



Burrowing megafauna in SCI 3

New Zealand Fisheries Assessment Report 2013/20

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EXECUTIVE SUMMARY

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Data on benthic species that occur within scampi grounds were collated from biodiversity and fisheries survey research voyages, from both physical samples and photographic data, and also Ministry for Primary Industries observer records from fishing vessels targeting scampi. The species lists generated were examined to identify species that could be potential burrow formers, and available literature was examined to evaluate whether burrows were likely to be confused with what are considered to be scampi burrows.

A range of known and potential burrowers were identified, and burrow surface features (where known) examined. Only the larger crustaceans would be big enough to generate a comparable sized burrow to that formed by scampi. It remains uncertain as to whether *Munida* burrows, or simply makes use of burrows created by other species in these habitats. Goneplacidea crabs are thought to burrow (one species known to), but their burrows are likely to be of a different shape, and smaller than scampi burrows.

1. INTRODUCTION

Scampi live in burrows in muddy seabed areas, and their vulnerability to trawling varies over daily and seasonal cycles in relation to emergence patterns. Owing to concerns over variability in emergence patterns affecting scampi trawl catchability, photographic surveys (counting burrows) have become a key component of scampi assessments in both Europe and New Zealand (ICES 2007, Tuck & Dunn 2012). The use of burrow counts as an index of scampi abundance avoids any uncertainty over scampi emergence, but introduces uncertainty over burrow detection and burrow occupancy. A number of species are known to generate burrows within scampi grounds, and some may generate burrows that could be mistaken for scampi burrows. Within Europe, the angular crab *Goneplax rhomboides*, has been identified as generating similar, but smaller burrows to *Nephrops* (Rice & Chapman 1971, Atkinson 1974), but no species known to generate burrows similar to scampi have yet been identified in New Zealand. However, if such a species did occur, and was to change in abundance relative to scampi (perhaps because of different vulnerability to fishing), then the relationship between the burrows counted and the scampi population (*q* photo) would change.

This project aims to investigate the available data on other species present within scampi grounds, and identify potential burrow formers, as a first attempt to evaluate the extent to which other species are generating burrows that are counted as scampi burrows. This work has been limited to data from the SCI 3 fishery area. Megafaunal burrowing communities may be different in other areas.

The objective of the study was to:

Identify burrowing megafauna in SCI 3 from scampi survey images, trawl bycatch and other available data.

2. METHODS

A range of data are available on the benthic community within the SCI 3 scampi fishery area. The data sources likely to be most useful in identifying scampi sized burrowing animals are considered to be i) seabed images (from scampi surveys in 2001, 2009 and 2010 and OS2020 sampling in 2007), ii) benthic faunal sampling (from OS2020 in 2007 and other relevant trips), iii) bycatch from trawl surveys conducted in the area, and iv) bycatch recorded by Ministry of Fisheries (now Ministry for Primary Industries) observers from commercial scampi fishing operations in the area. Each of the data sources is discussed in more detail below.

Having identified the larger benthic fauna in the area, existing knowledge on life history characteristics will be used to identify potential burrowers, and assess the likelihood that burrows could be mistaken for scampi burrows. Most New Zealand studies on burrowers have focussed on intertidal crabs (Jones 1976) and thalassinid shrimps (Berkenbusch et al. 2007), and so details of other burrowers will be drawn from the international literature. Spatial and temporal patterns in the abundance of relevant species will be examined where possible. Although some finfish species are known to be active burrowers (Atkinson 1977, Nash 1980, Able et al. 1982), and similar species occur in New Zealand waters (e.g. *Ceploa aotea*), these species or families have not been recorded on the Chatham Rise, and finfish have been excluded from the analysis. Where burrowing fish and scampi species coexist elsewhere e.g. the snake blenny *Lumpenus lampretiformis*, and the Norway lobster *Nephrops norvegicus*, the burrows are considered to be quite different (Atkinson 1986). Hagfish have also been observed inhabiting burrows with conspicuous, volcano-like mounds (Foss 1962), but again, these are quite different from scampi burrows.

Benthic faunal sampling

Benthic faunal sampling was conducted within the OS2020 surveys (Bowden 2011), and similar data are also available from a recent Tangaroa voyage in the area (TAN1116). Species abundance lists are available for each station sampled, and have been examined.

Within the OS2020 voyages, benthic sampling was conducted across a number of sites within the Chatham Rise. Only one site fell within the currently surveyed scampi grounds (Figure 1), but previous examination of these seabed images (Tuck et al. 2011) suggests that a number of these sites represent typical scampi habitat. Within the OS2020 voyages, sites were sampled with DTIS (simultaneously collecting high resolution video and still images) and either a small beam trawl or a small epibenthic sled (seamount sled). Sites at which scampi were recorded with any of the sampling approaches were taken as potentially representative of the benthic communities within scampi

grounds. Across these sampling approaches scampi were recorded at sites ranging from 271–1231 m in depth. Given that the scampi fishery (and scampi surveys) focus on the 300–500 m depth range, and that benthic communities considerably deeper than this are likely to be quite different, sites deeper than 600 m were excluded. The distribution of the sites shallower than 600 m where scampi were recorded are presented in relation to SCI 3 survey strata in Figure 1.

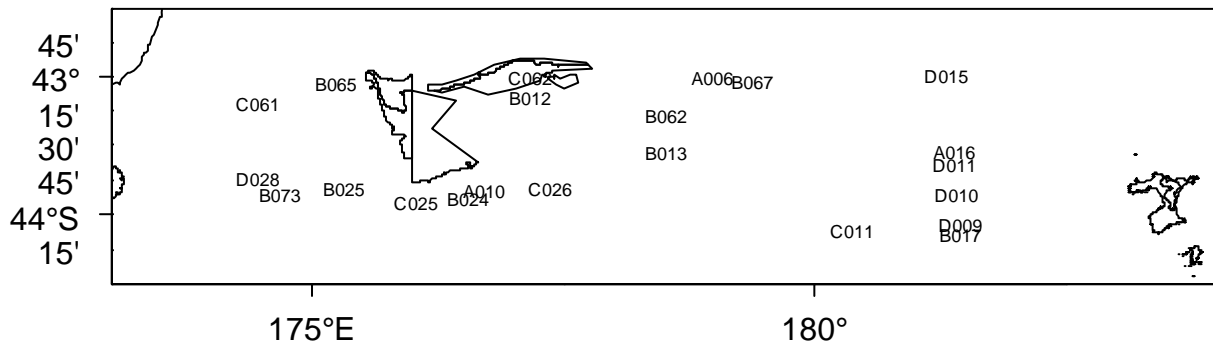


Figure 1: OS2020 survey sites shallower than 600 m where scampi were recorded, and SCI 3 survey strata (as used in recent scampi photographic and trawl surveys).

During the TAN1116 voyage, benthic sampling was conducted across a range of sites on the Chatham Rise with a beam trawl. As with the OS2020 voyages, only one site fell within the currently surveyed scampi grounds, but scampi were recorded at six sites in total (Figure 2), and the benthic communities at these sites has been examined.

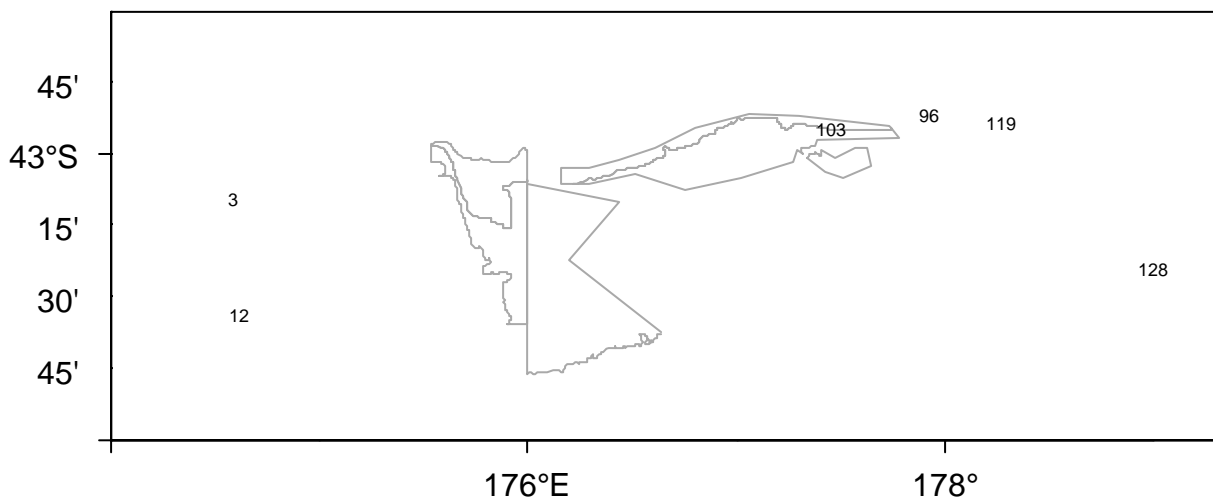


Figure 2: TAN1116 stations where scampi were recorded, and SCI 3 survey strata. Numbers on figure represent station numbers.

Seabed images

Scampi photographic surveys have been conducted in SCI 3 in 2001, 2009 and 2010. From these surveys over 5000 seabed images have been recorded. Images have already been analysed to estimate readable area and quantify scampi and their burrows, but other species have not been recorded. Within this study we have randomly selected 10 images from each of the 158 scampi photographic survey stations, and identified larger visible benthic organisms.

Video and still images were collected around the Chatham Rise during the OS2020 surveys in 2007, and benthic species have already been quantified from these records (for all the video and some of the still image stations). These data have also been examined, from the sites identified in Figure 1.

Trawl survey bycatch

Scampi and middle depths (hoki, hake and ling) trawl survey sampling has been conducted within scampi grounds on the Chatham Rise. Bycatch has been quantified on these surveys, and the information is available at the station level. All scampi trawl survey stations have been within scampi grounds, and are included in the analysis (Figure 3). Middle depth trawl survey stations within the vicinity of the main scampi grounds in SCI 3 have been examined to identify the main bycatch species. The locations of stations included in the analysis are presented in Figure 3.

Commercial fishery bycatch

Ministry of Fisheries (now Ministry for Primary Industries) observers collect information on fish and benthic material bycatch as part of their standard sampling protocol. These data are stored at the individual tow level on the *cod* database. The benthic data recorded from vessels targeting scampi within the vicinity of the main scampi grounds within SCI 3 have been extracted and examined to identify the main bycatch species. The locations of tows included in the analysis are presented in Figure 4.

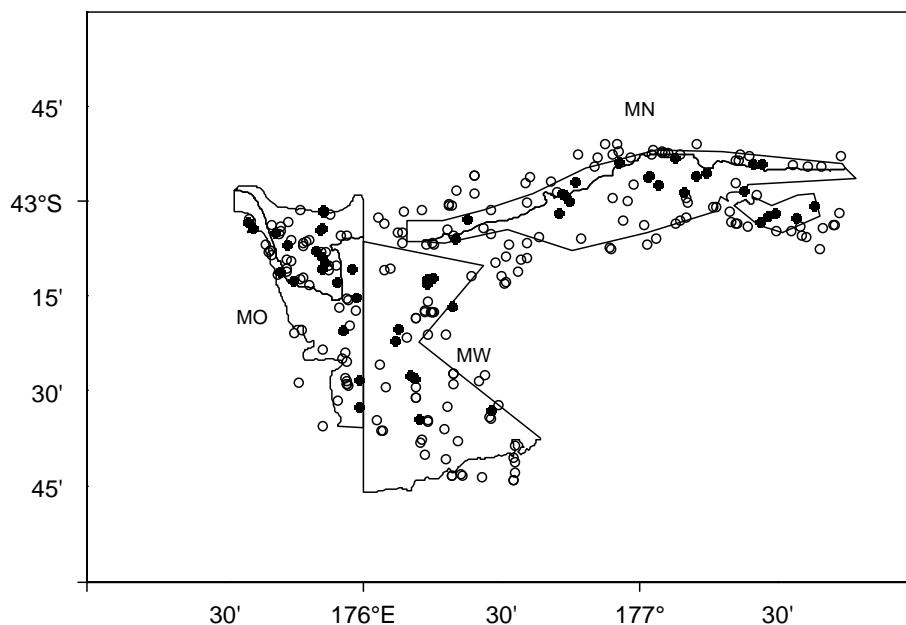


Figure 3: Location of scampi (solid symbols) and middle depth (hollow symbol) trawl survey stations within the vicinity of the main scampi grounds in SCI 3, in relation to SCI 3 survey strata. MN, MO and MW represent three subareas within the fishery.

