the type locality.

**Current name:** *Saccella waihiana* (Powell, 1931) – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).

*Poroleda pertubata* Iredale, 1924

Iredale, T., 1924. Results from Roy Bell's molluscan collections. *Proceedings of the Linnean Society of New South Wales* 49(3): 179–278 [185, 186], not figured.

**Holotype:** MA72961, Figure 4 e, f, right valve dredged by C. Hedley from 200m (110 fathoms) east of Great Barrier Island, New Zealand.

**Remarks:** The label, in A.W.B. Powell's script, states that it is figured in Hedley (1906, p. 71, pl. 2, fig. 7) as *Poroleda lanceolata* (Hutton, 1885). Either the specimen has been damaged along the ventral and posterior margins since the illustration or Hedley's illustration is a composite of a number of specimens. *P. lanceolata* was originally described by Hutton from a fossil specimen.

**Current name:** *Poroleda lanceolata* (Hutton, 1885) – Powell (1979: 362); Spencer *et al.* (2016).

YOLDIIDAE

†*Nuculana (Jupiteria) taioma* Finlay & Marwick, 1937

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [16, 17], pl. 1, fig. 3 (holotype), figs 1, 6 (paratype).

**Paratypes:** MA72862, 2 right valves and 1 left valve all embedded in rock from the Early Paleocene (Lower Teurian) at Boulder Hill, near Dunedin, Otago, New Zealand.

**Current name:** *Ledina taioma* (Finlay & Marwick, 1937) – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).

†*Ovaleda ardgowanica* Powell, 1935

Powell, A.W.B., 1935. New Recent and Tertiary Nuculanidae from New Zealand. *Proceedings of the Malacological Society* 21(4): 252–255 [253], pl. 27, figs 3, 4 (holotype).

**Holotype:** MA70580, left valve collected by A.W.B. Powell from the Early Miocene (Altonian) of the Mount Harris Formation at Ardgowan near Oamaru, Otago, New Zealand.

**Paratype:** MA71398, left valve from the type locality.

**Current name:** *Yoldiella ardgowanica* (Powell, 1935) – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).

*Ovaleda hamiltoni* Powell, 1935

Powell, A.W.B., 1935. New Recent and Tertiary Nuculanidae from New Zealand. *Proceedings of the Malacological Society* 21(4): 252–255 [252, 253] pl. 27, figs 1, 2 (holotype).

**Holotype:** MA72110, left valve presumed to have been collected by Captain Fairchild from 366m (200 fathoms) off Five Fingers Peninsula, Resolution Island, Fiordland, New Zealand.

**Current name:** *Yoldiella hamiltoni* (Powell, 1935) – Spencer *et al.* (2016).

MALLETIIDAE (=NEILONELLIDAE)

*Austrotindaria benthicola* Dell, 1956

Dell, R.K., 1956. *The archibenthal Mollusca of New Zealand*. Dominion Museum Bulletin 18, 235 pp. [13, 14], pl. 2, figs 14, 15 (holotype).

**Paratype:** MA72743, left valve dredged from the type locality, Station 41, Chatham Islands Expedition 1954, from 600m (330 fathoms) south east of Pitt Island, Chatham Islands, New Zealand.

**Current name:** *Neilonella benthicola* (Dell, 1956) – Spencer *et al.* (2016).

*Austrotindaria flemingi* Dell, 1956

Dell, R.K., 1956. *The archibenthal Mollusca of New Zealand*. Dominion Museum Bulletin 18, 235 pp. [14], pl. 2 figs 12, 13 (holotype), fig. 16 (paratype).

**Paratype:** MA72757, left valve dredged from the type locality, Station 41, Chatham Islands Expedition 1954, from 600m (330 fathoms) south east of Pitt Island, Chatham Islands, New Zealand.

**Current name:** *Neilonella flemingi* (Dell, 1956) – Spencer *et al.* (2016).

*Neilo annectens* Powell, 1931

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [92], pl. 12, fig. 25 (holotype).

**Holotype:** MA70516, left valve embedded in siltstone, collected by A.W.B. Powell from Late Pliocene (Waipipian) Tangahoe Formation, near the mouth of Waihi Stream, Hawera, New Zealand.

**Remarks:** the species is found from the Early Pliocene (Opoitian) through to the Recent.

**Current name:** *Neilo annectens* Powell, 1931 – Spencer *et al.* (2016).

†*Neilo awamoana* Finlay, 1926

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [255], pl. 58, fig. 21 (holotype),

fig. 20 (paratype MA73332), fig. 22 (paratype MA71686).

**Holotype:** MA70517, right valve collected from the Early Miocene (Altonian) of the Mount Harris Formation at Mount Harris, Oamaru district, Otago, New Zealand.

**Paratypes:** MA71686, left valve collected from the Early Miocene (Altonian) of the Mount Harris Formation at Devils Bridge near Oamaru, Otago, New Zealand; MA73332, right valve collected from the Early Miocene (Altonian) of the Mount Harris Formation at Ardgowan near Oamaru, Otago, New Zealand.

**Current name:** *Neilo awamoana* Finlay, 1926 – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).

#### †*Neilo sinangula* Finlay, 1926

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [256], pl. 58, fig. 19 (holotype).

**Holotype:** MA70518, right valve from the Late Oligocene (Duntroonian) Wharekuri Greensand at Wharekuri, Otago, New Zealand.

**Current name:** *Neilo sinangula* Finlay, 1926 – Maxwell in: Spencer *et al.* (2009: 234); Beu & Maxwell (1990: 393).

### Subclass AUTOBRANCHIA

#### Order MYTILIDA

##### MYTILIDAE

#### *Aulacomya ater regia* Powell, 1957

Powell, A.W.B., 1957. Mollusca of Kerguelen and Macquarie Islands. *Reports of the British Australian New Zealand Antarctic Research Expedition 1929-1931, series B, Zoology and Botany* 6: 109–149 [120], pl. 2, figs. 1, 2 (holotype).

**Paratypes:** MA71952, 2 articulated specimens, from station 52, British Australian New Zealand Antarctic Research Expedition, in 20–30m, Bras Bolinder, near the head of Greenland Harbour, Kerguelen Island, District of the French Southern and Antarctic Lands.

**Remarks:** In the list of Recorded Species, p. 111 Powell (1957) recorded the name as *Aulacomya magellanica regia* n. subsp. However, on p. 120 Powell used the name *Aulacomya ater regia* n. subsp.

**Current name:** *Aulacomya regia* Powell, 1957 – Huber (2013a).

#### *Mytilus aoteanus* Powell, 1958

Powell, A.W.B., 1958. New Zealand molluscan systematics with descriptions of new species, part 3. *Records of the Auckland Institute and Museum* 5(1 & 2): 87–91 [87, 88], text figs 2, 4, pl. 12, fig. 5 (holotype).

**Holotype:** MA71237, articulated specimen, collected from Rona Bay, Wellington Harbour, Wellington, New Zealand.

**Current name:** *Mytilus galloprovincialis* Lamarck, 1819 – Spencer *et al.* (2016).

#### †*Mytilus tetleyi* Powell & Bartrum, 1929

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [399, 400], pl. 49, fig. 103 (holotype), pl. 40, figs 46, 47 (paratypes).

**Holotype:** MA72103, 1 largely intact left valve, from the Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA73335, 2 anterior fragments from right valves, from the type locality.

**Remarks:** The 2 specimens in MA73335 were found in the box with the holotype and are here assumed to have paratype status. Powell & Bartrum (1929) illustrated two paratypes (figs 46, 47) which were lodged with Auckland University (L2635, fig. 46; L2633, fig. 47), along with a third unfigured paratype (L2635). They discussed the internal ligament area with particular regard to paratypes, consistent with the features shown by one of the fragments of MA73335. Only 1 of the Auckland University specimens shows these features and as there is direct reference in the text to more than 1 paratype with these, it has to be assumed that Auckland Museum’s fragment is a paratype. It is therefore also assumed that the second fragment was part of the type series and is therefore treated as a paratype.

**Current name:** *Perna tetleyi* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 234).

#### †*Trichomusculus lornensis* Laws, 1932

Laws, C.R., 1932. New Tertiary Mollusca from New Zealand. No. 2. *Transactions and Proceedings of the New Zealand Institute* 62: 183–202 [183], pl. 32, fig. 41 (holotype).

**Holotype:** MA70770, a left valve collected by C.R. Laws from a fallen block of Late Eocene (Kaiatan-Runangan) Waiareka Volcanics, hillside near the disused Lorne railway station, Waiareka Valley, inland from Oamaru, New Zealand.

**Current name:** *Trichomusculus lornensis* Laws, 1932 – Maxwell in: Spencer *et al.* (2009: 234).

#### Order ARCIDA

##### ARCIDAE

#### *Acar sandersonae* Powell, 1933

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [200], pl. 17, figs 6, 7 (holotype), fig. 8 (paratype).

**Holotype:** MA70003, articulated specimen collected by Mrs F.W. Sanderson, from west of Taupo Bay, Whangaroa, Northland, New Zealand.

**Paratype:** MA71435, articulated specimen from the type locality.

**Current name:** *Acar sandersonae* Powell, 1933 – Spencer *et al.* (2016).

***Arca sociella* Brookes, 1926**

Brookes, A.E., 1926. New Species of Recent Mollusca. *Transactions and Proceedings of the New Zealand Institute* 56: 588–590 [590], pl. 102, figs 4, 4a.

**Holotype:** MA71290, collected by A.E. Brookes near Russell, Bay of Islands, New Zealand.

**Paratypes:** MA73329, 5 articulated specimens collected by A.E. Brookes from the Bay of Islands, New Zealand, no further details available.

**Current name:** *Acar sociella* (Brookes, 1926) – Powell (1979: 364); Spencer *et al.* (2016).

**†*Barbatia awamoana* Finlay, 1930**

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [49], pl. 5, figs. 63 (holotype), 64, 65 (paratypes).

**Holotype:** MA70093, right valve, collected from the Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Paratypes:** MA72441, 6 right valves, 12 unrelated left valves, of varying sizes and preservation, from the type locality.

**Current name:** *Barbatia awamoana* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 234).

**†*Bentharca waitakerensis* Eagle, 2000**

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [147–150], figs 5, 6 (holotype), figs 7, 8 (paratypes), figs 9, 12.

**Paratype:** MA72301, left valve collected by M.K. Eagle from Early Miocene (Altonian) Nihotupu Formation, Shaw Road quarry, Oratia, Auckland, New Zealand.

**Remarks:** In Eagle (2000) the species name is variously spelled *Bentharca waitakarensis* or *Bentharca waitakerensis*. The description states that the species is named after the Waitakere Ranges (p. 148) and therefore the spelling *waitakerensis* is adopted here as the correct one.

**Current name:** *Bentharca waitakerensis* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 234).

**CUCULLAEIDAE****†*Cucullaea (Cucullastis) barbara* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [20, 21], pl. 1, figs 15, 16 (holotype), figs 11, 14 (paratype).

**Holotype:** MA70224, left valve, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Paratype:** MA73093, left valve from the type locality (illustrated in Beu & Maxwell (1990), p. 78, fig. 1a,c).

**Remarks:** Also the type for the genus.

**Current name:** *Cucullaea (Cucullastis) barbara* Finlay & Marwick, 1937 – Beu & Raine (2009).

**†*Cucullaea (Cucullona) inarata* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [20], pl. 2, figs 2, 5 (holotype), figs 3, 4 (paratype).

**Holotype:** MA73355, left valve, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Paratype:** MA73356, right valve from the type locality.

**Current name:** *Cucullaea (Cucullona) inarata* Finlay & Marwick, 1937 – Beu & Raine (2009).

**GLYCYMERIDIDAE****†*Glycymeris marshalli* Laws, 1930**

Laws, C.R., 1930. New Tertiary Mollusca from New Zealand. No. 1. *Transactions and Proceedings of the New Zealand Institute* 61: 547–553 [547], pl. 91, figs 13, 14 (holotype).

**Holotype:** MA70347, right valve, collected from the Late Oligocene (Duntroonian) Chatton Shellbed, Shell Gully, Chatton, Southland, New Zealand.

**Current name:** *Glycymeris (Glycymeris) marshalli* Laws, 1930 – Maxwell in: Spencer *et al.* (2009: 234).

**†*Glycymeris (Grandaxinea) aucklandica* Powell, 1938**

Powell, A.W.B., 1938. Tertiary molluscan faunules from the Waitemata Beds. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 362–379 [364, 365], pl. 38, fig. 9 (holotype).

**Holotype:** MA70346: left valve with part of the postero-dorsal margin broken away, collected by A.W.B. Powell from the Early Miocene (Otaian) Tipakuri Formation at ‘Fossil Bay’ just south of Church Bay (sometimes known as Squadron Bay), Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA73113, 2 damaged left (?) valves from the type locality.

**Current name:** *Tucetona aucklandica* (Powell, 1938) – Maxwell in: Spencer *et al.* (2009: 235).

**†*Glycymeris (Grandaxinea) wairarapaensis* Powell, 1938**

Powell, A.W.B., 1938. A Pliocene molluscan faunule from Castle Point. *Records of the Auckland Institute and Museum* 2(3): 157–164 [158, 159], pl. 39, fig. 2 (holotype and paratype left valve).

**Holotype:** MA70348, right valve collected by A.W.B. Powell from the Early Pleistocene (Nukumarian) Castlepoint Formation at the lighthouse reef, Castlepoint, Wairarapa, New Zealand.

**Paratypes:** MA72418, 1 articulated specimen, 3 right valves, 6 left valves, from the type locality.

**Current name:** *Tucetona wairarapaensis* (Powell, 1938) – Maxwell in: Spencer *et al.* (2009: 235).

## LIMOPSIDAE

†*Limopsis campa* Allan, 1926

Allan, R.S., 1926. Fossil Mollusca from Waihao Greensands. *Transactions and Proceedings of the New Zealand Institute* 56: 338-346 [345, 346], text figure p. 346 (holotype).

**Holotype:** MA70397, articulated specimen from Middle Eocene (Bortonian) Waihao Greensand, Waihao Downs, Canterbury, New Zealand.

**Current name:** *Limopsis campa* Allan, 1926 – Maxwell in: Spencer *et al.* (2009: 234).

†*Limopsis lawsi* King, 1933

King, L.C., 1933. Tertiary molluscan faunas from the southern Wairarapa. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 334–354 [353], pl. 37, figs 18, 19 (holotype).

**Paratypes:** MA73197, 1 articulated specimen and 1 right valve attached to the right valve of the articulated specimen, collected from the Late Miocene (Tongaporutuan) Hurupi Formation, Hurupi Creek, Palliser Bay, New Zealand.

**Current name:** *Limopsis lawsi* King, 1933 – Maxwell in: Spencer *et al.* (2009: 234).

†*Limopsis marwicki* Powell, 1938

Powell, A.W.B., 1938. A Pliocene molluscan faunule from Castle Point. *Records of the Auckland Institute and Museum* 2(3): 157–164 [159, 160], pl. 39, figs 3, 4, 5.

**Holotype:** MA70398, right valve, collected by A.W.B. Powell from the Early Pleistocene (Nukumaruian) Castlepoint Formation at the lighthouse reef, Castlepoint, Wairarapa, New Zealand.

**Paratypes:** MA71442, 3 right valves, 2 unrelated left valves, from the type locality.

**Current name:** *Limopsis marwicki* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 234).

†*Limopsis producta* Finlay & McDowall, 1923

Finlay, H.J. and F.H. McDowall, 1923: Fossiliferous Limestone at Dowling Bay. *Transactions and Proceedings of the New Zealand Institute* 54: 106–114 [112, 113], text fig. 1.

**Holotype:** MA70399, right valve from the Middle Miocene (Waiauian) of the Dowling Bay Limestone, Dunedin, Otago, New Zealand.

**Current name:** *Limopsis producta* Finlay & McDowall, 1923 – Maxwell in: Spencer *et al.* (2009: 234).

†*Limopsis waihaoensis* Allan, 1926

Allan, R.S., 1926. Fossil Mollusca from Waihao Greensands. *Transactions and Proceedings of the New Zealand Institute* 56: 338-346 [346], pl. 77, figs 8a, 8b (holotype).

**Holotype:** MA70400, articulated specimen, collected by R.S. Allan from Middle Eocene (Bortonian) Waihao Greensand, McCulloch's Bridge, Waihao, Canterbury, New Zealand.

**Paratypes:** MA73117, 3 articulated specimens, 12 right valves and 17 left valves, from the type locality.

**Remarks:** right valve of holotype is articulated, but the left valve has been broken and repaired since the original type illustration.

**Current name:** *Limopsis waihaoensis* Allan, 1926 – Maxwell in: Spencer *et al.* (2009: 234).

†*Limopsis (Limopsista) microps* Finlay & Marwick, 1937

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [24, 25], pl. 1, fig. 13 (holotype), fig. 12 (paratype).

**Paratypes:** MA72863, 2 left valves from the Early Paleocene (Lower Teurian) Wangaloa Formation, coast between Mitchells Rocks and Measly Beach, near Wangaloa, Otago, New Zealand.

**Current name:** *Limopsista microps* (Finlay & Marwick, 1937) – Maxwell in: Spencer *et al.* (2009: 234).

## PHILOBRYIDAE

*Aupouria parvula* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [165], pl. 45, fig. 1 (holotype).

**Paratypes:** MA71877, 6 right valves, 14 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** Also the type for the genus.

**Current name:** *Aupouria parvula* Powell, 1937 – Spencer *et al.* (2016).

†*Cosa kaawaensis* Laws, 1936

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [48], pl. 9, figs 9, 12, 16 (holotype).

**Syntypes:** MA70207, unrelated right and left valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, Waikato, New Zealand.

**Paratypes:** MA72687, 10 right valves and 11 left valves from the type locality.

**Remarks:** Laws (1936) gave the dimensions of the holotype as dorso-ventral, 2.1mm; antero-posterior, 1.6mm, which is correct for the left valve. The right valve is much smaller, but figured as holotype in figs 9 and 12.

**Current name:** *Cosa kaawaensis* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 235).

*Cosa laevicostata* Powell, 1933

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [200, 201], pl. 18, figs 3, 4 (holotype).

**Holotype:** MA70208, a right valve collected in February 1932 from shell sand by A.W.B. Powell, from Takapaukura, Tom Bowling Bay, Northland, New Zealand.

**Paratypes:** MA71428, 2 articulated specimens, 27 right valves, 23 left valves, from the type locality.

**Current name:** *Cosa laevicostata* Powell, 1933 – Spencer *et al.* (2016).

***Cosa serratocostata* Powell, 1933**

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [201, 202], pl. 18, figs 1, 2 (holotype).

**Holotype:** MA70209, a left valve collected in February 1932 from shell sand by A.W.B. Powell, from Takapaukura, Tom Bowling Bay, Northland, New Zealand.

**Paratypes:** (15) MA72419, 10 right valves, 6 left valves, from the type locality.

**Current name:** *Cosa serratocostata* Powell, 1933 – Spencer *et al.* (2016).

***Cosa serratocostata dispar* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [165, 166], pl. 45, fig. 7 (holotype).

**Paratypes:** MA71879, 5 right valves, 4 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Cosa dispar* Powell, 1937 – Spencer *et al.* (2016).

**†*Cosa wanganuica* Finlay, 1930**

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [49], pl. 5, fig. 75 (holotype), figs 76, 77 (paratypes MA72453).

**Holotype:** MA70210, left valve, collected from Pleistocene (Castlecliffian) sediments, Castlecliff, Whanganui, New Zealand.

**Paratypes:** MA72442, 79 right valves, 97 left valves; MA72453, 2 right valves, from the type locality.

**Current name:** *Cosa wanganuica* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 235).

***Cratis delicatula* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [166, 167], pl. 45, fig. 3 (holotype).

**Paratypes:** MA71880, 21 right valves, 14 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Cratis delicatula* Powell, 1937 – Spencer *et al.* (2016).

**†*Cratis miocenica* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [49], pl. 10, figs 18, 20 (holotype).

**Holotype:** MA70216, a single right valve, from the Middle Miocene (Waiuan) of the Park Bluff Sandstone,

[Finlay's bed 8 (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Remarks:** Finlay's subdivision of Clifden beds 7 and 8 cannot be identified with confidence (Fleming *et al.*, 1969: 77).

**Current name:** *Cratis miocenica* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 235).

**†*Cratis pliocenica* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [48, 49], pl. 9, figs 13, 14, 15 (holotype).

**Syntypes:** MA70217, unrelated right and left valve from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Remarks:** Laws (1936) gave the dimensions of the holotype as height, 2.2mm; length, 2.0mm, which is correct for the right valve. The left valve is smaller, but figured as holotype in figs 13 and 14. A third specimen, a small, worn juvenile left valve, was removed from the vial and put into the general collections (MA119035).

**Current name:** *Cratis pliocenica* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 235).

***Cratis retiaria* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [166], pl. 45, fig. 4 (holotype).

**Paratypes:** MA71878, 15 right valves, 8 left valves, collected by A.W.B. Powell from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Cratis retiaria* Powell, 1937 – Spencer *et al.* (2016).

***Hochstetteria acutangula* Powell, 1935**

Powell, A.W.B., 1935. Five new species of pelecypod Mollusca from New Zealand. *Proceedings of the Malacological Society* 21(4): 255–258 [257], pl. 28, fig. 4.

**Holotype:** MA70358, disarticulated specimen collected from fish stomach in 1924 by Captain J. Bollons, Three Kings Islands, New Zealand.

**Paratypes:** MA71401, articulated specimen, 3 right valves, 5 left valves, collected as for holotype.

**Current name:** *Philobrya acutangula* (Powell, 1935) – Spencer *et al.* (2016).

**†*Hochstetteria kaawa* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [47], pl. 9, figs 10, 11 (holotype).

**Holotype:** MA70359, a single right valve collected by C.R. Laws from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Philobrya kaawa* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 235).

***Hochstetteria munita* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [245], pl. 44, figs 29 (holotype), fig. 30 (paratype).

**Syntypes:** MA70360, unrelated right and left valve, collected by A.W.B. Powell from under small stones in direct contact with sand, half to low tide, Tryphena, Great Barrier Island, New Zealand.

**Paratypes:** MA72593, 5 articulated specimens, 1 right valve, from the type locality.

**Current name:** *Philobrya munita* (Finlay, 1930) – Powell (1979: 367); Spencer *et al.* (2016).

***Hochstetteria pinctada* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [245], pl.44, figs 22, 23 (holotype), fig. 24 (paratype).

**Syntypes:** MA70361, unrelated right and left valves, collected from 91m (50 fathoms), 16km (10 miles) ENE off Otago Heads, Otago, New Zealand.

