



NEW ZEALAND THREAT CLASSIFICATION SERIES 9

Conservation status of New Zealand marine invertebrates, 2013

Debbie Freeman, Karen Schnabel, Bruce Marshall, Dennis Gordon, Stephen Wing, Di Tracey and Rod Hitchmough

Cover: Black coral with snake stars, Fiordland, New Zealand. *Photo: Stephen Wing.*

New Zealand Threat Classification Series is a scientific monograph series presenting publications related to the New Zealand Threat Classification System (NZTCS). Most will be lists providing NZTCS status of members of a plant or animal group (e.g. algae, birds, spiders). There are currently 23 groups, each assessed once every 3 years. After each three-year cycle there will be a report analysing and summarising trends across all groups for that listing cycle. From time to time the manual that defines the categories, criteria and process for the NZTCS will be reviewed. Publications in this series are considered part of the formal international scientific literature.

This report is available from the departmental website in pdf form. Titles are listed in our catalogue on the website, refer www.doc.govt.nz under *Publications*, then *Science & technical*.

© Copyright December 2014, New Zealand Department of Conservation

ISSN 2324-1713 (web PDF)
ISBN 978-0-478-15032-2 (web PDF)

This report was prepared for publication by the Publishing Team; editing and layout by Lynette Clelland. Publication was approved by the Deputy Director-General, Science and Technical Group, Department of Conservation, Wellington, New Zealand.

Published by Publishing Team, Department of Conservation, PO Box 10420, The Terrace, Wellington 6143, New Zealand.

In the interest of forest conservation, we support paperless electronic publishing.

CONTENTS

| | |
|--|----|
| Abstract | 1 |
| 1. Summary | 2 |
| 2. Conservation status of New Zealand marine invertebrates | 7 |
| 2.1 Taxonomically determinate | 7 |
| Extinct (0) | 7 |
| Data Deficient (55) | 8 |
| Threatened (11) | 9 |
| Nationally Critical (6) | 9 |
| Nationally Endangered (1) | 10 |
| Nationally Vulnerable (4) | 10 |
| At Risk (222) | 11 |
| Declining (13) | 11 |
| Recovering (0) | 12 |
| Relict (0) | 12 |
| Naturally Uncommon (209) | 12 |
| Non-resident Native (0) | 17 |
| Migrant | 17 |
| Vagrant | 17 |
| Coloniser | 17 |
| Not Threatened (19) | 17 |
| Introduced and Naturalised (0) | 18 |
| 2.2 Taxonomically indeterminate | 18 |
| Data Deficient (6) | 18 |
| At Risk (102) | 18 |
| Naturally Uncommon (102) | 18 |
| 3. Acknowledgements | 20 |
| 4. References | 20 |

Conservation status of New Zealand marine invertebrates, 2013

Debbie Freeman¹, Karen Schnabel², Bruce Marshall³, Dennis Gordon², Stephen Wing⁴, Di Tracey² and Rod Hitchmough¹

¹ Science and Capability Group, Department of Conservation, PO Box 10420, Wellington 6143, New Zealand. dfreeman@doc.govt.nz

² National Institute of Water and Atmospheric Research (NIWA), PO Box 14901, Kilbirnie, Wellington, New Zealand.

³ Museum of New Zealand Te Papa Tongarewa, PO Box 467, Wellington 6140, New Zealand.

⁴ Otago University, PO Box 56, Dunedin 9054, New Zealand.

Abstract

The conservation status of a proportion of all known New Zealand marine invertebrate taxa was reassessed in June 2013 using the New Zealand Threat Classification System (NZTCS) criteria. A full list is presented, along with a statistical summary and brief notes on the most important changes. This list replaces all previous NZTCS lists for marine invertebrates.

Keywords: New Zealand Threat Classification System, NZTCS, conservation status, marine invertebrates

© Copyright December 2014, Department of Conservation. This paper may be cited as:
Freeman, D.; Schnabel, K.; Marshall, B.; Gordon, D.; Wing, S.; Tracey, D.; Hitchmough, R.: Conservation status of New Zealand marine invertebrates, 2013. *New Zealand Threat Classification Series 9*. Department of Conservation, Wellington. 20 p.

1. Summary

In June 2013, the Department of Conservation held an expert workshop to assess New Zealand's marine invertebrates using the New Zealand Threat Classification System (NZTCS) criteria (Townsend et al. 2008), updating a previous listing process from 2009 (Freeman et al. 2009). A number of changes were made to the list, including those resulting from taxonomic name changes (Table 1). A total of 415 taxa was assessed (Table 2), with a number of changes made to threat categories to reflect changes in certainty or knowledge around the distribution, abundance and population trends of some taxa, or to reflect a reinterpretation of the available data (Table 3). All marine invertebrates assessed in 2009 were reassessed and an additional 108 taxa were also assessed (Table 4). Most of the latter were assessed as either data deficient, or naturally uncommon. One taxon that was included in the list produced in 2009 was excluded from the current listing—*Cellana strigilis bollonsi* Powell, 1955, which is now considered to be a synonym of *C. oliveri*.

While a number of changes were made to the threat categories assigned to the marine invertebrates we assessed, just one change was the result of an actual decline in abundance. The brachiopod *Pumilus antiquatus* (a monotypic, endemic genus) was listed as Nationally Endangered in 2009, but listed as Nationally Critical in 2013, to reflect an apparent decline in abundance at the sites it has previously been recorded from (Otago Harbour and Lyttleton). No taxa improved in status between 2009 and 2013 as a result of an actual change in distribution or abundance.

Six taxa were listed as Nationally Critical: the polychaete *Boccardiella magniovata*, the barnacle *Idioibla idiotica*, the gravel maggots *Smeagol climoi* and *Smeagol manneringi*, brachiopod *Pumilus antiquatus* and the giant seep mussel *Bathymodiolus tangaroa*. An additional five taxa were also included in the Threatened category. The majority of taxa we assessed were classified as At Risk, with most of these being taxa that are naturally uncommon, such as island endemics.

A large number of marine invertebrates were assessed as Data Deficient. However, the majority of the New Zealand marine invertebrate fauna (over 95%) remains unassessed in the New Zealand Threat Classification System. While representatives of phyla not assessed in 2009 were included in the current assessment (e.g. sponges, phylum porifera), the full range of marine invertebrate phyla are not yet represented in the list.

Table 1. Name changes affecting New Zealand marine invertebrate species between the publication of Freeman et al. (2009) and this document.

| NAME AND AUTHORITY IN FREEMAN ET AL. (2009) | NAME IN THIS DOCUMENT | COMMON NAME |
|---|--|------------------------|
| Phylum Arthropoda | | |
| <i>Ibla idiotica</i> Batham, 1945 | <i>Idioibla idiotica</i> (Batham, 1945) | Stalked barnacle |
| <i>Volcanolepas osheai</i> (Buckeridge, 2000) | <i>Vulcanolepas osheai</i> (Buckeridge, 2000) | O'Shea's vent barnacle |
| Phylum Cnidaria | | |
| <i>Metallogorgia cf. melanotrichos</i> | <i>Metallogorgia</i> spp. | Golden coral |
| <i>Mopsea elongata</i> Roule, 1908 | <i>Mopsea</i> sp. | Bamboo coral |
| <i>Peltastisis</i> | <i>Peltastisis</i> sp. | Bamboo coral |
| Phylum Mollusca | | |
| <i>Cellana strigilis flemingi</i> Powell, 1955 | <i>Cellana strigilis</i> (Hombron & Jacquinot, 1841) | Limpet |
| <i>Cellana strigilis oliveri</i> Powell, 1955 | <i>Cellana oliveri</i> Powell, 1955 | Limpet |
| <i>Margarella antipoda hinemoa</i> Powell, 1956 | <i>Cantharidus antipoda hinemoa</i> (Powell, 1956) | Snail |
| <i>Margarella</i> sp. A (NMNZ M.59506) | <i>Cantharidus</i> sp. A (NMNZ M.59506) | Snail |
| <i>Margarella</i> sp. B (NMNZ M.131607) | <i>Cantharidus</i> sp. B (NMNZ M.131607) | Snail |

Continued on next page

Table 1 continued

| NAME AND AUTHORITY IN FREEMAN ET AL. (2009) | NAME IN THIS DOCUMENT | COMMON NAME |
|---|--|-------------|
| <i>Micrelenchus festivus</i> B.A. Marshall, 1999 | <i>Cantharidus festivus</i> (B.A. Marshall, 1999) | Snail |
| <i>Patella kermadecensis</i> (Pilsbry, 1894) | <i>Scutellastra kermadecensis</i> (Pilsbry, 1894) | Limpet |
| <i>Patinigera terroris</i> (Filhol, 1880) | <i>Nacella terroris</i> (Filhol, 1880) | Limpet |
| <i>Thoristella polychroma</i> B.A. Marshall, 1999 | <i>Coelotrochus polychroma</i> (B.A. Marshall, 1999) | Snail |

Table 2. Comparison of the status of New Zealand marine invertebrate species assessed in 2009 (Freeman et al. 2009) and 2013 (this document).

| CATEGORY | TOTAL 2009 | TOTAL 2013 |
|----------------------------------|------------|------------|
| Extinct | 0 | 0 |
| Data Deficient | 12 | 61 |
| Threatened—Nationally Critical | 10 | 6 |
| Threatened—Nationally Endangered | 2 | 1 |
| Threatened—Nationally Vulnerable | 21 | 4 |
| At Risk—Declining | 8 | 21 |
| At Risk—Recovering | 0 | 0 |
| At Risk—Relict | 0 | 0 |
| At Risk—Naturally Uncommon | 243 | 303 |
| Non-resident Native—Migrant | 0 | 0 |
| Non-resident Native—Vagrant | 0 | 0 |
| Non-resident Native—Coloniser | 0 | 0 |
| Not Threatened | 11 | 19 |
| Introduced and Naturalised | 0 | 0 |
| Total | 307 | 415 |