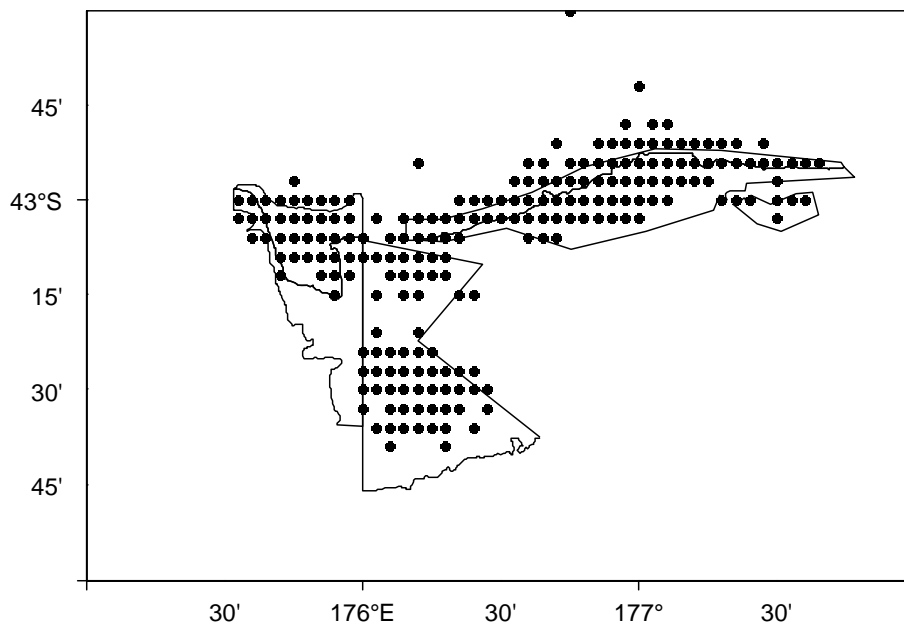


Figure 4: Location (truncated to the tenth of a degree) of commercial tows with observer data recorded, in relation to SCI 3 survey strata.

3. RESULTS

The individual datasets are briefly described below, and an overall list of species identified for further examination is provided.

3.1 Benthic faunal sampling

A full species list by site for the OS2020 beam trawl and sled sampling is provided in Appendix 1. A full species list for the TAN1116 sampling is provided in Appendix 2. A wide range of species were recorded using both sampling approaches. The OS2020 voyages sampled throughout the 24 hour period, while the beam trawl sampling on TAN1116 was conducted during daylight hours.

3.2 Seabed images

A full species list by site for the OS2020 DTIS video sampling is provided in Appendix 3. A full species list by site for the OS2020 DTIS still image sampling, and larger species and features by subarea and year from scampi photographic surveys are provided in Appendix 4. The OS2020 voyages sampled throughout the 24 hour period, while scampi photographic survey work is conducted during hours of daylight. The DTIS system is generally deployed closer to the seabed than the scampi survey system, and also has a higher still image resolution, making direct comparison of data from the two systems difficult (Tuck et al. 2011). A wide range of species were recorded using both the video and still image data from DTIS. The additional analysis of the scampi survey images conducted within this project focussed on larger bodies species.

3.3 Trawl survey bycatch

A full benthic species list by subarea and year for the scampi trawl survey sampling is provided in Appendix 5, with an equivalent benthic species list for the middle depth research trawling provided in Appendix 6. Both of these surveys only sample during the hours of daylight. While the trawl used in the scampi survey is designed for scampi, the middle depths trawl is designed for fish, and the larger groundgear may mean that benthic invertebrates are poorly sampled.

3.4 Commercial fishery bycatch

A full benthic species list for observer sampling from scampi targeted tows within the study area is provided in Appendix 7. While observer sampling has been undertaken since the early 1990s, sampling of benthic bycatch appears to have been variable, and the level of taxonomic identification has also varied considerably over time, generally improving in recent years.

3.5 Species potentially generating burrows that may be confused with scampi

Although a wide range of benthic species have been recorded from the main scampi fishery area within SCI 3, most of these can be discounted as permanent burrow formers. Of the phyla recorded, only Annelida, Arthropoda and Hemichordata are known to form permanent burrows. Some echinoderms, anemones, bivalves and gastropods burrow or live within the surface layers of the sediment, but do not form permanent burrow structures. Polychaete burrows are far smaller than any features likely to be associated with scampi, and so only some of the crustaceans and the hemichordate species recorded in the study area are considered for further examination. The recent checklist of New Zealand Decapoda (Yaldwyn & Webber 2011) was particularly useful in collating general ecological information on this group. Scampi burrows showing the key identification characteristics of a crescent-shaped entrance with smooth flat bottom, a shallow tunnel and well maintained “tracks” are shown in Figure 5 for comparison with other types of burrows.

Amphipoda & Isopoda

Species of both amphipods and isopods are known to form permanent burrows, but given their generally small body size, the burrow openings tend to be quite small. Amphipods have been found in complex burrow systems of multiple interconnected U-shaped narrow elliptical tunnels, with up to 70 slit-like openings (Atkinson et al. 1982).

The predatory and scavenging isopods recorded from the Chatham Rise are thought to spend most of their time within burrows (Wagele & Sieg 1991, Bruce 2009), which may be quite similar to those found for isopods with similar lifestyles elsewhere (Taylor & Moore 1995). These are quite simple vertical shafts or Y-shaped with funnel shaped openings.

Thalassinidae

Mud and ghost shrimps form a range of burrow types, based on feeding patterns and environmental constraints, (Nickell & Atkinson 1995, Bird & Poore 1999). Surface openings tend to be small (approximately 1–2cm in diameter), and may be funnel shaped from the surface with a vertical tunnel, or within an exhalant volcano-like feature.

Galatheids

Squat lobsters are common on scampi grounds, both in Europe and New Zealand, and are frequently observed within the entrances to burrows. Some species of *Munida* are thought to regularly excavate shelters under rocks, but it remains unclear as to whether they are capable of actually generating a burrow themselves, or simply make use of burrows created by other species (Gramitto & Frogliani 1998, Huguet et al. 2005), and they are frequently found within burrows known to be created by other species (Atkinson et al. 1974). Within scampi survey images, *Munida* are often observed walking free on the surface, but when they are associated with burrows, they range considerably in size and form, and do not have the “well maintained” appearance typical of those burrows thought to be associated with scampi (Figure 6).

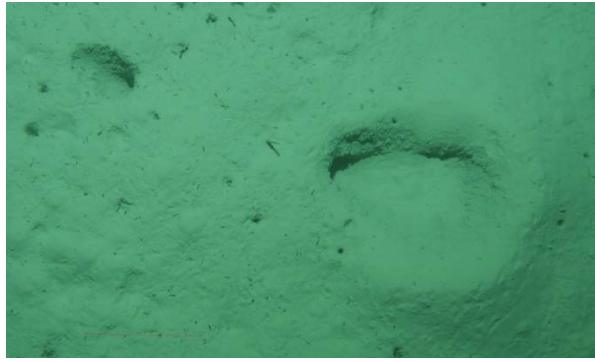
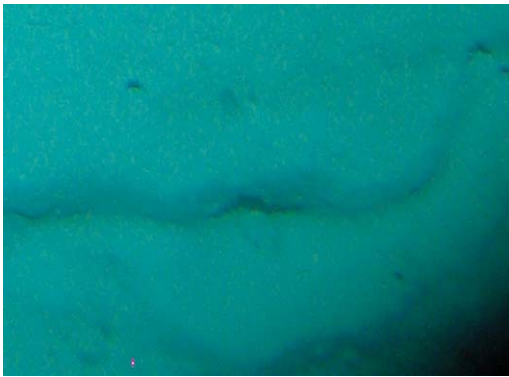


Figure 5: Scampi burrows showing key identification characteristics.

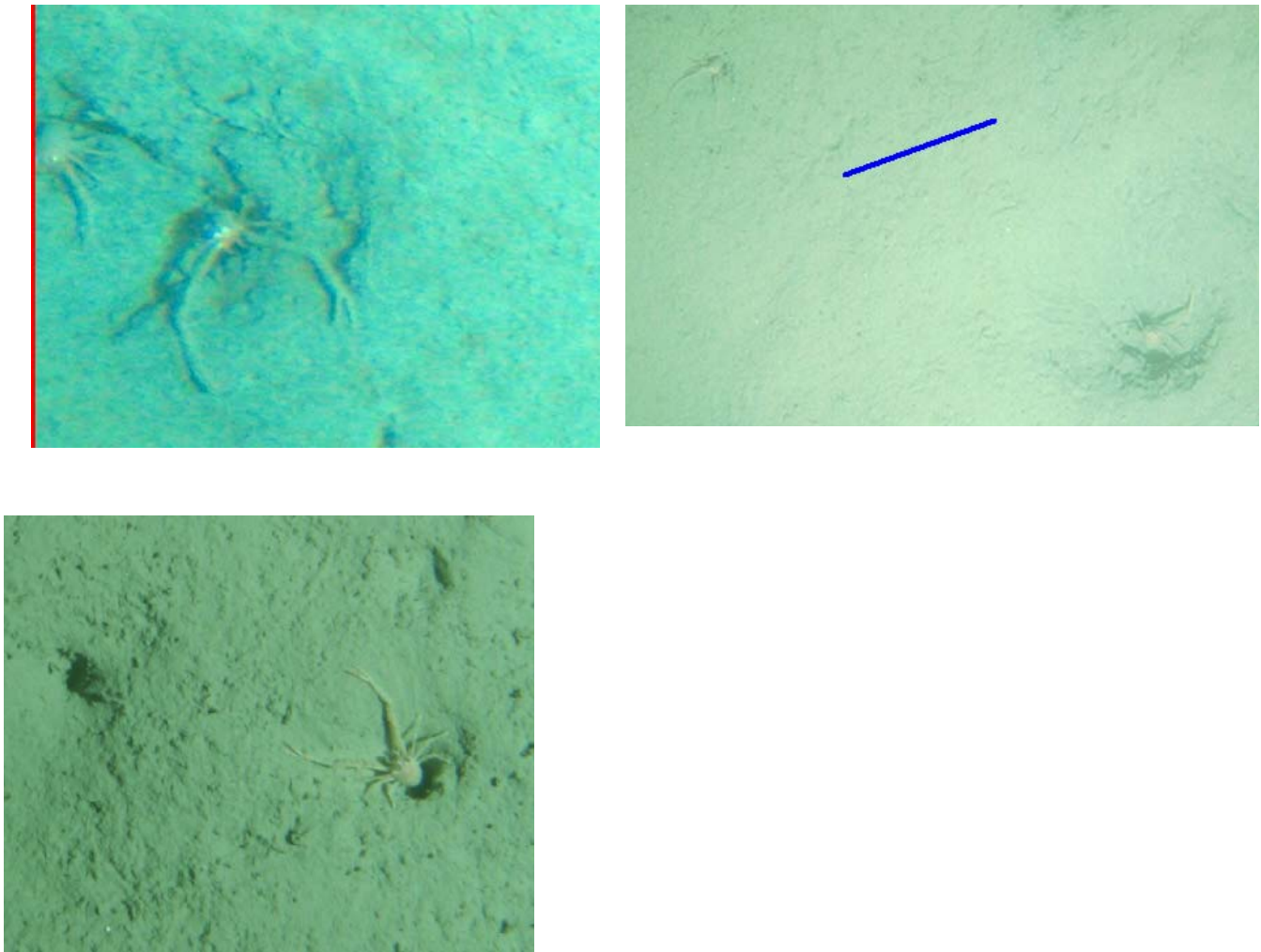


Figure 6: *Munida* associated with different types of burrows within scampi grounds.

Crabs

No deeper water New Zealand crabs have been reported to generate burrows (Yaldwyn & Webber 2011), although both *Pycnoplax* (*Carcinoplax*) *victoriensis* and *Neommatocarcinus huttoni* (not recorded within the data collated for this area, but reported from elsewhere on the Chatham Rise) are members of the Goneplacidae family, which also includes *Goneplax rhomboides*, a crab known to dig burrows in *Nephrops* grounds in Europe. Images of *Goneplax rhomboides*, *Neommatocarcinus huttoni*, and *Pycnoplax victoriensis* are shown in Figure 7.