**Paratypes:** MA72592, 1 articulated specimen, 7 right valves, 6 left valves, from the type locality.

**Current name:** *Philobrya pinctada* (Finlay, 1930) – Powell (1979: 367); Spencer *et al.* (2016).

**†*Hochstetteria pinctagrina* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [47], pl. 9, figs 2, 3, 6 (holotype).

**Syntypes:** MA70362, unrelated right and left valves collected by C.R. Laws from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Philobrya pinctagrina* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 235).

***Hochstetteria sculpturalis* Dell, 1956**

Dell, R.K., 1956. *The archibenthal Mollusca of New Zealand*. Dominion Museum Bulletin 18, 235 pp. [17, 18], pl. 3, figs 21, 22 (holotype).

**Paratype:** MA72742, right valve collected by R.K. Dell from 238m (130 fathoms), east of the Forty Fours, Chatham Rise, New Zealand.

**Current name:** *Philobrya sculpturalis* (Dell, 1956) – Spencer *et al.* (2016).

**†*Hochstetteria tela* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [47], pl. 9, figs 5, 7, 8 (Syntypes).

**Syntypes:** MA70363, 2 right valves collected by C.R. Laws from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Remarks:** Laws (1936) referred to ‘Type in writer’s collection’ on p. 47, and figures 5, 7 and 8 are captioned

holotype, but clearly show 2 different specimens.

**Current name:** *Philobrya tela* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 235).

***Lissarca exilis* Suter, 1913**

Suter, H., 1913. *Manual of the New Zealand Mollusca. With an atlas of quarto plates*. Wellington, John MacKay, Government Printer, 1120 pp. [855], pl. 51, fig. 11.

**Paratypes:** MA72781, 23 right valves, 17 left valves, collected by Captain Bollons from 91m (50 fathoms), The Snares Islands, ~120km south west of Stewart Island, New Zealand.

**Current name:** *Lissarca exilis* Suter, 1913 – Spencer *et al.* (2016).

***Lissarca pileopsis* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [120], pl. 22, figs 3, 4.

**Paratypes:** MA72348, 2 articulated specimens, 13 right valves, 5 left valves, dredged by a private scientific party in December 1908, from the steamer ‘Rakiura’ in 311m (170 fathoms) off Puysegur Point, Southland, New Zealand.

**Current name:** *Adacnarca pileopsis* (Powell, 1927) – Spencer *et al.* (2016).

***Lissarca pisum* Suter, 1913**

Suter, H., 1913. *Manual of the New Zealand Mollusca. With an atlas of quarto plates*. Wellington, John MacKay, Government Printer, 1120 pp. [855, 856], pl. 51, fig. 12.

**Paratypes:** MA72785, 5 right valves, 8 left valves, collected by Captain Bollons from 91m (50 fathoms), The Bounty Islands, ~650km south south east of Dunedin, New Zealand.

**Current name:** *Lissarca pisum* Suter, 1913 – Spencer *et al.* (2016).

***Lissarca stewartiana* Powell, 1935**

Powell, A.W.B., 1935. Five new species of pelecypod Mollusca from New Zealand. *Proceedings of the Malacological Society* 21(4): 255–258 [255], pl. 28, fig. 3.

**Holotype:** MA70414, left valve, collected by Mrs R.H. Harrison from shell sand from Mason Bay, Stewart Island, New Zealand.

**Paratype:** MA71399, right valve, from the type locality.

**Current name:** *Lissarca stewartiana* Powell, 1935 – Spencer *et al.* (2016).

**†*Verticipronus stirps* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [52], pl. 10, figs 25, 26 (holotype).

**Holotype:** MA70837, a single left valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Verticipronus stirps* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 235).

**Order PTERIIDA**  
**PTERIIDAE**

†*Electroma intecta* **Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [25], pl. 1, figs 2, 8 (holotype), fig. 7 (paratype).

**Holotype:** MA73346, left valve, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Current name:** *Electroma intecta* Finlay & Marwick, 1937 – Maxwell in: Spencer *et al.* (2009: 235).

†*Isognomon oneroaensis* **Powell & Bartrum, 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [400, 401], pl. 49, fig. 106 (holotype); pl. 44, fig. 69 (paratype).

**Holotype:** MA72072, a right valve with damaged and eroded hinge collected from the Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Remarks:** Powell (1938) wrote that the finding of subsequent material showed that the holotype and paratype of *Isognomon oneroaensis* were in fact not the same species. While the paratype was indeed an *Isognomon*, the holotype was considered to belong to the genus *Pteria* (see *Pteria oneroaensis* below). The figured paratype specimen was indicated as *Isognomon* n.sp. and was considered too fragmentary to name.

**Current name:** *Pteria oneroaensis* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 235).

†*Pteria oneroaensis* (**Powell & Bartrum, 1929**)

Powell, A.W.B., 1938. Tertiary molluscan faunules from the Waitemata Beds. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 362–379 [365, 366], pl. 38, fig. 4 (neotype).

**Neotype:** MA70645, right valve, collected by C.A. Fleming from the Early Miocene (Otaian) Tipakuri Formation at ‘Fossil Bay’ just south of Church Bay (sometimes known as Squadron Bay), Waiheke Island, Auckland, New Zealand.

**Remarks:** Specimens found after 1929 showed that the holotype and paratype of *Isognomon oneroaensis* Powell & Bartrum, 1929 were in fact two separate species. While the paratype was indeed an *Isognomon*, the holotype was considered to belong to the genus *Pteria*. Therefore, Powell (1938) selected a better preserved specimen (MA70645) to be the neotype of *Pteria oneroaensis* (Powell & Bartrum, 1929) and included a further description for the species.

**Current name:** *Pteria oneroaensis* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 235).

**Order OSTREIDA**  
**GRYPHAEIDAE**

†*Ostrea (Gigantostrea) gittosina* **Powell & Bartrum 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [401, 402], pl. 43, fig. 65 (holotype), fig. 64 (paratype).

**Holotype:** MA72109, from the Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Paratype:** MA71691, right valve from the type locality.

**Remarks:** The type material was compared with topotype specimens collected by Auckland Museum staff from Te Hara Point (Te Akau), Auckland Museum specimens from basal Waitemata Group sediments (Mathesons Bay and Kawau Island, e.g. Suter, 1915), and the illustrations of specimens, including the holotype, figured in Beu & Maxwell (1990) and Beu *et al.* (2012). Based on this comparison it is likely that *Crenostrea gittosina* is a junior synonym of *Pycnodonte wuellerstorfi* (Zittel 1864) (H. Grenfell pers. comm. 2015).

**Current name:** *Crenostrea gittosina* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 235).

**OSTREIDAE**

*Ostrea charlottae* **Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [265], pl. 40, figs 25, 26 (holotype).

**Holotype:** MA70578, articulated specimen, from Queen Charlotte Sound, Marlborough, New Zealand.

**Current name:** *Ostrea chilensis* Philippi in Küster, 1844 – Spencer *et al.* (2016).

*Ostrea hefferdi* **Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [265].

**Syntypes:** MA70579, 2 attached specimens collected from Dunedin Harbour, Otago, New Zealand.

**Current name:** *Ostrea chilensis* Philippi in Küster, 1844 – Spencer *et al.* (2016).

**Order PECTINIDA**  
**DIMYIDAE**

*Dimya maoria* **Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [168], pl. 45, fig. 2 (holotype).

**Paratypes:** MA71881, 15 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Dimya maoria* Powell, 1937 – Spencer *et al.* (2016).

## PECTINIDAE

***Aequipecten (Corymbichlamys) iredalei* Powell, 1958**

Powell, A.W.B., 1958. Mollusca of the Kermadec Islands. Part 1. *Records of the Auckland Institute and Museum* 5(1 & 2): 65–85 [68, 69], text fig. 2; pl. 11, fig. 1 (paratype), fig. 2 (holotype).

**Paratypes:** MA71971, 1 right valve and 2 unrelated left valves collected on 3 March 1952 from station 675, Galathea Cruise, in 58m–64m off Raoul Island, Kermadec Islands, New Zealand.

**Current name:** *Annachlamys iredalei* (Powell, 1958) – Dijkstra and Marshall (2008: 47); Spencer *et al.* (2016).

**†*Ambonychia hailesensis* Eagle, 1999**

Eagle, M.K., 1999. The bivalve *Ambonychia* in the Ordovician of New Zealand. *New Zealand Journal of Geology and Geophysics* 42: 557–564 [557–562], pl. 41, figs 2–7.

**Holotype:** MA73104, external mould of a right valve, from a float boulder from Dry Stream, Upper Takaka, northwest Nelson, New Zealand.

**Paratype:** MA73105, internal mould of a right valve; MA73106, external shell fragment, from the type locality.

**Remarks:** Eagle (1999) described the species from a float boulder which he identified as being Arthur Marble of Late Ordovician (Ashgillian) age. However, Maxwell in Spencer *et al.* (2009), p. 170, stated that ‘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’. A further comment on p. 253 added that ‘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.’

**Current name:** ‘*Chlamys*’ *hailesensis* (Eagle, 1999) – Maxwell in Spencer *et al.* (2009: 253).

***Chlamys celator* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [268, 269], pl. 42, figs 49, 50 (holotype).

**Holotype:** MA70166, articulated specimen, Stewart Island, New Zealand.

**Current name:** *Talochlamys zelandiae* (Gray, 1843) – Powell (1979: 378); Spencer *et al.* (2016).

***Chlamys kiwaensis* Powell, 1933**

Powell, A.W.B., 1933. Two new Molluscs of the Pectinidae from 600 to 700 fathoms, four hundred miles west of New Plymouth. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 370–372 [371, 372], pl. 40, figs 1, 2 (paratype), figs 3–5 (holotype).

**Holotype:** MA70167, articulated specimen collected by W. Forster in 1931 from deep-sea cable in 1097m–1280m (600–700 fathoms) water depth, on the C.S.

“Recorder”, about 640km (400 miles) west of New Plymouth, Taranaki, New Zealand.

**Paratypes:** MA71422, 2 articulated specimens and 1 right valve from the type locality.

**Current name:** *Veprichlamys kiwaensis* (Powell, 1933) – Spencer *et al.* (2016).

***Chlamys suprasilis* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [269], pl. 43, figs 52, 53 (holotype).

**Holotype:** MA70168, live-collected specimen from ‘rubbish scraped from the bottom of a ship which had been in dock for several years’, Port Chalmers, Otago, New Zealand.

**Current name:** *Talochlamys zelandiae* (Gray, 1843) – Powell (1979: 378); Spencer *et al.* (2016).

***Chlamys (Mimachlamys) asperrimoides* Powell, 1958**

Powell, A.W.B., 1958. Mollusca of the Kermadec Islands. Part 1. *Records of the Auckland Institute and Museum* 5(1 & 2): 65–85 [70], text fig. 3; pl. 11, fig. 3, (holotype).

**Holotype:** MA71235, articulated specimen, collected in 1931 from cable in 82m–91m (45–50 fathoms) water depth by W. Forster, on the C.S. “Recorder”, south of Norfolk Island, Australia.

**Paratypes:** MA71906, 1 articulated specimen and 3 left valves from the type locality.

**Current name:** *Mimachlamys sanguinea* (Linnaeus, 1758) – Dijkstra, H. (2009).

***Chlamys (Mimachlamys) taiaroa* Powell, 1952**

Powell, A.W.B., 1952. New Zealand molluscan systematics, with descriptions of new species, part 1. *Records of the Auckland Institute and Museum* 4(3): 169–185 [169, 170], pl. 35, fig. 1 (holotype).

**Holotype:** MA71183, articulated specimen, trawled by Captain J. Black from 91m–128m (50–70 fathoms) off the eastern coast of Otago, New Zealand.

**Paratypes:** MA71437, 1 articulated specimen, 6 right valves and 3 unrelated left valves from the type locality.

**Current name:** *Talochlamys dichroa* (Suter, 1909) – Spencer *et al.* (2016).

**†*Notovola marwicki* Finlay, 1930**

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [52, 53], not figured.

**Holotype:** MA70546, Figure 6 a-d, disarticulated right and left valves of a specimen from the Pleistocene (Castlecliffian), Castlecliff, Whanganui, New Zealand.

**Current name:** *Pecten novaezelandiae* Reeve, 1852 – Dijkstra & Marshall (2008: 44).

**†*Notovola tainui* Finlay, 1930**

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [51, 52], pl. 4, fig. 46 (holotype), fig. 56 (paratype), pl. 6, fig. 81 (holotype).



**Holotype:** MA70547, articulated specimen from the Pleistocene (Castlecliffian), Castlecliff, Whanganui, New Zealand.

**Current name:** *Pecten novaezelandiae* Reeve, 1852 – Dijkstra & Marshall (2008: 44).

***Palliolium fosterianum* Powell, 1933**

Powell, A.W.B., 1933. Two new Molluscs of the Pectinidae from 600 to 700 fathoms, four hundred miles west of New Plymouth. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 370–372 [370, 371], pl. 40, fig. 6 (holotype), fig. 7 (paratype).

**Holotype:** MA70582, articulated specimen collected from deep-sea cable in 1097m–1280m (600–700 fathoms) water depth by W. Foster, off the cable steamer ‘Recorder’, about 640km (400 miles) west of New Plymouth, Taranaki, New Zealand.

**Paratype:** MA71427, articulated specimen from the type locality.

**Current name:** *Delectopecten fosterianus* (Powell, 1933) – Powell (1979: 379); Spencer *et al.* (2016).

†***Sectipecten allani* Marwick, 1928**

Marwick, J., 1928. The Tertiary Mollusca of the Chatham Islands including a generic revision of the New Zealand Pectinidae. *Transactions and Proceedings of the New Zealand Institute* 58: 432–494 [459], figs 13, 21 (holotype).

**Paratype:** MA72598, right valve, collected by J. Marwick in 1924 as member of an Otago Institute party from Early Pliocene (Opotian) Momoe-a-Toa Shellbed, 1.5km south west of Cape Young, Chatham Island, New Zealand.

**Current name:** *Sectipecten allani* Marwick, 1928 – Maxwell in: Spencer *et al.* (2009: 235).

†***Serripecten tahuiana* Laws, 1935**

Laws, C.R., 1935. New Eocene Mollusca from New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 65: 23–29 [23, 24], pl. 4, fig. 2 (holotype).

**Holotype:** MA70709, right valve from Middle Eocene (Bortonian) Waihao Greensand at McCulloch’s Bridge, Waihao, Canterbury, New Zealand.

**Current name:** *Serripecten tahuianus* Laws, 1935 – Maxwell in: Spencer *et al.* (2009: 235).

**PROPEAMUSSIIDAE**

***Chlamydella favus lemchei* Powell, 1958**

Powell, A.W.B., 1958. Mollusca of the Kermadec Islands. Part 1. *Records of the Auckland Institute and Museum* 5(1 & 2): 65–85 [70, 71], Pl. 9, figs 7, 8 (holotype).

**Paratypes:** MA71975, 50 right valves and 21 unrelated left valves, collected on 3 March, 1952 from Galathea Station 674, 29° 15’S; 177° 5’W, from 75m–85m depth off Raoul Island, Kermadec Islands, New Zealand.

**Current name:** *Cycloclamys lemchei* (Powell, 1958) – Dijkstra & Marshall (2008: 29); Spencer *et al.* (2016).

***Cyclopecten hexagonalis* Powell, 1958**

Powell, A.W.B., 1958. Mollusca from the Victoria-Ross Quadrants of Antarctica. *Reports of the British Australian New Zealand Antarctic Research Expedition 1929–1931, series B, Zoology and Botany* 6(9): 167–215 [176], pl. 1, fig. 3 (holotype).

**Paratypes:** MA71955, 1 damaged, live-collected specimen, 7 left valves, collected from the type locality, station 39, during 1929–1931 British Australian New Zealand Antarctic Research Expedition, in 300m off Enderby Land, Australian Antarctic Territory.

**Current name:** *Cycloclamys hexagonalis* (Powell, 1958) – Dijkstra (2010).

***Cyclopecten (Cycloclamys) aupouria* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [167], pl. 47, fig. 2 (holotype), fig. 1.

**Paratypes:** MA72214, 1 articulated specimen, 3 right valves, 3 entire and 3 partial left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** The specimens are not conspecific and appear to belong to three species. The articulated specimen has 2 smooth valves and belongs to *Cycloclamys mestayerae*. The 3 right valves are similarly smooth but are likely to belong to *Cyclopecten secundus* (pers. comm. B A Marshall, 2/7/15). The left valves are the only specimens that belong to *Cycloclamys aupouria*.

**Current name:** *Cycloclamys aupouria* (Powell, 1937) – Dijkstra & Marshall (2008: 22); Spencer *et al.* (2016).

**Order LIMIDA  
LIMIDAE**

†***Ctenoides gracilissimus* Beu, 1967**

Beu, A.G., 1967. Deep-water Pliocene Mollusca from Palliser Bay, New Zealand. *Transactions of the Royal Society of New Zealand, Geology* 5(3): 89–122 [94, 95], pl. 1, fig. 2 (holotype), figs 1, 3, 4 (paratypes).

**Paratype:** MA72850, left valve, from an Early Pleistocene (Nukumaruan) *Lophelia* coral thicket in the Onoke Formation, about 800m east of Lake Ferry, Palliser Bay, New Zealand.

**Current name:** *Ctenoides gracilissimus* Beu, 1967 – Maxwell in: Spencer *et al.* (2009: 235).

***Escalima regularis* Powell, 1955**

Powell, A.W.B., 1955. Mollusca of the southern islands of New Zealand. *Cape Expedition Series Bulletin* 15, DSIR, Wellington, 151 pp. [27], not figured.

Records of the Canterbury Museum 3(1): 48, pl. 6, figs 1, 2.

**Holotype:** MA72204 (missing), in 180m (100 fathoms) off Lyttelton, New Zealand.

**Remarks:** The holotype specimen has not been sighted since at least 1993. The holotype was selected by Powell from material given to him in 1926 by Prof. Speight, curator of the Canterbury Museum. It was figured as *Lima (Mantellum) murrayi* in Powell (1926), and redescribed

but not figured by Powell (1955) as *Escalima regularis*. Two further specimen lots from the original Speight material (MA14842 and MA64263) are in the AWMM general collections.

**Current name:** *Escalima regularis* Powell, 1955 – Spencer *et al.* (2016).

#### ***Lima marwicki* Powell, 1926**

Powell, A.W.B., 1926. Mollusca from 100 fathoms off Lyttelton, with descriptions of four new species, and also a new Pliocene fossil. *Records of the Canterbury Museum* 3(1): 43–50 [48, 49], pl. 6, figs 3, 4.

**Paratypes:** MA72339, 2 right valves collected by J. Marwick from the Pleistocene (Castlecliffian) at Castlecliff, Whanganui, New Zealand.

**Remarks:** Powell (1926) stated ‘*Holotype* and 4 paratypes in collection of New Zealand Geological Survey; 1 paratype (27.5 x 19 x 6.5) in writer’s collection, Auckland’. However, 2 specimens were found in the present paratype lot, both of which closely matched the measurements given by Powell for the paratype in his possession.

**Current name:** *Limaria orientalis* (A. Adams & Reeve, 1850) – Spencer *et al.* (2016).

#### ***Limatula aupouria* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [168, 169], pl. 47, fig. 4 (holotype).

**Paratypes:** MA71882, 2 right valves, 5 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Limatula aupouria* Powell, 1937 – Spencer *et al.* (2016).

#### ***Limatula maoria* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [454], fig. 106 (holotype), figs 104, 105 (paratypes).

**Holotype:** MA70396, right valve from Pleistocene (Castlecliffian) sediments, Castlecliff, Whanganui, New Zealand.

**Paratypes:** MA73241, unrelated right and left valve, from 108m (60 fathoms) off Otago Heads, Otago, New Zealand.

**Current name:** *Limatula (Stabilima) maoria* Finlay, 1926 – Powell (1979: 382); Spencer *et al.* (2016).

#### **†*Limatula pontis* Fleming, 1978**

Fleming, C.A., 1978. The bivalve mollusc Genus *Limatula*: a list of described species and a review of living and fossil species in the southwest Pacific. *Journal of the Royal Society of New Zealand* 8(1): 17–91 [55–57], fig. 27 (holotype).

**Holotype:** MA71352, left valve, from Late Eocene (Kaiatan) Waihao Greensand, McCulloch’s Bridge, Waihao River, Canterbury, New Zealand.

**Remarks:** Fleming (1978) labelled the holotype a right

valve, but MA71352, which is heavily pyritised and the same as the specimen in figure 27, is in fact a left valve.

**Current name:** *Limatula (Limatula) pontis* Fleming, 1978 – Maxwell in: Spencer *et al.* (2009: 235).

#### ***Limatula powelli powelli* Fleming, 1978**

Fleming, C.A., 1978. The bivalve mollusc Genus *Limatula*: a list of described species and a review of living and fossil species in the southwest Pacific. *Journal of the Royal Society of New Zealand* 8(1): 17–91 [54], fig. 32 (holotype), figs 28, 30, 33, 34, 36, 39 (paratypes).

**Paratypes:** MA72720, unrelated right and left valve, from 132m water depth, Antipodes Islands, New Zealand.

**Remarks:** Though not labelled as paratypes, Fleming stated that paratypes from subantarctic localities were lodged with AWMM. As these are the only specimens of *L. powelli powelli* in AWMM’s collections they are assumed to be the type material.

**Current name:** *Limatula powelli* Fleming, 1978 – Spencer *et al.* (2016).

#### **†*Limatula (Limatuletta) japonica waitahana* Fleming, 1978**

Fleming, C.A., 1978. The bivalve mollusc Genus *Limatula*: a list of described species and a review of living and fossil species in the southwest Pacific. *Journal of the Royal Society of New Zealand* 8(1): 17–91 [78, 79], fig. 87 (holotype), fig. 86 (paratype).

**Paratype:** MA73202, right valve, from Late Eocene (Kaiatan-Runangan) Waiareka Volcanics at the type locality near the disused Lorne railway station, Waiareka Valley, inland from Oamaru, New Zealand.

**Current name:** *Limatula (Limatuletta) waitahana* Fleming, 1978 – Maxwell in: Spencer *et al.* (2009: 235).

### **Order UNIONIDA HYRIIDAE**

#### ***Echyridella onekaka* Fenwick & Marshall, 2006**

Fenwick, M.C., and B.A. Marshall, 2006. A new species of *Echyridella* from New Zealand, and recognition of *Echyridella lucasi* (Suter, 1905) (Mollusca: Bivalvia: Hyriidae). *Molluscan Research* 26: 69–76, figs 1A–D, 2A.

**Paratype:** MA73307, 2 disarticulated specimens, collected in 2005 from an artificial pond fed from Dogan Creek, a tributary of Onekaka River, south of Collingwood, New Zealand.