Table 3. Statistical summary of status changes of marine invertebrates between 2009 (Freeman et al. 2009) and 2013 (this document).

| CONSERVATION STATUS 2013 | CONSERVATION STATUS 2009 | DETERMINATE | INDETERMINATE | TOTAL |
|------------------------------|--------------------------|-------------|---------------|-------|
| DATA DEFICIENT | | 55 | 6 | 61 |
| | Data Deficient | 11 | 0 | 11 |
| | Nationally Critical | 1 | 1 | 2 |
| | Nationally Vulnerable | 6 | 2 | 8 |
| | Naturally Uncommon | 7 | 1 | 8 |
| | Not in previous list | 30 | 2 | 31 |
| THREATENED | | 11 | 0 | 11 |
| Nationally Critical | | 6 | 0 | 6 |
| | Nationally Critical | 4 | 0 | 4 |
| | Nationally endangered | 1 | 0 | 1 |
| | Declining | 1 | 0 | 1 |
| Nationally Endangered | | 1 | 0 | 1 |
| | Nationally Endangered | 1 | 0 | 1 |
| Nationally Vulnerable | | 4 | 0 | 4 |
| | Nationally Vulnerable | 4 | 0 | 4 |
| AT RISK | | 222 | 102 | 324 |
| Declining | | 13 | 8 | 21 |
| | Declining | 3 | 0 | 3 |
| | Data deficient | 0 | 1 | 1 |
| | Nationally Vulnerable | 4 | 3 | 7 |
| | Naturally uncommon | 1 | 4 | 5 |
| | Not in previous list | 5 | 0 | 5 |
| Naturally Uncommon | | 209 | 94 | 303 |
| | Naturally Uncommon | 138 | 89 | 227 |
| | Nationally Critical | 3 | 1 | 4 |
| | Nationally Vulnerable | 1 | 1 | 2 |
| | Not in previous list | 67 | 3 | 70 |
| NOT THREATENED | | 19 | 0 | 19 |
| | Declining | 4 | 0 | 4 |
| | Naturally Uncommon | 2 | 0 | 2 |
| | Not in previous list | 2 | 0 | 2 |
| | Not Threatened | 11 | 0 | 11 |
| TOTAL | | 307 | 108 | 415 |

Table 4. Taxa included in this document that were not listed in Freeman et al. (2009).

| NAME AND AUTHORITY | COMMON NAME | FAMILY |
|---|---------------|----------------|
| Phylum Arthropoda | | |
| <i>Gonodactylellus osheai</i> Ahyong, 2012 | Mantis shrimp | Gonodactylidae |
| <i>Lithodes aotearoa</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Lithodes jessica</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Lithodes macquariae</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Lithodes robertsoni</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Neolithodes brodiei</i> Dawson & Yaldwyn, 1970 | King crab | Lithodidae |
| <i>Neolithodes bronwynae</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Paralomis dawsoni</i> Macpherson, 2001 | King crab | Lithodidae |
| <i>Paralomis poorei</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Paralomis staplesi</i> Ahyong, 2010 | King crab | Lithodidae |
| <i>Paralomis webberi</i> Ahyong, 2010 | King crab | Lithididae |

Continued on next page

Table 4 continued

| NAME AND AUTHORITY | COMMON NAME | FAMILY |
|---|---------------|-------------------|
| <i>Paralomis zealandica</i> Dawson & Yaldwyn, 1971 | King crab | Lithididae |
| <i>Colubrissa dempseyi</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae |
| <i>Heterosquilla koningi</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae |
| <i>Heterosquilla laevis</i> (Hutton, 1879) | Mantis shrimp | Tetrasquillidae |
| <i>Heterosquilla tricarinata</i> (Claus, 1871) | Mantis shrimp | Tetrasquillidae |
| <i>Heterosquilla tridentata</i> (Thomson, 1882) | Mantis shrimp | Tetrasquillidae |
| <i>Heterosquilla trifida</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae |
| <i>Pariliacantha georgeorum</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae |
| Phylum Cnidaria | | |
| <i>Goniocorella dumosa</i> (Alcock, 1902) | Stony coral | Caryophylliidae |
| <i>Solenosmilia variabilis</i> Duncan 1873 | Stony coral | Caryophylliidae |
| <i>Enallopammia rostrata</i> (Pourtalès, 1878) | Stony coral | Dendrophylliidae |
| <i>Chathamisis</i> spp. Kermadec Ridge | Bamboo coral | Isididae |
| <i>Echinispa spicata</i> (Hickson, 1907) | Bamboo coral | Isididae |
| <i>Keratoisis glaesae</i> Grant, 1976 | Bamboo coral | Isididae |
| <i>Keratoisis hikurangiensis</i> Grant, 1976 | Bamboo coral | Isididae |
| <i>Keratoisis</i> n. sp. | Bamboo coral | Isididae |
| <i>Keratoisis projecta</i> Grant, 1976 | Bamboo coral | Isididae |
| <i>Keratoisis tangentis</i> Grant, 1976 | Bamboo coral | Isididae |
| <i>Keratoisis zelandica</i> Grant, 1976 | Bamboo coral | Isididae |
| <i>Primnoisis ambigua</i> Wright & Studer, 1889 | Bamboo coral | Isididae |
| <i>Primnoisis antarctica</i> (Studer, 1878) | Bamboo coral | Isididae |
| <i>Primnoisis</i> sp. C | Bamboo coral | Isididae |
| <i>Calyptrophora cristata</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Calyptrophora cucullata</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Calyptrophora diaphana</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Calyptrophora inornata</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Calyptrophora niwa</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Helicoprimnoa fasciola</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Metanarella nannolepis</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Narella hypocalyx</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Narella mesolepis</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Narella mosaica</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Narella vulgaris</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Narelloides crinitus</i> Cairns, 2012 | Sea fan | Primnoidae |
| <i>Errina bicolor</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Errina chathamensis</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Errina cheilopora</i> Cairns, 1983 | Red coral | Stylasteridae |
| <i>Errina cooki</i> Hickson, 1912 | Red coral | Stylasteridae |
| <i>Errina dendyi</i> Hickson, 1912 | Red coral | Stylasteridae |
| <i>Errina hicksoni</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Errina laevigata</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Errina novaezealandiae</i> Hickson, 1912 | Red coral | Stylasteridae |
| <i>Errina reticulata</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Errina sinuosa</i> Cairns, 1991 | Red coral | Stylasteridae |
| <i>Protulophila</i> sp. | Hydroid | |
| Phylum Echinodermata | | |
| <i>Gorgonocephalus chilensis</i> (Philippi, 1858) | Basket star | Gorgonocephalidae |
| <i>Gorgonocephalus pustulatum</i> (H. L. Clark, 1916) | Basket star | Gorgonocephalidae |
| <i>Gorgonocephalus sundanus</i> Döderlein, 1927 | Basket star | Gorgonocephalidae |
| Phylum Mollusca | | |
| <i>Acrosterigma sorenseni</i> (Powell, 1967) | Bivalve | Cardiidae |
| <i>Vexillum iredalei</i> (Powell, 1958) | Snail | Costellariidae |
| <i>Crassatina iredalei</i> (Powell, 1958) | Bivalve | Crassatellidae |

Continued on next page

Table 4 continued

| NAME AND AUTHORITY | COMMON NAME | FAMILY |
|---|--------------|-----------------|
| <i>Epigrus gracilis</i> Oliver, 1915 | Snail | Epagridae |
| <i>Epigrus insularis</i> Oliver, 1915 | Snail | Epagridae |
| <i>Emarginula connectens</i> Thiele, 1915 | Snail | Fissurellidae |
| <i>Larochea spirata</i> Geiger & B.A. Marshall, 2012 | Snail | Larocheidae |
| <i>Larocheopsis amplexa</i> B.A. Marshall, 1993 | Snail | Larocheidae |
| <i>Bathyaustrilla thionipta</i> Glover, Taylor & Rowden, 2004 | Bivalve | Lucinidae |
| <i>Cancilla kermadecensis</i> (Cernohorsky, 1978) | Snail | Mitridae |
| <i>Hirtomurex taranui</i> B.A. Marshall & Oliverio, 2009 | Snail | Muricidae |
| <i>Cyclopecten kermadecensis</i> (E.A. Smith, 1885) | Scallop | Propeamussiidae |
| <i>Besla insularis</i> (Oliver, 1915) | Snail | Pyramidellidae |
| <i>Eulimella inexpectata</i> (Oliver, 1915) | Snail | Pyramidellidae |
| <i>Hinemoa punicea</i> Oliver, 1915 | Snail | Pyramidellidae |
| <i>Striatesta poutama</i> Ponder, 1967 | Snail | Rissoidae |
| <i>Striatesta bountyensis</i> Powell, 1927 | Snail | Rissoidae |
| <i>Striatesta eulima</i> Powell, 1940 | Snail | Rissoidae |
| <i>Satondella bicristata</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae |
| <i>Scissurella bountyensis</i> Powell, 1933 | Slit shell | Scissurellidae |
| <i>Sinezona brucei</i> Geiger, 2012 | Slit shell | Scissurellidae |
| <i>Sinezona enigmatica</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae |
| <i>Sinezona platyspira</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae |
| <i>Grippina globosa</i> B.A. Marshall, 2002 | Bivalve | Spheniopsidae |
| <i>Grippina pumila</i> B. Marshall, 2002 | Bivalve | Spheniopsidae |
| <i>Grippina spirata</i> B. Marshall, 2002 | Bivalve | Spheniopsidae |
| <i>Tornus aupouria</i> (Powell, 1937) | Snail | Tornidae |
| <i>Tornus maoria</i> (Powell, 1937) | Snail | Tornidae |
| <i>Coelotrochus carinatus</i> (B.A. Marshall, 1998) | Snail | Trochidae |
| <i>Coelotrochus rex</i> (B.A. Marshall, 1998) | Snail | Trochidae |
| <i>Bolma kermadecensis</i> Beu & Ponder, 1979 | Snail | Turbanidae |
| <i>Vanikoro wallacei</i> Iredale, 1912 | Snail | Vanikoridae |
| Phylum Porifera | | |
| <i>Aulocalyx australis</i> Reiswig & Kelly, 2011 | Glass sponge | Aulocalycidae |
| <i>Auloplax breviscopulata</i> Reiswig & Kelly, 2011 | Glass sponge | Aulocalycidae |
| <i>Auloplax sonnae</i> Reiswig & Kelly, 2011 | Glass sponge | Auloplacidae |
| <i>Chonelasma australe</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Chonelasma biscopulatum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Chonelasma chathamense</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Chonelasma glaciale</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Chonelasma lamella</i> Schulze, 1888 | Glass sponge | Euretidae |
| <i>Concrete gordoni</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Gymnoretete pacificum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Gymnoretete stabulatum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae |
| <i>Farrea anchorata</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Farrea anoxyhexastera</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Farrea medusiforma</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Farrea onychohexastera</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Farrea raoulensis</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Farrea similaris</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae |
| <i>Hexactinella acanthacea</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae |
| <i>Hexactinella aurea</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae |
| <i>Hexactinella simplex</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae |

Table 5. Names included in Freeman et al. (2009) that have been rejected from this document.

| NAME IN FREEMAN ET AL. (2009) | REASON FOR REJECTION |
|--|----------------------------------|
| <i>Cellana strigilis bollonsi</i> Powell, 1955 | Now synonym of <i>C. oliveri</i> |

2. Conservation status of New Zealand marine invertebrates

The revised threat ranking for marine invertebrates is provided in this section and replaces all previous NZTCS lists for marine invertebrates.

Taxa were assessed according to the criteria of Townsend et al. (2008), grouped by conservation status, then alphabetically by scientific name. Categories are ordered by degree of loss, with Extinct at the top of the list and Not Threatened at the bottom, above Introduced and Naturalised. The Data Deficient list is inserted between Extinct and Threatened. Although the true status of Data Deficient taxa will span the entire range of available categories, taxa are in that list mainly because they are very seldom seen, so most are likely to end up being considered threatened and some may already be extinct. The Data Deficient list is likely to include many of the most threatened species in New Zealand.

See Townsend et al. (2008) for details of criteria and qualifiers, which are abbreviated as follows:

| | |
|-----|------------------------|
| CD | Conservation Dependent |
| De | Designated |
| DP | Data Poor |
| EF | Extreme Fluctuations |
| EW | Extinct in the Wild |
| IE | Island Endemic |
| Inc | Increasing |
| OL | One Location |
| PD | Partial Decline |
| RF | Recruitment Failure |
| RR | Range Restricted |
| SO | Secure Overseas |
| Sp | Sparse |
| St | Stable |
| TO | Threatened Overseas |

2.1 Taxonomically determinate

Extinct (o)

Taxa for which there is no reasonable doubt—following repeated surveys in known or expected habitats at appropriate times (diurnal, seasonal and annual) and throughout the taxon’s historic range—that the last individual has died.

No taxonomically determinate marine invertebrate taxa are listed in this category.

Data Deficient (55)

Taxa that are suspected but not definitely known to belong to any particular category due to a lack of current information about their distribution and abundance. It is hoped that listing such taxa will stimulate research to find out the true category or threat. (For a fuller definition see Townsend et al. 2008.)

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|--------------------------|-------------------|----------------|
| Phylum Annelida | | | |
| <i>Scoletoma lynnei</i> (Knox, 1951) | Polychaete | Lumbrineridae | |
| <i>Hartmanonuphis pectinata</i> (Knox & Hicks, 1973) | Polychaete | Onuphidae | |
| Phylum Arthropoda | | | |
| <i>Nautilocaris saintlaurentae</i> Komai & Segonzac, 2006 | Shrimp | Alvinocarididae | SO |
| <i>Bathysquilla microps</i> (Manning, 1961) | Mantis shrimp | Bathysquillidae | SO |
| <i>Chionelasmus crosnieri</i> (Buckeridge 1998) | Primitive acorn barnacle | Chionelasmatidae | |
| <i>Cancelus laticoxa</i> Forest & McLaughlan, 2000 | Crab | Diogenidae | OL |
| <i>Gonodactylellus osheai</i> Ahyong, 2012 | Mantis shrimp | Gonodactylidae | DP, Sp |
| <i>Lithodes jessica</i> Ahyong, 2010 | King crab | Lithodidae | DP, RR, Sp |
| <i>Paralomis staplesi</i> Ahyong, 2010 | King crab | Lithodidae | DP, Sp |
| <i>Paralomis webberi</i> Ahyong, 2010 | King crab | Lithodidae | DP, OL, RR, Sp |
| <i>Notopoides latus</i> Henderson, 1888 | Crab | Raninidae | OL |
| <i>Heterosquilla trifida</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae | DP, RR, Sp |
| Phylum Cnidaria | | | |
| <i>Antipathes fruticosa</i> Gray, 1857 | Black coral | Antipathidae | |
| <i>Coenocyathus brooki</i> Cairns, 1995 | Stony coral | Caryophylliidae | RR |
| <i>Circinisis circinata</i> Grant, 1976 | Bamboo coral | Isididae | OL |
| <i>Primnoisis ambigua</i> Wright & Studer, 1889 | Bamboo coral | Isididae | RR, SO |
| <i>Primnoisis antarctica</i> (Studer, 1878) | Bamboo coral | Isididae | |
| <i>Calyptrophora cristata</i> Cairns, 2012 | Sea fan | Primnoidae | DP, OL, RR, Sp |
| <i>Calyptrophora diaphana</i> Cairns, 2012 | Sea fan | Primnoidae | DP, RR, Sp |
| <i>Calyptrophora niwa</i> Cairns, 2012 | Sea fan | Primnoidae | DP, RR, Sp |
| <i>Helicoprimnoa fasciola</i> Cairns, 2012 | Sea fan | Primnoidae | DP, OL, RR, Sp |
| <i>Metanarella nannolepis</i> Cairns, 2012 | Sea fan | Primnoidae | DP, RR, Sp |
| <i>Narella mosaica</i> Cairns, 2012 | Sea fan | Primnoidae | DP, OL, RR, Sp |
| <i>Narelloides crinitus</i> Cairns, 2012 | Sea fan | Primnoidae | DP, RR, Sp |
| <i>Paragorgia aotearoa</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | Sp |
| <i>Paragorgia kaupeka</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | DP, RR |
| <i>Paragorgia maunga</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | DP, RR |
| <i>Paragorgia wahine</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | OL |
| <i>Paragorgia whero</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | DP, Sp |
| <i>Sibogagorgia dennisgordoni</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | OL |
| <i>Sibogagorgia tautahi</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | DP, OL |
| <i>Errina cooki</i> Hickson, 1912 | Red coral | Styasteridae | DP, RR, Sp |
| <i>Errina dendyi</i> Hickson, 1912 | Red coral | Styasteridae | DP, Sp |
| <i>Errina hicksoni</i> Cairns, 1991 | Red coral | Styasteridae | DP, RR, Sp |
| Phylum Echinodermata | | | |
| <i>Porterpygus kieri</i> Baker, 1984 | Kier's echinoid | Apatopygidae | |
| <i>Gorgonocephalus sundanus</i> Döderlein, 1927 | Basket star | Gorgonocephalidae | Sp |
| <i>Xyloplax medusiformis</i> Baker, Rowe & Clark, 1987 | Sea daisy | Xyloplacidae | |
| Phylum Mollusca | | | |
| <i>Micropilina reinga</i> B.A. Marshall, 2006 | Monoplacophoran | Neopilinidae | OL, RR |
| <i>Micropilina wareni</i> B.A. Marshall, 2006 | Monoplacophoran | Neopilinidae | OL, RR |
| <i>Vema occidua</i> B.A. Marshall, 2006 | Monoplacophoran | Neopilinidae | OL |

Continued on next page

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--|--------------|-----------------|----------------|
| <i>Cyclopecten kermadecensis</i> (E.A. Smith, 1885) | Scallop | Propeamussiidae | OL |
| <i>Spondylus ostreoides</i> E.A. Smith, 1886 | Scallop | Spondylidae | OL |
| Phylum Porifera | | | |
| <i>Auloplax sonnae</i> Reiswig & Kelly, 2011 | Glass sponge | Auloplacidae | DP, OL, RR, Sp |
| <i>Chonelasma australe</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Chonelasma bispiculatum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Chonelasma chathamense</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Chonelasma glaciale</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Conorete gordoni</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Farrea medusiforma</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | DP, Sp |
| <i>Farrea onychohexastera</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | DP, Sp |
| <i>Farrea raoulensis</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | DP, Sp |
| <i>Gymnoretete pacificum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, Sp |
| <i>Gymnoretete stabulatum</i> Reiswig & Kelly, 2011 | Glass sponge | Euretidae | DP, OL, RR, Sp |
| <i>Hexactinella acanthacea</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae | DP, RR, Sp |
| <i>Hexactinella aurea</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae | DP, OL, RR, Sp |

Threatened (11)

Taxa that meet the criteria specified by Townsend et al. (2008) for the categories Nationally Critical, Nationally Endangered and Nationally Vulnerable.