Morphologically, *N. huttoni* is similar to the European *G. rhomboides* (elongated eyes and eye peducles, wide, transversely rectangular and relatively short carapace) (Castro 2007), suggesting that it may fill a similar burrowing niche (P. Castro, California State Polytechnic University, pers. com.), although in shallower sandy habitats it is reported to make temporary furrows (rather than burrows), leaving the long eye peducles protruding from the sediment (McLay 1988). Elongate eye peducles are considered an adaptation to a burrowing mode of life in brachyuran crabs (Barnes 1968).

Pycnoplax victoriensis has a more rounded body and lacks elongated eye peducles (Figure 7), suggesting that it may not be a burrower, although it is observed within burrow entrances on scampi surveys (Figure 8). It is observed associated with a range of burrow types, and may make burrows and/or make use of burrows generated by other species. On the southern flank of the Chatham Rise, *P. victoriensis* is very abundant, and appears to be associated with small (approximately 25 mm diameter) circular openings (D. Bowden, NIWA, pers. com.). Other

scampi grounds have not been examined within this investigation, but *Pycnoplax victoriensis* appears to be more abundant in SCI 3 than other areas (IDT, pers. obs. and B. Hartill, NIWA, pers. com.).

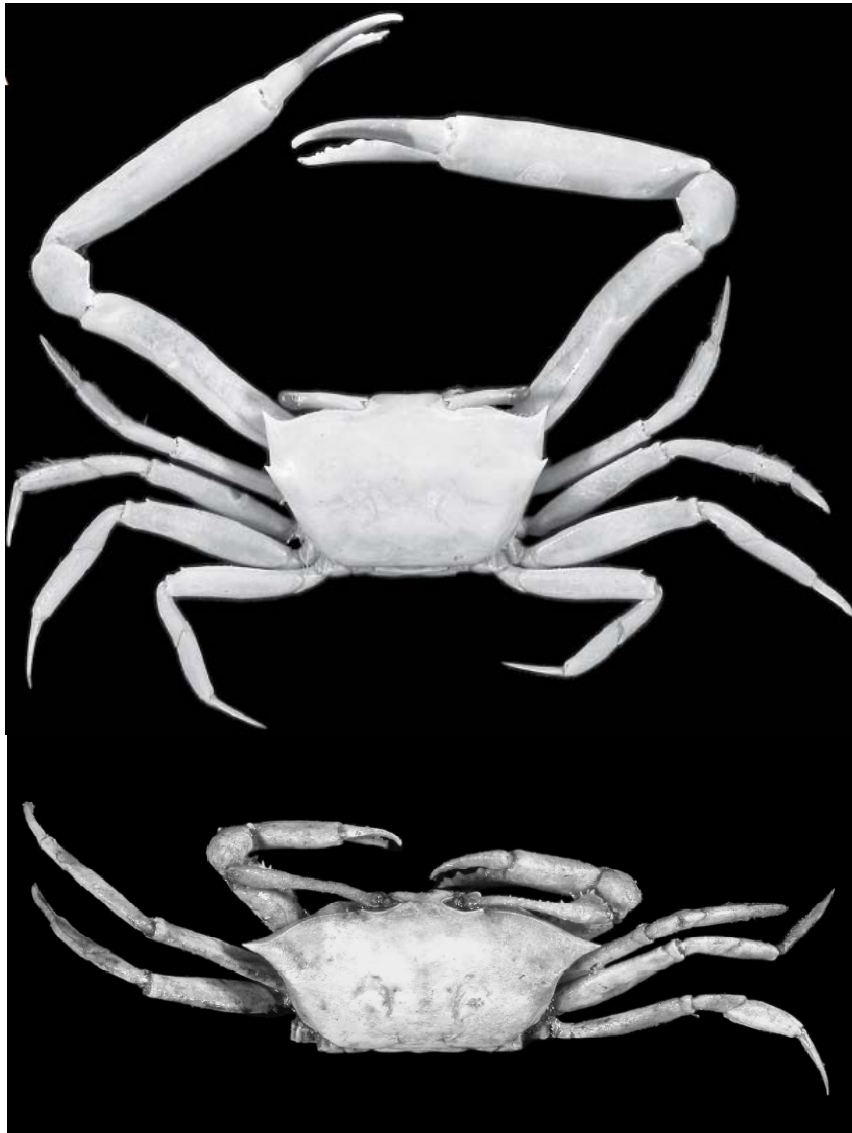


Figure 7: Images of *Gonelpax rhomboides* (European - top), *Neommatocarcinus huttoni* (NZ similar species - middle) and *Pycnoplax victoriensis* (observed in SCI 3 scampi grounds - bottom). Images sources from Castro (2007) and Tracey et al. (2011).

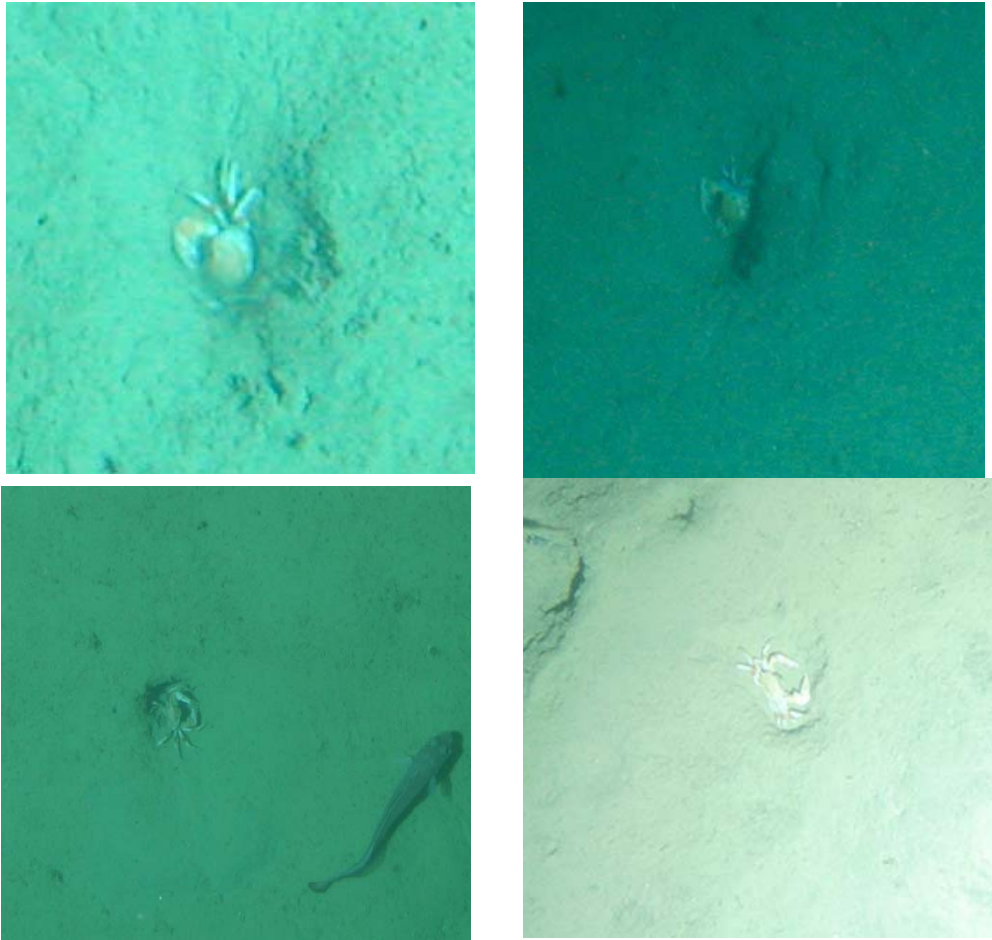


Figure 8: Burrows and surface features associated with *Pycnoplax victoriensis*.

Hemichordata

Enteropneusta form U-shaped burrows in soft sediment, with narrow openings. No Echiuran (spoon) worms were reported in the data examined, although they are likely to be found in muddy seabed areas, and they were reported from other areas within the OS2020 voyages. Echiuran burrows generally have a small surface opening and a narrow neck through which the proboscis extends, the burrow becoming wider below the surface (Hughes et al. 1993, Nickell et al. 1995). Feeding traces (Figure 9) by the proboscis often leave lines radiating out from the burrow opening (Ohta 1984).



Figure 9: Surface trace of Echiuran burrow, showing feeding traces of proboscis.

4. DISCUSSION

The burrows of scampi, *Metanephrops challengeri*, are considered quite distinctive (Figure 5), and following development of the photographic survey approach in New Zealand, a burrow identification protocol was developed from a “library” of images in which *M. challengeri* could be seen associated with burrows (Cryer et al. 2002). The criteria used in survey analysis for defining and counting animals and burrows are provided in Appendix 8. Key characteristics of major burrow openings (those used in the abundance index) are a crescent-shaped entrance with smooth flat bottom, over 50 mm wide at the base, with a shallow rather than vertical tunnel, well maintained “tracks”, typically leading away at right angles from the burrow, fans of excavated sediment and an associated minor opening positioned to form a linear system.

Of the potential other burrowers recorded, only the larger crustaceans (crabs and galatheids) are potentially big enough to generate a comparable burrow. Although the various data sources examined each have potential selectivity issues (sampling during daylight will not collect or observe nocturnal emergers, trawl sampling may miss smaller individuals, visual sampling does not provide a physical specimen to identify), by combining the approaches we should have sampled species of comparable size to scampi that emerge at some time during the day.

It remains unclear as to whether the galatheids recorded in the area excavate burrows, or simply use (and potentially modify) existing ones, but when *Munida* appears associated with a burrow, it does not show the typical scampi burrow features described in Appendix 8. *P. victoriensis* is also observed associated with burrows, but it does not appear to be a “typical burrower” morphologically, and where it has been recorded in high densities, it is associated with a small circular burrow quite different from scampi burrows. *N. huttoni* shows all the morphometric characteristics of a burrowing crab, and may well generate burrows within scampi grounds on the Chatham Rise (although we have no record of it in this specific area yet). However, like *G. rhomboides*, the wide and relatively short carapace means that even at maximum size (approximately 40 mm carapace width; Tracey et al. 2011), burrow openings would only be 30 mm wide, somewhat smaller than that counted for scampi.

Given the reliance on comparison with overseas species, it would be very useful to undertake aquarium studies on some of the species considered within this study, which may help clarify issues over burrowing abilities and burrow morphology.

5. CONCLUSIONS

A range of sources of data on species distributions on the Chatham Rise have been examined to identify the burrowing megafauna within scampi grounds in SCI 3. While a large number of species were recorded in the area, relatively few of them are likely to form permanent burrows of appropriate size to be confused with scampi, and of these, none are actually known to generate burrows. Both galatheids and goneplacids occur on scampi grounds, and are observed within a range of burrows, but galatheids are known to be opportunistic users of other burrows (Atkinson et al. 1974), and if goneplacids do form burrows (probably for *N. huttoni*, given its similar morphology to *G. rhomboides*, uncertain for *P. victoriensis*) it appears unlikely they would be big enough, or have the appropriate characteristics to be counted as scampi burrows.