**Current name:** *Echyridella onekaka* Fenwick & Marshall, 2006 – Spencer *et al.* (2016).

### **Order LUCINIDA LUCINIDAE**

#### **†*Anodontia (Anodontia) waharoaensis* Eagle, 1992**

Eagle, M.K., 1992. A new Lower Miocene species of *Anodontia* (Mollusca: Bivalvia). *Records of the Auckland Institute and Museum* 29: 103–111 [104–107], figs 2–5, 10 (holotype).

**Holotype:** MA72308, articulated fossil specimen from Early Miocene (Altonian) Tirikohua Formation, collected by M.K. Eagle in May 1992 from Te Waharoa Bay, south of Muriwai, Auckland, New Zealand.

**Paratypes:** MA72309, 6 fragments of internal moulds from the type locality.

**Current name:** *Anodontia waharohaensis* Eagle, 1992 – Maxwell in: Spencer *et al.* (2009: 236).

***Epicodakia neozelanica* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [171], pl. 46, fig. 8 (holotype).

**Paratypes:** MA72213, 4 right and 4 unrelated left valves, collected by A.W.B. Powell in 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92m off the Three Kings Islands, New Zealand.

**Remarks:** This type material includes 1 right and 2 left valves which belong to *Bathylhaerus cuneatus*.

**Current name:** *Epicodakia neozelanica* Powell, 1937 – Spencer *et al.* (2016).

**†*Eulopia (Notomyrtea) microlirata* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [29], pl.3, fig. 9 (holotype).

**Holotype:** MA70298, right valve, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Current name:** *Myrtea microlirata* (Finlay & Marwick, 1937) – Maxwell in: Spencer *et al.* (2009: 236).

**†*Miltha (Milthoidea) agilis* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [27, 28], pl.3, fig. 10 (holotype), figs 3, 6 (paratype).

**Holotype:** MA73358, internal mould with shell remnants, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Paratype:** MA73359, left valve from the type locality.

**Current name:** *Miltha agilis* Finlay & Marwick, 1937 – Maxwell in: Spencer *et al.* (2009: 236).

**†*Myrtea maoria* Powell, 1935**

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [330, 331], pl. 76, fig. 2 (holotype).

**Holotype:** MA72101, left valve collected from Early Miocene (Altonian) Nihotupu Formation, between Powell and Bartrum Bays, approximately 2km south of Muriwai Beach, west Auckland, New Zealand.

**Current name:** *Myrtea maoria* Powell, 1935 – Maxwell in: Spencer *et al.* (2009: 236).

**†*Myrtea (Lucinoma) taylori* Powell, 1935**

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [331], pl. 76, fig. 3 (holotype).

**Holotype:** MA72102, articulated specimen collected from large fallen blocks of Early Miocene (Altonian) Nihotupu Formation, southern end of Maori Bay, south of Muriwai Beach, New Zealand.

**Current name:** *Lucinoma taylori* (Powell, 1935) – Maxwell in: Spencer *et al.* (2009: 236).

**†*Pteromyrtea motutaraensis* Powell, 1935**

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [331, 332], pl. 76, fig. 4 (holotype).

**Holotype:** MA72123, articulated specimen collected from large fallen blocks of Early Miocene (Altonian) Nihotupu Formation, southern end of Maori Bay, south of Muriwai Beach, west Auckland, New Zealand.

**Paratypes:** MA71382, right valve and associated internal mould from the type locality.

**Current name:** *Pteromyrtea motutaraensis* Powell, 1935 – Maxwell in: Spencer *et al.* (2009: 236).

**†*Pteromyrtea obesa* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [28], pl.3, figs 7, 8 (holotype).

**Holotype:** MA73345, right valve, from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Current name:** *Pteromyrtea obesa* Finlay & Marwick, 1937 – Maxwell in: Spencer *et al.* (2009: 236).

**THYASIRIDAE**

***Maorithyas flemingi* Powell, 1955**

Powell, A.W.B., 1955. Mollusca of the southern islands of New Zealand. *Cape Expedition Series Bulletin* 15, DSIR, Wellington, 151 pp. [34], pl. 1, fig. 1 (holotype).

**Paratypes:** MA72376, 8 right valves and 6 left valves, from 16m water depth, Cape Expedition Dredge Station No. 2, Tagua Cove, Carnley Harbour, Auckland Islands, New Zealand.

**Current name:** *Maorithyas flemingi* Powell, 1955 – Spencer *et al.* (2016).

**†*Thyasira (Prothyasira) bartrumi* Powell, 1935**

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [332, 333], pl. 76, figs 5, 6 (holotype).

**Holotype:** MA72151, articulated specimen, from Early Miocene (Altonian) Nihotupu Formation, between Powell and Bartrum Bays, approximately 2km south of Muriwai Beach, west Auckland, New Zealand.

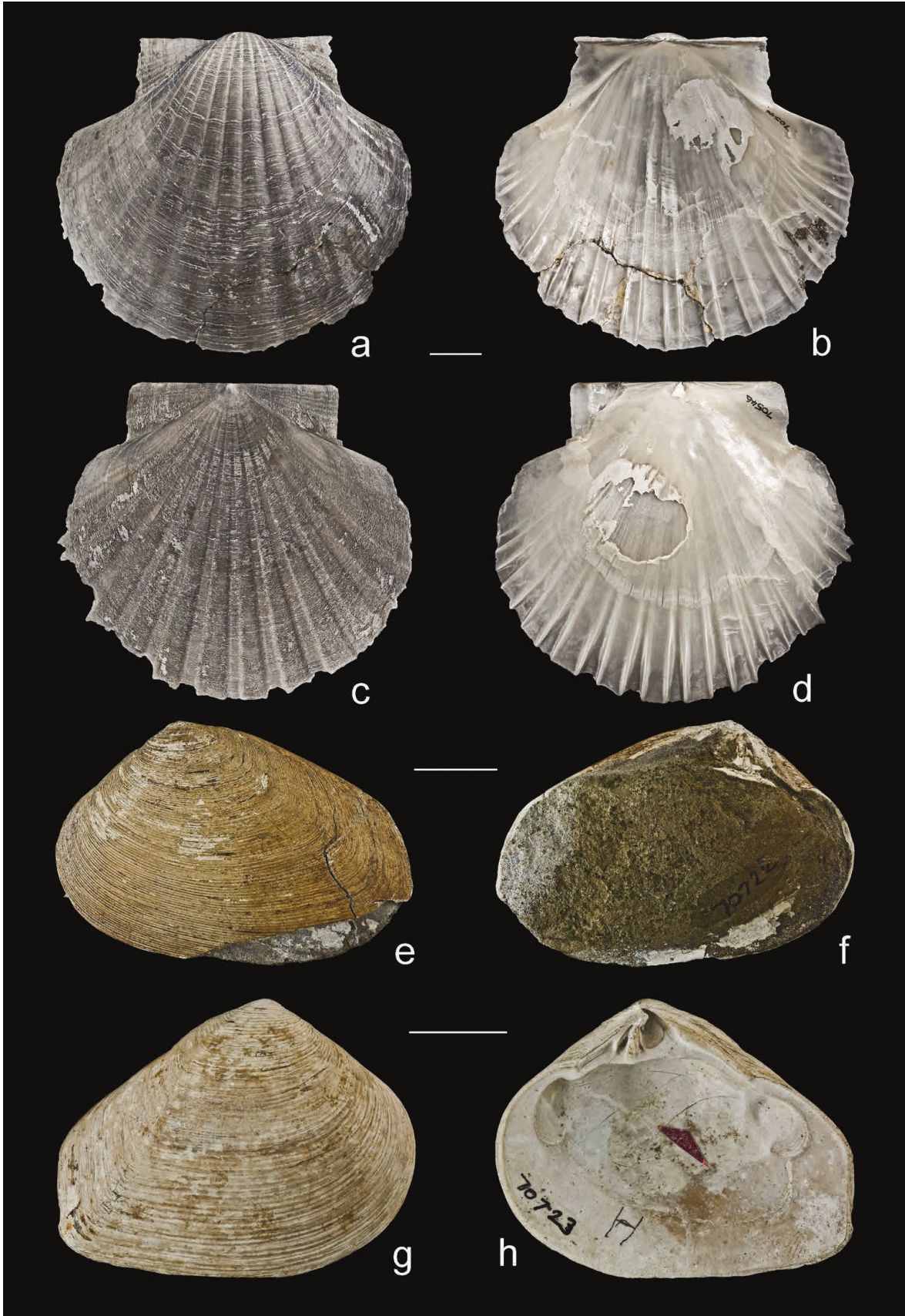


Figure 6. *Notovola marwicki* Finlay, 1930, holotype, right and left valves exterior and interior views (a-d); *Spissatella acculta* Finlay, 1926, holotype, right valve exterior and obverse views (e, f); *Spissatella clifdenensis* Finlay, 1926, holotype, left valve exterior and interior views (g, h). Scale bar 10mm.

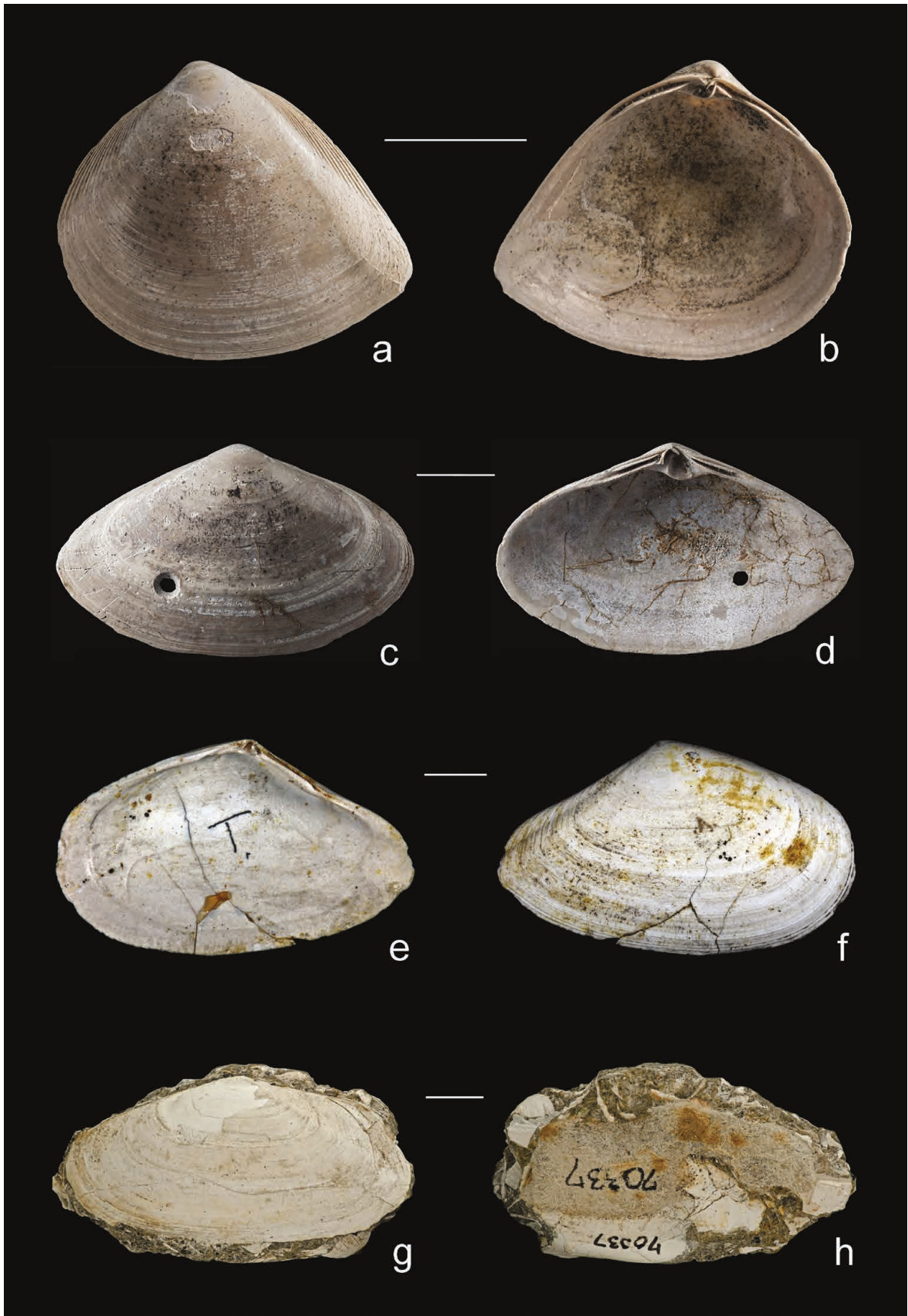


Figure 7. *Maorimactra acuminella* Finlay, 1930, holotype, left valve exterior and interior views (a, b); *Scalpomactra continua* Finlay, 1930, holotype, right valve exterior and interior views (c, d); *Angulus (Peronidia) tumens* Laws, 1933, holotype, right valve exterior and interior views (e, f); *Gari oamarutica* Finlay, 1930, holotype, left valve exterior and obverse views (g, h). Scale bar 5mm.

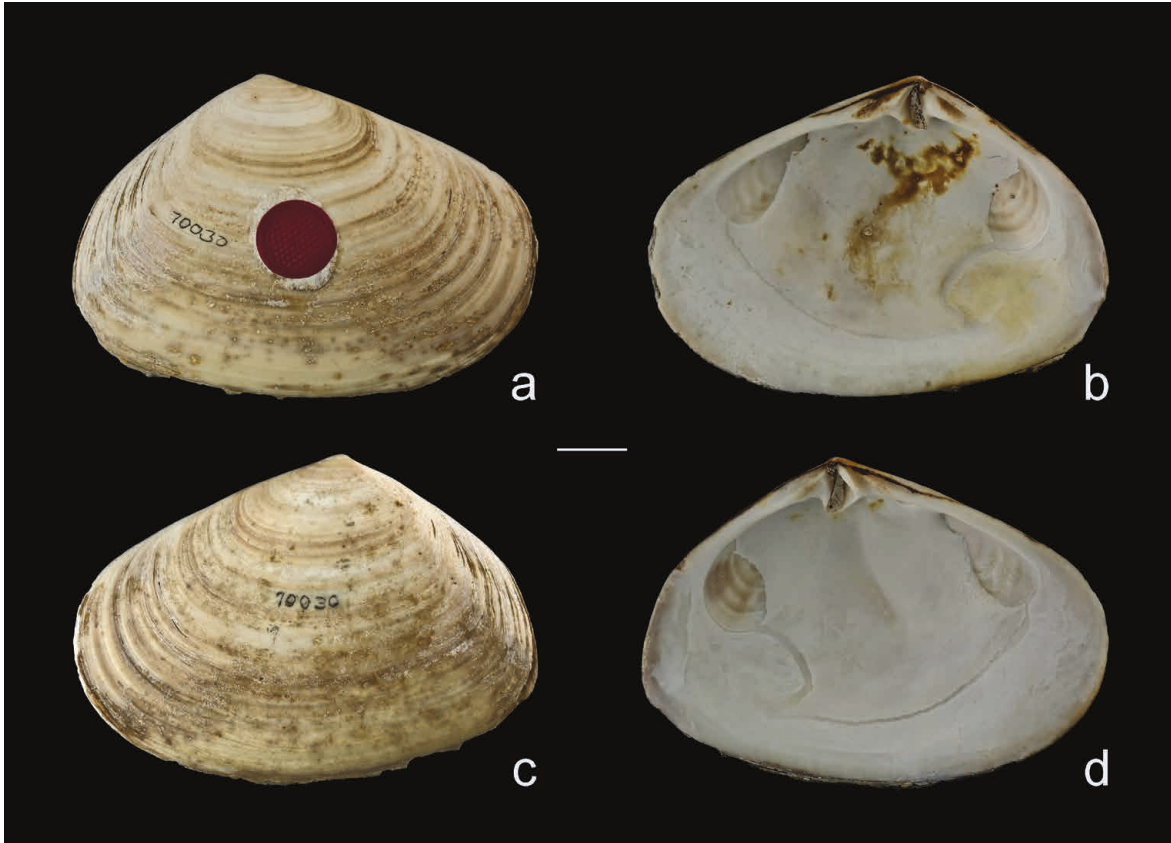


Figure 8. *Amphidesma forsteriana* Finlay, 1926, holotype, right and left valves exterior and interior views (a-d). Scale bar 10mm.

**Paratypes:** MA71384, 3 articulated specimens from the type locality.

**Current name:** *Thyasira bartrumi* Powell, 1935 – Maxwell in: Spencer *et al.* (2009: 236).

†*Thyasira (Prothyasira) motutaraensis* Powell, 1935  
Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute and Museum* 1(6): 327–340 [332], pl. 76, fig. 7 (holotype).

**Holotype:** MA72152, articulated specimen, from Early Miocene (Altonian) Nihotupu Formation, between Powell and Bartrum Bays, approximately 2km south of Muriwai Beach, west Auckland, New Zealand.

**Paratypes:** MA71387, 6 articulated specimens from the type locality.

**Current name:** *Thyasira motutaraensis* Powell, 1935 – Maxwell in: Spencer *et al.* (2009: 237).

#### Order CARDITIDA CARDITIDAE

##### *Cardita aoteana* Finlay, 1926

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [459, 460], pl. 22, figs 114, 115 (holotype).

**Holotype:** MA70134, articulated specimen, attached to rocks at low tide level in Otago Harbour, Dunedin, New Zealand.

**Paratype:** MA72546, articulated specimen from the type locality.

**Current name:** *Cardita distorta* Reeve, 1843 – Spencer *et al.* (2016).

##### *Cardita brookesi* Finlay, 1926

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [459], pl. 22, fig. 116 (holotype), figs 117, 118 (paratype).

**Holotype:** MA70135, articulated specimen, collected by A.E. Brookes, from Whangaroa Harbour, Northland, New Zealand.

**Paratypes:** MA72545, 2 articulated specimens from the type locality.

**Current name:** *Powellina brookesi* (Finlay, 1926) – Huber (2010: 654).

##### *Cuna aupouria* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [169], pl. 46, figs 1, 2 (holotype).

**Paratypes:** MA71883, 1 articulated specimen, 11 right and 10 unrelated left valves, collected by A.W.B. Powell

in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** The unrelated valves include 1 right and 1 left valve of *Hamacuna gibbosa* (Powell, 1937).

**Current name:** *Hamacuna aupouria* (Powell, 1937) – Spencer *et al.* (2016).

***Cuna gibbosa* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [170], pl. 46, fig.4 (holotype).

**Paratypes:** MA71886, 1 articulated specimen, 4 right and 10 unrelated left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Hamacuna gibbosa* (Powell, 1937) – Spencer *et al.* (2016).

†***Cuna kaawa* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [51], pl. 10, figs 24, 27 (holotype).

**Syntypes:** MA70229, unrelated right and left valves, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Paratypes:** MA72689, 8 right valves, 5 left valves, from the type locality.

**Current name:** *Hamacuna kaawa* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 236).

***Cuna otagoensis* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [120, 121], pl. 23, figs 7, 8.

**Paratypes:** MA72349, 1 articulated specimen, 4 right and 7 unrelated left valves, dredged by a private scientific party in December 1908, off the steamer ‘Rakiura’ in 183m (100 fathoms) off Puysegur Point, Southland, New Zealand.

**Current name:** *Hamacuna otagoensis* (Powell, 1927) – Spencer *et al.* (2016).

†***Pleuromeris finlayi* Powell, 1938**

Powell, A.W.B., 1938. A Pliocene molluscan faunule from Castle Point. *Records of the Auckland Institute and Museum* 2(3): 157–164 [161, 162], pl. 39, figs 7, 8.

**Holotype:** MA70630, right valve, collected from the Early Pleistocene (Nukumaruian) blue clays, inner harbour, Napier, New Zealand.

**Paratypes:** MA71443, 9 right and 6 unrelated left valves, from the type locality; MA73091, 7 right and 8 unrelated left valves, from the type locality.

**Current name:** *Pleuromeris finlayi* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 236).

†***Pleuromeris hectori* Powell, 1938**

Powell, A.W.B., 1938. A Pliocene molluscan faunule from Castle Point. *Records of the Auckland Institute and Museum* 2(3): 157–164 [160, 161], pl. 39, figs 9, 10.

**Holotype:** MA70631, right valve, collected by A.W.B. Powell, from the Early Pleistocene (Nukumaruian) Castlepoint Formation at the lighthouse reef, Castlepoint, Wairarapa, New Zealand.

**Paratypes:** MA72424, 5 right and 2 unrelated left valves, from the type locality.

**Current name:** *Pleuromeris hectori* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 236).

***Pleuromeris latiuscula* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221, [170, 171], pl. 45, fig. 5 (holotype).

**Paratypes:** MA71887, 7 articulated specimens, 83 right and 89 unrelated left valves, collected by A.W.B. Powell in 1932 from the type locality, station 930, R.R.S. Discovery II cruise, in 29m off Waikuku Beach, North Cape, New Zealand.

**Remarks:** The paratype lot consisted of 3 vials. Two vials, one labelled as ‘Paratypes No. 1312’ and the other as ‘Paratypes. R.R.S. Discovery II. Presented’ in what is presumed to be A.W.B. Powell’s handwriting have been retained as paratypes. A third vial showed it was collected during the Discovery II cruise from station 930, but came from C. Barker’s collection in 1963. It is not labelled as paratypes and has been removed to the general collection, as MA119551.

**Current name:** *Pleuromeris latiuscula* Powell, 1937 – Spencer *et al.* (2016).

***Pleuromeris latiuscula benthicola* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [171], pl. 45, fig. 6 (holotype).

**Paratypes:** MA71888, 1 articulated specimen, 39 right and 35 unrelated left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** The paratype lot consisted of 3 vials. Only one vial contained a label marked ‘Paratypes No. 1313’ and has been retained as such. A second vial, also from station 933, was labelled as ‘AM 17345’ and ‘Presented by Discovery Committee’ in what is presumed to be A.W.B. Powell’s handwriting. Although this label lacked the word ‘paratypes’ the specimen lot has been retained with MA71888. A label with the third vial showed it was collected from Discovery II station 931. It has been removed to the general collection, as MA119552.

**Current name:** *Pleuromeris benthicola* Powell, 1937 – Spencer *et al.* (2016).

†***Pleuromeris murdochi* Powell, 1938**

Powell, A.W.B., 1938. A Pliocene molluscan faunule from Castle Point. *Records of the Auckland Institute and*

*Museum* 2(3): 157–164 [161], pl. 39, fig. 6.