Nationally Critical (6)

Criteria for Nationally Critical:

A—very small population (natural or unnatural)

- A(1) <250 mature individuals, regardless of cause
- A(2) ≤2 subpopulations, ≤200 mature individuals in the larger subpopulation
- A(3) Total area of occupancy ≤1 ha (0.01 km²)

B—small population (natural or unnatural) with a high ongoing or predicted decline

- B(1/1) 250–1000 mature individuals, predicted decline 50–70%
- B(2/1) ≤5 subpopulations, ≤300 mature individuals in the largest subpopulation, predicted decline 50–70%
- B(3/1) Total area of occupancy ≤10 ha (0.1 km²), predicted decline 50–70%

C—population (irrespective of size or number of subpopulations) with a very high ongoing or predicted decline (>70%)

- C Predicted decline >70%

| NAME AND AUTHORITY | COMMON NAME | FAMILY | CRITERIA | QUALIFIERS |
|--|------------------------|--------------|----------|------------|
| Phylum Annelida | | | | |
| <i>Boccardiella magniovata</i> (Read, 1975) | Large-egged polychaete | Spionidae | B(2/1) | |
| Phylum Arthropoda | | | | |
| <i>Idioibla idiota</i> (Batham, 1945) | Barnacle | Idioiblidae | C | |
| Phylum Brachiopoda | | | | |
| <i>Pumilus antiquatus</i> Atkins, 1958 | Dwarf white lamp shell | Kraussinidae | C | PE |
| Phylum mollusca | | | | |
| <i>Bathymodiolus tangaroa</i> Cosel & Marshall, 2003 | Giant seep mussel | Mytilidae | A(3) | RR |
| <i>Smeagol climoii</i> Tillier & Ponder, 1993 | Gravel maggot | Smeagolidae | A(3) | OL |
| <i>Smeagol manneringi</i> Climo 1981 | Gravel maggot | Smeagolidae | A(3) | DP, OL |

Nationally Endangered (1)

Criteria for Nationally Endangered:

A—small population (natural or unnatural) that has a low to high ongoing or predicted decline

- A(1/1) 250–1000 mature individuals, predicted decline 10–50%
- A(2/1) ≤5 subpopulations, ≤300 mature individuals in the largest subpopulation, predicted decline 10–50%
- A(3/1) Total area of occupancy ≤10 ha (0.1 km²), predicted decline 10–50%

B—small stable population (unnatural)

- B(1/1) 250–1000 mature individuals, stable population
- B(2/1) ≤5 subpopulations, ≤300 mature individuals in the largest subpopulation, stable population
- B(3/1) Total area of occupancy ≤10 ha (0.1 km²), stable population

C—moderate population and high ongoing or predicted decline

- C(1/1) 1000–5000 mature individuals, predicted decline 50–70%
- C(2/1) ≤15 subpopulations, ≤500 mature individuals in the largest subpopulation, predicted decline 50–70%
- C(3/1) Total area of occupancy ≤100 ha (1 km²), predicted decline 50–70%

| NAME AND AUTHORITY | COMMON NAME | FAMILY | CRITERIA | QUALIFIERS |
|-----------------------------------|--------------------|-----------|----------|------------|
| Phylum Annelida | | | | |
| <i>Spio aequalis</i> Ehlers, 1904 | Giant spionid worm | Spionidae | A(1/1) | DP, RR, Sp |

Nationally Vulnerable (4)

Criteria for Nationally Vulnerable:

A—small, increasing population (unnatural)

- A(1/1) 250–1000 mature individuals, predicted increase >10%
- A(2/1) ≤5 subpopulations, ≤300 mature individuals in the largest subpopulation, predicted increase > 10%
- A(3/1) Total area of occupancy ≤10 ha (0.1 km²), predicted increase >10%

B—moderate, stable population (unnatural)

- B(1/1) 1000–5000 mature individuals, stable population
- B(2/1) ≤15 subpopulations, ≤500 mature individuals in the largest subpopulation, stable population
- B(3/1) Total area of occupancy ≤100 ha (1 km²), stable population

C—moderate population, with population trend that is declining

- C(1/1) 1000–5000 mature individuals, predicted decline 10–50%
- C(2/1) ≤15 subpopulations, ≤500 mature individuals in the largest subpopulation, predicted decline 10–50%
- C(3/1) Total area of occupancy ≤100 ha (1 km²), predicted decline 10–50%

D—moderate to large population, and moderate to high ongoing or predicted decline

- D(1/1) 5000–20 000 mature individuals, predicted decline 30–70%
- D(2/1) ≤15 subpopulations and ≤1000 mature individuals in the largest subpopulation, predicted decline 30–70%
- D(3/1) Total area of occupancy ≤1000 ha (10 km²), predicted decline 30–70%

E—large population, and high ongoing or predicted decline

- E(1/1) 20 000–100 000 mature individuals, predicted decline 50–70%
 E(2/1) Total area of occupancy ≤10 000 ha (100 km²), predicted decline 50–70%

| NAME AND AUTHORITY | COMMON NAME | FAMILY | CRITERIA | QUALIFIERS |
|---|------------------------|----------------|----------|----------------|
| Phylum Bryozoa | | | | |
| <i>Calvetia osheai</i> Taylor & Gordon, 2003 | O'Shea's tree bryozoan | Calvetiidae | C(3/1) | CD, PD, RR |
| <i>Spiritopora perplexa</i> Taylor & Gordon, 2003 | Bryozoan | Diaperoeciidae | C(3/1) | CD, OL, PD, RR |
| Phylum Cnidaria | | | | |
| <i>Chathamisis bayeri</i> Grant, 1976 | Bamboo coral | Isididae | D(3/1) | DP, Sp |
| <i>Paragorgia alisonae</i> Sanchez, 2005 | Bubblegum coral | Paragorgiidae | D(3/1) | DP, Sp |

At Risk (222)

Taxa that meet the criteria specified by Townsend et al. (2008) for Declining, Recovering, Relict and Naturally Uncommon.

Declining (13)

Taxa that do not qualify as 'Threatened' because they are buffered by large population size and/or a slower rate of decline than the trigger points.

Criteria for Declining:

A—moderate to large population and low ongoing or predicted decline

- A(1/1) 5000–20 000 mature individuals, predicted decline 10–30%
 A(2/1) Total area of occupancy ≤1000 ha (10 km²), predicted decline 10–30%

B—large population and low to moderate ongoing or predicted decline

- B(1/1) 20 000–100 000 mature individuals, predicted decline 10–50%
 B(2/1) Total area of occupancy ≤10 000 ha (100 km²), predicted decline 10–50%

C—very large population and low to high ongoing or predicted decline

- C(1/1) >100 000 mature individuals, predicted decline 10–70%
 C(2/1) Total area of occupancy >10 000 ha (100 km²), predicted decline 10–70%

| NAME AND AUTHORITY | COMMON NAME | FAMILY | CRITERIA | QUALIFIERS |
|--|-------------------------|-------------------|----------|------------|
| Phylum Bryozoa | | | | |
| <i>Steginoporella perplexa</i> Livingstone, 1929 | Bryozoan | Steginoporellidae | C(2/1) | CD, PD, RR |
| Phylum Cnidaria | | | | |
| <i>Goniocorella dumosa</i> (Alcock, 1902) | Stony coral | Caryophylliidae | C(2/1) | CD, SO |
| <i>Solenosmilia variabilis</i> Duncan 1873 | Stony coral | Caryophylliidae | C(2/1) | CD, SO |
| <i>Enallopsammia rostrata</i> (Pourtales, 1878) | Stony coral | Dendrophylliidae | C(2/1) | CD, PD, SO |
| <i>Paragorgia arborea</i> (Linnaeus, 1758) | Bubblegum coral | Paragorgiidae | C(2/1) | SO, Sp |
| <i>Madrepora oculata</i> Linnaeus, 1758 | Stony coral | Oculinidae | C(2/1) | CD, SO |
| Phylum Echinodermata | | | | |
| <i>Gorgonocephalus chilensis</i> (Philippi, 1858) | Basket star | Gorgonocephalidae | C(2/1) | SO |
| <i>Gorgonocephalus dolichodactylus</i> Döderlein, 1911 | Basket star | Gorgonocephalidae | C(2/1) | SO |
| <i>Gorgonocephalus pustulatum</i> (H.L. Clark, 1916) | Basket star | Gorgonocephalidae | C(2/1) | |
| Phylum Mollusca | | | | |
| <i>Cellana flava</i> (Hutton, 1873) | Golden limpet | Nacellidae | A(2/1) | RR |
| <i>Octopus kaharoa</i> O'Shea, 2000 | Octopus | Octopodidae | C(2/1) | |
| <i>Opisthoteuthis mero</i> O'Shea, 2000 | Mero's umbrella octopus | Opisthoteuthidae | C(2/1) | DP |
| <i>Alcithoe davegibbsi</i> Hart, 1999 | Volute | Volutidae | C(2/1) | OL |

Recovering (o)

Taxa that have undergone a documented decline within the last 1000 years and now have an ongoing or predicted increase of >10% in the total population or area of occupancy, taken over the next 10 years or three generations, whichever is longer. Note that such taxa that are increasing but have a population size of <1000 mature individuals (or total area of occupancy of <10 ha) are listed in one of the Threatened categories, depending on their population size (for more details see Townsend et al. (2008)).

Criteria for Recovering:

- A 1000–5000 mature individuals or total area of occupancy ≤100 ha (1 km²), and predicted increase >10%
- B 5000–20 000 mature individuals or total area of occupancy ≤1000 ha (10 km²), and predicted increase >10%

No taxonomically determinate marine invertebrate taxa are listed in this category.

Relict (o)

Taxa that have undergone a documented decline within the last 1000 years, and now occupy <10% of their former range and meet one of the following criteria:

Criteria for Relict:

- A 5000–20 000 mature individuals; population stable ($\pm 10\%$)
- B >20 000 mature individuals; population stable or increasing at >10%. The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Relict can also include taxa that exist as reintroduced and self-sustaining populations within or outside their former known range (for more details see Townsend et al. (2008)).

The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Relict can also include taxa that exist as reintroduced and self-sustaining populations within or outside their former known range (for more details see Townsend et al. (2008)).

No taxonomically determinate marine invertebrate taxa are listed in this category.

Naturally Uncommon (209)

Taxa whose distribution is confined to a specific geographical area or which occur within naturally small and widely scattered populations, where this distribution is not the result of human disturbance.