6. ACKNOWLEDGMENTS

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APPENDIX 1: BENTHIC SPECIES FROM BEAM TRAWL AND SLED (OS2020)

Benthic species recorded by site (Figure 1) from beam trawl and sled sampling within OS2020 voyages.

| Phylum | Class | Order | Species | B073 | B025 | B024 | A010 | B017 | A016 | B067 | A006 | B013 | B062 | C062 | B012 | B065 | D028 | C061 |
|------------|--------------|--------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Annelida | Polychaeta | Amphinomida | Chloeia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Amphinomida | Chloeia inermis | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Eunicida | Eunice | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 0 |
| Annelida | Polychaeta | Eunicida | Hyalinoecia longibranchiata | 12 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 40 | 0 |
| Annelida | Polychaeta | Eunicida | Kinbergonuphis proalopus | 5 | 8 | 4 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Annelida | Polychaeta | Eunicida | Lumbrineridae | 0 | 2 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Annelida | Polychaeta | Oeononidae | Oeononidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Eunicida | Onuphis onuphis-A | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Eunicida | Rhampobranchium averincevi | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Aglaophamus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Aglaophamus macroura | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Glycera | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Glycera knoxi | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Phyllodocida | Glyceridae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Goniada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Phyllodocida | Goniadidae | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Nephtyidae | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Aphrodita talpa | 0 | 0 | 0 | 3 | 0 | 6 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Euphione squamosa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Panthalis novaezealandiae | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Polynoidae | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Sthenolepis magellanica | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Syllidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Sabellida | Frenulata (was Pogonophora) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Sabellida | Galathowenia australis | 2 | 0 | 1 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Sabellida | Oweniidae | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Sabellida | Sabellidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Sabellida | Serpulidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Scolecida | Asychis trifilosus | 4 | 3 | 7 | 36 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 8 |
| Annelida | Polychaeta | Scolecida | Lumbriclymene cylindricauda | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Scolecida | Maldane theodori | 2 | 3 | 1 | 8 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| Annelida | Polychaeta | Scolecida | Metasychis Metasychis-A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Scolecida | Notoproctus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Scolecida | Ophelina | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Scolecida | Phylo novaezealandiae | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Spionida | Chaetopteridae | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Spionida | Paraprionospio coora | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Terebellida | Cirratulidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Terebellida | Ampharetidae | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Annelida | Polychaeta | Terebellida | Lanice | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Annelida | Polychaeta | Terebellida | Terebellidae | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Terebellida | Terebellides | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Annelida | Polychaeta | Terebellida | Trichobranchidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Amphipoda | Byblisoides | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Arthropoda | Malacostraca | Amphipoda | Camacho | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Arthropoda | Malacostraca | Amphipoda | Pardaliscidae | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Alainopasiphaea australis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

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|---------------|---------------|------------------|------------------------------------|---|---|---|---|---|---|---|----|---|----|---|---|---|----|---|
| Arthropoda | Malacostraca | Decapoda | Bellidilia cheesmani | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Brachyura | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Arthropoda | Malacostraca | Decapoda | Campylonotus rathbunae | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Ebalia tuberculosa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | |
| Arthropoda | Malacostraca | Decapoda | Lophopagurus lacertosus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | |
| Arthropoda | Malacostraca | Decapoda | Metacrangon knoxi | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Arthropoda | Malacostraca | Decapoda | Metanephrops challengeri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Arthropoda | Malacostraca | Decapoda | Munida gracilis | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 2 | 0 | 3 | 1 | 1 |
| Arthropoda | Malacostraca | Decapoda | Pycnoplax victoriensis | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 13 | 1 | 9 | 2 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Stereomastis suhmi | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Sympagurus dimorphus | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Trichopeltarion fantasticum | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Arcturides | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Arthropoda | Malacostraca | Isopoda | Bathynathia | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Serolidae | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | |
| Arthropoda | Maxillopoda | Pedunculata | Arcoscalpellum affibricatum | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Maxillopoda | Pedunculata | Smillium acutum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Brachiopoda | Articulata | Terebratulida | Gyrothyris mawsoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bitectipora retepora | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Celleporaria emancipata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Cornucopina | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Melicerita chathamensis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Schizosmittina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chordata | Thaliacea | | Thaliacea [Salps] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | |
| Cnidaria | Anthozoa | Actiniaria | Actiniaria | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | |
| Cnidaria | Anthozoa | Actiniaria | Hormathiidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| Cnidaria | Anthozoa | Alcyonacea | Taiaroa tauhou | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 11 | 1 | 0 | 0 | 4 | 6 | 0 | |
| Cnidaria | Anthozoa | Gorgonacea | Radicipes | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 33 | |
| Cnidaria | Anthozoa | Gorgonacea | Thouarella | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Cnidaria | Anthozoa | Pennatulacea | Anthoptilum | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Cnidaria | Anthozoa | Pennatulacea | Funiculina quadriangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Cnidaria | Anthozoa | Pennatulacea | Halipteris | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Cnidaria | Anthozoa | Pennatulacea | Stylatula | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Cnidaria | Anthozoa | Telestacea | Telesto | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | |
| Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 2 | 0 | 2 | 6 | 1 | 3 |
| Cnidaria | Hydrozoa | Leptothecata | Stegolaria | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Forcipulatida | Pseudechinaster rubens | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Forcipulatida | Zoroaster spinulosus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Paxillosida | Astropectinidae | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| Echinodermata | Asteroidea | Paxillosida | Dipsacaster magnificus | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Paxillosida | Plutonaster sp. B | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Paxillosida | Proserpinaster neozelanicus | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Asteroidea | Paxillosida | Psilaster acuminatus | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | |
| Echinodermata | Asteroidea | Valvatida | Mediaster sladeni | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | |
| Echinodermata | Echinoidea | Echinothurioida | Phormosoma bursarium | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Echinoidea | Echinothurioida | Sperosoma | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| Echinodermata | Echinoidea | Spatangoida | Brissopsis oldhami | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Echinoidea | Spatangoida | Echinocardium lymani | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| Echinodermata | Echinoidea | Spatangoida | Hemiaster expergitus ssp. gibbosus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Echinodermata | Echinoidea | Spatangoida | Spatangus multispinus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Echinodermata | Holothuroidea | Dactylochirotida | Ypsilothuria bitentaculata | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |

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|---------------|---------------|-----------------|----------------------------------|---|---|---|----|---|---|---|---|---|---|---|----|---|---|----|
| Echinodermata | Holothuroidea | Dendrochirotida | Heterothyone alba | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Dendrochirotida | Neoamphicyclus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Dendrochirotida | Neothyonidium armatum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Pentadactyla | Neotadactyla longidentis | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogone violacea | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Holothuroidea | Holothuroidea | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Heteromolpadia pikei | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Molpadia antarctica | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Molpadia musculus | 1 | 0 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Paracaudina chilensis | 0 | 2 | 0 | 0 | 4 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Amphioplus (A.) ctenacantha | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Echinodermata | Ophiuroidea | Ophiurida | Amphiura | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Amphiura dikellacantha | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Amphiura lanceolata | 1 | 6 | 6 | 1 | 1 | 0 | 0 | 6 | 0 | 8 | 0 | 0 | 2 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiacantha otagoensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiomyxa brevirima | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiura irrorata | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Foraminifera | Foraminifera | | Foraminifera | 0 | 0 | 8 | 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| Mollusca | Bivalvia | Myoidea | Cuspidaria | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Myoidea | Cuspidaria fairchildi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Bivalvia | Myoidea | Cuspidaria tuhua | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Bivalvia | Myoidea | Pendaloma micans | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Nuculoidea | Neilo wairoana delli | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Nuculoidea | Poroleda lanceolata | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Nuculoidea | Varinucula gallinacea | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Ostreoida | Veprichlamys kiwaensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Pholadomyoidea | Euciroa galathea | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Bivalvia | Pterioidea | Pododesmus zelandicus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mollusca | Bivalvia | | Bivalvia | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | | Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Mollusca | Gastropoda | Cephalaspidea | Scaphander otagoensis | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Nudibranchia | Nudibranchia | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Mesogastropoda | Falsilunatia powelli | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Mesogastropoda | Falsilunatia subperforata | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Bathytoma parengonius | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Splendrillia benthicola | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Volutomitra banksi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Fusitriton laudandus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Galeodea triganceae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Aeneator recens | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Alcithoe wilsonae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Coluzea mariae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Cominella alertae | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 8 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Cominella mirabilis canturiensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 11 | 6 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Nassarius ephamillus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Penion chathamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Poirieria zelandica | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Vetigastropoda | Archiminolia meridiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Scaphopoda | Dentaliida | Fissidentalium zelandicum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 |
| Mollusca | Scaphopoda | | Scaphopoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Nemertea | Nemertea | Nemertea | Nemertea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Porifera | Demospongiae | Poecilosclerida | Biemna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Poecilosclerida | Fibulia | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | | |
|-----------|----------------|-----------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Porifera | Demospongiae | Poecilosclerida | Ophlitaspongia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Poecilosclerida | Tedania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Spirophorida | Fangophilina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Porifera | Hexactinellida | Lyssacosida | Hyalascus | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Sipuncula | Sipunculidea | | Sipunculidea | 5 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |

APPENDIX 2: BENTHIC SPECIES FROM BEAM TRAWL (TAN1116)

Benthic species recorded by site (Figure 2) from beam trawl sampling within TAN1116.

| Phylum | Class | Order | species | 3 | 12 | 96 | 103 | 119 | 128 |
|---------------|--------------|-----------------|-------------------------------|-----|----|-----|-----|-----|-----|
| Annelida | Polychaeta | Amphinomida | Chloelia inermis | 0 | 0 | 0 | 1 | 0 | 0 |
| Annelida | Polychaeta | Eunicida | Hyalinoecia | 0 | 26 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Aphrodita | 0 | 0 | 0 | 1 | 0 | 0 |
| Annelida | Polychaeta | Phyllodocida | Polynoidae | 2 | 0 | 0 | 0 | 0 | 0 |
| Annelida | Polychaeta | | Polychaeta | 6 | 2 | 1 | 16 | 0 | 3 |
| Arthropoda | Malacostraca | Amphipoda | Amphipoda | 0 | 0 | 0 | 1 | 0 | 4 |
| Arthropoda | Malacostraca | Amphipoda | Oedicerotidae | 1 | 4 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Campylonotus rathbunae | 69 | 9 | 13 | 7 | 46 | 34 |
| Arthropoda | Malacostraca | Decapoda | Caridea | 0 | 1 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crangonidae | 0 | 13 | 0 | 43 | 0 | 13 |
| Arthropoda | Malacostraca | Decapoda | Gastroptrychus novaezelandiae | 1 | 0 | 0 | 0 | 1 | 0 |
| Arthropoda | Malacostraca | Decapoda | Goreopagurus poorei | 0 | 1 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Lipkius holthuisi | 0 | 0 | 0 | 0 | 14 | 0 |
| Arthropoda | Malacostraca | Decapoda | Majidae | 0 | 1 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Metacrangon | 0 | 15 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Metanephrops challenger | 6 | 1 | 7 | 7 | 3 | 1 |
| Arthropoda | Malacostraca | Decapoda | Munida | 0 | 0 | 1 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Munida gracilis | 201 | 64 | 60 | 26 | 18 | 174 |
| Arthropoda | Malacostraca | Decapoda | Notocrangon | 16 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Notopandalus magnoculus | 0 | 0 | 0 | 13 | 18 | 83 |
| Arthropoda | Malacostraca | Decapoda | Pasiphaea | 70 | 26 | 19 | 9 | 42 | 0 |
| Arthropoda | Malacostraca | Decapoda | Phylladorhynchus | 4 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Polychelidae | 1 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Polychelidae | 0 | 0 | 2 | 0 | 12 | 0 |
| Arthropoda | Malacostraca | Decapoda | Prionocrangon curvicaulus | 1 | 0 | 0 | 2 | 0 | 7 |
| Arthropoda | Malacostraca | Decapoda | Propagurus deprofundis | 2 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Pteropeltarion novaezelandiae | 0 | 0 | 0 | 1 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Pycnoplax | 123 | 0 | 23 | 41 | 6 | 1 |
| Arthropoda | Malacostraca | Decapoda | Sergestes | 0 | 3 | 1 | 1 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Sympagurus dimorphus | 5 | 0 | 0 | 0 | 1 | 2 |
| Arthropoda | Malacostraca | Decapoda | Teratomaia | 0 | 0 | 1 | 0 | 0 | 1 |
| Arthropoda | Malacostraca | Decapoda | Thalassinidea | 2 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Trichopeltarion fantasticum | 1 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Aegidae | 0 | 1 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Brucerolis | 795 | 61 | 363 | 17 | 326 | 60 |
| Arthropoda | Malacostraca | Isopoda | Isopoda | 0 | 0 | 0 | 0 | 1 | 0 |
| Arthropoda | Malacostraca | Isopoda | Sphaeromatidae | 0 | 0 | 0 | 0 | 0 | 12 |
| Arthropoda | Malacostraca | Mysida | Mysida | 3 | 2 | 12 | 0 | 22 | 0 |
| Brachiopoda | | | Brachiopoda | 0 | 0 | | | | |
| Bryozoa | | | Bryozoa | 0 | 0 | 0 | 0 | 0 | 17 |
| Chordata | Ascidiacea | | Tunicates | 0 | 2 | 2 | 9 | 0 | 14 |
| Cnidaria | Anthozoa | Actiniaria | Actiniaria | 0 | 1 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Actinostolidae | 1 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Bolocera | 1 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Alcyonacea | 0 | 0 | 0 | 0 | 0 | 3 |
| Cnidaria | Anthozoa | Alcyonacea | Anthomastus zealandicus | 1 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Taiaroa tauhou | 0 | 0 | 0 | 1 | 0 | 7 |
| Cnidaria | Anthozoa | Gorgonacea | Radicipes | 3 | 0 | 0 | 0 | 1 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Thouarella | 0 | 0 | 0 | 0 | 0 | 3 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea | 4 | 3 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Caryophyllia | 0 | 0 | 0 | 0 | 0 | 12 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum | 0 | 1 | 0 | 0 | 0 | 4 |
| Echinodermata | Asteroidea | Forcipulatida | Asteriidae | 0 | 0 | 0 | 0 | 0 | 1 |
| Echinodermata | Asteroidea | Forcipulatida | Zoroaster | 0 | 0 | 0 | 13 | 0 | 2 |
| Echinodermata | Asteroidea | Notomyotida | Benthopecten | 0 | 0 | 0 | 0 | 0 | 2 |
| Echinodermata | Asteroidea | Paxillosida | Astropectinidae | 0 | 0 | 1 | 0 | 0 | 3 |
| Echinodermata | Asteroidea | Paxillosida | Plutonaster knoxi | 0 | 0 | 0 | 0 | 1 | 0 |
| Echinodermata | Asteroidea | Paxillosida | Psilaster | 0 | 2 | 1 | 2 | 0 | 0 |
| Echinodermata | Asteroidea | Spinulosida | Henricia | 0 | 1 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Velatida | Crossaster | 0 | 0 | 0 | 0 | 1 | 0 |
| Echinodermata | Asteroidea | Velatida | Pterasteridae | 0 | 0 | 0 | 0 | 0 | 1 |
| Echinodermata | Asteroidea | | Asteroidea | 2 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Cidaroida | Cidaridae | 2 | 0 | 0 | 0 | 0 | 2 |
| Echinodermata | Echinoidea | Cidaroida | Goniocidarid parasol | 1 | 0 | 0 | 0 | 0 | 3 |
| Echinodermata | Echinoidea | Echinothurioida | Phormosoma | 0 | 30 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Echinothurioida | Phormosoma bursarium | 2 | 0 | 1 | 0 | 9 | 9 |
| Echinodermata | Echinoidea | Spatangoida | Brissopsis | 0 | 0 | 0 | 20 | 0 | 0 |
| Echinodermata | Echinoidea | Spatangoida | Brissopsis oldhami | 0 | 0 | 5 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Spatangoida | Echinocardium | 0 | 0 | 0 | 0 | 0 | 67 |
| Echinodermata | Echinoidea | Spatangoida | Echinocardium lymani | 0 | 0 | 3 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Spatangoida | Hemiaster | 0 | 0 | 10 | 0 | 0 | 0 |