**Holotype:** MA72117, left valve, collected by A.W.B. Powell from the Early Pleistocene (Nukumaru) Castlepoint Formation at the lighthouse reef, Castlepoint, Wairarapa, New Zealand.

**Current name:** *Pleuromeris murdochi* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 236).

***Pleuromeris ultima* Dell, 1956**

Dell, R.K., 1956. *The archibenthal Mollusca of New Zealand*. Dominion Museum Bulletin 18, 235 pp. [28, 29], pl. 3, figs 23, 24 (paratypes), fig. 25 (holotype).

**Paratypes:** MA72758, 2 left valves, collected from the type locality, station 34, Chatham Island Expedition, in 234m east of the Forty Fours, New Zealand.

**Current name:** *Pleuromeris ultima* Dell, 1956 – Spencer *et al.* (2016).

†***Venericardia fyfei* Finlay & Marwick, 1937**

Finlay, H.J. and J. Marwick, 1937. *The Whangaloan and associated molluscan faunas of Kaitangata-Green Island Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 15, 140 pp. [26, 27], pl. 3, figs 2, 5 (holotype), fig. 4 (paratype).

**Holotype:** MA70821, left valve, collected from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Paratypes:** MA72858, 1 right and 2 left valves, from the type locality.

**Current name:** *Purpurocardia* (?) *fyfei* (Finlay & Marwick, 1937) – Maxwell in: Spencer *et al.* (2009: 236, 237).

†***Venericardia lilliei* Fleming, 1943**

Fleming, C.A., 1943. Tertiary Mollusca from Dannevirke Subdivision. *Transactions of the Royal Society of New Zealand* 73: 193–208 [193, 194], pl. 28, figs 1, 2 (holotype).

**Paratypes:** MA73198, unrelated right and left valves, collected from the Late Pliocene (Waipipian), from NZGS location 2314, east of Takapau, southern Hawke's Bay, New Zealand.

**Remarks:** The type locality is given as GS2314 which is a NZGS (GNS Science) bulk fossil collection number. This corresponds to fossil record (FRED) number U23/f6362 and the grid reference for this plots on the western slope of a Te Aute Limestone ridge. However, it is not possible to resolve further the lithological unit from which the specimens were collected (Beu pers. comm. 2016).

**Current name:** *Purpurocardia lilliei* (Fleming, 1943) – Maxwell in: Spencer *et al.* (2009: 237).

***Venericardia reinga* Powell, 1933**

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [202, 203], pl. 17, figs 1, 2 (holotype), fig. 5 (paratype).

**Holotype:** MA70822, articulated specimen, collected by the Rev. W. H. Webster from Te Werahi Beach, south of Cape Reinga, Northland, New Zealand.

**Remarks:** Three paratypes are listed in the original description, but could not be identified from material held in the AWMM collections. Figure 5 is wrongly labelled as Holotype, which it does not match.

**Current name:** *Purpurocardia reinga* (Powell, 1933) – Spencer *et al.* (2016).

†***Venericardia (Megacardita) squadronensis* Powell, 1938**

Powell, A.W.B., 1938. Tertiary molluscan faunules from the Waitemata Beds. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 362–379 [367], pl. 38, fig. 10 (holotype), fig. 11 (paratype MA71710), fig. 12 (paratype MA71716).

**Holotype:** MA72162, incomplete left valve, collected by A.W.B. Powell from the Early Miocene (Otaian) Tipakuri Formation at 'Fossil Bay' just south of Church Bay (sometimes known as Squadron Bay), Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA71709, MA71710, MA71716, all single right valves, from the type locality.

**Current name:** *Megacardita squadronensis* (Powell, 1938) – Maxwell in: Spencer *et al.* (2009: 236).

**CONDYLOCARDIIDAE**

***Benthocardiella hamatadens* Powell, 1930**

Powell, A.W.B., 1930. New species of New Zealand Mollusca from shallow-water dredgings. Part 2. *Transactions and Proceedings of the New Zealand Institute* 61: 536–546 [539, 540], text figs 7, 8, 9 (holotype).

**Syntypes:** MA70097, 1 articulated specimen and a right valve collected by W. La Roche in 1922 from 11–18m (6–10 fathoms), "Mangonui Heads", Doubtless Bay, New Zealand.

**Paratypes:** MA71458, 7 articulated specimens, 4 right and 8 left valves, from the type locality.

**Remarks:** All specimens in MA70097 show signs of glass disease. Powell's holotype illustrations included drawings of the interior aspect of a right and left valve, and cannot therefore be solely based on the specimens in MA70097.

**Current name:** *Benthocardiella hamatadens* Powell, 1930 – Spencer *et al.* (2016).

***Benthocardiella obliquata* Powell, 1930**

Powell, A.W.B., 1930. New species of New Zealand Mollusca from shallow-water dredgings. Part 2. *Transactions and Proceedings of the New Zealand Institute* 61: 536–546 [538], text figs 4, 5, 6 (holotype).

**Holotype:** MA70098, left valve, collected by W. La Roche in 1922 from 11–18m (6–10 fathoms), Mangonui Heads, Doubtless Bay, New Zealand.

**Paratype:** MA71457, 19 articulated specimens, 5 right and 3 left valves, from the type locality.

**Remarks:** Powell's holotype illustrations included drawings of the interior aspect of a right and left valve, and cannot therefore be solely based on the single left valve in MA70098.



Current name: *Benthocardiella obliquata obliquata* Powell, 1930 – Spencer *et al.* (2016).

***Benthocardiella obliquata bountyensis* Powell, 1933**

Powell, A.W.B., 1933. Marine Mollusca from the Bounty Islands. *Records of the Canterbury Museum* 4(1): 29–39 [33], text fig. 1.

**Paratypes:** MA72368, 2 right and 1 left valve, dredged by Captain J. Farchild on 1 June 1893 from the type locality, from 311m (170 fathoms) off the Bounty Islands, New Zealand.

**Remarks:** Showing signs of glass disease.

**Current name:** *Benthocardiella obliquata bountyensis* Powell, 1933 – Spencer *et al.* (2016).

***Benthocardiella obliquata chathamensis* Powell, 1933**

Powell, A.W.B., 1933. The marine Mollusca of the Chatham Islands. *Records of the Auckland Institute and Museum*, 1(4), 181–208 [190, 191], pl. 34, fig. 2 (holotype).

**Holotype:** MA70100, articulated specimen, collected from shell sand, Waitangi, Chatham Islands, New Zealand.

**Paratype:** MA71991, 2 articulated specimens and 1 right valve, from the type locality.

**Remarks:** Both valves of the holotype are badly damaged by glass disease, and the paratypes also show signs of this.

**Current name:** *Benthocardiella obliquata chathamensis* Powell, 1933 – Spencer *et al.* (2016).

***Benthocardiella orbicula* Powell, 1930**

Powell, A.W.B., 1930. New species of New Zealand Mollusca from shallow-water dredgings. Part 2. *Transactions and Proceedings of the New Zealand Institute* 61: 536–546 [538, 539], text figs 1, 2, 3 (holotype).

**Holotype:** MA70099, right and left valves, collected by W. La Roche in 1922 from 11–18m (6–10 fathoms) depth, Mangonui Heads, Doubtless Bay, New Zealand.

**Paratype:** MA71421, articulated specimen, from the type locality.

**Remarks:** Both valves of the holotype are damaged by glass disease.

**Current name:** *Benthocardiella orbicula* Powell, 1930 – Spencer *et al.* (2016).

***Benthocardiella pusilla* Powell, 1930**

Powell, A.W.B., 1930. New species of New Zealand Mollusca from shallow-water dredgings. *Transactions and Proceedings of the New Zealand Institute* 60: 532–543 [533, 534], pl. 60, fig. 4 (holotype), fig. 5 (paratypes).

**Holotype:** MA70101, collected by W. La Roche in 1927 from 18–22m (10–12 fathoms), off Whanganui, New Zealand.

**Paratypes:** MA71391, 43 articulated specimens, 3 right and 4 left valves, from the type locality.

**Remarks:** The holotype has been almost completely

destroyed by glass disease, and the paratypes also show some signs. Type for the genus.

**Current name:** *Benthocardiella pusilla* Powell, 1930 – Spencer *et al.* (2016).

***Benthocardiella rakiura* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [223, 224], pl. 48, fig. 6 (holotype).

**Holotype:** MA70102, right and left valve, collected by A.W.B. Powell in November 1934 from beach drift, “Old Neck Beach”, presumed here to be The Neck, Paterson Inlet, Stewart Island, New Zealand.

**Paratypes:** MA71543, 6 articulated specimens, 13 right and 12 left valves, from the type locality.

**Remarks:** The holotype has been severely damaged by glass disease.

**Current name:** *Benthocardiella rakiura* Powell, 1939 – Spencer *et al.* (2016).

***Condylocardia mernoo* Dell, 1952**

Dell, R.K., 1952. New Marine Mollusca from the Cook Strait area and southern New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 79: 412–418 [412, 413], pl. 84, fig. 1 (holotype).

**Paratypes:** MA72766, 2 left valves, collected from the type locality, by the NZGS *Matai* in 1936 from 95m (52 fathoms) on the Mernoo Bank (43°21’S, 175°E), approx. 144km north east of Godley Head, Canterbury, New Zealand.

**Remarks:** Both valves damaged by glass disease.

**Current name:** *Condylocuna mernoo* (Dell, 1952) – Spencer *et al.* (2016).

***Condylocardia pectinata chathamensis* Powell, 1933**

Powell, A.W.B., 1933. The marine Mollusca of the Chatham Islands. *Records of the Auckland Institute and Museum*, 1(4), 181–208 [189, 190], pl. 33, fig. 8 (holotype).

**Holotype:** MA70197, right and left valve, collected by A.W.B. Powell in 1933 from shell sand, Waitangi, Chatham Islands, New Zealand.

**Paratypes:** MA72799, 2 articulated specimens, from the type locality.

**Remarks:** Both valves of the holotype are damaged by glass disease.

**Current name:** *Condylocardia pectinata chathamensis* Powell, 1933 – Spencer *et al.* (2016).

***Cuna compressidens* Powell, 1933**

Powell, A.W.B., 1933. On five new species of Recent New Zealand Mollusca. *Proceedings of the Malacological Society* 20(4): 194–198 [194, 195], pl. 16, fig. 1 (holotype).

**Holotype:** MA70226, right and left valve, collected by W. La Roche in 1922 from 11m (6 fathoms) off Mangonui, Doubtless Bay, Northland, New Zealand.

**Paratypes:** MA72433, 3 articulated specimens, 10 right and 10 left valves, from the type locality.

**Current name:** *Cuna compressidens* Powell, 1933 – Spencer *et al.* (2016).

†***Cuna crassicardo* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [51], pl. 10, figs 21, 22 (holotype).

**Holotype:** MA70227, a single right valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Cuna crassicardo* Laws, 1936 – Maxwell *in:* Spencer *et al.* (2009: 237).

†***Cuna fictilia* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [50, 51], pl. 10, figs 19, 23 (holotype).

**Holotype:** MA70228, right and left valve, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Paratypes:** MA72688, 2 articulated individuals, 21 right valves, 25 left valves, from the type locality.

**Current name:** *Volupicuna fictilia* Laws, 1936 – Beu & Raine (2009).

***Cuna laqueus* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [459], pl. 21, fig. 92 (holotype), figs 90, 91 (paratypes).

**Holotype:** MA70230, right valve, collected from 91m (50 fathoms) off the Snares Islands, New Zealand.

**Paratypes:** MA72544, right and left valve, from the type locality.

**Current name:** *Cuna laqueus* Finlay, 1926 – Spencer *et al.* (2016).

***Cuna manawatawhia* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [169, 170], pl. 46, fig. 5 (holotype).

**Paratypes:** MA71885, 4 right and 1 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92m off the Three Kings Islands, New Zealand.

**Current name:** *Cuna manawatawhia* Powell, 1937 – Spencer *et al.* (2016).

***Cuna mayi* Powell, 1930**

Powell, A.W.B., 1930. New species of New Zealand Mollusca from shallow-water dredgings. *Transactions and Proceedings of the New Zealand Institute* 60: 532–543 [532, 533], pl. 60, fig. 1 (holotype), fig. 2 (paratype).

**Holotype:** MA70231, disarticulated right and left valves of the same specimen, collected by W. La Roche in 1927 from 18–22m (10–12 fathoms), off Whanganui, New Zealand.

**Paratypes:** MA71390, 9 articulated specimens, 8 right and 9 left valves; MA73390, right valve, from the type locality.

**Remarks:** The figured paratype was stored with the holotype, but has been removed and given a separate registration number, MA73390. The holotype was originally figured as an articulated specimen.

**Current name:** *Cuna mayi* Powell, 1930 – Spencer *et al.* (2016).

***Cuna mendica* Dell, 1952**

Dell, R.K., 1952. A deep water molluscan fauna from the Tasman Sea. *Dominion Museum Records in Zoology* 10: 99–107 [103], figs 8, 9 (holotype).

**Paratypes:** MA72768, 4 right valves, collected from *Globigerina* ooze from the type locality, Discovery II cruise, in 536m on the Lord Howe Rise, Tasman Sea.

**Current name:** *Cuna mendica* Dell, 1952 – Spencer *et al.* (2016).

***Cuna waikukuensis* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [169], pl. 46, fig.3 (holotype).

**Paratypes:** MA71884, 3 right and 2 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 930, R.R.S. Discovery II cruise, in 29m off Waikuku Beach, North Cape, New Zealand.

**Remarks:** Some of the valves are showing signs of glass disease.

**Current name:** *Cuna waikukuensis* Powell, 1937 – Spencer *et al.* (2016).

**CRASSATELLIDAE**

†***Crassatellites tripliciter* Laws, 1935**

Laws, C.R., 1935. New Eocene Mollusca from New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 65: 23–29 [23], pl. 4, figs 1, 1a (syntypes).

**Syntypes:** MA70215, articulated but damaged specimen, MA72672, slightly damaged left valve, collected from the Middle Eocene (Bortonian) Waihao Greensand at Waihao Downs, South Canterbury, New Zealand.

**Remarks:** MA70215 was labelled as the holotype, and lots MA72672 and MA72670 were labelled as paratypes. However, in the original description Laws wrote that ‘this species is represented by two fragmentary specimens’ which are both figured as holotype in plate 4, (MA70215 as fig.1 and MA72672 as fig. 1a). As there is no further mention of the holotype, MA70215 and MA72672 should be treated as syntypes. The additional 2 specimens in MA72670 cannot be paratypes.

**Current name:** *Triplicitella australis* (Hutton, 1873) – Collins *et al.* (2015: 16 – 18).

†***Eucrassatella marshalli* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of*

*the Auckland Institute and Museum* 1(2): 85–112 [93, 94], pl. 12, figs 21, 22 (syntypes).

**Syntypes:** MA70287, unrelated right and left valves of very similar size, collected by A.W.B. Powell in January 1931 from Late Pliocene (Waipipian) Lower Waipipi Shellbed, Waipipi coast near Waverley, about 1.2km west of the mouth of the Wairoa Stream, New Zealand.

**Current name:** *Eucrassatella marshalli* Powell, 1931 – Collins *et al.* (2015: 9 – 11).

†***Spissatella acculta* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [257], not figured.

**Holotype:** MA70722, Figure 6 e, f, right valve, collected from the Late Oligocene (Duntroonian) Wharekuri Greensand, Waitaki River, head of Lake Waitaki, north Otago, New Zealand.

**Current name:** *Spissatella acculta* Finlay, 1926 – Collins *et al.* (2015: 12, 13).

†***Spissatella clifdenensis* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [258], not figured.

**Holotype:** MA70723, Figure 6 g, h, left valve, from Early Miocene (Altonian) Fouraye Siltstone, [Finlay's bed 4B (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Current name:** *Spissatella clifdenensis* Finlay, 1926 – Collins *et al.* (2015: 13, 14).

†***Spissatella discrepans* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [256, 257], pl. 59, fig. 10 (holotype).

**Holotype:** MA70724, left valve probably collected by J. Park from Late Oligocene – Early Miocene (Duntroonian) Bob's Cove Beds, Bob's Cove, Lake Wakatipu, South Island, New Zealand.

**Current name:** *Spissatella acculta* Finlay, 1926 – Collins *et al.* (2015: 12, 13).

†***Spissatella poroleda* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [257], pl. 59, fig. 11 (holotype).

**Holotype:** MA70725, right valve, from Late Oligocene (Duntroonian) Chatton Formation, Chatton, Southland, New Zealand.

**Current name:** *Spissatella poroleda* Finlay, 1926 – Collins *et al.* (2015: 15).

†***Spissatella scopalveus* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [258], pl. 60, fig.7 (holotype), fig.8 (paratype).

**Holotype:** MA70726, left valve, from the Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Mount Harris Formation, Oamaru, New Zealand.

**Paratype:** MA71687, right valve, from the type locality.  
**Current name:** *Eucrassatella scopalveus* (Finlay, 1926) – Collins *et al.* (2015: 11, 12).

†***Spissatella scopalveus concisus* Finlay, 1926**

Finlay, H.J., 1926. New shells from New Zealand Tertiary beds: part 2. *Transactions and Proceedings of the New Zealand Institute* 56: 227–258 [258], pl. 59, fig. 12 (holotype).

**Holotype:** MA70727, right valve, from the Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, New Zealand.

**Current name:** *Eucrassatella scopalveus* (Finlay, 1926) – Collins *et al.* (2015: 11, 12).

†***Talabrica nummaria* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [109, 110], pl. 12, figs 19, 20 (holotype).

**Holotype:** MA70754, disarticulated specimen collected by A.W.B. Powell in January 1931 from Early Pleistocene (Nukumaruan) uppermost lens of Nukumaruan Limestone, Nukumaruan Beach, Whanganui, New Zealand.

**Paratype:** MA71646, disarticulated specimen from the type locality.

**Current name:** *Talabrica nummaria* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 237).

†***Talabrica senecta* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [109], pl. 12, fig. 24 (holotype), fig. 23 (paratype).

**Holotype:** MA70755, left valve collected by A.W.B. Powell from the Early Pleistocene (Nukumaruan) Castlepoint Formation at the lighthouse reef, Castlepoint, Wairarapa, New Zealand.

**Paratypes:** MA71903, 5 right valves, 1 left valve, from the type locality.

**Current name:** *Talabrica senecta* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 237).

**Order VENERIDA**

**CARDIIDAE**

†***Cardium gudexi* Laws, 1933**

Laws, C.R., 1933. New Tertiary Mollusca from Timaru District, South Canterbury, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 315–329 [316], pl. 30, figs 7, 14 (holotype).

**Holotype:** MA70137, right valve, collected by Laws from the Early Miocene (Altonian) Southburn Sand, Sutherlands, Tengawai River, South Canterbury, New Zealand.

**Current name:** *Maoricardium gudexi* (Laws, 1933) – Maxwell in: Spencer *et al.* (2009: 237).

†***Cardium oneroaensis* Powell, 1938**

Powell, A.W.B., 1938. Tertiary molluscan faunules from the Waitemata Beds. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 362–379 [367], pl. 38, figs 7, 8 (holotype).

**Holotype:** MA72039, left valve, collected by A.W.B. Powell from Early Miocene (Otaian) Tipakuri Formation at ‘Fossil Bay’ just south of Church Bay (sometimes known as Squadron Bay), Waiheke, Auckland, New Zealand.

**Current name:** *Maoricardium oneroaense* (Powell, 1938) – Maxwell in: Spencer *et al.* (2009: 237).

†***Cardium (Trachycardium) cantuariense* Laws, 1933**

Laws, C.R., 1933. New Tertiary Mollusca from Timaru District, South Canterbury, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 315–329 [317], pl. 29, figs 1, 4, 5 (holotype).

**Holotype:** MA70136, right valve collected by Laws from the Early Miocene (Altonian) Southburn Sand, Sutherlands, Tengawai River, South Canterbury, New Zealand.

**Paratypes:** MA72659, right valve; MA72660, left valve from the type locality.

**Current name:** *Hedecardium (Titanocardium) cantuariense* (Laws, 1933) – Maxwell in: Spencer *et al.* (2009: 237).

***Trachycardium (Vasticardium) sorenseni* Powell, 1958**

Powell, A.W.B., 1958. Mollusca of the Kermadec Islands. Part 1. *Records of the Auckland Institute and Museum* 5(1 & 2): 65–85 [76], pl. 11, figs 6, 7 (holotype).

**Holotype:** MA71236, right valve, collected during the Galathea Expedition by J. H. Sorensen, from Denham Bay, Raoul Island, Kermadec Islands, New Zealand.

**Current name:** *Acrosterigma sorenseni* (Powell, 1958) – Spencer *et al.* (2016).

**CHAMIDAE**

†***Chama (Chama) hunua* Eagle, 2000**

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [154–157]: figs 20, 21 (holotype), figs 22, 23 (Paratypes).

**Holotype:** MA72655, right valve collected by M.K. Eagle, from the Early Miocene (Otaian) Tipakuri Formation, Hunua Road cutting, Hays Stream, Hunua Ranges, south-east Auckland, New Zealand.

**Paratype:** MA72656, left valve from the type locality.

**Remarks:** In Eagle (2000) the paratype registration is incorrectly given as MA72657.

**Current name:** *Chama hunua* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 236).

**CYAMIIDAE**

***Costokidderia lyallensis* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [457], pl. 21, fig. 95 (holotype), figs 93, 94 (paratype).

**Holotype:** MA70211, a right valve, from shell sand from Lyall Bay, Wellington, New Zealand.

**Paratypes:** MA72543, 2 left valves, from the type locality.

**Remarks:** The species was not actually mentioned on p. 457 in the original Finlay (1926) paper, as a typesetting error reproduced the heading for the preceding species, *Costokidderia pedica*. *C. lyallensis* was mentioned only in the figure captions.

**Current name:** *Kidderia (Costokidderia) costata* Odhner, 1924 – Powell (1979: 401); Spencer *et al.* (2016).

***Costokidderia pedica* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [457], pl. 21, fig. 96 (holotype), figs 97, 98 (paratype).

**Holotype:** MA70212, a worn left valve, collected from 91m (50 fathoms), Snares Island, New Zealand.

**Paratype:** MA72542, a worn left valve, from the type locality.

**Current name:** *Kidderia (Costokidderia) costata* Odhner, 1924 – Powell (1979: 401); Spencer *et al.* (2016).

***Cyamium iridescens* Cooper & Preston, 1910**

Cooper, J.E. and H.B. Preston, 1910. Diagnosis of new species of marine and freshwater shells from the Falkland Islands, including descriptions of two new genera of marine Pelecypoda. *The Annals and Magazine of Natural History* (ser. 8) 5: 110–114 [112, 113], pl. 4, fig. 6.