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--|-------------|-----------------|------------|
| Phylum Arthropoda | | | |
| <i>Alvinocaris alexander</i> Ahyong, 2009 | Vent shrimp | Alvinocarididae | RR |
| <i>Alvinocaris longirostris</i> Kikuchi & Ohta, 1995 | Vent shrimp | Alvinocarididae | RR |
| <i>Alvinocaris niwa</i> Webber, 2004 | Vent shrimp | Alvinocarididae | RR |
| <i>Gandalpus puia</i> McLay 2007 | Crab | Bythograeidae | RR, Sp |
| <i>Mursia microspina</i> Davie & Short, 1989 | Crab | Calappidae | RR, SO |
| <i>Philanisus fasciatus</i> Riek, 1976 | Caddisfly | Chathamiidae | OL |
| <i>Vulcanolepas osheai</i> (Buckeridge, 2000) | Barnacle | Eolepadidae | OL |
| <i>Elamena momona</i> Melrose, 1975 | Crab | Hymenosomatidae | Sp |
| <i>Halimena aotearoa</i> Melrose, 1975 | Crab | Hymenosomatidae | Sp |
| <i>Lebbeus wera</i> Ahyong, 2009 | Vent shrimp | Hippolytidae | OL |
| <i>Chitinolepas spiritsensis</i> Buckeridge & Newman, 2006 | Barnacle | Idioiblidae | DP |
| <i>Lithodes macquariae</i> Ahyong, 2010 | King crab | Lithodidae | DP, RR, Sp |

Continued on next page

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--|---------------|-------------------|------------|
| <i>Lithodes robertsoni</i> Ahyong, 2010 | King crab | Lithodidae | DP, Sp |
| <i>Neolithodes bronwynae</i> Ahyong, 2010 | King crab | Lithodidae | DP, RR, Sp |
| <i>Paralomis dawsoni</i> Macpherson, 2001 | King crab | Lithodidae | DP, Sp |
| <i>Paralomis hirtella</i> Macpherson & Saintlaurent, 1998 | King crab | Lithodidae | SO |
| <i>Paralomis poorei</i> Ahyong, 2010 | King crab | Lithodidae | DP, Sp |
| <i>Paralomis zealandica</i> Dawson & Yaldwyn, 1971 | King crab | Lithodidae | Sp |
| <i>Leptomithrax tuberculatus mortenseni</i> Bennett, 1964 | Spider crab | Majidae | RR |
| <i>Colubriscilla dempseyi</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae | DP, Sp |
| <i>Heterosquilla koningi</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae | DP, Sp |
| <i>Heterosquilla laevis</i> (Hutton, 1879) | Mantis shrimp | Tetrasquillidae | Sp |
| <i>Heterosquilla tricarinata</i> (Claus, 1871) | Mantis shrimp | Tetrasquillidae | Sp |
| <i>Heterosquilla tridentata</i> (Thomson, 1882) | Mantis shrimp | Tetrasquillidae | DP, RR, Sp |
| <i>Parilacantha georgeorum</i> Ahyong, 2012 | Mantis shrimp | Tetrasquillidae | DP, Sp |
| <i>Xenograpus ngatama</i> McLay, 2007 | Crab | Xenograpidae | RR, SO |
| Phylum Cnidaria | | | |
| <i>Balanophyllia chnous</i> Squires, 1962 | Stony coral | Dendrophylliidae | RR |
| <i>Crateritheca novaezelandiae</i> (Thompson, 1879) | Stony coral | Dendrophylliidae | RR |
| <i>Falcatoflabellum raoulensis</i> Cairns, 1995 | Stony coral | Flabellidae | RR |
| <i>Keratoisis glaesae</i> Grant, 1976 | Bamboo coral | Isididae | DP, Sp |
| <i>Keratoisis hikurangiensis</i> Grant, 1976 | Bamboo coral | Isididae | Sp |
| <i>Keratoisis projecta</i> Grant, 1976 | Bamboo coral | Isididae | Sp |
| <i>Keratoisis tangentis</i> Grant, 1976 | Bamboo coral | Isididae | OL, RR, Sp |
| <i>Keratoisis zelandica</i> Grant, 1976 | Bamboo coral | Isididae | Sp |
| <i>Antipathella fiordensis</i> (Grange, 1990) | Black coral | Myriopathidae | RR |
| <i>Oculina virgosa</i> Squires, 1958 | Stony coral | Oculinidae | RR |
| <i>Nemertesia elongata</i> Totton, 1930 | Hydrozoan | Plumulariidae | RR |
| <i>Calyptrophora cucullata</i> Cairns, 2012 | Sea fan | Primnoidae | DP, Sp |
| <i>Calyptrophora inornata</i> Cairns, 2012 | Sea fan | Primnoidae | DP, Sp |
| <i>Narella hypsocalyx</i> Cairns, 2012 | Sea fan | Primnoidae | DP, Sp |
| <i>Narella mesolepis</i> Cairns, 2012 | Sea fan | Primnoidae | DP, RR, Sp |
| <i>Narella vulgaris</i> Cairns, 2012 | Sea fan | Primnoidae | DP, Sp |
| <i>Errina bicolor</i> Cairns, 1991 | Red coral | Stylerasteridae | DP, Sp |
| <i>Errina chathamensis</i> Cairns, 1991 | Red coral | Stylerasteridae | DP, Sp |
| <i>Errina cheilopora</i> Cairns, 1983 | Red coral | Stylerasteridae | DP, Sp |
| <i>Errina laevigata</i> Cairns, 1991 | Red coral | Stylerasteridae | DP, Sp |
| <i>Errina reticulata</i> Cairns, 1991 | Red coral | Stylerasteridae | DP, Sp |
| <i>Errina sinuosa</i> Cairns, 1991 | Red coral | Stylerasteridae | DP, RR, Sp |
| <i>Lillipathes lillei</i> (Totton, 1923) | Black coral | Schizopathidae | RR, S?O |
| <i>Sphenotrochus squiresi</i> Cairns, 1995 | Stony coral | Turbinoliidae | RR |
| Phylum Echinodermata | | | |
| <i>Eurygonias hyalacanthus</i> Farquhar, 1913 | Cushion star | Odontasteridae | RR, Sp |
| Phylum Mollusca | | | |
| <i>Ruapukea carolus</i> Dell, 1953 | Snail | Aclididae | DP, RR |
| <i>Discotectonica acutissima</i> (G.B. Sowerby III, 1914) (NZOI TAN107.122) | Snail | Architectonicidae | DP, RR, SO |
| <i>Suterilla imperforata</i> Fukuda, Ponder & B.A. Marshall, 2006 | Snail | Assimineidae | RR |
| <i>Fictonoba oliveri</i> (Powell, 1927) | Snail | Barleeiidae | RR |
| <i>Cominella quoyana griseicalyx</i> Willan, 1979 | Whelk | Buccinidae | RR |
| <i>Cominella regalis</i> Willan, 1979 | Whelk | Buccinidae | RR |
| <i>Caecum maori</i> Pizzini & Raines, 2006 | Snail | Caecidae | RR |
| <i>Bathyfautor rapuhia</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |

Continued on next page

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|--------------------------------|------------------|------------|
| <i>Calliostoma antipodense</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Calliostoma benthicola</i> (Dell, 1950) | Snail | Calliostomatidae | RR |
| <i>Calliostoma consobrinum</i> (Powell, 1958) | Snail | Calliostomatidae | RR |
| <i>Calliostoma eminens</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Calliostoma gendalli</i> B.A. Marshall, 1980 | Snail | Calliostomatidae | RR |
| <i>Calliostoma gibbsorum</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Calliostoma jamiesoni</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Calliostoma peregrinum</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Calliostoma xanthos</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | SO, Sp |
| <i>Carinastele coronata</i> B.A. Marshall, 1989 | Snail | Calliostomatidae | DP, RR |
| <i>Carinastele jugosa</i> B.A. Marshall, 1989 | Snail | Calliostomatidae | DP, RR |
| <i>Carinastele kristelleae</i> B.A. Marshall, 1989 | Snail | Calliostomatidae | RR |
| <i>Fautrix candida</i> B.A. Marshall, 1996 | Snail | Calliostomatidae | RR |
| <i>Selastele kopua</i> (B.A. Marshall, 1995) | Snail | Calliostomatidae | RR |
| <i>Selastele limatum</i> (B.A. Marshall, 1995) | Snail | Calliostomatidae | RR |
| <i>Selastele onustum</i> (Odhner, 1924) | Snail | Calliostomatidae | RR |
| <i>Calliotropis crystalophorus</i> B.A. Marshall, 1980 | Snail | Calliotropidae | DP, RR |
| <i>Acrosterigma sorenseni</i> (Powell, 1967) | Veneroid bivalve | Cardiidae | RR |
| <i>Purpuocardia reinga</i> (Powell, 1933) | Bivalve | Carditidae | RR |
| <i>Sundaya exquisita</i> Oliver, 1915 | Snail | Cerithiopsidae | RR |
| <i>Herpetopoma pruinosa</i> B.A. Marshall, 1980 | Snail | Chilodontidae | RR |
| <i>Chiton themeropsis</i> (Iredale, 1914) | Chiton | Chitonidae | RR |
| <i>Onithochiton oliveri</i> (Iredale, 1914) | Chiton | Chitonidae | RR |
| <i>Rhyssoplax exasperata</i> Iredale, 1915 | Chiton | Chitonidae | RR |
| <i>Cirroctopus hochbergi</i> O'Shea, 2000 | Four-blotched umbrella octopus | Cirroctopodidae | DP, Sp |
| <i>Etrema hedleyi</i> (Oliver, 1915) | Cone snail | Clathurellidae | RR |
| <i>Lienardia roseocincta</i> (Oliver, 1915) | Snail | Clathurellidae | RR |
| <i>Leptothyra benthicola</i> B.A. Marshall, 1980 | Snail | Colloniidae | RR |
| <i>Leptothyra kermadecensis</i> B.A. Marshall, 1980 | Snail | Colloniidae | RR |
| <i>Zafra fuscolineata</i> Oliver, 1915 | Whelk | Columbellidae | RR |
| <i>Zafra kermadecensis</i> Oliver, 1915 | Whelk | Columbellidae | RR |
| <i>Benthocardiella obliquata bountyensis</i> Powell, 1934 | Bivalve | Condylocardiidae | DP, RR |
| <i>Vexillum iredalei</i> (Powell, 1958) | snail | Costellariidae | RR |
| <i>Crassatina iredalei</i> (Powell, 1958) | Bivalve | Crassatellidae | RR |
| <i>Crosseola favosa</i> Powell, 1937 | Snail | Crosseolidae | RR |
| <i>Crosseola intertexta</i> Powell, 1937 | Snail | Crosseolidae | RR |
| <i>Cyclochlamys pileolus</i> Dijkstra & B.A. Marshall, 2008 | Scallop | Cyclochlamydidae | DP, RR |
| <i>Iredalea subtropicalis</i> Oliver, 1915 | Cone shell | Drilliidae | RR |
| <i>Eatonella (E.) iredalei</i> (Oliver, 1915) | Snail | Eatonelliidae | RR |
| <i>Epigrus gracilis</i> Oliver, 1915 | Snail | Epagridae | RR |
| <i>Epigrus insularis</i> Oliver, 1915 | Snail | Epagridae | RR |
| <i>Annulobalcis marshalli</i> Warén, 1981 | Snail | Eulimidae | RR |
| <i>Fuscapex ophioacanthicola</i> Warén, 1981 | Snail | Eulimidae | OL, DP, RR |
| <i>Fusceulima goodingi</i> Warén, 1981 | Snail | Eulimidae | OL, DP, RR |
| <i>Melanella kermadecensis</i> Oliver, 1915 | Snail | Eulimidae | RR |
| <i>Melanella luminosa</i> B.A. Marshall, 1997 | Snail | Eulimidae | RR |
| <i>Melanella perplexa</i> Oliver, 1915 | Snail | Eulimidae | RR |
| <i>Melanella spinosa</i> Oliver, 1915 | Snail | Eulimidae | RR |
| <i>Ophieulima fuscoapicata</i> Warén, 1981 | Snail | Eulimidae | OL, DP |
| <i>Punctifera ophiomoerae</i> Warén, 1981 | Snail | Eulimidae | OL, DP |
| <i>Pyramidelloides suteri</i> (Oliver, 1915) | Snail | Eulimidae | RR |