| | | | | | | | | | |
|---------------|----------------|-----------------|-------------------------|----|---|---|----|---|-----|
| Echinodermata | Echinoidea | Spatangoida | Spatangidae | 0 | 0 | 0 | 0 | 0 | 20 |
| Echinodermata | Echinoidea | Spatangoida | Spatangus multispinus | 0 | 0 | 0 | 0 | 0 | 105 |
| Echinodermata | Echinoidea | Temnopleuroidea | Pseudechinus flemingi | 0 | 3 | 0 | 0 | 0 | 1 |
| Echinodermata | Echinoidea | | Echinoidea | 1 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores | 0 | 8 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Dendrochirotida | Psolidae | 0 | 0 | 0 | 0 | 0 | 9 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogonidae | 0 | 0 | 0 | 0 | 0 | 1 |
| Echinodermata | Holothuroidea | Molpadiida | Molpadia | 0 | 0 | 0 | 2 | 0 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Molpadia musculus | 0 | 0 | 1 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Molpadiida | Molpadiidae | 2 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Euryalinida | Astrothorax | 0 | 0 | 0 | 1 | 0 | 0 |
| Echinodermata | Ophiuroidea | | Ophiuroidea | 5 | 0 | 8 | 45 | 0 | 27 |
| Hydrozoa | Hydrozoa | Anthoathecata | Calyptopora | 0 | 0 | 0 | 0 | 0 | 3 |
| Hydrozoa | Hydrozoa | | Hydrozoa | 0 | 0 | 2 | 0 | 0 | 1 |
| Mollusca | Bivalvia | Myoida | Cuspidaria | 0 | 4 | 0 | 5 | 0 | 0 |
| Mollusca | Bivalvia | Ostreoida | Pectinidae | 0 | 0 | 0 | 0 | 0 | 13 |
| Mollusca | Bivalvia | | Bivalvia | 3 | 0 | 0 | 2 | 0 | 0 |
| Mollusca | Cephalopoda | Octopoda | Octopodidae | 0 | 0 | 0 | 0 | 0 | 1 |
| Mollusca | Cephalopoda | Octopoda | Octopus mernoo | 2 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | Sepiida | Sepioloidea | 0 | 0 | 0 | 0 | 0 | 1 |
| Mollusca | Cephalopoda | Teuthida | Teuthida | 0 | 1 | 1 | 0 | 0 | 0 |
| Mollusca | Gastropoda | | Gastropoda | 14 | 1 | 1 | 3 | 0 | 1 |
| Mollusca | Gastropoda | Cephalaspidea | Scaphander | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Gastropoda | Nudibranchia | Nudibranchia | 0 | 0 | 0 | 0 | 4 | 3 |
| Mollusca | Gastropoda | Neogastropoda | Turridae | 0 | 0 | 0 | 1 | 0 | 1 |
| Mollusca | Gastropoda | Neotaenioglossa | Fusitriton magellanicus | 4 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Stenoglossa | Coluzea | 0 | 0 | 0 | 1 | 0 | 0 |
| Mollusca | Polyplacophora | Ischnochitonida | Chitonidae | 0 | 0 | 0 | 0 | 0 | 1 |
| Mollusca | Scaphopoda | | Scaphopoda | 0 | 0 | 0 | 2 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Thenea | 5 | 0 | 0 | 0 | 0 | 1 |
| Porifera | Demospongiae | Hadromerida | Suberites | 0 | 0 | 0 | 0 | 0 | 2 |
| Porifera | Demospongiae | | Demospongiae | 0 | 0 | 0 | 0 | 0 | 2 |
| Porifera | Hexactinellida | Lyssacinoida | Hyalascus | 0 | 0 | 0 | 0 | 0 | 1 |
| Porifera | | | Porifera | 0 | 0 | 0 | 0 | 0 | 4 |
| Sipuncula | | | Sipuncula | 0 | 0 | | | | |

APPENDIX 3: BENTHIC SPECIES FROM DTIS VIDEO (OS2020)

Benthic species recorded by site (Figure 1) from DTIS video sampling within OS2020 voyages (other stations below). Counts standardised to 1000m transect (1.5m wide).

| Phylum | Class | Order | Species | B073 | B025 | C025 | B024 | A010 | C026 | C011 | B017 | A016 | D009 | D010 |
|-------------|--------------|---------------|--------------------------------|-------|------|--------|-------|-------|--------|-------|------|-------|-------|------|
| Annelida | Polychaeta | Aciculata | Quill worm | 64.78 | 0 | 160.53 | 32.25 | 10.6 | 633.09 | 3.45 | 0 | 0 | 2.77 | 0 |
| Arthropoda | Malacostraca | Decapoda | Atelecyclidae | 4.63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Carcinoplax victoriensis | 0 | 0.71 | 0.86 | 0 | 0 | 4.92 | 0 | 1.24 | 1.04 | 0.92 | 5.81 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (crab) | 6.61 | 0.71 | 0 | 0 | 0 | 0.61 | 0.86 | 1.24 | 0 | 0 | 1.94 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (galatheid) | 0.66 | 0 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (lobster) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (pagurid) | 32.39 | 14.9 | 55.24 | 27.12 | 30.78 | 81.75 | 19 | 8.06 | 26.2 | 39.72 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (scampi) | 0 | 0 | 0 | 0 | 2.15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (shrimp) | 0.66 | 0.71 | 0 | 0.73 | 1.7 | 0.61 | 0 | 0 | 2.36 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Galatheididae | 7.27 | 0 | 0 | 5.86 | 29.71 | 0 | 0 | 5.58 | 4.73 | 4.62 | 0 |
| Arthropoda | Malacostraca | Decapoda | Goneplacidae | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0.62 | 0 | 0 | 0.97 |
| Arthropoda | Malacostraca | Decapoda | Inachidae | 0 | 0 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Lithodidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Metanephrops challengeri | 0.66 | 2.84 | 2.59 | 1.47 | 4.04 | 1.23 | 1.73 | 2.48 | 1.04 | 5.54 | 0.97 |
| Arthropoda | Malacostraca | Decapoda | Munida gracilis | 0.66 | 8.51 | 12.95 | 0.73 | 0 | 3.07 | 8.64 | 0 | 0 | 95.14 | 1.94 |
| Arthropoda | Malacostraca | Decapoda | Nematocarcinus sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Teratomaia richardsoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Trichopeltarion fantasticum | 0 | 0 | 0.86 | 1.47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Acutiserolis spp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Isopoda | Isopoda | 4.63 | 0 | 0 | 0.73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brachiopoda | | | Brachiopods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoan - Branched coral-like | 0 | 0 | 5.18 | 1.47 | 4.93 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoan - bushy form | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoan - Lacy fan forms | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chordata | Ascidiacea | | Ascidians (solitary) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chordata | Thaliacea | | Salp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anemones | 0.66 | 0.71 | 2.59 | 4.4 | 30.34 | 5.53 | 0.86 | 0 | 8.13 | 2.77 | 0.97 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 12 | 0 | 0 | 0 | 0 | 0 | 1.23 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 2 | 1.32 | 0 | 1.73 | 2.93 | 10.86 | 65.77 | 1.73 | 0 | 26.85 | 0 | 0.97 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 3 | 0 | 0.71 | 0 | 0 | 0 | 4.3 | 26.78 | 0 | 18.35 | 0 | 0.97 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 5 | 3.97 | 0 | 0 | 0 | 3.41 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.04 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Alcyonacea | 26.44 | 0 | 5.18 | 0 | 11.33 | 0 | 0 | 0 | 3.97 | 0 | 3.87 |
| Cnidaria | Anthozoa | Alcyonacea | Anthomastus sp. | 0.66 | 0 | 107.88 | 0 | 6.74 | 5.53 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Taiaroa tauhou | 26.44 | 0 | 5.18 | 0 | 0 | 0 | 0 | 0 | 3.97 | 0 | 0 |
| Cnidaria | Anthozoa | Ceriantheria | Ceriantheria spp | 0.66 | 0 | 4.32 | 2.2 | 5.04 | 0 | 0 | 3.1 | 2.36 | 10.16 | 0 |