**Paratypes:** MA73215, 2 articulated specimens, 1 disarticulated specimen, 1 right valve from Falkland Islands, British Overseas Territory.

**Current name:** *Cyamium falklandicum* Melvill & Standen, 1898 – Huber (2013b).

***Kidderia aupouria* Powell, 1933**

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [204, 205], pl. 18, fig. 5 (holotype).

**Holotype:** MA70378, a right valve collected in February 1932 from shell sand by A.W.B. Powell, from Takapaukura, Tom Bowling Bay, Northland, New Zealand.

**Paratypes:** MA71430, 2 articulated specimens, 9 right and 11 left valves; MA73391, right valve; from the type locality.

**Remarks:** MA70378 contained 2 specimens, both of which have been badly affected by glass disease. However, as one was distinctly larger than the other and approximated the length given by Powell for the holotype this is assumed to be the original holotype specimen. The second specimen has been removed and

given paratype status as MA73391. The 11 left valves in MA71430 include a left valve of *Cosa serratocostata*.

**Current name:** *Kidderia aupouria* Powell, 1933 – Spencer *et al.* (2016).

***Kidderia aupouria fiordlandica* Fleming, 1948**

Fleming, C.A., 1948. New species and genera of marine Mollusca from the Southland Fiords. *Transactions of the Royal Society of New Zealand* 77: 72–92 [78], pl. 6, fig. 6 (holotype).

**Paratype:** MA73327, 2 articulated specimens, 2 right and 6 left valves, collected in 1935 by the New Zealand Government steamer *Matai*, from 62m of water from the entrance to George Sound, Fiordland, New Zealand.

**Remarks:** The specimen lot was found in a separate, labelled container with MA71430, which is the paratype lot of *K. aupouria*. Both lots were labelled as subspecies (*K. aupouria fiordlandica* and *K. aupouria aupouria*). As they have since been elevated to species level, a new paratype record has been created for *K. aupouria fiordlandica*.

**Current name:** *Kidderia fiordlandica* Fleming, 1948 – Spencer *et al.* (2016).

***Kidderia rakiura* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [223], pl. 48, fig. 1 (holotype).

**Syntypes:** MA70379, unrelated left and right valve, collected by Mrs R.H. Harrison, after a storm, from Ringaringa Beach, Stewart Island, New Zealand.

**Current name:** *Kidderia rakiura* Powell, 1939 – Spencer *et al.* (2016).

***Legrandina aucklandica* Powell, 1933**

Powell, A.W.B., 1933. New species of marine Mollusca from the subantarctic islands of New Zealand. *Proceedings of the Malacological Society* 20(5): 232–236 [233], text fig. 1 (holotype).

**Paratypes:** MA72363, 17 articulated specimens, 36 right valves and 19 left valves collected from beach drift by Captain J. Bollons, from Faith Harbour, Auckland Islands, New Zealand.

**Current name:** *Legrandina aucklandica* Powell, 1933 – Spencer *et al.* (2016).

***Legrandina harrisonae* Powell, 1935**

Powell, A.W.B., 1935. Five new species of pelecypod Mollusca from New Zealand. *Proceedings of the Malacological Society* 21(4): 255–258 [256, 257], pl. 28, fig. 2.

**Holotype:** MA70392, a right and left valve, collected in 1934 by Mrs R.H. Harrison from shell sand from Mason Bay, Stewart Island, New Zealand.

**Paratypes:** MA71409, 3 right valves and 1 unrelated left valve, from the type locality.

**Remarks:** Both valves of the holotype show effects of glass-disease.

**Current name:** *Legrandina harrisonae* Powell, 1935 – Spencer *et al.* (2016).

***Legrandina turneri* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [221], pl. 48, fig. 7 (holotype).

**Holotype:** MA70393, left valve, collected by A.W.B. Powell in November, 1934 from “Old Neck Beach”, presumed here to be The Neck, Paterson Inlet, Stewart Island, New Zealand.

**Paratypes:** MA71542, 6 articulated specimens, 10 right valves and 11 unrelated left valves, from the type locality.

**Remarks:** The holotype shows effects of glass-disease.

**Current name:** *Legrandina turneri* Powell, 1939 – Spencer *et al.* (2016).

***Perrierina insulana* Powell, 1933**

Powell, A.W.B., 1933. The marine Mollusca of the Chatham Islands. *Records of the Auckland Institute and Museum*, 1(4), 181–208 [188, 189], pl. 34, fig. 1 (holotype).

**Holotype:** MA70614, a right and left valve, collected from clean shell sand from 18m depth off Owenga Beach, Chatham Islands, New Zealand.

**Paratypes:** MA71529, 5 right valves and 6 unrelated left valves, from the type locality.

**Remarks:** Both valves of the holotype and some of the paratypes show effects of glass-disease.

**Current name:** *Perrierina insulana* Powell, 1933 – Spencer *et al.* (2016).

***Perrierina matai* Fleming, 1948**

Fleming, C.A., 1948. New species and genera of marine Mollusca from the Southland Fiords. *Transactions of the Royal Society of New Zealand* 77: 72–92 [76, 77], pl. 5, fig. 5 (holotype and paratypes).

**Paratypes:** MA72948, 4 right valves and 2 unrelated left valves, collected by the N.Z. Government steamer *Matai* for Dr. P. Marshall, from 62m (34 fathoms) at the entrance to George Sound, Fiordland, New Zealand.

**Current name:** *Perrierina matai* Fleming, 1948 – Spencer *et al.* (2016).

***Perrierina mestayerae* Powell, 1933**

Powell, A.W.B., 1933. New species of marine Mollusca from the subantarctic islands of New Zealand. *Proceedings of the Malacological Society* 20(5): 232–236 [232], text fig. 2 (holotype).

**Paratype:** MA72362, dredged by Captain J. Bollons from 91m (50 fathoms), from the Snares Islands, New Zealand.

**Current name:** *Perrierina mestayerae* Powell, 1933 – Spencer *et al.* (2016).

**†*Perrierina ovata* Marwick, 1928**

Marwick, J., 1928. The Tertiary Mollusca of the Chatham Islands including a generic revision of the New Zealand Pectinidae. *Transactions and Proceedings of the New Zealand Institute* 58: 432–494 [444], figs 8, 9 (holotype).

**Paratypes:** MA72931, 10 right valves, 5 left valves and several fragmented specimens, collected in January

and February, 1924 by J. Marwick as the geologist with an Otago Institute party, from the Early Pleistocene (Nukumaruian) Titirangi Sand, Titirangi, Chatham Island, New Zealand.

**Current name:** *Perrierina ovata* Marwick, 1928 – Maxwell in: Spencer *et al.* (2009: 236).

#### ***Perrierina perstriata* Fleming, 1948**

Fleming, C.A., 1948. New species and genera of marine Mollusca from the Southland Fiords. *Transactions of the Royal Society of New Zealand* 77: 72–92 [75, 76], pl. 5, fig. 6 (holotype and paratype).

**Paratypes:** MA72947, 5 left valves, collected by the New Golden Hind from rock with patches of shell grit, from 27–46 m (15–25 fathoms), Gilbert Islands, Breaksea Sound, Fiordland, New Zealand.

**Current name:** *Perrierina perstriata* Fleming, 1948 – Spencer *et al.* (2016).

#### †***Perrierina sola* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [52], pl. 10, fig. 29.

**Holotype:** MA70615, incomplete right valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Perrierina sola* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 236).

#### ***Perrierina substriata* Powell, 1935**

Powell, A.W.B., 1935. Five new species of pelecypod Mollusca from New Zealand. *Proceedings of the Malacological Society* 21(4): 255–258 [255, 256], pl. 28, fig. 1.

**Holotype:** MA70616, disarticulated specimen, collected from fish stomach in 1924 by Captain J. Bollons, Three Kings Islands, New Zealand.

**Paratypes:** MA71400, 2 articulated specimens, 5 right and 3 left valves.

**Current name:** *Perrierina substriata* Powell, 1935 – Spencer *et al.* (2016).

### **GAIMARDIIDAE**

#### ***Gaimardia aucklandica* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [456], pl. 22, fig. 124 (holotype), figs 122, 123 (paratype).

**Holotype:** MA70335, left valve, collected off Auckland Islands, New Zealand.

**Paratypes:** MA72541, 151 articulated specimens, 17 right valves of which 2 are illustrated, 15 left valves, from the type locality.

**Current name:** *Gaimardia fosteriana aucklandica* Finlay, 1926 – Spencer *et al.* (2016).

#### ***Gaimardia fosteriana* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand

molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [456].

**Holotype:** MA70336, disarticulated right and left valves, collected from seaweed at half-tide from Taieri Beach, Otago, New Zealand.

**Paratypes:** MA72540, 21 articulated specimens, 20 right valves and 23 left valves, from the type locality.

**Current name:** *Gaimardia fosteriana fosteriana* Finlay, 1926 – Spencer *et al.* (2016).

#### ***Neogaimardia finlayi* Powell, 1933**

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [203, 204], text fig. 16 (holotype).

**Holotype:** MA70519, disarticulated right and left valves, collected from shell sand by A.W.B. Powell in February 1932 from Takapaukura, Tom Bowling Bay, Northland, New Zealand.

**Paratypes:** MA71429, 6 articulated specimens and 5 left valves, from the type locality.

**Current name:** *Gaimardia (Neogaimardia) finlayi* (Powell, 1933) – Spencer *et al.* (2016).

### **GALEOMMATIDAE**

#### ***Arthritica crassiformis* Powell, 1933**

Powell, A.W.B., 1933. On five new species of Recent New Zealand Mollusca. *Proceedings of the Malacological Society* 20(4): 194–198 [195], pl. 16, fig. 2, 3 (holotype).

**Paratypes:** MA72361, 28 articulated specimens, 15 right valves and 14 left valves, collected by Miss M. K. Mestayer on 24 March, 1920, from the type locality at Mahina Bay, Wellington, New Zealand.

**Current name:** *Arthritica crassiformis* Powell, 1933 – Spencer *et al.* (2016).

#### †***Arthritica elongata* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [53], pl. 10, fig. 28 (holotype).

**Holotype:** MA70048, left valve, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Remarks:** In the original description Laws refers to ‘odd right and left valves’, and he has figured the right valve. However, this valve appears to have been lost as only the left valve remains in Auckland Museum’s collections.

**Current name:** *Arthritica elongata* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 236).

#### ***Arthritica hulmei* Ponder, 1965**

Ponder, W.F., 1965. The biology of the Genus *Arthritica*. *Transactions of the Royal Society of New Zealand, Zoology* 6(8): 75–86 [83–85], fig. 4(d) (holotype and paratype).

**Paratypes:** MA72964, 3 articulated specimens, dredged by S.G. Hulme from the type locality in Cook Strait off Island Bay, Wellington, New Zealand.

**Remarks:** The specimens were removed from the polychaete *Aphrodita australis* on which it is commensal. Although the collection date is unknown, it is presumably sometime in the early 1960s as the species is named after S. G. Hulme, who was a technician at the New Zealand Geological Survey (now GNS Science) and who died in October, 1962 (Hornibrook, 1963).

**Current name:** *Arthritica hulmei* Ponder, 1965 – Spencer *et al.* (2016).

***Borniola neozelanica* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [173, 174], pl. 47, fig. 8 (holotype).

**Paratypes:** MA72211, unrelated right and left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Borniola neozelanica* Powell, 1937 – Spencer *et al.* (2016).

***Divariscintilla maoria* Powell, 1932**

Powell, A.W.B., 1932. On some New Zealand pelecypods. *Proceedings of the Malacological Society* 20(1): 65–72 [66, 67], pl. 6, fig. 1 (holotype).

**Holotype:** MA70240, disarticulated right and left valves, collected by W. La Roche in 1922 from beach wash-up near Rangaunu Harbour, Northland, New Zealand.

**Paratypes:** MA71994, 3 right and 6 left valves, possibly from 3 individuals, from the type locality.

**Remarks:** Type for the genus. The type description for the species stated it was collected from Awanui Heads. This is not a currently recognised geographic location but is here presumed to mean the entrance to Rangaunu Harbour. However, as *Divariscintilla maoria* is commensal with the mantis shrimp, *Heterosquilla tricarinata*, it could equally be the intertidal flats near the Awanui River mouth, inside Rangaunu Harbour.

**Current name:** *Divariscintilla maoria* Powell, 1932 – Spencer *et al.* (2016).

***Kellia bifurca* Webster, 1908**

Webster, W.H., 1908. Additions to the New Zealand molluscan fauna. *Transactions and Proceedings of the New Zealand Institute* 40: 254–259 [257, 258], pl. 21, figs 24–29.

**Holotype:** MA70374, disarticulated right and left valves, collected by the Reverend W.H. Webster from the type locality at Orua Bay, Manukau Harbour, Auckland, New Zealand.

**Paratypes:** MA71807, 4 right and 3 unrelated left valves from the type locality.

**Current name:** *Arthritica bifurca* (Webster, 1908) – Spencer *et al.* (2016).

**†*Kellia effossa* Hutton, 1885**

Hutton, F.W., 1885. Descriptions of new Tertiary shells. Part 1. *Transactions and Proceedings of the New Zealand Institute* 17: 313–332 [323] (not figured).

**Paratypes:** MA72941, 3 right valves and 5 unrelated left

valves, from the Early Pleistocene (Nukumaruan) type locality, Petane, Hawke's Bay, New Zealand.

**Current name:** *Melliteryx effosa* (Hutton, 1885) – Maxwell in: Spencer *et al.* (2009: 236).

***Kellia maoria* Powell, 1933**

Powell, A.W.B., 1933. The high tidal Mollusca of Rangitoto Island, Auckland, with descriptions of a new genus and two new species. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 144–152 [151, 152], fig. 2 (holotype).

**Holotype:** MA70375, disarticulated right and left valves, collected by A.W.B. Powell from the underside of stones in the upper intertidal, Rangitoto Island, Auckland, New Zealand.

**Current name:** *Lasaea maoria* (Powell, 1933) – Spencer *et al.* (2016).

***Kellia (Kaneoha) minima* Ponder, 1971**

Ponder, W.F., 1971. Some New Zealand and subantarctic bivalves of the Cyamiacea and Leptonacea with descriptions of new taxa. *Records of the Dominion Museum* 7: 119–141 [132, 133], text figure 42 (holotype).

**Paratypes:** MA72974, 2 left valves and a right valve, dredged from 68m (35 fathoms) by J. Graham in 1963 from the type locality, off Oamaru, New Zealand.

**Remarks:** Some damage from probably glass disease is evident, especially to the right valve.

**Current name:** '*Kaneoha*' *minima* (Ponder, 1971) – Spencer *et al.* (2016).

***Lasaea hinemoa* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [274, 275], pl. 40, figs 27, 28 (holotype).

**Holotype:** MA70387, disarticulated right and left valves collected probably by F.H. MacDowall from seaweeds at mid-tide, Riverton, Southland, New Zealand.

**Paratypes:** MA72564, 11 articulated specimens, 6 right and 3 left valves, from the type locality.

**Current name:** *Lasaea hinemoa* Finlay, 1928 – Spencer *et al.* (2016).

***Lasaea parengaensis* Powell, 1935**

Powell, A.W.B., 1935. Five new species of pelecypod Mollusca from New Zealand. *Proceedings of the Malacological Society* 21(4): 255–258 [257, 258], pl. 28, fig. 5.

**Holotype:** MA70388, disarticulated right and left valves, dredged from 13m (7 fathoms) by A.W.B. Powell in February 1932, off Otehe Point, near the entrance to Parengarenga Harbour, Northland, New Zealand.

**Remarks:** Powell (1932) mentioned paratypes, but these have either been lost or are not identifiable within our collections. There is one lot, MA11483, which consists of 1 articulated specimen, 4 right and 3 left valves, and has the same primary data as the holotype.

**Current name:** *Lasaea parengaensis* Powell, 1935 – Spencer *et al.* (2016).

***Lasaea rossiana tutanekai* Fleming, 1948**

Fleming, C.A., 1948. New species and genera of marine Mollusca from the Southland Fiords. *Transactions of the Royal Society of New Zealand* 77: 72–92 [78, 79], pl. 6, fig. 5 (holotype and paratype).

**Paratypes:** MA72946, 9 right and 10 left valves, collected from the type locality, New Golden Hind Station 80, in 106m (58 fathoms) waterdepth, ‘inside the rock bar’ in Dagg Sound, Fiordland, New Zealand.

**Current name:** *Lasaea hinemoa* Finlay, 1928 – Powell (1979: 389).

***Lasaea rossiana vexata* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [275], pl. 41, figs 41, 42.

**Holotype:** MA70389, disarticulated right and left valves, from the Chatham Islands, New Zealand.

**Paratypes:** MA72565, 2 right and 3 left valves, from the type locality.

**Current name:** *Lasaea hinemoa* Finlay, 1928 – Powell (1979: 389).

***Malvinasia arthuri* Cooper & Preston, 1910**

Cooper, J.E. and H.B. Preston, 1910. Diagnosis of new species of marine and freshwater shells from the Falkland Islands, including descriptions of two new genera of marine Pelecypoda. *The Annals and Magazine of Natural History* (ser. 8) 5: 110–114 [113], pl. 4, figs 7, 8.

**Paratypes:** MA73236, 1 articulated specimen, disarticulated right and left valves, from the type locality, Falkland Islands, British Overseas Territory.

**Remarks:** In a hand-written catalogue kept by A.W.B. Powell he noted that the specimens are ex-Preston.

**Current name:** *Mysella arthuri* (Cooper & Preston, 1910) – Rosenberg, G. (2013).

†***Melliteryx angulata* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [53, 54], pl.11, figs 32, 33 (holotype).

**Syntypes:** MA70458, unrelated right and left valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Melliteryx angulata* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 236).

†***Melliteryx mirificus* Powell & Bartrum, 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [403, 404], pl. 39, fig. 41 (holotype).

**Holotype:** MA72091, right? valve embedded in rock, from the Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA71692, 1 right? valve and 2 left? valves embedded in rock, from the type locality.

**Current name:** *Melliteryx mirifica* Powell & Bartrum, 1929 – Maxwell in: Spencer *et al.* (2009: 236).

†***Myllitella fragilis* Laws, 1936**

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [54], pl.11, figs 34, 35, 37 (holotype).

**Syntypes:** MA70510, unrelated right and left valves, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Myllitella fragilis* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 236).

***Myllitella vivens* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [464], pl. 22, fig. 119 (holotype), figs 120, 121 (paratype).

**Holotype:** MA70511, left valve, collected from 46m off Hen and Chickens Islands, northern Hauraki Gulf, New Zealand.

**Paratypes:** MA73088, unrelated right and left valves, from the type locality.

**Remarks:** The type for the genus.

**Current name:** *Myllitella (Myllitella) vivens vivens* (Finlay, 1926) – Spencer *et al.* (2016).

***Mysella alpha* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [173], pl. 46, fig. 6 (holotype).

**Paratypes:** MA72209, 3 right and 5 left valves, collected by A.W.B. Powell in 1932, from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Mysella alpha* Powell, 1937 – Spencer *et al.* (2016).

***Mysella beta* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [173], pl. 46, fig.7 (holotype).

**Paratypes:** MA72210, 1 articulated specimen, 7 right and 10 left valves, collected by A.W.B. Powell in 1932, from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** the majority of the specimens are tiny and it is likely that several are not conspecific and that they belong to *Mysella alpha* rather than *Mysella beta*.

**Current name:** *Mysella beta* Powell, 1937 – Spencer *et al.* (2016).

***Mysella bidentifera* Powell, 1933**

Powell, A.W.B., 1933. New pelecypod Mollusca from northern New Zealand. *Proceedings of the Malacological Society* 20(4): 199–206 [205, 206], pl. 18, fig. 6.



**Holotype:** MA70512, a right valve collected in February 1932 from shell sand by A.W.B. Powell, from Takapaukura, Tom Bowling Bay, Northland, New Zealand.

**Remarks:** valve severely affected by glass disease.

**Current name:** *Borniola bidentifera* (Powell, 1933) – Powell (1979: 390); Spencer *et al.* (2016).

***Mysella larochei* Powell, 1940**

Powell, A.W.B., 1940. The marine Mollusca of the Aupourian Province, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 70: 205–248 [218], Text fig. 1a (holotype; p. 219).

**Holotype:** MA72100, disarticulated right and left valves, collected by Mr W. La Roche, from Taupo Bay, Whangaroa Bay, New Zealand.

**Current name:** *Mysella larochei* Powell, 1940 – Spencer *et al.* (2016).

***Rochefortula decapitata* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [226], pl. 48, fig. 4 (holotype).

**Holotype:** MA70682, disarticulated right and left valves, collected by Mrs R.H. Harrison from shell sand, Rosa Island, Port Pegasus, Stewart Island, New Zealand.

**Current name:** *Borniola decapitata* (Powell, 1939) – Powell (1979: 390); Spencer *et al.* (2016).

***Rochefortula taieriensis* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [226], pl. 48, fig. 3 (holotype).

**Holotype:** MA70683, disarticulated right and left valves, collected from shell sand and seaweed washings, Taieri Beach, Otago, New Zealand.

**Paratypes:** MA71545, 1 articulated specimen, and disarticulated right and left valves, from the type locality.

**Remarks:** the left valve of the disarticulated pair is broken.

**Current name:** *Borniola taieriensis* (Powell, 1939) – Powell (1979: 391); Spencer *et al.* (2016).

***Scintilla stevensoni* Powell, 1932**

Powell, A.W.B., 1932. On some New Zealand pelecypods. *Proceedings of the Malacological Society* 20(1): 65–72 [65, 66], pl. 6, fig. 2 (holotype).

**Holotype:** MA70699, disarticulated right and left valves, collected in February 1931 from the underside of a stone at low water, at Oruawharo Bay, Great Barrier Island, New Zealand.

**Remarks:** There are two Oruawharo Bays on Great Barrier Island. The one in Powell (1932) is presumed to be the larger bay at Medlands.

**Current name:** *Scintilla stevensoni* Powell, 1932 – Spencer *et al.* (2016).

**†*Semeloidea miocenica* Laws, 1932**

Laws, C.R., 1932. New Tertiary Mollusca from New Zealand. No. 2. *Transactions and Proceedings of the New Zealand Institute* 62: 183–202 [184], pl. 32, fig. 46 (holotype).

**Holotype:** MA70708, single right valve from the Early Miocene (Altonian) of the Mount Harris Formation, ‘Old Rifle Butts’, coast south of Cape Wanbrow, Oamaru, Otago, New Zealand.