Continued on next page

Naturally Uncommon continued

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|-------------------------|------------------|------------|
| <i>Cornisepta festiva</i> (Crozier, 1966) | Snail | Fissurellidae | RR |
| <i>Diodora bollonsi</i> (Oliver, 1915) | Snail | Fissurellidae | RR |
| <i>Emarginula connectens</i> Thiele, 1915 | Snail | Fissurellidae | RR |
| <i>Fissurisepta manawatawhia</i> Powell, 1937 | Snail | Fissurellidae | RR |
| <i>Zygoceras tropidophora</i> Warén & Bouchet, 1991 | snail | Haloceratidae | OL, DP, SO |
| <i>Larochea spirata</i> Geiger & B.A. Marshall, 2012 | Snail | Larocheidae | RR |
| <i>Larocheopsis amplexa</i> B.A. Marshall, 1993 | Snail | Larocheidae | RR |
| <i>Leptochiton norfolkensis subtropicalis</i> (Iredale, 1914) | Chiton | Leptochitonidae | RR |
| <i>Laevilitorina antipodum</i> (Filhol, 1880) | Snail | Littorinidae | RR |
| <i>Laevilitorina bifasciata</i> Suter, 1914 | Snail | Littorinidae | RR |
| <i>Laevilitorina dellii</i> (Powell, 1955) | Snail | Littorinidae | RR |
| <i>Munditia anomala</i> Powell, 1941 | Snail | Liotiidae | RR |
| <i>Munditia aupouria</i> Powell, 1937 | Snail | Liotiidae | RR |
| <i>Munditia delicatula</i> Powell, 1941 | Snail | Liotiidae | RR |
| <i>Munditia echinata</i> Powell, 1937 | Snail | Liotiidae | RR |
| <i>Munditia manawatawhia</i> Powell, 1937 | Snail | Liotiidae | RR |
| <i>Munditia suteri</i> (Mestayer, 1919) | Snail | Liotiidae | RR |
| <i>Bathyauliella thionipta</i> Glover, Taylor & Rowden, 2004 | Bivalve | Lucinidae | RR |
| <i>Lutraria bruuni</i> Powell, 1967 | Bivalve | Mactridae | OL, DP, RR |
| <i>Oxyperas belliana</i> (Oliver, 1915) | Bivalve | Mactridae | RR |
| <i>Serrata raoulica</i> B.A. Marshall, 2004 | Snail | Marginellidae | RR |
| <i>Cancilla kermadecensis</i> (Cernohorsky, 1978) | Snail | Mitridae | RR |
| <i>Mitromorpha expeditionis</i> Oliver, 1915 | Cone shell | Mitromorphidae | RR |
| <i>Mysella tellinula</i> (Odhner, 1924) | Bivalve | Montacutidae | RR |
| <i>Hexaplex puniceus</i> Oliver, 1915 | Snail | Muricidae | RR |
| <i>Hirtomurex tangaroa</i> Marshall & Oliverio, 2009 | Snail | Muricidae | RR |
| <i>Hirtomurex taranui</i> B.A. Marshall & Oliverio, 2009 | Snail | Muricidae | RR |
| <i>Trophon subtropicalis</i> Iredale, 1913 | Snail | Muricidae | RR |
| <i>Hunkydora rakiura</i> B.A. Marshall, 2002 | Bivalve | Myochamidae | RR |
| <i>Gigantidas gladius</i> Cosel & B.A. Marshall, 2003 | Vent mussel | Mytilidae | RR |
| <i>Cellana craticulata</i> (Suter, 1905) | Limpet | Nacellidae | RR |
| <i>Cellana oliveri</i> Powell, 1955 E | Limpet | Nacellidae | RR |
| <i>Nacella terroris</i> (Filhol, 1880) | Limpet | Nacellidae | RR |
| <i>Micropilina rakiura</i> B.A. Marshall, 1999 | Monoplacophoran | Neopilinidae | RR |
| <i>Micropilina tangaroa</i> B.A. Marshall, 1991 | Monoplacophoran | Neopilinidae | DP, RR |
| <i>Rokopella capulus</i> B.A. Marshall, 2006 | Monoplacophoran | Neopilinidae | DP |
| <i>Pronucula kermadecensis</i> Oliver, 1915 | Bivalve | Nuculidae | RR |
| <i>Opisthoteuthis chathamensis</i> O'Shea, 2000 | Roughy umbrella octopus | Opisthoteuthidae | Sp |
| <i>Scutellastra kermadecensis</i> (Pilsbry, 1894) | Limpet | Patellidae | RR |
| <i>Cyclopecten fluctuatus</i> (Bavay, 1905) | Scallop | Pectinidae | DP, RR, SO |
| <i>Dilemma inexpectatum</i> (Crozier, 1967) | Bivalve | Poromyidae | RR |
| <i>Cyclopecten fluctuosus</i> Dijkstra & B.A. Marshall, 2008 | Scallop | Propeamussiidae | DP, RR |
| <i>Cyclopecten horridus</i> Dijkstra, 1995 | Scallop | Propeamussiidae | DP, RR |
| <i>Cyclopecten kermadecensis</i> (E.A. Smith, 1885) | Scallop | Propeamussiidae | RR |
| <i>Pteria avicula</i> (Holten, 1802) | Bivalve | Pteriidae | DP, RR, SO |
| <i>Eulimella inexpectata</i> (Oliver, 1915) | Snail | Pyramidellidae | RR |
| <i>Hinemoa punicea</i> Oliver, 1915 | Snail | Pyramidellidae | RR |
| <i>Besla insularis</i> (Oliver, 1915) | Snail | Pyramidellidae | RR |
| <i>Kermia benhami</i> Oliver, 1915 | Cone shell | Raphitomidae | RR |
| <i>Rastodens electra</i> (Oliver, 1915) | Snail | Rastodontidae | RR |
| <i>Pusillina wallacei</i> (Oliver, 1915) | Snail | Rissoidae | RR |