| | | | | | | | | | | | | | | |
|----------------|---------------|------------------|---------------------------------------|------|------|-------|--------|--------|------|------|------|------|-------|-------|
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Coralliidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Gorgonacea | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Isididae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Radicipes spp | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.97 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Stephanocyathus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Desmophyllum/Caryophyllia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum | 15.2 | 0 | 45.74 | 25.65 | 241.77 | 0.61 | 2.59 | 1.24 | 0 | 9.24 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum loure kexeii | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum rubrum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Zoanthidea | Zoanthidea | 0 | 0 | 1.73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | | Corals (hard) | 0 | 0 | 0.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Brisingida | Brisingida | 0.66 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | | Asteroid | 0.66 | 0 | 1.73 | 0 | 5.74 | 0.61 | 2.59 | 0.62 | 0 | 2.77 | 0.97 |
| Echinoderamata | Echinoidea | | Echinoid | 0 | 0.71 | 0 | 0 | 1.7 | 0 | 0 | 0 | 1.32 | 3.69 | 4.84 |
| Echinoderamata | Holothuroidea | | Holothurian | 0.66 | 0 | 0 | 1.47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Ophiuroidea | | Ophiuroid | 0 | 0 | 0 | 0 | 1.26 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Brisingida | Brisingid 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Brisingida | Brisingid 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Brisingida | Brisingid 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Forcipulatida | Asteriidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.92 | 0 |
| Echinoderamata | Asteroidea | Forcipulatida | Zoroaster sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Forcipulatida | Zoroasteridae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Forcipulatida | Zoroasteridae/Asteriidae | 0 | 3.55 | 5.18 | 0.73 | 1.7 | 0 | 0.86 | 1.24 | 3.4 | 9.24 | 5.81 |
| Echinoderamata | Asteroidea | Notomyotida | Benthopectinidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Paxillosida | Astromesites/Psilaster/Proserpinaster | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.97 | 0 | 0 |
| Echinoderamata | Asteroidea | Paxillosida | Astropectinidae | 1.32 | 0 | 0 | 0 | 0 | 0 | 0 | 6.82 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Paxillosida | Dipsacaster magnificus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Paxillosida | Plutonaster/Dytaster | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.86 | 0 | 5.54 | 31.93 |
| Echinoderamata | Asteroidea | Paxillosida | Radiasteridae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Spinulosida | Crossaster multispinus | 0 | 0 | 0 | 0 | 30.3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Spinulosida | Echinasteridae | 0 | 0 | 0.86 | 0 | 0 | 0.61 | 0.86 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Spinulosida | Solaster torulatus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Spinulosida | Solasteridae | 4.63 | 0 | 48.33 | 101.14 | 48.74 | 3.07 | 0 | 4.34 | 0 | 11.08 | 17.42 |
| Echinoderamata | Asteroidea | Valvatida | Goniasteridae | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Valvatida | Lithosoma novaezealandiae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Valvatida | Lithosoma/Pseudarchaster | 1.32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Valvatida | Mediaster sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.04 | 0 | 0 |
| Echinoderamata | Asteroidea | Valvatida | Pillsburiaster sp | 0 | 0 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Asteroidea | Valvatida | Plinthaster/Ceramaster | 0 | 0 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinoderamata | Crinoidea | Comatulida | Crinoidea (motile) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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|---------------|---------------|-------------------|---------------------------------|------|--------|--------|-------|--------|-------|--------|-------|-------|--------|--------|
| Echinodermata | Echinoidea | Cidaroida | Cidaridae | 3.97 | 45.4 | 6.04 | 0 | 5.11 | 4.3 | 0 | 1.86 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Cidaroida | Gonicidaris sp | 0 | 0 | 0 | 7.33 | 0 | 0 | 0 | 0 | 0 | 39.72 | 0 |
| Echinodermata | Echinoidea | Cidaroida | Ogmicidaris benhami | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Echinoida | Echinoida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Echinoida | Gracilechinus multidentatus | 0 | 0 | 0 | 0 | 0 | 0.61 | 0 | 0 | 0 | 3.69 | 0 |
| Echinodermata | Echinoidea | Echinothurioida | Echinothuriidae/Phormosomatidae | 0 | 0 | 0 | 0 | 2.15 | 0 | 131.29 | 2.48 | 1.04 | 0.92 | 15.48 |
| Echinodermata | Echinoidea | Echinothurioida | Phormosoma bursarium | 0 | 0 | 18.99 | 11.73 | 13.19 | 0.61 | 5.18 | 11.17 | 18.92 | 14.78 | 47.42 |
| Echinodermata | Echinoidea | Spatangoida | Spatangidae | 9.92 | 170.94 | 9.49 | 17.59 | 9.52 | 0 | 0 | 13.03 | 0 | 110.85 | 124.83 |
| Echinodermata | Echinoidea | Spatangoida | Spatangus sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores moseleyi | 0.66 | 0 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores sulcatus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Pseudostichopus mollis | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Synallactidae | 0 | 7.09 | 0 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Deimatidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Enypniastes eximia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogone sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogonidae | 0 | 0 | 1.73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiomyxa brevirima | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiurida unspecified | 9.92 | 5.67 | 0.86 | 5.13 | 0 | 4.3 | 0 | 0 | 0 | 0 | 0 |
| Foraminifera | | | Foram (giant) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemichordata | Enteropneusta | | Hemichordate | 0 | 0 | 0 | 0 | 0 | 1.84 | 0 | 0 | 0 | 0 | 0 |
| Hydrozoa | Hydrozoa | Leptothecatae | Hydroids | 1.32 | 0 | 106.16 | 0.73 | 114.52 | 1.23 | 0 | 66.37 | 3.4 | 36.02 | 12.58 |
| Mollusca | Cephalopoda | Octopoda | Graneledone sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | Octopoda | Octopodinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | Teuthida | Squid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | | Octopod | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Archaeogastropoda | Calliostoma alertae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Buccinidae | 0 | 0 | 3.45 | 1.47 | 0 | 12.29 | 5.18 | 0 | 4.73 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Olividae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Penion sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Turbinellidae | 0 | 0 | 0 | 0 | 0 | 0.61 | 0 | 0 | 1.04 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Turridae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Volutidae | 3.97 | 0.71 | 5.18 | 0 | 1.26 | 0 | 0 | 0 | 2.36 | 0.92 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Cassidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Fusitriton magellanicus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Ranellidae | 5.29 | 0.71 | 0 | 0 | 0 | 0 | 0 | 0.62 | 0 | 0 | 0 |
| Mollusca | Gastropoda | | Mollusc (gastropod) | 6.61 | 0 | 1.73 | 0 | 4.93 | 1.23 | 0 | 0.62 | 0 | 1.85 | 0 |
| Mollusca | | | Mollusc (opisthobranch) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | Molluscs (bivalves) | 0 | 0 | 0.86 | 0 | 0.63 | 0 | 0 | 0 | 0 | 0.92 | 0 |
| Mollusca | | | Scaphopoda | 0 | 0 | 0.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Astrophorid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Geodia regina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.92 | 0 |
| Porifera | Demospongiae | Astrophorida | Geodinella vestigifera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Hadromerida | Suberites affinis | 0 | 0 | 0 | 0 | 0 | 0.61 | 0 | 0 | 0 | 1.85 | 0 |
| Porifera | Demospongiae | Lithistida | Awhiowhio sepulchrum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Lithistida | Lithistid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Spirophorida | Tetilla leptoderma | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | | Encrusting sponges | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | | Sponge (demospongiae) | 0.66 | 0 | 0.86 | 0.73 | 0 | 0 | 0.86 | 0.62 | 0 | 9.24 | 0 |

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|----------|----------------|----------------|--------------------------|---|---|------|---|---|---|---|------|---|------|---|
| Porifera | Hexactinellida | Amphidiscosida | Hyalonema sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | Hexactinosida | Hexactinosida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | Lyssacosida | Hyalascus n. sp | 0 | 0 | 3.45 | 0 | 0 | 0 | 0 | 0.62 | 0 | 2.77 | 0 |
| Porifera | Hexactinellida | | Sponge (hexactinellidae) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.62 | 0 | 0 | 0 |

| Phylum | Class | Order | Species | D011 | D015 | B067 | A006 | B013 | B062 | C062 | B012 | B065 | D028 | C061 |
|-------------|--------------|------------------|-------------------------------|-------|-------|------|-------|------|-------|-------|------|-------|--------|-------|
| Annelida | Polychaeta | Aciculata | Quill worm | 0 | 0 | 0 | 0.79 | 4.84 | 0 | 0.78 | 0 | 0 | 0 | 0.74 |
| Arthropoda | Malacostraca | Decapoda | Atelecyclidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Carcinoplax victoriensis | 0 | 0 | 0 | 40.99 | 0.97 | 0 | 0 | 0 | 9.07 | 6 | 20.83 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (crab) | 0 | 0 | 0 | 1.84 | 0 | 0.78 | 0 | 0 | 3.02 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (galatheid) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (lobster) | 0 | 0.95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (pagurid) | 2.46 | 8.21 | 7.84 | 2.63 | 2.9 | 5.48 | 0 | 3.88 | 0 | 107.25 | 5.95 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (scampi) | 0 | 0 | 0 | 1.84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Crustacean (shrimp) | 0.82 | 4.68 | 1.74 | 8.7 | 2.9 | 3.91 | 0 | 1.94 | 0 | 3.75 | 2.98 |
| Arthropoda | Malacostraca | Decapoda | Galatheididae | 0 | 0.95 | 0 | 0 | 0 | 2.35 | 0 | 0 | 1.51 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Goneplacidae | 0 | 0 | 0.87 | 0 | 0 | 4.69 | 5.48 | 0 | 0 | 0.75 | 5.21 |
| Arthropoda | Malacostraca | Decapoda | Inachidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Lithodidae | 0 | 0 | 0 | 0.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Metanephrops challengeri | 4.09 | 3.52 | 0.87 | 10.41 | 2.9 | 4.69 | 26.61 | 0.65 | 1.51 | 0.75 | 9.67 |
| Arthropoda | Malacostraca | Decapoda | Munida gracilis | 49.12 | 0 | 0 | 8.31 | 48.4 | 100.9 | 19.57 | 5.82 | 16.63 | 36 | 8.93 |
| Arthropoda | Malacostraca | Decapoda | Nematocarcinus sp. | 0 | 4.75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Teratomaia richardsoni | 0 | 0 | 0.87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Malacostraca | Decapoda | Trichopeltarion fantasticum | 0 | 0 | 0 | 0 | 1.94 | 0 | 0 | 0 | 0 | 12.75 | 0.74 |
| Arthropoda | Malacostraca | Isopoda | Acutiserolis spp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.74 |
| Arthropoda | Malacostraca | Isopoda | Isopoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brachiopoda | | | Brachiopods | 0 | 0 | 0 | 0 | 0 | 2.35 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoans | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoa - Branched coral-like | 0 | 0 | 0 | 0 | 0 | 3.91 | 0 | 0 | 0 | 0.75 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoa - bushy form | 0 | 44.05 | 2.61 | 26.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bryozoa | Gymnolaemata | Cheilostomata | Bryozoa - Lacy fan forms | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Chordata | Ascidiacea | | Ascidians (solitary) | 0 | 0 | 0 | 0 | 0 | 32.85 | 0 | 0 | 0 | 0 | 0 |
| Chordata | Thaliacea | | Salp | 0 | 0 | 0 | 1.71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anemones | 3.27 | 3.66 | 0 | 1.84 | 2.9 | 1.56 | 0 | 0 | 0 | 4.5 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.29 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 16 | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 2 | 1.64 | 0 | 0 | 0 | 0 | 0 | 1.57 | 0 | 0 | 1.5 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 3 | 20.46 | 0 | 0 | 0 | 0.97 | 6.26 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 4 | 0 | 0 | 0 | 0 | 1.94 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 5 | 0 | 4.41 | 0 | 2.51 | 2.9 | 1.56 | 0 | 3.23 | 0 | 3.75 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 7 | 0 | 0 | 4.35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Actiniaria | Anenome uni 9 | 0 | 1.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Alcyonacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Anthomastus sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Alcyonacea | Taiaroa tauhou | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 0 |
| Cnidaria | Anthozoa | Ceriantheria | Ceriantheria spp | 0 | 0.88 | 0 | 6.72 | 0.97 | 2.35 | 0.78 | 0 | 0 | 4.5 | 3.72 |
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia | 0 | 1.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia 1 | 0 | 2.85 | 0 | 0.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Corallimorpharia | Corallimorpharia 3 | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Coralliidae | 0 | 0 | 0.87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Gorgonacea | Gorgonacea | 0 | 2.64 | 4.35 | 0.92 | 0 | 0.78 | 0.78 | 0 | 0 | 0.75 | 11.16 |
| Cnidaria | Anthozoa | Gorgonacea | Isididae | 0 | 5.29 | 1.74 | 3.55 | 0 | 0 | 0 | 0 | 0 | 0 | 5.21 |