**Current name:** *Semeloidea miocenica* Laws, 1932 – Maxwell in: Spencer *et al.* (2009: 236).

***Tahunanuia alata* Powell, 1952**

Powell, A.W.B., 1952. New Zealand molluscan systematics, with descriptions of new species, part 1. *Records of the Auckland Institute and Museum* 4(3): 169–185 [170, 171], text fig. 1, 1a (holotype).

**Holotype:** MA71184, right valve, collected from Tahunanui Beach, Nelson, New Zealand.

**Paratypes:** MA71438, 9 right valves and 7 left valves, from the type locality.

**Current name:** *Anisodonta (Tahunanuia) alata alata* (Powell, 1952) – Spencer *et al.* (2016).

***Tahunanuia trigonia* Powell, 1952**

Powell, A.W.B., 1952. New Zealand molluscan systematics, with descriptions of new species, part 1. *Records of the Auckland Institute and Museum* 4(3): 169–185 [171], text fig. 2 (holotype).

**Holotype:** MA72202, a right valve collected by Captain J. Bollons from 33m (18 fathoms), from Perseverance Harbour, Campbell Island, New Zealand.

**Current name:** *Anisodonta (Tahunanuia) alata trigonia* (Powell, 1952) – Spencer *et al.* (2016).

***Virmysella hounseli* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [111], pl. 11, fig. 13 (holotype), fig. 14 (paratype).

**Holotype:** MA70838, left valve collected from the Pleistocene (Castlecliffian) at Castlecliff, Whanganui, New Zealand.

**Paratype:** MA73474, right valve, from the type locality.

**Current name:** *Mysella hounseli* (Powell, 1931) – Maxwell in: Spencer *et al.* (2009: 199); Spencer *et al.* (2016).

**GLAUCONOMIDAE**

***Hemidonax arafurensis* Ponder, Colman, Yonge & Colman, 1981**

Ponder, W.F., Colman, P.H., Yonge, C.M. and M.H. Colman, 1981. The taxonomic position of *Hemidonax* Mörch, 1871 with a review of the genus (Bivalvia: Cardiacea). *Journal of the Malacological Society of Australia* 5: 41–64 [51], Figs 1–5, 11, 12, pl. 2, figs 6–8 (holotype).

**Paratype:** MA73217, 1 articulated specimen, collected by P. H. Colman on 26 October, 1969 from a sandbar off Emery Point, Darwin, Northern Territories, Australia.

**Current name:** *Hemidonax arafurensis* Ponder, Colman, Yonge & Colman, 1981 – Huber (2015a).

## MACTRIDAE

### †*Eumarcia altilunula* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [627, 628], pl. 51, fig. 196.

**Holotype:** MA70299, incomplete left valve from Middle Miocene (Lillburnian) Lima Sand, [Finlay's bed 7C (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Remarks:** Finlay's subdivision of Clifden beds 7 and 8 cannot be identified with confidence and specimens from Finlay's 7C can probably be matched to their source horizon only by comparing their preservation with that of later collections (Fleming *et al.*, 1969: 77, 93). On the basis of preservation the Lima Sand is the likely source of the type of *Eumarcia altilunula*.

**Current name:** *Cyclomactra* (?) *altilunula* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 237).

### *Lutraria bruuni* Powell, 1967

Powell, A.W.B., 1967. Mollusca of the Kermadec Islands part 2. *Records of the Auckland Institute and Museum* 6(3): 197–199 [198, 199], pl. 38, figs 1, 2 (holotype).

**Paratypes:** MA72551, 2 right valves, collected on 3 March, 1952 from Galathea Station 674, 29° 15'S; 177° 5'W, from 15m–75m depth off Raoul Island, Kermadec Islands, New Zealand.

**Current name:** *Lutraria* (*Psammophila*) *bruuni* Powell, 1967 – Spencer *et al.* (2016).

### †*Mactra* (*Cyclomactra*) *williamsi* Marwick, 1948

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [22], pl. 3, figs 6, 8 (holotype), fig. 7 (paratype).

**Holotype:** MA71014, left valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA72939, incomplete right valve, from the type locality.

**Current name:** *Cyclomactra williamsi* (Marwick, 1948) – Maxwell in: Spencer *et al.* (2009: 237).

### †*Maorimactra acuminella* Finlay, 1930

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [53], not figured.

**Holotype:** MA70438, Figure 7 a, b, left valve, collected from Early Miocene (Altonian) Southburn Sand, White Rock River, Canterbury, New Zealand.

**Paratypes:** MA73555, 2 right and 4 left valves, from the type locality.

**Remarks:** The holotype and paratypes for this species were found together as a single lot of 7 specimens. As none was labeled or marked the holotype was not obvious. However, in many instances Finlay published measurements in his original descriptions, including for a number of other species for which we hold the

holotype. Although Finlay did not relate measurements to specific specimens, where checked, in each case they were found to match the dimensions of a holotype. Based on this it is assumed that the measurements published for *Maorimactra acuminella* also applied to the holotype specimen for this species. Therefore, the specimen which exactly matched Finlay's measurements in his description for *Maorimactra acuminella* has been separated out as the holotype, and the remaining 6 are deemed to be paratypes.

**Current name:** *Maorimactra acuminella* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 237).

### †*Scalpomactra biconvexa* Powell & Bartrum 1929

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [405, 406], pl. 50, figs 108 (holotype).

**Holotype:** MA72132, right valve, from the Early Miocene (Otaian) Tipakuri Formation of 'Double U Bay', approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Current name:** *Scalpomactra biconvexa* Powell & Bartrum 1929 – Maxwell in: Spencer *et al.* (2009: 237).

### †*Scalpomactra continua* Finlay, 1930

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [53, 54], not figured.

**Holotype:** MA70687, Figure 7 c, d, right valve, from the Early Miocene (Altonian) Southburn Sand at White Rock River, Canterbury, New Zealand.

**Paratypes:** MA72443, 43 right and 42 left valves, from the type locality.

**Current name:** *Scalpomactra continua* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 237).

### †*Spisula* (*Spisulona*) *couttsi* Marwick, 1948

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [23], pl. 3, figs 3, 4 (holotype), fig. 5 (paratype), figs 9, 10 (paratype)

**Holotype:** MA71117, left valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratypes:** MA72998, 2 right valves, from the type locality.

**Remarks:** also the type for the subgenus.

**Current name:** *Spisula* (*Spisulona*) *couttsi* Marwick, 1948 – Maxwell in: Spencer *et al.* (2009: 237).

### *Standella aequalis* Webster, 1905

Webster, W. H., 1905. Some new species of New Zealand marine shells, together with remarks on some non-marine species, and some additions to the "Index Faunæ." *Transactions and Proceedings of the New Zealand Institute* 37: 276–280 [280], fig. 13a.

**Holotype:** MA70728, right valve, from Kauri Point,

Manukau Harbour, Auckland, New Zealand.

**Current name:** *Cyclomactra ovata* (Gray, 1843) – Powell (1979: 413).

## MESODESMATIDAE

### *Amphidesma forsteriana* Finlay, 1926

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [468], not figured.

**Holotype:** MA70030, Figure 8 a-d, disarticulated right and left valves, from Warrington, near Dunedin, Otago, New Zealand.

**Current name:** *Paphies (Taria) donacina* (Spengler, 1793) – Powell (1979: 416); Spencer *et al.* (2016).

### †*Paphies otaiana* Eagle, 2000

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [151–153], fig. 15 (holotype).

**Holotype:** MA72652, left valve, collected by M.K. Eagle from Early Miocene (Otaian) Tipakuri Formation, Hunua Road cutting, Hays Stream, Hunua Ranges, south-east Auckland, New Zealand.

**Current name:** *Paphies otaiana* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 237).

## TELLINIDAE

### †*Angulus (Peronidia) artus* Laws, 1933

Laws, C.R., 1933. New Tertiary Mollusca from Timaru District, South Canterbury, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 315–329 [318], pl. 30, figs 11, 12, 13.

**Holotype:** MA70035, right valve, collected by C.R. Laws from the Early Miocene (Altonian) Southburn Sand at Sutherlands, Tengawai River, South Canterbury, New Zealand.

**Paratype:** MA110823, right valve, from the type locality.

**Current name:** *Tellinota arta* (Laws, 1933) – Maxwell in: Spencer *et al.* (2009: 238).

### †*Angulus (Peronidia) tumens* Laws, 1933

Laws, C.R., 1933. New Tertiary Mollusca from Timaru District, South Canterbury, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 315–329 [318], not figured.

**Holotype:** MA70036, Figure 7 e, f, right valve, from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Paratypes:** MA72661, 1 partial right valve, 2 partial left valves, 1 entire left valve 3; MA72662, right and 1 left valves, from the type locality.

**Current name:** *Tellinota tumens* (Laws, 1933) – Maxwell in: Spencer *et al.* (2009: 238).

### †*Ascitellina protensa* Powell, 1935

Powell, A.W.B., 1935. Tertiary Mollusca from Motutara, west coast, Auckland. *Records of the Auckland Institute*

*and Museum* 1(6): 327–340 [333], pl. 76 fig. 8 (holotype).

**Holotype:** MA72009, left valve, from Early Miocene (Altonian) Nihotupu Formation, north end of Pillow Lava Bay, south of Muriwai Beach, west Auckland, New Zealand.

**Current name:** *Elliptotellina protensa* (Powell, 1935) – Maxwell in: Spencer *et al.* (2009: 237).

### †*Barytellina anomalodonta* Finlay, 1924

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [473, 474], pl. 50, figs 7a–c.

**Syntypes:** MA70095, unrelated right and left valves, from the Early Pleistocene (Nukumaru) at Rissington, Hawke's Bay, New Zealand.

**Remarks:** These were referred to by Finlay (1924) in the original description as 'types' and therefore treated here collectively as the name-bearing type.

**Current name:** *Barytellina crassidens* Marwick, 1924 – Beu and Raine (2009).

### †*Eurytellina solitaria* Powell, 1931

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [95], pl. 14, fig. 40 (holotype).

**Holotype:** MA70302, right valve, collected by A.W.B. Powell in January 1931 from Late Pliocene (Waipiian) Tangahoe Formation, near the mouth of Waihi Stream, Hawera, New Zealand.

**Current name:** *Eurytellina (?) solitaria* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 237).

### †*Finlayella sinuaris* Laws, 1933

Laws, C.R., 1933. New Tertiary Mollusca from Timaru District, South Canterbury, New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 63: 315–329 [319, 320], pl. 29, figs 2, 3, 6.

**Holotype:** MA70327, right valve collected by C.R. Laws from the Early Miocene (Altonian) Southburn Sand at Sutherlands, Tengawai River, South Canterbury, New Zealand.

**Paratypes:** MA72663, right and left valves from the type locality.

**Remarks:** Type for the genus.

**Current name:** *Finlayella sinuaris* Laws, 1933 – Maxwell in: Spencer *et al.* (2009: 238).

### †*Macoma hesterna* Powell & Bartrum 1929

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [404], pl. 44, fig. 76 (holotype).

**Paratypes:** MA71693, left valve collected from the Early Miocene (Otaian) Tipakuri Formation of 'Double U Bay', approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Remarks:** MA71693 contained a right and left valve, but as Powell (1929) specifically mentioned a left valve as the only paratype it is here assumed that the right valve is not a paratype.

**Current name:** *Tellina hesterna* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 238).

† ***Macoma oneroensis* Powell & Bartrum 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [404, 405], pl. 42, fig. 62 (holotype).

**Holotype:** MA72085, left valve, from the Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Current name:** *Bartruria oneroensis* (Powell & Bartrum, 1929) – Maxwell in: Spencer *et al.* (2009: 237).

† ***Macoma robini* Finlay, 1924**

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [474, 475], pl. 51, fig. 6a (holotype); figs 6b, 6c (paratype).

**Holotype:** MA70425, articulated specimen, collected by R.S. Allan from the Early Miocene (Waitakian) Otekaike Limestone, ‘Trig Z’ (Fossil Record File I40/f9519), Otiake, Waitaki Valley Otago, New Zealand.

**Paratypes:** MA72490, articulated specimen, partial right valve; MA73240, 1 right valve, 2 left valves (1 figured as 6c), from the type locality.

**Current name:** *Peronaea robini* (Finlay, 1924) – Maxwell in: Spencer *et al.* (2009: 237).

***Tellina urinaria* Suter, 1913**

Suter, H., 1913. *Manual of the New Zealand Mollusca. With an atlas of quarto plates.* Wellington, John MacKay, Government Printer, 1120 pp. [950], pl. 54, fig. 13.

**Paratype:** MA72784, collected by E.R. Waite from 219m (120 fathoms) water depth, from 38km (24 miles) south east of Long Point, Fiordland, Southland, New Zealand.

**Current name:** *Elliptotellina urinaria* (Suter, 1913) – Spencer *et al.* (2016).

**DONACIDAE**

† ***Donax (Paradonax) parengarengaensis* Eagle, 2000**

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [157–159], figs 29, 30 (holotype and Paratypes).

**Holotype:** MA72653, left valve, collected by M.K. Eagle from the Early Miocene (Altonian) Paratoetoe Formation, north shore, Parengarenga Harbour, New Zealand.

**Paratype:** MA72654, left valve from the type locality.

**Current name:** *Donax (Paradonax) parengarengaensis* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 237).

**PSAMMOBIIDAE**

† ***Gari aucklandica* Marwick, 1948**

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland.* New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [26], pl. 1, figs 8, 9 (holotype), fig. 12 (paratype).

**Holotype:** MA70989, right valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA73000, left valve, from the type locality.

**Current name:** *Gari (Psammobia) aucklandica* Marwick, 1948 – Maxwell in: Spencer *et al.* (2009: 237).

† ***Gari hodgei* Willan, 1980**

Willan, R.C., 1980. A re-evaluation of *Gari lineolata* (Gray in Yate, 1835) (Bivalvia: Psammobiidae). *Journal of the Royal Society of New Zealand* 10: 173–183 [174–176], fig. 1A, figs 2A, B, figs 3I–K, L (holotype), M, N.

**Holotype:** MA71360, articulated specimen, collected by A.W.B. Powell in 1936 from Owenga, Chatham Islands, New Zealand.

**Paratypes:** MA14290, 9 articulated specimens and 2 left valves, from the type locality.

**Current name:** *Gari (Psammobia) convexa* Reeve, 1857 – Spencer *et al.* (2016).

† ***Gari oamarutica* Finlay, 1930**

Finlay, H.J., 1930. New shells from New Zealand Tertiary Beds. Part 3. *Transactions and Proceedings of the New Zealand Institute* 61: 49–84 [53], not figured.

**Holotype:** MA70337, Figure 7 g, h, left valve, collected from Early Miocene (Altonian) of the Mount Harris Formation, Awamoia Beach boulders, Otago, New Zealand.

**Paratypes:** MA73116, 11 fragments of partial right and left valves, from the type locality.

**Current name:** *Gari (Psammobia) oamarutica* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 237).

† ***Kermadysmea galathea* Powell, 1958**

Powell, A.W.B., 1958. Mollusca of the Kermadec Islands. Part 1. *Records of the Auckland Institute and Museum* 5(1 & 2): 65–85 [74], text fig. A, 1, 4, pl. 10, fig. 4 (holotype).

**Paratypes:** MA72300, articulated specimen and 2 left valves, collected on 3 March 1952 from the type locality, station 676, Danish Galathea Expedition, from 83m off Raoul Island, Kermadec Islands, New Zealand.

**Current name:** *Gari (Kermadysmea) galathea* (Powell, 1958) – Spencer *et al.* (2016).

† ***Solecurtus bensoni* Finlay, 1924**

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [471, 472], pl. 50, figs 8a, 8b (holotype).

**Holotype:** MA70714, articulated specimen, collected from Early Miocene (Altonian) Calamity Point Sandstone, [Finlay's bed 6A (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Paratypes:** MA73056, 10 fragments from 9 partial right and left valves, from the type locality.

**Current name:** *Solecortus bensoni* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 237).

†***Solecortus chattonensis* Finlay, 1924**

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [472, 473], pl. 50, fig. 10 (holotype).

**Holotype:** MA70715, left valve, collected from Late Oligocene (Duntroonian) Chatton Formation, Chatton, Southland, New Zealand.

**Current name:** *Solecortus chattonensis* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 237).

†***Solecortus evolutus* Finlay, 1924**

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [472], pl. 50, fig. 9 (holotype).

**Holotype:** MA70716, right valve, collected from Early Miocene (Altonian) of the Mount Harris Formation, Awamoa Beach boulders, Otago New Zealand.

**Current name:** *Solecortus evolutus* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 237).

***Soletellina siliquens* Willan, 1993**

Willan, R.C., 1993. Taxonomic revision of the family Psammobiidae (Bivalvia: Tellinoidea) in the Australian and New Zealand region. *Records of the Australian Museum, Supplement* 18, 132 pp. [85, 86], fig. 344 (holotype), 345–348, 413.

**Holotype:** MA71377, articulated specimen, collected from Beachlands Beach, Auckland, New Zealand.

**Current name:** *Hiatula siliquens* (Willan, 1993) – Spencer *et al.* (2016).

†***Soletellina waitemata* Marwick, 1948**

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [26, 27], pl. 1, figs 3, 4 (holotype).

**Holotype:** MA71116, left valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Current name:** *Hiatula waitemata* (Maxwell, 1948) – Maxwell in: Spencer *et al.* (2009: 237).

**SEMELIDAE**

***Leptomya retiaria aucklandica* Powell, 1955**

Powell, A.W.B., 1955. Mollusca of the southern islands of New Zealand. *Cape Expedition Series Bulletin* 15, DSIR, Wellington, 151 pp. [38], pl. 1, fig. 2 (holotype).

**Paratype:** MA72377, right valve, collected by C.A. Fleming in 1942 during the 'Cape Expedition' from 7–9m (4–5 fathoms), Musgrave Harbour, Auckland Islands, New Zealand.

**Current name:** *Leptomya retiaria aucklandica* Powell, 1955 – Spencer *et al.* (2016).

†***Leptomya waitemataensis* Powell & Bartrum, 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [405], pl. 50, fig. 109 (holotype).

**Holotype:** MA72079, right valve, from the Early Miocene (Otaian) Tipakuri Formation of 'Double U Bay', approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Current name:** *Leptomya waitemataensis* Powell & Bartrum, 1929 – Maxwell in: Spencer *et al.* (2009: 237).

***Semele brambleyae* Powell, 1967**

Powell, A.W.B., 1967. New Zealand molluscan systematics with descriptions of new species; part 6. *Records of the Auckland Institute and Museum* 6(3): 185–196 [196], pl. 37, figs 7–9 (holotype).

**Holotype:** MA71299, right and left valves of a disarticulated specimen, found as fresh specimen on mud flats by Miss D. Brambley at the east end of Orua Bay, Manukau Harbour, New Zealand.

**Remarks:** This is the only specimen ever recorded from New Zealand and is considered adventive, possibly having arrived in ballast water from a ship (Marshall & Spencer, 2013).

**Current name:** *Semele vestalis* (A. Adams in Reeve, 1853) – Bouchet (2015).

**UNGULINIDAE**

***Zemysia rakiura* Powell, 1939**

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [224, 225], text figs d, e.

**Holotype:** MA70890, disarticulated right and left valves, collected by Mrs R.H. Harrison from Ringaringa Beach, Stewart Island, New Zealand.

**Current name:** *Zemysia rakiura* Powell, 1939 – Spencer *et al.* (2016).

***Zemysia (Zemysina) globus* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [462], pl. 22, fig. 109 (holotype), figs 110, 111 (paratype).

**Holotype:** MA70889, left valve, from Stewart Island, New Zealand.

**Paratypes:** MA72547, articulated specimen and 1 right valve, from the type locality.

**Current name:** *Zemysina globus* (Finlay, 1926) – Spencer *et al.* (2016).

***Zemysia (Zemysina) striatula* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [462, 463], pl. 22, figs 113 (holotype), 112 (paratype).

**Holotype:** MA70891, right valve, from Waitemata Harbour, Auckland, New Zealand.

**Paratype:** MA72548, articulated specimen from the type locality.

**Current name:** *Zemysina striatula* (Finlay, 1926) – Spencer *et al.* (2016).

## VENERIDAE

†***Austrovenus northlandica* Eagle, 2000**

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [160–162], fig. 36 (holotype), figs 37–39 (paratypes).

**Holotype:** MA72649, partial right valve, collected by M.K. Eagle in 1992 from Early Miocene (Otaian) Tipakuri Formation, Hunua Road cutting, Hays Stream, Hunua Ranges, New Zealand.

**Paratypes:** MA72650, partial left valve; MA76821, probable partial right valve and other fragments; MA76823, 1 partial right valve and 1 indeterminate fragment; all from the type locality.

**Remarks:** In Eagle (2000) the holotype is described as a left valve, but the figured specimen, MA72649 is a right valve; the paratype, MA72650, is described as a right valve, whereas it is a left valve.

**Current name:** *Austrovenus northlandica* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 238).

†***Bassina katherinae* Marwick, 1948**

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [24], pl. 4, figs 5, 6 (holotype), fig. 8 (paratype).

**Holotype:** MA70938, right valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA72997, left valve, from the type locality.

**Current name:** *Bassina (Callanaitis) katherinae* Marwick, 1948 – Maxwell in: Spencer *et al.* (2009: 238).

†***Chione crassitesta* Finlay, 1924**

Finlay, H.J., 1924. New shells from New Zealand Tertiary beds. *Transactions and Proceedings of the New Zealand Institute* 55: 450–479 [478, 479], pl. 50, figs 1a, 1b, 1c (holotype).

**Holotype:** MA70165, disarticulated right and left valves, collected by Dr Benson from the Pleistocene (Castlecliffian) at Clifton [Clifden sic] near Cape Kidnappers, Hawke's Bay, New Zealand.

**Current name:** *Austrovenus stutchburyi* (Wood, 1828) – Beu (2006: 278).

***Chione (Austrovenus) aucklandica* Powell, 1932**

Powell, A.W.B., 1932. On some New Zealand pelecypods. *Proceedings of the Malacological Society* 20(1): 65–72 [68], pl. 6, figs 3,4 (holotype).

**Holotype:** MA72048, disarticulated specimen, collected by Captain J. Bollons in 1922, from the Auckland Islands, New Zealand.

**Current name:** *Austrovenus stutchburyi* (Wood, 1828) – Beu (2006: 278).

†***Chione (Austrovenus) tamakiensis* Marwick, 1948**

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [24, 25], pl. 4, figs 2, 3 (holotype), fig. 1 (paratype).

**Holotype:** MA70944, right valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA72996, left valve, from the type locality.

**Current name:** *Austrovenus tamakiensis* (Marwick, 1948) – Maxwell in: Spencer *et al.* (2009: 238).

***Dosinia maoriana* Oliver, 1923**

Oliver, W.R.B., 1923. Notes on New Zealand pelecypods. *Proceedings of the Malacological Society* 15: 179–188 [188], not figured.