Continued on next page

Naturally Uncommon continued

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|--------------|----------------|------------|
| <i>Striatesta poutama</i> Ponder, 1967 | Snail | Rissoidae | RR |
| <i>Striatesta bountyensis</i> Powell, 1927 | Snail | Rissoidae | RR |
| <i>Striatesta eulima</i> Powell, 1940 | Snail | Rissoidae | RR |
| <i>Alvania kermadecensis</i> (Oliver, 1915) | Snail | Rissoidae | RR |
| <i>Sinezona brucei</i> Geiger, 2012 | Slit shell | Scissurellidae | RR |
| <i>Sinezona enigmatica</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae | OL |
| <i>Sinezona pacifica</i> (Oliver, 1915) | Slit shell | Scissurellidae | RR |
| <i>Sinezona platyspira</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae | RR |
| <i>Satondella bicristata</i> Geiger & B.A. Marshall, 2012 | Slit shell | Scissurellidae | RR |
| <i>Scissurella bountyensis</i> Powell, 1933 | Slit shell | Scissurellidae | RR |
| <i>Scissurella fairchildi</i> Powell, 1934 | Slit shell | Scissurellidae | RR |
| <i>Brookula stibarochila</i> (Iredale, 1912) | Snail | Seguenzioidea | RR |
| <i>Lissotesta conoidea</i> Powell, 1937 | Snail | Seguenzioidea | RR |
| <i>Cirsonella laxa</i> Powell, 1937 | Snail | Skeneidae | RR |
| <i>Cirsonella maoria</i> (Powell, 1937) | Snail | Skeneidae | RR |
| <i>Cirsonella paradoxa</i> Powell, 1937 | Snail | Skeneidae | RR |
| <i>Philorenere texturata</i> Oliver, 1915 | Snail | Skeneidae | RR |
| <i>Archiminolia dawsoni</i> (B.A. Marshall, 1979) | Snail | Solariellidae | DP, RR |
| <i>Archiminolia hurleyi</i> (B.A. Marshall, 1979) | Snail | Solariellidae | DP, RR |
| <i>Bathymophila valentia</i> B.A. Marshall, 2000 | Snail | Solariellidae | RR |
| <i>Grippina acherontis</i> B.A. Marshall, 2002 | Bivalve | Pheniopsidae | OL, RR |
| <i>Grippina globosa</i> B.A. Marshall, 2002 | Bivalve | Pheniopsidae | RR |
| <i>Grippina pumila</i> B. Marshall, 2002 | Bivalve | Pheniopsidae | RR |
| <i>Grippina spirata</i> B. Marshall, 2002 | Bivalve | Pheniopsidae | RR |
| <i>Spondylus raoulensis</i> Oliver, 1915 | Scallop | Spondylidae | RR |
| <i>Tectus royanus</i> (Iredale, 1912) | Snail | Tegulidae | RR |
| <i>Graphis sculpturata</i> (Oliver, 1915) | Snail | Tofanellidae | RR |
| <i>Tornus aupouria</i> (Powell, 1937) | Snail | Tornidae | RR |
| <i>Tornus maoria</i> (Powell, 1937) | Snail | Tornidae | RR |
| <i>Metaxia kermadecensis</i> B.A. Marshall 1978 | Snail | Triphoridae | RR |
| <i>Cantharidus antipoda hinemoa</i> (Powell, 1956) | Snail | Trochidae | RR |
| <i>Cantharidus burchorum</i> B.A. Marshall, 1999 | Snail | Trochidae | RR |
| <i>Cantharidus festivus</i> (B.A. Marshall, 1999) | Snail | Trochidae | RR |
| <i>Clanculus atypicus</i> Iredale, 1913 | Snail | Trochidae | RR |
| <i>Coelotrochus carinatus</i> (B.A. Marshall, 1998) | Snail | Trochidae | RR |
| <i>Coelotrochus polychroma</i> (B.A. Marshall, 1999) | Snail | Trochidae | RR |
| <i>Coelotrochus rex</i> (B.A. Marshall, 1998) | Snail | Trochidae | RR |
| <i>Monilea incerta</i> Iredale 1913 | Snail | Trochidae | RR |
| <i>Stomatella oliveri</i> (Iredale, 1912) | Snail | Trochidae | RR |
| <i>Bolma kermadecensis</i> Beu & Ponder, 1979 | Snail | Turbinidae | RR |
| <i>Vanikoro wallacei</i> Iredale, 1912 | Snail | Vanikoridae | RR |
| Phylum Porifera | | | |
| <i>Aulocalyx australis</i> Reiswig & Kelly, 2011 | Glass sponge | Aulocalycidae | DP, RR, Sp |
| <i>Auloplax breviscopulata</i> Reiswig & Kelly, 2011 | Glass sponge | Aulocalycidae | DP, RR, Sp |
| <i>Chonelasma lamella</i> Schulze, 1888 | Glass sponge | Euretidae | Sp |
| <i>Farrea anachorata</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | DP, RR, Sp |
| <i>Farrea anoxyhexastera</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | DP, Sp |
| <i>Farrea similaris</i> Reiswig & Kelly, 2011 | Glass sponge | Farreidae | Sp |
| <i>Hexactinella simplex</i> Reiswig & Kelly, 2011 | Glass sponge | Tretodictyidae | DP, Sp |

Non-resident Native (O)

Taxa whose natural presence in New Zealand is either discontinuous (Migrant) or sporadic or temporary (Vagrant) or which have succeeded in recently (since 1950) establishing a resident breeding population (Coloniser).

Migrant

Taxa that predictably and cyclically visit New Zealand as part of their normal life cycle (a minimum of 15 individuals known or presumed to visit per annum) but do not breed here.

No taxonomically determinate marine invertebrate taxa are listed in this category.

Vagrant

Taxa whose occurrences, though natural, are sporadic and typically transitory, or migrants with fewer than 15 individuals visiting New Zealand per annum.

No taxonomically determinate marine invertebrate taxa are listed in this category.

Coloniser

Taxa that otherwise trigger Threatened categories because of small population size, but have arrived in New Zealand without direct or indirect help from humans and have been successfully reproducing in the wild only since 1950.

No taxonomically determinate marine invertebrate taxa are listed in this category.

Not Threatened (19)

Resident native taxa that have large, stable populations.

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--|--------------------|------------------|------------|
| Phylum Arthropoda | | | |
| <i>Lithodes aotearoa</i> Ahyong, 2010 | King crab | Lithodidae | Sp |
| <i>Neolithodes brodiei</i> Dawson & Yaldwyn, 1970 | King crab | Lithodidae | Sp |
| Phylum Bryozoa | | | |
| <i>Cinctipora elegans</i> Hutton, 1873 | Bryozoan | Cinctiporidae | |
| <i>Hippomenella vellicata</i> (Hutton, 1873) | Bryozoan | Escharinidae | |
| <i>Celleporaria agglutinans</i> (Hutton, 1873) | Bryozoan | Lepraliellidae | |
| Phylum Mollusca | | | |
| <i>Calliostoma turnerarum</i> (Powell, 1964) | Snail | Calliostomatidae | |
| <i>Cyclochlamys transenna</i> (Suter, 1913) | Scallop | Cyclochlamydidae | |
| <i>Notoacmea badia</i> Oliver, 1927 | Limpet | Lottiidae | |
| <i>Notoacmea helmsi</i> (E.A. Smith, 1894) | Limpet | Lottiidae | |
| <i>Cellana strigilis</i> (Hombron & Jacquinot, 1841) | Limpet | Nacellidae | RR |
| <i>Sinepecten segonzaci</i> Schein, 2006 | Scallop | Pectinidae | SO |
| <i>Archiminolia tenuiseptum</i> B.A. Marshall, 2000 | Snail | Solariellidae | |
| <i>Astraea heliotropium</i> (Martyn, 1784) | Circular saw shell | Turbinidae | |
| <i>Alcithoe benthicola</i> (Dell, 1963) | Volute | Volutidae | |
| <i>Alcithoe fissurata</i> (Dell, 1963) | Volute | Volutidae | |
| <i>Alcithoe flemingi</i> Dell, 1978 | Volute | Volutidae | |
| <i>Alcithoe larochei</i> Marwick, 1926 | Volute | Volutidae | |
| <i>Alcithoe lutea</i> (Watson, 1882) | Volute | Volutidae | |
| <i>Provocator mirabilis</i> (Finlay, 1926) | Volute | Volutidae | |

Introduced and Naturalised (O)

Taxa that have become naturalised in the wild after being deliberately or accidentally introduced into New Zealand by human agency.

No taxonomically determinate marine invertebrate taxa are listed in this category.

2.2 Taxonomically indeterminate

This section includes described taxa whose taxonomic status is uncertain and requires further investigation, and also potentially distinct marine invertebrates whose taxonomic status has yet to be determined. Definitions of threat categories follow those given in the Taxonomically Determinate section above.

Data Deficient (6)

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--------------------------------------|-----------------|--------------|------------|
| Phylum Cnidaria | | | |
| <i>Mopsea</i> sp. | Bamboo coral | Isididae | DP, SO, Sp |
| <i>Peltastisis</i> sp. | Bamboo coral | Isididae | DP, Sp |
| <i>Primnoisis</i> sp. C | Bamboo coral | Isididae | |
| <i>Sclerisis</i> sp. NIWA J. Sanchez | Bamboo coral | Isididae | DP, OL |
| <i>Protulophila</i> sp. | Hydroid | | |
| Phylum Mollusca | | | |
| <i>Calyptogena</i> spp. (NZOI) | Giant seep clam | Vesicomyidae | |

At Risk (102)

Naturally Uncommon (102)

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|--------------|-------------------|------------|
| Phylum Bryozoa | | | |
| <i>Alcyonidium</i> n. sp. 1 Leigh Reserve | Bryozoan | Alcyonidiidae | OL, DP |
| Phylum Cnidaria | | | |
| <i>Antipathes</i> n. sp. | Black coral | Antipathidae | RR |
| <i>Solatisonax</i> aff. <i>alleryi</i> (Seguenza, 1876) (NZOI TAN107.053) | Snail | Architectonicidae | DP, RR |
| <i>Acanella</i> spp. | Bamboo coral | Isididae | DP, SO |
| <i>Chathamisis</i> spp. Kermadec Ridge | Bamboo coral | Isididae | DP, Sp |
| <i>Echinisis</i> <i>spicata</i> (Hickson, 1907) | Bamboo coral | Isididae | DP, SO |
| <i>Echinisis</i> spp. | Bamboo coral | Isididae | DP |
| <i>Keratoisis</i> n. sp. | Bamboo coral | Isididae | DP, Sp |
| <i>Minuensis</i> | Bamboo coral | Isididae | DP, Sp |
| <i>Gonaxia</i> sp. (NZOI) | Hydrozoan | Sertulariidae | OL, RR |
| Phylum Mollusca | | | |
| <i>Anabathron</i> sp. aff. <i>ovatus</i> (Powell, 1927) (NMNZ M.227089) | Snail | Anabathridae | RR |
| <i>Bellomitra</i> sp. (NZOI TAN107.127) | Whelk | Belomitridae | DP, RR |
| <i>Buccipagoda</i> sp. (NZOI TAN107.136) | Whelk | Buccinidae | DP, RR |