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|---------------|---------------|-----------------|---------------------------------------|-------|--------|--------|-------|------|-------|------|------|------|------|------|
| Cnidaria | Anthozoa | Gorgonacea | Radicipes spp | 0 | 40.53 | 92.32 | 54.45 | 0 | 0 | 0 | 0 | 0 | 0.75 | 5.21 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea | 0 | 1.76 | 1.74 | 6.86 | 0 | 0 | 0 | 0 | 0 | 4.5 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 1 | 0 | 6.24 | 0.87 | 78.1 | 0 | 0 | 0 | 0 | 0 | 10.5 | 4.46 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 2 | 0 | 28.19 | 135.87 | 84.49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 3 | 0 | 1.76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.7 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 4 | 0 | 0 | 0 | 0.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Pennatulacea | Pennatulacea 5 | 0 | 13.22 | 222.1 | 5.01 | 0 | 0 | 13.3 | 0 | 0 | 0.75 | 7.44 |
| Cnidaria | Anthozoa | Scleractinia | Stephanocyathus spp. | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Desmophyllum/Caryophyllia | 0 | 0 | 0 | 0 | 0 | 10.17 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum | 2.46 | 0.95 | 0.87 | 0 | 1.94 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum loure kexei | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.75 | 0 |
| Cnidaria | Anthozoa | Scleractinia | Flabellum rubrum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.25 | 0 |
| Cnidaria | Anthozoa | Zoanthidea | Zoanthidea | 0 | 2.85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | Anthozoa | | Corals (hard) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Brisingida | Brisingida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | | Asteroid | 0.82 | 1.83 | 0.87 | 0 | 0 | 0.78 | 0.78 | 3.88 | 4.54 | 0.75 | 0.74 |
| Echinodermata | Echinoidea | | Echinoid | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | | Holothurian | 0.82 | 1.76 | 3.48 | 3.17 | 0 | 0 | 0 | 4.53 | 1.51 | 0 | 0 |
| Echinodermata | Ophiuroidea | | Ophiuroid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Brisingida | Brisingid 1 | 0 | 0.95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Brisingida | Brisingid 3 | 0 | 0 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Brisingida | Brisingid 4 | 0 | 5.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Forcipulatida | Asteriidae | 0 | 0 | 0 | 0 | 0 | 3.91 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Forcipulatida | Zoroaster sp | 0 | 0 | 0 | 0 | 1.94 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Forcipulatida | Zoroasteridae | 0 | 0 | 0 | 0 | 0 | 2.35 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Forcipulatida | Zoroasteridae/Asteriidae | 9.82 | 1.76 | 0.87 | 0 | 0 | 19.56 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Notomyotida | Benthopectinidae | 0 | 0.95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.74 |
| Echinodermata | Asteroidea | Paxillosida | Astromesites/Psilaster/Proserpinaster | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Paxillosida | Astropectinidae | 0.82 | 0 | 1.74 | 0 | 1.94 | 0 | 0.78 | 3.88 | 0 | 0.75 | 0.74 |
| Echinodermata | Asteroidea | Paxillosida | Dipsacaster magnificus | 0 | 0 | 0 | 0.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Paxillosida | Plutonaster/Dytaster | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Paxillosida | Radiasteridae | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Spinulosida | Crossaster multispinus | 0 | 0.88 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Spinulosida | Echinasteridae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Spinulosida | Solaster torulatus | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Spinulosida | Solasteridae | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Valvatida | Goniasteridae | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.75 | 0 |
| Echinodermata | Asteroidea | Valvatida | Lithosoma novaezealandiae | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0.65 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Valvatida | Lithosoma/Pseudarchaster | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.29 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Valvatida | Mediaster sp | 1.64 | 0 | 0 | 0 | 9.68 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Valvatida | Pillsburiaster sp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Asteroidea | Valvatida | Plinthaster/Ceramaster | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Crinoidea | | Crinoidea (motile) | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Cidaroida | Cidaridae | 0.82 | 0.88 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Cidaroida | Goniocidarid sp | 18.01 | 1.76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.49 |
| Echinodermata | Echinoidea | Cidaroida | Ogmocidarid benhami | 0 | 0 | 0 | 0 | 0 | 1.56 | 0 | 0 | 0 | 0 | 0.74 |
| Echinodermata | Echinoidea | Echinoidea | Echinoidea | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Echinoidea | Gracilechinus multidentatus | 0 | 101.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Echinoidea | Echinothurioida | Echinothuriidae/Phormosomatidae | 0 | 6.65 | 0 | 10.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | |
|---------------|----------------|-------------------|--------------------------|------|-------|-------|------|-------|------|------|-------|------|-------|------|
| Echinodermata | Echinoidea | Echinothurioida | Phormosoma bursarium | 1.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1.49 |
| Echinodermata | Echinoidea | Spatangoida | Spatangidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.51 | 0 | 0 |
| Echinodermata | Echinoidea | Spatangoida | Spatangus sp | 0 | 0 | 0 | 0 | 84.22 | 0.78 | 0 | 14.87 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores moseleyi | 0 | 0 | 0 | 0 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0.74 |
| Echinodermata | Holothuroidea | Aspidochirotida | Bathyplores sulcatus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.99 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Pseudostichopus mollis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.65 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Aspidochirotida | Synallactidae | 6.55 | 0 | 0 | 0 | 0 | 0 | 0 | 0.65 | 6.05 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Deimatidae | 0 | 0 | 18.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Enypniastes eximia | 0 | 0 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogone sp | 0 | 8.27 | 0 | 91.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Echinodermata | Holothuroidea | Elasipodida | Laetmogonidae | 0 | 14.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.49 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiomyxa brevirima | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.87 | 0 | 0 | 0 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiurida unspecified | 0 | 28.5 | 0.87 | 0 | 1.94 | 0.78 | 0 | 2.59 | 0 | 0.75 | 0.74 |
| Foraminifera | | | Foram (giant) | 0 | 3.8 | 0 | 1.84 | 0 | 7.82 | 0 | 0 | 0 | 0 | 0 |
| Hemichordata | Enteropneusta | | Hemichordate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydrozoa | Hydrozoa | Leptothecatae | Hydroids | 7.37 | 21.15 | 8.71 | 3.43 | 0 | 0.78 | 0 | 0 | 0 | 30 | 0.74 |
| Mollusca | Cephalopoda | Octopoda | Graneledone sp | 0 | 0 | 0 | 0 | 0 | 0 | 1.57 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | Octopoda | Octopodinae | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | Teuthida | Squid | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Cephalopoda | | Octopod | 0 | 0 | 0 | 1.84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Archaeogastropoda | Calliostoma alertae | 0 | 0 | 0 | 0 | 0.97 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Buccinidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Olividae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.65 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Penion sp | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0.75 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Turbinellidae | 0 | 0 | 0 | 0 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Turridae | 0 | 0.95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | Gastropoda | Neogastropoda | Volutidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7.5 | 0.74 |
| Mollusca | Gastropoda | Neotaenioglossa | Cassidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.65 | 0 | 0 | 0.74 |
| Mollusca | Gastropoda | Neotaenioglossa | Fusitriton magellanicus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7.5 | 0 |
| Mollusca | Gastropoda | Neotaenioglossa | Ranellidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.75 | 0 |
| Mollusca | Gastropoda | | Mollusc (gastropod) | 0 | 4.54 | 0.87 | 2.38 | 9.68 | 9.39 | 0.78 | 5.82 | 1.51 | 27.75 | 2.98 |
| Mollusca | | | Mollusc (opisthobranch) | 0 | 0 | 0 | 0.92 | 0 | 0 | 1.57 | 5.82 | 0 | 0 | 0 |
| Mollusca | | | Molluscs (bivalves) | 0 | 0 | 0 | 0 | 0 | 1.56 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | Scaphopoda | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0.65 | 9.07 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Astrophorid | 1.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Geodia regina | 7.37 | 0 | 0 | 0 | 0 | 3.13 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Astrophorida | Geodinella vestigifera | 0 | 0 | 0 | 0 | 0 | 2.35 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Hadromerida | Suberites affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Lithistida | Awhiowhio sepulchrum | 0 | 0 | 0 | 0 | 0 | 3.13 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Lithistida | Lithistid | 0 | 0 | 0 | 0 | 0 | 1.56 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | Spirophorida | Tetilla leptoderma | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | | Encrusting sponges | 0.82 | 0 | 0 | 0 | 0 | 13.3 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Demospongiae | | Sponge (demospongiae) | 0.82 | 0.88 | 0 | 0 | 0 | 9.39 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | Amphidiscosida | Hyalonema sp | 0 | 0.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | Hexactinosida | Hexactinosida | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | Lyssacinosisida | Hyalascus n. sp | 0 | 0 | 0 | 0 | 0 | 0.78 | 0 | 0 | 0 | 0 | 0 |
| Porifera | Hexactinellida | | Sponge (hexactinellidae) | 0 | 0 | 0 | 0 | 0 | 3.13 | 0 | 0 | 0 | 0 | 0 |

APPENDIX 4: BENTHIC SPECIES FROM DTIS STILL IMAGE (OS2020)

Benthic species recorded by site (Figure 1) from DTIS still image sampling within OS2020 voyages (other stations below). Densities per m².

| phylum | Class | order | species | B025 | A010 | C011 | B017 | A016 | D015 | A006 | B062 | B012 | C061 |
|---------------|---------------|-------------------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Annelida | Polychaeta | Canalipalpata | Sabellid | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0473 | 0.0000 | 0.0731 | 0.0000 | 0.0000 |
| Annelida | Polychaeta | Eunicida | Hyalinoecia | 0.0000 | 0.0481 | 0.0000 | 0.0240 | 0.0000 | 0.0684 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Annelida | Polychaeta | | Errant polychaete | 0.0000 | 0.0218 | 0.0517 | 0.0000 | 0.0000 | 0.0000 | 0.0073 | 0.0000 | 0.0000 | 0.0000 |
| Annelida | | | Worm (indet.) | 0.0000 | 0.0243 | 0.0000 | 0.0000 | 0.0000 | 0.0351 | 0.0000 | 0.0000 | 0.1071 | 0.0000 |
| Arthropoda | Malacostraca | Amphipoda | Amphipoda | 0.0000 | 0.0000 | 0.0000 | 0.0202 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Brachyura | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0186 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Campylonotus rathbunae | 0.0000 | 0.0000 | 0.0126 | 0.0000 | 0.0000 | 0.0000 | 0.0187 | 0.0000 | 0.0000 | 0.0139 |
| Arthropoda | Malacostraca | Decapoda | Galatheididae | 0.0000 | 0.0000 | 0.0252 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.1221 | 0.0579 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Galathea white. | 0.0355 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Galatheaidea | 0.0000 | 0.0000 | 0.0265 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Metanephrops challengeri | 0.0000 | 0.0000 | 0.0180 | 0.0157 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Munida gracilis | 0.1110 | 0.0600 | 0.0644 | 0.0426 | 0.0592 | 0.0000 | 0.0471 | 0.2965 | 0.0000 | 0.0170 |
| Arthropoda | Malacostraca | Decapoda | Natant decapod (General shrimp) | 0.0268 | 0.0421 | 0.1383 | 0.0000 | 0.0422 | 0.0302 | 0.0352 | 0.0522 | 0.1661 | 0.2744 |
| Arthropoda | Malacostraca | Decapoda | Pagurid | 0.0210 | 0.0193 | 0.1030 | 0.0000 | 0.0211 | 0.5069 | 0.0000 | 0.0000 | 0.0180 | 0.0000 |
| Arthropoda | Malacostraca | Decapoda | Pycnoplax victoriensis | 0.0000 | 0.0000 | 0.0132 | 0.0311 | 0.0231 | 0.0000 | 0.0687 | 0.0000 | 0.0000 | 0.0635 |
| Arthropoda | Malacostraca | Isopoda | Acutiserolis spp | 0.0396 | 0.2490 | 0.0570 | 0.1613 | 0.0503 | 0.0000 | 0.0457 | 0.0458 | 0.0000 | 0.2104 |
| Arthropoda | Pycnogonida | Pantopoda | Pycnogonid indet | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0114 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | Brisingida | Brisingid 4 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0137 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | Forcipulatida | Asteriidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0365 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | Forcipulatida | Cosmasterias dyscrita | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0088 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | Forcipulatida | Zoroasteridae/Asteriidae | 0.0000 | 0.0000 | 0.0263 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0220 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | Spinulosida | Crossaster multispinus | 0.0000 | 0.0281 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Asteroidea | | Asteroids | 0.0190 | 0.0000 | 0.0263 | 0.0000 | 0.0342 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | Cidaroida | Goniocidaris sp | 0.0199 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | Echinoida | Gracilechinus multidentatus | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0888 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | Echinothurioida | Echinothuriidae/Phormosomatidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0068 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | Spatangoida | Paramaretia peloria | 0.0000 | 0.0000 | 0.1026 | 0.0000 | 0.5290 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | Spatangoida | Spatangidae | 0.1435 | 0.0000 | 0.0126 | 0.0000 | 0.0070 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Echinoidea | | Echinoids | 0.0268 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Holothuroidea | | holothurian indet. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0113 | 0.0368 | 0.0356 | 0.0000 | 0.0275 |
| Echinodermata | Holothuroidea | | Holothurians | 0.0000 | 0.0145 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0081 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Ophiuroidea | Ophiurida | Ophiuridae | 0.0387 | 0.0183 | 0.0846 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Ophiuroidea | | Ophiuroids | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0220 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Bivalvia | | Bivalves | 0.0000 | 0.0109 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Cephalopoda | Octopoda | Cirroteuthididae/Luteuthididae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0085 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Cephalopoda | Octopoda | Octopodinae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0154 | 0.0130 |
| Mollusca | Gastropoda | Archaeogastropoda | Callostomatidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0229 | 0.0000 | 0.0000 |
| Mollusca | Gastropoda | Neogastropoda | Buccinidae | 0.0000 | 0.0000 | 0.0000 | 0.0298 | 0.0000 | 0.2762 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Gastropoda | Neogastropoda | Coluzea sp | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0154 | 0.0000 |
| Mollusca | Gastropoda | Neogastropoda | Olividae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0275 | 0.0000 | 0.0000 | 0.0000 | 0.0275 |
| Mollusca | Gastropoda | Neogastropoda | Turbinellidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 |
| Mollusca | Gastropoda | Neogastropoda | Volutidae | 0.0000 | 0.0000 | 0.0106 | 0.0112 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Gastropoda | Neotaenioglossa | Cassidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0482 | 0.0000 |

| | | | | | | | | | | | | | | |
|----------|------------|-----------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mollusca | Gastropoda | Neotaenioglossa | Naticidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0793 |
| Mollusca | Gastropoda | Neotaenioglossa | Ranellidae | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1524 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Gastropoda | | Gastropods | 0.1010 | 0.0302 | 0.1050 | 0.0000 | 0.0490 | 0.0000 | 0.0000 | 0.0605 | 0.0000 | 0.0000 | 0.0530 |
| Mollusca | Gastropoda | | Opisthobrancia | 0.0000 | 0.0000 | 0.0252 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0417 | 0.0000 | 0.0000 |