**Paratypes:** MA72889, disarticulated specimen, from Elmslie Bay, French Pass, South Island, New Zealand.

**Current name:** *Dosinia (Pectunculus) maoriana* Oliver, 1923 – Spencer *et al.* (2016).

†***Dosinia (Austrodosinia) waitakiensis* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [585], pl. 35 figs 20, 22.

**Holotype:** MA70251, partial left valve, from the Late Oligocene/Early Miocene (Waitakian) Otekaike Limestone, 'Trig Z' (Fossil Record File I40/f9519), Otiake, Waitaki Valley Otago, New Zealand.

**Current name:** *Austrodosinia waitakiensis* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†***Dosinia (Kereia) cottoni* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [590, 591], pl. 38, figs 42, 47 (holotype).

**Paratypes:** MA73196, 2 articulated specimens, from Late Miocene (Tongaporutuan) at Hurupi Creek, Palliser Bay, New Zealand.

**Current name:** *Dosinia (Kereia) cottoni* Marwick, 1927 – Beu & Raine (2009).

†***Dosinia (Kereia) densicosta* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [590], pl. 35, figs 16, 17.

**Holotype:** MA70250, partial left valve, from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Current name:** *Dosinia (Kereia) densicosta* (Marwick, 1927) – Beu & Maxwell (1990): 400.

†*Dosinia (Kereia) ongleyi* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [588, 589], pl. 40, figs 58, 59 (holotype), pl. 37, figs 37, 39 (paratypes).

**Paratype:** MA71541, left valve, from the Early Paleocene (Lower Teurian) Wangaloa Formation, coast between Mitchells Rocks and Measly Beach, near Wangaloa, Otago, New Zealand.

**Current name:** *Dosinia (Dosinobia) ongleyi* Marwick, 1927 – Beu & Maxwell (1990): 400.

†*Dosinia (Raina) bartrumi* Laws, 1930

Laws, C.R., 1930. New Tertiary Mollusca from New Zealand. No. 1. *Transactions and Proceedings of the New Zealand Institute* 61: 547–553 [548], pl. 89, fig. 5, pl. 90, fig. 7 (holotype).

**Holotype:** MA70248, left valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Dosinia (Raina) bartrumi* Laws, 1930 – Beu & Maxwell (1990): 400.

†*Dosinia (Raina) benereparata* Laws, 1930

Laws, C.R., 1930. New Tertiary Mollusca from New Zealand. No. 1. *Transactions and Proceedings of the New Zealand Institute* 61: 547–553 [547, 548], pl. 89, figs 2, 3 (holotype).

**Holotype:** MA70249: left valve collected from the Late Oligocene (Duntroonian) Chatton Formation, Chatton, Southland, New Zealand.

**Current name:** *Dosinia (Raina) benereparata* Laws, 1930 – Beu & Maxwell (1990): 400.

†*Dosinia (Raina) powelli* Marwick, 1948

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [24], pl. 4, figs 9, 10 (holotype), 7 (paratype).

**Holotype:** MA70962: left valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA72995: partial right valve, from the type locality.

**Current name:** *Dosinia (Raina) powelli* Marwick, 1948 – Beu & Maxwell (1990): 400.

†*Dosinula firmocosta* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [610, 611], pl. 44, figs 122, 123 (holotype).

**Holotype:** MA70252, right valve from Early Miocene (Altonian) Long Beach Shellbed, [Finlay's bed 6B (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Paratypes:** MA73124, 2 right and 1 left valves, from Middle Miocene (Lillburnian) Lill Sand, [Finlay's bed 7A (for correlation see Fleming *et al.*, 1969)], at the type locality.

**Current name:** *Dosina firmocosta* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Dosinula suboblonga* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [609, 610], pl. 45, fig. 124, 127 (holotype), 130 (paratype).

**Paratype:** MA71968, right valve, from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Current name:** *Dosina suboblonga* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Dosinula uttlei* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [610], pl. 45, figs 128, 129 (holotype).

**Paratype:** MA73126, partial right valve from Middle Miocene (Lillburnian) Lima Sand, [Finlay's bed 7C (for correlation see Fleming *et al.*, 1969)] at Clifden, Southland, New Zealand.

**Paratypes:** MA73127, 1 complete and 2 partial right valves, 1 repaired and 1 partial left valve, from the Early Miocene (Waitakian) Otekaike Limestone, 'Trig Z' (Fossil Record File I40/f9519), Otiake, Waitaki Valley Otago, New Zealand.

**Remarks:** Finlay's subdivision of Clifden beds 7 and 8 cannot be identified with confidence and specimens from Finlay's 7C can probably be matched to their source horizon only by comparing their preservation with that of later collections (Fleming *et al.*, 1969: 77, 93).

**Current name:** *Dosina uttlei* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Eumarcia (Atamarcia) crassatelliformis* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [628], pl. 50, figs 191, 192.

**Holotype:** MA70300, damaged left valve from Late Miocene (Kapitean) Mussel Beach, Te Waewae Bay, Southland, New Zealand.

**Current name:** *Atamarcia (Atamarcia) crassatelliformis* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Eumarcia (Atamarcia) sulcifera* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [629], pl. 52, fig. 203.

**Holotype:** MA70301, left valve from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Current name:** *Atamarcia (Atamarcia) sulcifera* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Eumarcia (Opimarcia) healyi* Marwick, 1948

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [26], pl. 5, figs 1, 4 (holotype), fig. 2 (paratype).

**Holotype:** MA70983, left valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratype:** MA72978, dorsal fragment of right valve, collected from the type locality.

**Current name:** *Atamarcia (Opimarcia) healyi* (Marwick, 1948) – Maxwell in: Spencer *et al.* (2009: 238).

†*Finlaya parthiana* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [596], pl. 40, fig. 60 (paratype), figs 61, 62 (holotype).

**Holotype:** MA70323, left valve, collected from the Early Paleocene (Lower Teurian) of Boulder Hill, near Dunedin, Otago, New Zealand.

**Remarks:** Type for the genus.

**Current name:** *Marwickia parthiana* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Kuia macdowalli* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [601], pl. 42, figs 98, 100 (Paratypes); fig. 99 (holotype).

**Holotype:** MA70380, left valve, from Middle Miocene (Waiauan) Third Bay Sandstone, [Finlay's bed 6D (for correlation see Fleming *et al.*, 1969)] Clifden, Southland, New Zealand.

**Paratypes:** MA73121, 4 articulated specimens and 1 left valve; MA73136, 1 right and 1 left valve, all from Middle Miocene (Lillburnian) Lima Sand, [Finlay's bed 7C (for correlation see Fleming *et al.*, 1969)] Clifden, north west of the type locality;

**Paratypes:** MA73122, 1 articulated specimen and 2 left valves, from Middle Miocene (Waiauan) [Finlay's bed 8B (for correlation see Fleming *et al.*, 1969)] at Clifden, precise location unknown;

**Paratypes:** MA73123, 1 articulated specimen and 1 right valve, from the type locality.

**Remarks:** Finlay's subdivision of Clifden Beds 7 and 8 cannot be identified with confidence and specimens from Finlay's 7C can probably be matched to their source horizon only by comparing their preservation with that of later collections (Fleming *et al.*, 1969: 77, 93).

**Current name:** *Kuia macdowalli* Marwick, 1927 – Maxwell in: Spencer *et al.* (2009: 238).

†*Kuia singularis* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [601], pl. 42, figs 96, 97 (holotype).

**Holotype:** MA70381, damaged left valve, collected from the Late Miocene (Kapitean) at Mussel Beach, Te

Waewae Bay, Southland, New Zealand.

**Current name:** *Marama (Hina) singularis* (Marwick, 1927) – Maxwell in: Spencer *et al.* (2009: 238).

†*Marama hurupiensis* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [604], pl. 45, figs 125, 126 (holotype).

**Paratype:** MA73125, articulated specimen, from Late Miocene (Tongaporutuan), Hurupi Formation, Hurupi Stream, north east Palliser Bay, New Zealand.

**Current name:** *Marama (Marama) hurupiensis* Marwick, 1927 – Maxwell in: Spencer *et al.* (2009: 238).

†*Marama (Hina) hendersoni* Marwick, 1927

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [607], pl. 43, figs 107, 108 (holotype).

**Paratype:** MA71999, articulated right and left valve, from Middle Miocene (Lilburnian) Mokau Sandstone, Tongaporutu River, Taranaki, New Zealand.

**Current name:** *Marama (Hina) hendersoni* Marwick, 1927 – Maxwell in: Spencer *et al.* (2009: 238).

†*Notirus caudex* Laws, 1936

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [57], pl. 11, fig. 39 (holotype).

**Holotype:** MA70526, a single left valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Irus (Notirus) caudex* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 238).

†*Notocallista (Fossacallista) exigua* Marwick, 1938

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [77], Pl 13, figs 10,11 (holotype).

**Holotype:** MA70529, left valve, collected from the Eocene (Aldingan) at Port Willunga, South Australia, Australia.

**Remarks:** Marwick published the age as Oligocene–Miocene (Janjukian) and gave the location as Aldinga, South Australia. However, the labels with the specimen, including H.J. Finlay's original labels, give two conflicting locations (Aldinga and Adelaide bore gnds [sic]) and ages (Aldingan and Janjukian) for the specimen. Based on an image of the specimen sent to him, T. Darragh (pers com) suggests that from the little matrix still adhering to the interior of the specimen it appears to be from the Blanche Point Marl outcropping in the cliffs at Port Willunga. The age of the Blanche Point Marls at Port Willunga is Late Eocene. Darragh also suggests that Marwick's species could be a junior synonym of *N. (F.) tatei*, but further revision is required.

**Current name:** *Notocallista (Fossacallista) exigua* Marwick, 1938 – Darragh (1970: 137).



**†*Notocallista (Fossacallista) opima* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [76, 77], pl. 13, figs 14, 15 (holotype), fig. 13 (paratype).

**Paratypes:** MA73209, 6 right and 2 left valves, collected from the Middle Miocene (Balcombian) at Balcombe Bay, Victoria, Australia.

**Current name:** *Notocallista (Fossacallista) opima* Marwick, 1938 – Darragh (1970: 143).

**†*Notocallista (Fossacallista) singletoni* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [78], Pl 14, figs. 15,16 (holotype).

**Holotype:** MA70532, right valve, collected from Early Miocene (Longfordian) Fossil Bluff Sandstone at Fossil Bluff, near Wynyard, Tasmania, Australia.

**Current name:** *Notocallista (Fossacallista) singletoni* Marwick, 1938 – Darragh (1970: 147).

**†*Notocallista (Fossacallista) tecta* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [75], Pl 14, fig 5,6 (holotype).

**Holotype:** MA70533, right valve, collected from Late Oligocene (Duntroonian) Chatton Shellbed, Shell Gully, Chatton, Southland, New Zealand.

**Paratypes:** MA72935, partial right and complete left valves, from the type locality.

**Current name:** *Notocallista (Fossacallista) tecta* Marwick, 1938 – Maxwell in Spencer *et al.* (2009: 238).

**†*Notocallista (Fossacallista) tersa* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [75, 76], Pl 14, figs 4,7 (holotype).

**Holotype:** MA70534, right valve, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Oamaru, Otago, New Zealand.

**Paratypes:** MA73110, 3 right and 3 unrelated left valves, from the type locality.

**Current name:** *Notocallista (Fossacallista) tersa* Marwick, 1938 – Maxwell in Spencer *et al.* (2009: 238).

**†*Notocallista (Fossacallista) watti* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [75], pl. 14, figs 12, 13 (holotype).

**Paratype:** MA72938, right valve, collected from Early Miocene (Waitakian) Otekaike Limestone, ‘Trig Z’ (Fossil Record File I40/f9519), Otiake, Waitaki Valley, New Zealand.

**Current name:** *Notocallista (Fossacallista) watti* Marwick, 1938 – Maxwell in Spencer *et al.* (2009: 238).

**†*Notocallista (Striacallista) lutea* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [72], Pl 13, figs. 5, 6 (holotype).

**Holotype:** MA70530, left valve, collected by H.J. Finlay from Middle Miocene (Balcombian) Muddy Creek Marl, Muddy Creek, Hamilton, Victoria, Australia.

**Paratypes:** MA73111, unrelated right and left valves, from the type locality.

**Current name:** *Notocallista (Striacallista) lutea* Marwick, 1938 – Darragh (1970: 141).

**†*Notocallista (Striacallista) mollesta* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [73], pl. 13, figs 7–9 (holotype and paratype).

**Paratype:** MA73210, left valve, collected from Pliocene sediments at 133–166m (400–500 ft) depth, Abattoirs Bore, Adelaide, South Australia, Australia.

**Current name:** *Notocallista (Striacallista) mollesta* Marwick, 1938 – Darragh (1970: 142).

**†*Notocallista (Striacallista) pestis* Marwick, 1938**

Marwick, J., 1938. *Notocallista* and its allies. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 60–81 [73, 74], Pl 13, figs. 3,4 (holotype).

**Holotype:** MA70531, right valve, collected from Pliocene sediments at 133–166m (400–500 ft) depth, Abattoirs Bore, Adelaide, South Australia, Australia.

**Current name:** *Notocallista (Striacallista) pestis* Marwick, 1938 – Darragh (1970: 144).

**†*Paphia (Callistotapes) finlayi* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [633], figs 208 (holotype), 209 (paratype).

**Holotype:** MA70583, right valve, collected from Middle Miocene (Lillburnian) Lill Sand, [Finlay’s bed 7A (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Paratype:** MA71986, partially intact articulated specimen, from the type locality.

**Remarks:** Left valve missing the anterior and hinge.

**Current name:** *Paphia (Callistotapes) finlayi* Marwick, 1927 – Maxwell in Spencer *et al.* (2009: 238).

**†*Paradione (Notocallista) trigonalis* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [593, 594], fig. 73 (holotype).

**Holotype:** MA70585, articulated specimen, collected from Early Miocene (Altonian) Long Beach Shellbed, [Finlay’s bed 6B (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Paratypes:** MA73112, 1 right and 2 left valves, from the type locality.

**Current name:** *Rohea trigonalis* (Marwick, 1927) – Maxwell in Spencer *et al.* (2009: 238).

***Plurigens phenax* Finlay, 1930**

Finlay, H.J., 1930. Additions to the Recent molluscan fauna of New Zealand. No. 3. *Transactions and Proceedings of the New Zealand Institute* 61: 222–247 [246, 247], pl. 42, fig. 11 (holotype), figs 3 (paratype MA72919), 4 (paratypes).

**Holotype:** MA70632, left valve, collected from 110m (60 fathoms), off Otago Heads, Otago, New Zealand.

**Paratype:** MA72594, right valve; MA72919, right valve; MA73087, 3 right and 5 unrelated left valves, all from the type locality.

**Remarks:** Type for the genus.

**Current name:** *Tawera phenax* (Finlay, 1930) – Spencer *et al.* (2016).

***Tawera bollonsi* Powell, 1932**

Powell, A.W.B., 1932. On some New Zealand pelecypods. *Proceedings of the Malacological Society* 20(1): 65–72 [68–70], pl. 6, fig. 5 (holotype), fig. 6 (paratype).

**Holotype:** MA70758, right valve, collected by Captain J. Bollons in 1922 from the Auckland Islands, New Zealand.

**Paratype:** MA71425, left valve, from the type locality.

**Current name:** *Tawera sphaericula* (Deshayes, 1853) – Spencer *et al.* (2016).

**†*Tawera duobrunnea* Marwick, 1948**

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [25], pl. 2, figs 2, 3 (holotype), figs 5, 6 (paratypes).

**Holotype:** MA71133, right valve, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Paratypes:** MA72999, unrelated right and left valves, from the type locality.

**Current name:** *Tawera duobrunnea* Marwick, 1948 – Maxwell in Spencer *et al.* (2009: 238).

***Tawera marionae* Finlay, 1928**

Finlay, H.J., 1928. The Recent Mollusca of the Chatham Islands. *Transactions and Proceedings of the New Zealand Institute* 59: 232–286 [277, 278], pl. 40, figs 21–24 (holotype).

**Holotype:** MA70759, right and left valves, from 110m (60 fathoms), off Otago Heads, Otago, New Zealand.

**Paratypes:** MA72963, 1 articulated specimen, 5 right and 5 related left valves, from the type locality.

**Current name:** *Tawera marionae* Finlay, 1928 – Spencer *et al.* (2016).

**†*Tawera marthae* Marwick, 1928**

Marwick, J., 1928. The Tertiary Mollusca of the Chatham Islands including a generic revision of the New Zealand Pectinidae. *Transactions and Proceedings of the New Zealand Institute* 58: 432–494 [471], figs 72, 76 (holotype), fig. 75 (paratype).

**Paratypes:** MA73200, 4 right and 5 left valves, collected

from Early Pleistocene (Nukumaruan) Titirangi Sand, Titirangi, Chatham Islands, New Zealand.

**Current name:** *Tawera marthae* Marwick, 1928 – Maxwell in Spencer *et al.* (2009: 238).

***Tawera rosa* Powell, 1955**

Powell, A.W.B., 1955. Mollusca of the southern islands of New Zealand. *Cape Expedition Series Bulletin* 15, DSIR, Wellington, 151 pp. [41], pl. 5, figs 41, 42 (holotype).

**Paratypes:** MA72378, 3 left valves, collected by C.A. Fleming during the Cape Expedition, from the outer coast of the main island opposite Rose Island, Auckland Islands, New Zealand.

**Current name:** *Tawera rosa* Powell, 1955 – Spencer *et al.* (2016).

**†*Turia chattonensis* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [611, 612], pl. 41, figs 85, 86 (holotype), fig. 87 (paratype).

**Holotype:** MA70805, right valve, from Late Oligocene (Duntroonian) Chatton Formation, Chatton, Southland, New Zealand.

**Paratypes:** MA72375, 8 right and 17 left valves, from the type locality.

**Remarks:** Also the type for the genus.

**Current name:** *Turia chattonensis* Marwick, 1927 – Maxwell in Spencer *et al.* (2009: 238).

**†*Turia pukeuriensis* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [612], pl. 41, figs 79–81 (holotype).

**Paratypes:** MA72975, 1 articulated specimen, 16 right and 22 left valves, and various fragments, from Early Miocene (Altonian) Calamity Point Sandstone, [Finlay's bed 6A (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Current name:** *Turia pukeuriensis* Marwick, 1927 – Maxwell in Spencer *et al.* (2009: 238).

**†*Turia waiiauensis* Marwick, 1927**

Marwick, J., 1927. The Veneridae of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 57: 567–635 [612, 613], pl. 41, figs 82, 84 (holotype) fig. 83 (paratype).

**Holotype:** MA70806, left valve from Middle Miocene (Waiauan) Nissen Shellbeds 2–6, [Finlay's bed 8A (for correlation see Fleming *et al.*, 1969)], Clifden, Southland, New Zealand.

**Paratype:** MA71976, 64 right and 50 left valves; MA73476, figured right valve, collected from the type locality.

**Remarks:** Finlay's subdivision of Clifden beds 7 and 8 cannot be identified with confidence (Fleming *et al.*, 1969: 77).

**Current name:** *Turia waiiauensis* Marwick, 1927 – Maxwell in Spencer *et al.* (2009: 238).

## NEOLEPTONIDAE

***Neolepton caledonicum* Salas & Gofas, 1998**

Salas, C., and S. Gofas, 1998. Description of four new species of *Neolepton* Monterosato, 1875 (Mollusca: Bivalvia: Neoleptonidae), with comments on the genus and on its affinity with the Veneracea. *Ophelia* 48(1): 35–79 [47–49], figs 48–57 (48–55 paratypes).

**Paratypes:** MA73120, 9 articulated and disarticulated right and left valves, collected in September 1993 from the type locality, station 1240, Montrouzier Expedition, Touho Bay, New Caledonia.

**Current name:** *Neolepton caledonicum* Salas & Gofas, 1998 – Huber (2015b).

***Notolepton sublaevigatum* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [171, 172], pl. 47, fig. 7 (holotype).

**Paratypes:** MA71889, 1 articulated specimen, 15 right and 17 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Remarks:** In 1994 these specimens were examined by S. Gofas, then of the Museum National D'Histoire Naturelle and 2 specimens were set apart as these are probably not conspecific with the others.

**Current name:** *Neolepton sublaevigatum* (Powell, 1937) – Spencer *et al.* (2016).

***Notolepton subobliquum* Powell, 1937**

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [172], pl. 47, fig. 6 (holotype).

**Paratypes:** MA72212, 10 right and 5 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Neolepton subobliquum* (Powell, 1937) – Spencer *et al.* (2016).

***Notolepton triangulare* Dell, 1956**

Dell, R.K., 1956. *The archibenthal Mollusca of New Zealand*. Dominion Museum Bulletin 18, 235 pp. [30, 31], pl. 5, fig. 41 (holotype).

**Paratype:** MA72759, unrelated right and left valves, from the type locality, collected by R. K. Dell on 7 February, 1954, from C.I.E. station 44, north east of Kaingaroa, Chatham Islands, New Zealand.

**Current name:** *Neolepton triangulare* (Dell, 1956) – Spencer *et al.* (2016).

***Pachykellya bernardi* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [121], pl. 23, fig. 3.

**Paratype:** MA72350 (missing), dredged by a private scientific party in December 1908, from the steamer 'Rakiura' in 311m (170 fathoms) off Puysegur Point,

Southland, New Zealand.

**Remarks:** In the type paper (Powell, 1927) Powell listed only a single specimen found at 170 fathoms and none found at 100 fathoms. In addition, at the end of each new species description he listed the holotype as well as the number of paratypes. For *P. bernardi* he only lists a holotype. It is assumed therefore that there were no paratypes for this species and that the Auckland Museum paratype record was created in error.

**Current name:** *Pachykellya bernardi* Powell, 1927 – Spencer *et al.* (2016).

***Pachykellya concentrica* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [121], pl. 23, fig. 2.

**Paratypes:** MA72352 (missing), 6 specimens, dredged by a private scientific party in December 1908, from the steamer 'Rakiura' in from 311m (170 fathoms) off Puysegur Point, Southland, New Zealand.

**Remarks:** These specimens have not been found since 1993.

**Current name:** *Pachykellya concentrica* Powell, 1927 – Spencer *et al.* (2016).

***Pachykellya minima* Powell, 1931**

Powell, A.W.B., 1931. Descriptions of some new species of Recent Mollusca, mainly from the sub-Antarctic Islands of New Zealand. *Records of the Canterbury Museum* 3(6): 371–376 [372], text fig. on p. 372.