Continued on next page

Naturally Uncommon continued

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|--|-------------|------------------|-------------|
| <i>Eosipho</i> sp. (NMNZ M.150056) | whelk | Buccinidae | DP, RR |
| <i>Calliostoma</i> sp. (NZOI TAN107.233) | Snail | Calliostomatidae | RR |
| <i>Calliotropis</i> sp. A (NMNZ M.152747) | Snail | Calliostomatidae | DP, RR |
| <i>Calliotropis</i> sp. B (NMNZ M.152735) | Snail | Calliostomatidae | DP, RR |
| <i>Thysanodonta</i> sp. (NMNZ M.152736) | Snail | Calliostomatidae | DP, RR |
| <i>Pleuromeris</i> sp. (NMNZ M.148741) | Bivalve | Carditidae | RR |
| <i>Danilia</i> sp. (NZOI U599) | Snail | Chilodontidae | DP, RR |
| <i>Granata</i> sp. (NMNZ M.148566) | Snail | Chilodontidae | RR |
| <i>Herpetopoma</i> sp. (NZOI TAN107.233) | Snail | Chilodontidae | RR |
| <i>Tegulaplex</i> sp. (NZOI TAN107.235) | Chiton | Chitonidae | DP, RR |
| <i>Argalista</i> sp. A (NMNZ M.148551) | Snail | Colloniidae | RR |
| <i>Argalista</i> sp. B (NMNZ M.148552) | Snail | Colloniidae | RR |
| <i>Cantrainea</i> sp. A (NZOI TAN107.323) | Snail | Colloniidae | DP, RR |
| <i>Cantrainea</i> sp. B (NZOI TAN107.323) | Snail | Colloniidae | DP, RR |
| <i>Cantrainea</i> sp. C (NZOI TAN107.235) | Snail | Colloniidae | DP, RR |
| <i>Mitrella</i> sp. A (NZOI TAN107.233) | Whelk | Columbellidae | DP, RR |
| <i>Mitrella</i> sp. B (NZOI TAN107.323) | Whelk | Columbellidae | DP, RR |
| <i>Benthocardiella</i> sp. A (NMNZ M.148673) | Bivalve | Condylocardiidae | RR |
| <i>Benthocardiella</i> sp. B (NMNZ M.148674) | Bivalve | Condylocardiidae | RR |
| <i>Benthocardiella</i> sp. C (NMNZ M.148675) | Bivalve | Condylocardiidae | RR |
| <i>Benthocardiella</i> sp. D (NMNZ M.148676) | Bivalve | Condylocardiidae | RR |
| <i>Carditella</i> sp. (NMNZ M.20766) | Bivalve | Condylocardiidae | RR |
| <i>Condylocuna</i> sp. A (NMNZ M.144652) | Bivalve | Condylocardiidae | RR |
| <i>Condylocuna</i> sp. B (NMNZ M.144656) | Bivalve | Condylocardiidae | RR |
| <i>Condylocuna</i> sp. C (NMNZ M.144657) | Bivalve | Condylocardiidae | RR |
| <i>Condylocuna</i> sp. D (NMNZ M.144658) | Bivalve | Condylocardiidae | RR |
| <i>Hamacuna</i> sp. A (NMNZ M.143347) | Bivalve | Condylocardiidae | RR |
| <i>Hamacuna</i> sp. B (NMNZ M.149015) | Bivalve | Condylocardiidae | RR |
| <i>Talabrida</i> sp. (NMNZ M.137651) | Bivalve | Crassatellidae | RR |
| <i>Cyamimactra</i> sp. A (NMNZ M.60854) | Bivalve | Cyamiidae | RR |
| <i>Cyamimactra</i> sp. B (NMNZ M.33947) | Bivalve | Cyamiidae | RR |
| <i>Kiddleria</i> sp. (NMNZ M.134975) | Bivalve | Cyamiidae | RR |
| <i>Perrierina</i> sp. (NMNZ M.96189) | Bivalve | Cyamiidae | RR |
| <i>Amaea</i> sp. (NZOI TAN107.233) | Snail | Epitoniidae | DP, RR, SO? |
| <i>Asterophila</i> sp. Warén & Lewis, 1994 | Snail | Eulimidae | DP, RR |
| <i>Niso</i> sp. (NZOI TAN107.225) | Snail | Eulimidae | DP, RR |
| <i>Stilapex</i> sp. (NMNZ M.232084) | Snail | Eulimidae | OL |
| <i>Stilifer</i> sp. (NMNZ M.150057) | Snail | Eulimidae | DP, OL |
| <i>Clathrosepta</i> sp. (NZOI U608) | Snail | Fissurellidae | DP, RR |
| <i>Cranopsis</i> sp. (NZOI TAN107.323) | Snail | Fissurellidae | RR |
| <i>Fissurellidae</i> sp. (NMNZ M.118002) | Snail | Fissurellidae | RR |
| <i>Fissurisepta</i> sp. (NMNZ M.138467) | Snail | Fissurellidae | RR |
| <i>Profundisepta</i> sp. A (NMNZ M.148575) | Snail | Fissurellidae | RR |
| <i>Profundisepta</i> sp. B (NMNZ M.138462) | Snail | Fissurellidae | RR |
| <i>Puncturella</i> sp. (NZOI U601) | Snail | Fissurellidae | DP, RR |
| <i>Rimulanax</i> sp. (NMNZ M.225598) | Snail | Fissurellidae | DP, RR |
| <i>Tugali</i> sp. (NMNZ M.36012) | Snail | Fissurellidae | RR |
| <i>Meiocardia</i> sp. (NZOI T256) | Bivalve | Glossidae | DP, RR, SO? |
| <i>Haloceras</i> sp. 1 (NZOI U573) | Snail | Haloceratidae | DP, OL, RR |
| <i>Haloceras</i> sp. 2 (M.147782) | Snail | Haloceratidae | DP, OL, RR |
| <i>Haloceras</i> sp. 3 (NZOI P941) | Snail | Haloceratidae | DP, OL, RR |

Continued on next page

| NAME AND AUTHORITY | COMMON NAME | FAMILY | QUALIFIERS |
|---|-----------------------|--------------------|------------|
| <i>Lepetopsidae</i> sp. (NMNZ M.158228) | Limpet | Lepetopsidae | RR |
| <i>Pectunculina</i> sp. (NMNZ M.225313) | Bivalve | Limopsidae | DP, RR |
| <i>Serrata</i> sp. A (NMNZ M.227078) | Snail | Marginellidae | RR |
| <i>Idioteuthis cordiformis</i> (Chun, 1908) | Giant squid | Mastigoteuthidae | Sp, SO |
| <i>Mysella</i> sp. (NMNZ M.51502) | Bivalve | Montacutidae | RR |
| <i>Amygdalum</i> sp. (NMNZ M.147338) | Mussel | Mytilidae | Sp, SO? |
| <i>Nassarius</i> sp. (NZOI TAN107.218) | Whelk | Nassariidae | RR |
| <i>Peltospiridae</i> sp. A (NZOI Z9504) | Snail | Peltospiridae | DP, RR |
| <i>Peltospiridae</i> sp. B (NZOI Z9504) | Snail | Peltospiridae | DP, RR |
| <i>Peltospiridae</i> sp. C (NZOI Z9504) | Snail | Peltospiridae | DP, RR |
| <i>Olgasolaris</i> sp. (NZOI TAN107.228) | Snail | Phenacolepadidae | DP, RR |
| <i>Kaiparapelta</i> sp. (NMNZ M.137534) | Snail | Pseudococculinidae | DP, RR |
| <i>Pteria</i> sp. (NMNZ M.158247) | Bivalve | Pteriidae | RR |
| <i>Phymorhynchus</i> sp. (NZOI KAH11.21) | Cone shell | Raphitomidae | DP |
| <i>Merelina</i> sp. A (NMNZ M.148669) | Snail | Rissoidae | RR |
| <i>Merelina</i> sp. B (NMNZ M.148670) | Snail | Rissoidae | RR |
| <i>Merelina</i> sp. C (NMNZ M.148671) | Snail | Rissoidae | RR |
| <i>Merelina</i> sp. D (NMNZ M.148668) | Snail | Rissoidae | RR |
| <i>Ancistrosbasis</i> sp. (NZOI TAN107.232) | Snail | Seguenziidae | DP, RR |
| <i>Abra</i> sp. (NMNZ M.225609) | Bivalve | Semelidae | DP, RR |
| <i>Skeneoides</i> sp. (NMNZ M.148557) | Snail | Skeneidae | OL |
| <i>Solariella</i> sp. A (NZOI TAN107.233) | Snail | Solariellidae | DP, RR |
| <i>Solariella</i> sp. B (NZOI TAN107.225) | Snail | Solariellidae | DP, RR |
| <i>Solariella</i> sp. C (NZOI W672) | Snail | Solariellidae | DP, RR |
| <i>Solecurtus</i> sp. (NMNZ M.225439) | Bivalve | Solecurtidae | DP, RR |
| <i>Cantharidus</i> sp. A (NMNZ M.59506) | Snail | Trochidae | RR |
| <i>Cantharidus</i> sp. B (NMNZ M.131607) | Snail | Trochidae | RR |
| <i>Conchocele</i> sp. (NMNZ M.28418) | Bivalve | Thyasiridae | RR |
| <i>Turbinellid</i> sp. (NZOI TAN107.134) | Snail | Turbinellidae | DP, RR |
| Phylum Porifera | | | |
| <i>Lissodendoryx</i> sp. (yellow slimy) | Sponge “yellow slimy” | Coelosphaeridae | RR |

3. Acknowledgements

We would like to acknowledge NIWA, Museum of New Zealand Te Papa Tongarewa and Otago University for contributing the expertise and time of their staff during this process. Many thanks to those who provided additional advice on particular species during the re-listing process, including Daphne Lee, Geoff Read, Michelle Kelly and Heather Braid. Particular thanks also to Jeremy Rolfe for assisting with the workshop and recording and collating the resulting data, and to Lynette Clelland for editing this publication.

4. References

- Freeman, D.J.; Marshall, B.A.; Ahyong, S.T.; Wing, S.R.; Hitchmough, R.A. 2010: Conservation status of New Zealand marine invertebrates, 2009. *New Zealand Journal of Marine and Freshwater Research* 44: 129–148.
- Townsend, A.J.; de Lange, P.J.; Duffy, C.A.J.; Miskelly, C.M.; Molloy, J.; Norton, D.A. 2008: New Zealand Threat Classification System manual. Department of Conservation, Wellington. 35 p.