**Paratypes:** MA72355, 1 articulated, 3 right and 1 left valves, from 155m (85 fathoms) 16km (10 miles) north of Enderby Island, Auckland Islands, New Zealand.

**Remarks:** All valves, except one right valve, are affected by glass disease.

**Current name:** *Pachykellya minima* Powell, 1931 – Spencer *et al.* (2016).

***Pachykellya rotunda* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [121], pl. 23, fig. 4.

**Paratypes:** MA72351, 2 right and 2 left valves, dredged by a private scientific party in December 1908, from the steamer 'Rakiura' in 183m (100 fathoms) off Puysegur Point, Southland, New Zealand.

**Current name:** *Pachykellya rotunda* Powell, 1927 – Spencer *et al.* (2016).

***Puysegeria cuneata* Powell, 1927**

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [122], pl. 23, fig. 5.

**Paratypes:** MA72353 (missing), 2 specimens dredged by a private scientific party in December 1908, from the steamer 'Rakiura' in 311m (170 fathoms) off Puysegur Point, Southland, New Zealand.

**Remarks:** These specimens have not been found since 1993. This is the type species for the genus. In Powell (1927) the genus was consistently spelled as *Puysegeria*, as was the geographical location, Puyseger Point, after which it is presumably named. In Powell (1931, p. 110) the original spelling is retained, but in Powell (1939, p. 225) the spelling is changed to the more etymologically correct *Puyseguria* with specific reference to the emendation. Powell (1941) has both spellings in his list of ‘Biological primary types in the Auckland Museum’, but subsequent authors have used the 1939 emended spelling of *Puyseguria*.

**Current name:** *Puyseguria cuneata* Powell, 1927 – Spencer *et al.* (2016).

#### †*Puysegeria wanganuica* Powell, 1931

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [110, 111], pl. 14, fig. 39 (holotype, left valve; figured paratype).

**Holotype:** MA70654, left valve, collected by A.W.B. Powell in January 1931 from the Pleistocene (Castlecliffian) at Castlecliff, Whanganui, New Zealand.

**Paratypes:** MA71670, 2 articulated specimens, 2 right and 1 left valves, from the type locality.

**Remarks:** See above remarks for *Puysegeria cuneata* for the correct spelling of the genus.

**Current name:** *Puyseguria wanganuica* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 236).

#### *Puyseguria tani* Powell, 1939

Powell, A.W.B., 1939. The Mollusca of Stewart Island. *Records of the Auckland Institute and Museum* 2(4): 211–238 [225], pl. 48, fig. 2 (holotype).

**Holotype:** MA70653, left valve, collected by A.W.B. Powell in November 1934 from “Old Neck Beach”, presumed here to be The Neck, Paterson Inlet, Stewart Island, New Zealand.

**Paratypes:** MA71544, 4 articulated, 31 right and 28 left valves, from the type locality.

**Remarks:** See above remarks for *Puysegeria cuneata* for the correct spelling of the genus.

**Current name:** *Puyseguria tani* Powell, 1939 – Spencer *et al.* (2016).

### Order MYIDA CORBULIDAE

#### *Corbula pura* Webster, 1905

Webster, W. H., 1905. Some new species of New Zealand marine shells, together with remarks on some non-marine species, and some additions to the “Index Faunae.” *Transactions and Proceedings of the New Zealand Institute* 37: 276–280 [279], pl. 10, figs 12, 12a.

**Holotype:** MA70203, articulated specimen, dredged from Rangitoto Channel, Waitemata Harbour, Auckland, New Zealand.

**Paratypes:** MA71984, right and left valves of a disarticulated specimen, from the type locality.

**Current name:** *Corbula (Anisocorbula) zelandica* Quoy & Gaimard, 1835 – Spencer *et al.* (2016).

### PHOLADIDAE

#### †*Parapholas aucklandica* Powell, 1938

Powell, A.W.B., 1938. Tertiary molluscan faunules from the Waitemata Beds. *Transactions and Proceedings of the Royal Society of New Zealand* 68: 362–379 [368], pl. 38, fig. 5 (holotype), fig. 6 (paratype).

**Holotype:** MA70586, articulated specimen, collected by A.W.B. Powell from Early Miocene (Otaian) Tipakuri Formation at ‘Fossil Bay’ just south of Church Bay (sometimes known as Squadron Bay), Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA71711, 5 articulated specimens, from the type locality.

**Current name:** *Parapholas aucklandica* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 238).

#### *Pholadidea acherontea* Beu & Climo, 1974

Beu, A.G., and F.M. Climo, 1974. Mollusca from a recent coral community in Palliser Bay, Cook Strait. *New Zealand Journal of Marine and Freshwater Research* 8: 307–332 [310–312], figs 5–7 (holotype), figs 8, 9 (paratypes).

**Paratypes:** MA72876, articulated whole specimen, disarticulated whole specimen, and three fragments of the siphonoplax of the disarticulated (largest) specimen. Dried animals inside both specimens, collected off the RV Acheron on 11 May 1972, from boulders at 448–512m depth, from the type locality, Turakirae Trench, Palliser Bay, New Zealand.

**Current name:** *Pholadidea acherontea* Beu & Climo, 1974 – Spencer *et al.* (2016).

#### †*Pholadidea finlayi* Laws, 1936

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [57, 58], pl.11, figs 41, 42 (holotype).

**Holotype:** MA70619, right and left valve which are closely matched in size, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Paratype:** MA72690, hinge section with partial left and right valves, from type locality.

**Remarks:** MA70619 consists of a closely matched right and left valve which may have belonged to the same individual. However, Laws (1936) figured only the right valve in plate 11. He also stated that ‘Type in writer’s collection’ and that ‘There are 2 sets of valves, and odd adult left valve and a very young left valve.’

**Current name:** *Pholadidea finlayi* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 238).

## TEREDINIDAE

***Bankia neztalia* Turner & McKoy, 1979**

Turner, R.D., and J.L. McKoy, 1979. *Bankia neztalia* n. sp. (Mollusca: Bivalvia: Teredinidae) from Australia and New Zealand, and its relationships. *Journal of the Royal Society of New Zealand* 9: 465–473, figs 2, 3, 4 (holotype), 5–9, 17.

**Paratype:** MA73382, 9 whole organisms in 70% ethanol, from Mahanga Bay, Wellington, New Zealand.

**Current name:** *Bankia neztalia* Turner & McKoy, 1979 – Spencer *et al.* (2016).

†***Bankia turneri* Powell & Bartrum 1929**

Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447 [410–412], pl. 44, fig. 74 (holotype), fig. 75 (paratype).

**Holotype:** MA72016, left valve, from Early Miocene (Otaian) Tipakuri Formation of ‘Double U Bay’, approximately 800m north of Oneroa Beach, Waiheke Island, Auckland, New Zealand.

**Paratypes:** MA71694, partial right valve, 2 partial left valves, hinge fragment (?), from the type locality.

**Current name:** *Bankia turneri* Powell & Bartrum 1929 – Maxwell in: Spencer *et al.* (2009: 238).

Order UNCERTAIN  
HIATELLIDAE***Panopea smithae* Powell, 1950**

Powell, A.W.B., 1950. Mollusca from the continental shelf, eastern Otago. *Records of the Auckland Institute and Museum* 4(1): 73–81 [78, 79], pl. 7, fig. 5 (holotype), text figs 4–6 (p. 79).

**Holotype:** MA71166, disarticulated right and left valves, collected by Captain A. Black from 128m (70 fathoms), off eastern Otago, New Zealand.

**Current name:** *Panopea smithae* Powell, 1950: Spencer *et al.* (2016).

†***Panopea wanganuica* Powell, 1950**

Powell, A.W.B., 1950. Mollusca from the continental shelf, eastern Otago. *Records of the Auckland Institute and Museum* 4(1): 73–81 [80], pl. 7, fig. 6 (holotype), text figs 7 (holotype), 8 (p. 79).

**Holotype:** MA71167, right and left valves, from Pleistocene (Castlecliffian) Kupe Formation, (bed CL10 of Fleming, 1947; 1953), Kai Iwi Beach, Whanganui, New Zealand.

**Current name:** *Panopea smithae* Powell, 1950 – Beu (2006: 292).

Order PHOLADOMYIDA  
MYOCHAMIDAE†***Myadora kaiwiensis* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of*

*the Auckland Institute and Museum* 1(2): 85–112 [111, 112], pl. 14, figs 37, 38 (holotype).

**Holotype:** MA70508, disarticulated right and left valves possibly from same individual, collected by A.W.B. Powell in 1931 from the Pleistocene (Castlecliffian) 800m (half a mile) north-west of Kai Iwi Stream, Whanganui, New Zealand.

**Remarks:** Beu (2006: 308) suggested that Lower Kai-Iwi Siltstone is likely to be the provenance of the type, as the species is particularly common and well preserved in this formation. However, it occurs in all siltstone units in the Castlecliff section between Lower Okehu Siltstone and Kupe Formation (Beu pers. comm. 2016).

**Current name:** *Myadora kaiwiensis* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 238).

†***Myadora waitotarana* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [95], pl. 12, figs 26, 27 (holotype).

**Holotype:** MA70509, articulated right and left valves, collected by A.W.B. Powell in 1931 from Late Pliocene (Waipipian) Tangahoe Formation near the mouth of Waihi Stream, Hawera, New Zealand.

**Current name:** *Myadora waitotarana* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 239).

## CLEIDOTHAERIDAE

***Cleidothaerus maorianus* Finlay, 1926**

Finlay, H.J., 1926. A further commentary on New Zealand molluscan systematics. *Transactions and Proceedings of the New Zealand Institute* 57: 320–485 [474, 475], pl. 22, figs 125, 126.

**Holotype:** MA70176, disarticulated specimen from Kawhia Harbour, Waikato, New Zealand.

**Paratype:** MA72549, disarticulated specimen from the type locality.

**Remarks:** no collection date available.

**Current name:** *Cleidothaerus albidus* (Lamarck, 1819) – Beu and Maxwell (1990): 154; Spencer *et al.* (2016).

## PARILIMYIDAE

†***Pholadomya waitotarana* Powell, 1931**

Powell, A.W.B., 1931. Waitotaran faunules of the Wanganui System: and descriptions of new species of Mollusca from the New Zealand Pliocene. *Records of the Auckland Institute and Museum* 1(2): 85–112 [96], pl. 11, fig. 16 (holotype).

**Holotype:** MA70620, distorted but articulated right and left valves, collected by A.W.B. Powell in January 1931, from Late Pliocene (Waipipian) Waipipi Formation, near the mouth of the Wairoa Stream, on the coast near Waverley, New Zealand.

**Current name:** ‘*Parilimya*’ *waitotarana* (Powell, 1931) – Maxwell in: Spencer *et al.* (2009: 238).

## THRACIIDAE

†*Eximiothracia pusillior* Laws, 1936

Laws, C.R., 1936. The Waitotaran Faunule at Kaawa Creek –Part 1. *Transactions and Proceedings of the Royal Society of New Zealand* 66: 38–59 [58], fig. 40 (holotype).

**Paratype:** MA72691, right valve, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

**Current name:** *Asthenothaerus pusillior* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 239).

*Myadora biconvexa* Powell, 1927

Powell, A.W.B., 1927. Deep-water Mollusca from south-west Otago, with descriptions of 2 new genera and 22 new species. *Records of the Canterbury Museum* 3(2): 113–124 [123], pl. 23, fig. 9.

**Paratype:** MA72354, 2 right and 4 unrelated left valves, dredged by a private scientific party in December 1908, from the steamer ‘Rakiura’ in 311m (170 fathoms) off Puysegur Point, Southland, New Zealand.

**Current name:** *Barythaerus biconvexus* (Powell, 1927) – Spencer *et al.* (2016).

*Parvithracia cuneata* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [174], pl. 46, fig. 9 (holotype).

**Paratype:** MA72215, right valve, collected by A.W.B. Powell in 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92m off the Three Kings Islands, New Zealand.

**Current name:** *Batrythaerus cuneatus* (Powell, 1937) – Spencer *et al.* (2016).

## LATERNULIDAE

†*Laternula synthetica* Marwick, 1948

Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp. [27], pl. 6, figs 14 (holotype), 13 (paratype), 15 (reconstruction using fragments including holotype).

**Holotype:** MA71006, right valve hinge fragment, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

**Remarks:** MA71006 consists of 7 fragments figured in Marwick’s (1948) reconstruction (pl. 6, fig. 15), but only the hinge fragment is named as the holotype. The remaining fragments do not appear to have any type status.

**Current name:** *Laternula laterna* (Lamarck, 1818) – Beau (2004: 184).

## CUSPIDARIIDAE

*Austroneaera brevirostris* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [174, 175], pl. 48, fig. 11 (holotype).

**Paratypes:** MA72216, articulated individual, 3 right valves and 3 unrelated left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Austroneaera brevirostris* Powell, 1937 – Spencer *et al.* (2016).

*Austroneaera finlayi* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [175], pl. 48, fig. 12 (holotype).

**Holotype:** MA70071, disarticulated valves of single individual, collected in 110m off the Poor Knights Islands, New Zealand.

**Paratypes:** MA71893, disarticulated right and left valves of 1 individual and 1 left valve, from the type locality.

**Remarks:** Although the species was published in the Discovery Cruise II report, the type material came from the collection of H.J. Finlay and no further collecting data are available.

**Current name:** *Austroneaera finlayi* Powell, 1937 – Spencer *et al.* (2016).

## SPHENIOPSISIDAE

*Mysella aupouria* Powell, 1937

Powell, A.W.B., 1937. New species of marine Mollusca from New Zealand. *Discovery Reports* 15: 153–221 [172, 173], pl. 47, fig. 5 (holotype).

**Paratypes:** MA71890, 2 left valves, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260m off the Three Kings Islands, New Zealand.

**Current name:** *Grippina aupouria* (Powell, 1937) – Spencer *et al.* (2016).

## EUCIROIDAE

†*Euciroa (Euciroa) maoriana* Eagle, 2000

Eagle, M.K., 2000. Six new fossil bivalves from the Early Miocene of Auckland and Northland, New Zealand. *Records of the Auckland Museum* 36: 141–168 [163–165], figs 43, 44 (holotype).

**Holotype:** MA72657, right valve, collected by M.K. Eagle from Early Miocene (Altonian) Nihotupu Formation, south end of Maori Bay, Muriwai, west Auckland, New Zealand.

**Current name:** *Euciroa maoriana* Eagle, 2000 – Maxwell in: Spencer *et al.* (2009: 239).

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## REFERENCES

- ABRS, 2009. *Australian Faunal Directory*. Australian Biological Resources Study, Canberra. <http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/index.html>. Accessed 19 July 2015.
- Beu, A.G., 2004. Marine Mollusca of isotope stages of the last 2 million years in New Zealand. Part 1: Revised generic positions and recognition of warm-water and cool-water migrants. *Journal of the Royal Society of New Zealand* 34: 111–265.
- Beu, A.G., 2006. Marine Mollusca of oxygen isotope stages of the last 2 million years in New Zealand. Part 2. Biostratigraphically useful and new Pliocene to Recent bivalves. *Journal of the Royal Society of New Zealand* 36: 151–338.
- Beu, A.G. and P.A., Maxwell, 1990. *Cenozoic Mollusca of New Zealand*. New Zealand Geological Survey Paleontological Bulletin 58, 518 pp.
- Beu, A.G., Nolden, S. & T.A. Darragh, 2012. *Revision of New Zealand Cenozoic fossil Mollusca described by Zittel (1865) based on Hochstetter's collections from the Novara Expedition*. *Memoirs of the Association of Australasian Palaeontologists* 43, 68pp.
- Beu, A.G. and J.I. Raine, 2009. *Revised descriptions of New Zealand Cenozoic Mollusca from Beu and Maxwell (1990)*. GNS Science miscellaneous series no. 27. Available from <http://www.gns.cri.nz/static/Mollusca/#citation> Accessed 18 August 2016.
- Bouchet, P., 2015. *Semele vestalis* (A. Adams in Reeve, 1853). In: MolluscaBase (2015). Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=722865> on 7 June 2015.
- Cernohorsky, W.O., 1988. Arthur William Baden Powell (1901–1987) A brief biography and bibliography with a list of molluscan taxa. *Records of the Auckland Institute and Museum* 25: 1–38.
- Cheeseman, T.F., 1878. Descriptions of three new species of opisthobranchiate Mollusca, from New Zealand. *Transactions and Proceedings of the New Zealand Institute* 11: 378–380.
- Collins, K.S., Crampton, J.S. and M. Hannah, 2015. Stratocladistic analysis and taxonomic revision of the character-poor New Zealand crassatellid bivalves *Spissatella* and *Eucrassatella*. *Journal of Molluscan Studies* 81: 104–123.
- Darragh, T.A., 1970. Catalogue of Australian Tertiary Mollusca (except chitons). *Memoirs of the National Museum of Victoria* 31: 125–212.
- Dell, R.K., 1987. Arthur William Baden Powell. *Proceedings of the Royal Society of New Zealand* 116: 68–77.
- Dijkstra, H., 2009. *Chlamys (Mimachlamys) asperrimoides* Powell, 1958. Accessed through the World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=394638> on 3 August 2009.
- Dijkstra, H., 2010. *Cyclochlamys hexagonalis* (Powell, 1958). Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=391754> on 19 April 2011.
- Dijkstra, H. and B.A. Marshall, 2008. The Recent Pectinoidea of the New Zealand region (Mollusca: Bivalvia: Propeamussiidae, Pectinidae and Spondylidae). *Molluscan Research* 28(1): 1–88.
- Fleming, C.A., 1947. Standard sections and subdivisions of the Castlecliffian and Nukumaruan Stages in the New Zealand Pliocene. *Transactions of the Royal Society of New Zealand* 76: 300–326.
- Fleming, C.A., 1953. The geology of the Wanganui Subdivision, Waverley and Wanganui sheet districts (N137 and N138). *New Zealand Geological Survey Bulletin* 52: 1–362.
- Fleming, C.A. and J.A. Grant-Mackie, 1985. Obituary, Charles Reed Laws. *Proceedings of the Royal Society of New Zealand* 113: 19–30.
- Fleming, C.A., Hornibrook N. de B. and B.L. Wood, 1969. *Geology of the Clifden Section*. In: Wood, B.L. *Geology of the Tuatapere Subdivision*. New Zealand Geological Survey, Palaeontological Bulletin 79: 71–117.

- Hedley, C., 1906. Results of dredging on the continental shelf of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 38: 68–76.
- Hornibrook, N. de B., 1963. Sydney George Hulme (Obituary). *Geological Society of New Zealand Newsletter* 13: 17–18.
- Hornibrook, N. de B., 1971. Finlay & Marwick. *New Zealand Journal of Geology & Geophysics* 14(4): 640–54.
- Huber, M., 2010. *Compendium of bivalves*. ConchBooks, Hackenheim, 904pp.
- Huber, M., 2013a. *Aulacomya regia* Powell, 1957. Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=505964> on 5 December 2013.
- Huber, M., 2013b. *Cyamium falklandicum* Melville & Standen, 1898. Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=505173> on 5 December 2013.
- Huber, M., 2015a. *Hemidonax arafurensis* Ponder, Colman, Yonge & Colman, 1981. In: MolluscaBase (2015). Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=505397> on 6 June 2015.
- Huber, M., 2015b. *Neolepton caledonicum* Salas & Gofas, 1998. In: MolluscaBase (2015). Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=458303> on 11 June 2015.
- ICZN, 2015. International Commission on Zoological Nomenclature, International Code of Zoological Nomenclature Online. Accessed through: <http://iczn.org/iczn/index.jsp> on 19 June 2015.
- Marshall, B.A. and H.G. Spencer, 2013. Comments on some taxonomic changes affecting marine Bivalvia of the New Zealand region recently introduced in Huber's Compendium of bivalves, with some additional taxonomic changes. *Molluscan Research* 33: 40–49.
- Marwick, J., 1948. *Lower Pliocene Mollusca from Otahuhu, Auckland*. New Zealand Geological Survey, Palaeontological Bulletin 16, 38 pp.
- Powell, A.W.B., 1926. Mollusca from 100 fathoms, off Lyttelton, with descriptions of four new species, and also a new Pliocene fossil. *Records of the Canterbury Museum* 3(1): 43–50.
- Powell, A.W.B., 1941. Biological primary types in the Auckland Museum. *Records of the Auckland Institute and Museum* 2(5): 239–259.
- Powell, A.W.B., 1949. Biological primary types in the Auckland Museum. No. 3 zoological supplement. *Records of the Auckland Institute and Museum* 3(6): 403–409.
- Powell, A.W.B., 1979. *New Zealand Mollusca. Marine, Land and Freshwater Shells*. Auckland: Collins, 500 pp.
- Powell, A.W.B., and J.A. Bartrum, 1929. The Tertiary (Waitematan) molluscan fauna of Oneroa, Waiheke Island. *Transactions and Proceedings of the New Zealand Institute* 60: 395–447.
- Powell, A.W.B., Brooker, S.G., Troup, C.O., and E.G. Turbott, 1967. *The Centennial History of the Auckland Institute and Museum*. Auckland, Unity Press Ltd, 88 pp.
- Raine, J.I., Beu, A.G., Boyes, A.F., Campbell, H.J., Cooper, R.A., Crampton, J.S., Crundwell, M.P., Hollis, C.J., and H.E.G. Morgans, 2015. *Revised Calibration of the New Zealand Geological Timescale: NZGT2015/1*. GNS Science Report 2012/39, 53 pp.
- Rosenberg, G., 2013. *Mysella arthuri* (Cooper & Preston, 1910) Accessed through: World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=533139> on 5 December 2013.
- Spencer, H.G., Marshall, B.A., Maxwell, P.A., Grant-Mackie, J.A., Stilwell, J.D., Willan, R.C., Campbell, H.J., and J.S. Crampton, 2009. Phylum Mollusca – Chitons, clams, tusk shells, snails, squids and kin. In: D.P. Gordon (ed.) *The New Zealand Inventory of Biodiversity. Volume 1. Kingdom Animalia: Radiata, Lophotrochozoa and Deuterostomia*. Canterbury University Press, Christchurch, pp. 161–254.
- Spencer, H.G., Willan, R.C., Marshall, B.A., and T.J. Murray, 2016. Checklist of the Recent Mollusca recorded from the New Zealand Exclusive Economic Zone. <http://www.molluscs.otago.ac.nz/index.html> accessed on 19 September 2016.
- Suter, H., 1915. *Revision of the Tertiary Mollusca of New Zealand*. New Zealand Geological Survey, Palaeontological Bulletin 3, 69 pp.
- WoRMS Editorial Board, 2015. World Register of Marine Species. Available from <http://www.marinespecies.org> at VLIZ. Accessed 19 July 2015.