Larger features and benthic species recorded by subarea and year (Figure 3) from scampi photographic surveys. Densities per m².

| | 2001 | 2009 | 2010 | 2001 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | 2010 |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 902 | 902 | 902 | 903 | 903 | 903 | 902A | 902A | 902B | 902B | 902C | 902C | 903A | 903A |
| Scampi burrow openings | 0.1143 | 0.0474 | 0.0313 | 0.2674 | 0.0397 | 0.0743 | 0.0581 | 0.0549 | 0.0481 | 0.0875 | 0.0364 | 0.0512 | 0.0284 | 0.0790 |
| Visible scampi | 0.0233 | 0.0231 | 0.0078 | 0.0638 | 0.0192 | 0.0086 | 0.0302 | 0.0210 | 0.0285 | 0.0224 | 0.0084 | 0.0128 | 0.0112 | 0.0159 |
| Squat lobsters | 0.0205 | 0.0107 | 0.0234 | 0.0134 | 0.0068 | 0.0041 | 0.0363 | 0.0314 | 0.0050 | 0.0195 | 0.0049 | 0.0128 | 0.0022 | 0.0000 |
| Crabs | 0.0037 | 0.0000 | 0.0013 | 0.0116 | 0.0045 | 0.0044 | 0.0017 | 0.0063 | 0.0022 | 0.0005 | 0.0000 | 0.0035 | 0.0023 | 0.0017 |
| Sea pens | 0.0115 | 0.0067 | 0.0220 | 0.0032 | 0.0096 | 0.0212 | 0.0235 | 0.0347 | 0.0012 | 0.0109 | 0.0000 | 0.0000 | 0.0175 | 0.0092 |
| Holothurians | 0.0067 | 0.0088 | 0.0026 | 0.0016 | 0.0000 | 0.0000 | 0.0028 | 0.0032 | 0.0012 | 0.0000 | 0.0080 | 0.0000 | 0.0000 | 0.0000 |

APPENDIX 5: BENTHIC SPECIES FROM SCAMPI TRAWL SURVEYS (KAHAROA)

Benthic species recorded by subarea (Figure 3) and year from scampi research trawling. Average catch standardised to kg.h⁻¹.

| Phylum | Common name | Scientific name | Code | 2001_MO | 2009_MO | 2010_MO | 2009_MN | 2010_MN | 2009_MW | 2010_MW |
|---------------|------------------------|-----------------------------|------|----------|---------|---------|---------|---------|---------|---------|
| Annelida | Aphrodita spp. | Aphrodita spp. | ADT | 0 | 0 | 0 | 0 | 0.025 | 0 | 0 |
| Arthropoda | Sabre prawn | Camplonotus rathbunae | CAM | 0.02150 | 0 | 0 | 0 | 0.0328 | 0 | 0.0333 |
| Arthropoda | Crab | | CRB | 0 | 0 | 0 | 0.0938 | 0 | 0 | 0.1 |
| Arthropoda | Two-spined crab | Pycnoplax victoriensis | CVI | 0 | 0.0318 | 0.15 | 0 | 0 | 0.0242 | 0 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0 | 0.0333 | 0 | 0.0091 | 0.148 | 0.3333 | 0.5167 |
| Arthropoda | Paguroidea | Diacanthurus rubricatus | DIR | 0 | 0 | 0.1127 | 0.01 | 0.0167 | 0.0734 | 0.2322 |
| Arthropoda | Garrick's masking crab | Leptomithrax garricki | GMC | 0 | 0 | 0 | 0 | 0 | 0 | 0.1129 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0 | 0 | 0 | 0 | 0.0079 | 0 | 0 |
| Arthropoda | isopod | | ISO | 0 | 0 | 0 | 0 | 0.0083 | 0 | 0 |
| Arthropoda | Squat lobster | Munida spp. | MNI | 0 | 0 | 0 | 0 | 0 | 0.025 | 0 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0 | 0 | 0.05 | 0 | 0 | 0 | 0.0321 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0 | 0 | 0 | 0 | 0.0122 | 0 | 0.0164 |
| Arthropoda | Paralomis dawsoni | Paralomis dawsoni | PDA | 0 | 0 | 0 | 0.02 | 0 | 0 | 0 |
| Arthropoda | scampi | Metanephrops challengeri | SCI | 29.39985 | 6.489 | 9.9786 | 10.2142 | 14.5911 | 28.3727 | 15.1417 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0 | 0 | 0 | 0 | 0 | 0.125 | 0 |
| Arthropoda | Spider crab | | SPI | 0 | 0 | 0 | 0 | 0.0238 | 0 | 0 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0 | 0.0159 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | Friiled crab | Trichopeltarion fantasticum | TFA | 0 | 0.0308 | 4.0404 | 0 | 0.0164 | 0.0909 | 0.2425 |
| Chordata | Sea squirt | Asciacea | ASC | 0 | 0 | 0 | 0.0097 | 0 | 0 | 0 |
| Chordata | | Salps | SAL | 0 | 0 | 0 | 0.0476 | 0 | 0 | 0 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0 | 0.0833 | 0 | 0 | 0 | 0.2417 | 0 |
| Cnidaria | Anemones | Anthozoa | ANT | 0 | 0 | 0 | 0.0095 | 0 | 0 | 0 |
| Cnidaria | Black coral | Antipatharia (Order) | COB | 0 | 0 | 0 | 2.1538 | 0 | 0 | 0 |
| Cnidaria | Flabellum coral | Flabellum spp. | COF | 0 | 0 | 0 | 0.4615 | 0 | 0 | 0 |
| Cnidaria | | Desmophyllum dianthus | DDI | 0 | 0 | 0.0462 | 0 | 0 | 0 | 0.6667 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0 | 0 | 0.4918 | 0 | 0 | 0 | 0.082 |
| Cnidaria | Hydroid | Hydrozoa (Class) | HDR | 0 | 0.0164 | 0 | 0.01 | 0 | 0 | 0 |
| Cnidaria | Deepsea Anemone | Hormathiidae | HMT | 0 | 0 | 0.0833 | 0 | 0 | 0 | 0 |
| Cnidaria | Purple sea pen | Pennatulidae | PNN | 0 | 0 | 0 | 0 | 0.1833 | 0 | 0 |
| Cnidaria | Sea pen | Pennatulacea (Order) | PTU | 0 | 0 | 0.0167 | 0.02 | 0.0583 | 0 | 0.05 |
| Echinodermata | Starfish | | ASR | 0 | 0 | 0.5 | 0.0581 | 0.4833 | 0 | 0.573 |
| Echinodermata | | Astrothorax waitei | AWA | 0 | 0 | 0.0333 | 0 | 0 | 0 | 0 |
| Echinodermata | Benthopecten spp. | Benthopecten spp. | BES | 0 | 0 | 0.0154 | 0 | 0 | 0 | 0 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0 | 0 | 0.05 | 0 | 0 | 0 | 0 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0 | 0.1475 | 0.2872 | 0.0695 | 0.3468 | 0.025 | 1.0017 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0 | 0.0333 | 0.0303 | 0 | 0 | 0 | 0 |
| Echinodermata | Sea urchin | Goniocidarid parasol | GPA | 0 | 0 | 0 | 0.0203 | 0 | 0 | 0 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0 | 0.0333 | 0 | 0.01 | 0 | 0.0246 | 0 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0 | 0 | 0.0794 | 0 | 0 | 0 | 0 |
| Echinodermata | Rock Star | Lithosoma novaezelandiae | LNV | 0 | 0 | 0 | 0.0185 | 0 | 0.05 | 0 |
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0 | 0 | 0.2269 | 0 | 0.0325 | 0.1212 | 0.415 |
| Echinodermata | Ophiuroid | | OPH | 0 | 0 | 0 | 0.0091 | 0 | 0.025 | 0 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0 | 0 | 1.9333 | 0 | 0 | 0 | 0.8128 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0 | 0 | 0 | 0.08 | 0 | 0 | 0 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0 | 0.3164 | 0.4505 | 0.1974 | 0.3878 | 1.1387 | 0.6746 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0 | 0 | 0.0317 | 0.05 | 0 | 0 | 0 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0 | 0 | 39.3871 | 0 | 0 | 0.375 | 0.5833 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0 | 0 | 0 | 0.1116 | 0 | 0.1 | 0 |
| Mollusca | | Bivalvia | BIV | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 |
| Mollusca | | Coluzea mariae | CMR | 0 | 0 | 0 | 0 | 0.025 | 0 | 0.0167 |
| Mollusca | | Euciroa galathea | EGA | 0 | 0 | 0 | 0 | 0.0712 | 0 | 0.0321 |
| Mollusca | | Fusitriton magellanicus | FMA | 0 | 0.0305 | 0 | 0.0577 | 0 | 0 | 0.0492 |
| Mollusca | Gastropods | Gastropoda | GAS | 0 | 0 | 0.05 | 0 | 0.0619 | 0 | 0.3157 |
| Mollusca | | Nudibranchia | NUD | 0 | 0 | 0 | 0 | 0 | 0.025 | 0.0317 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 3.4770 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | Penion chathamensis | PCH | 0 | 0.0833 | 0 | 0.09 | 0.1167 | 0.0769 | 0.05 |
| Porifera | Sponges | Porifera (Phylum) | ONG | 0 | 0.4333 | 0 | 0.6962 | 0.1667 | 0 | 0 |

APPENDIX 6: BENTHIC SPECIES FROM MIDDLE DEPTH RESEARCH TRAWL SURVEYS (TANGAROA)

Benthic species recorded for subarea MN (Figure 3) and year from middle depth research trawling. Average catch standardised to kg.mile⁻¹.

| Phylum | Common name | Scientific name | Code | 1992_MN | 1993_MN | 1994_MN | 1995_MN | 1996_MN | 1997_MN | 1998_MN | 2000_MN | 2001_MN | 2002_MN |
|---------------|--------------------|-----------------------------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Sabre prawn | Camplyonotus rathbunae | CAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0084 | 0.0111 | 0.0000 | 0.0000 | 0.0662 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0412 |
| Arthropoda | Two-spined crab | Carcinoplax victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0000 | 0.0334 | 0.1500 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0220 | 0.0000 | 0.0000 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Lipkhus holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0248 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0084 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Parapagurus dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | scampi | Metanephrops challengeri | SCI | 0.0569 | 0.0515 | 0.1496 | 0.1474 | 0.2980 | 0.4649 | 0.2408 | 0.1537 | 0.8101 | 0.6432 |
| Arthropoda | Hermit crab | Sympagurus dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Frilled crab | Trichopeltarion fantasticum | TFA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bryozoa | Bryozoa | Bryozoa | COZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1724 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.3504 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0000 | 0.0223 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0443 | 0.2479 | 0.0000 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0165 | 0.0000 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0246 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Araeosoma coriaceum | ACO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.0000 |
| Echinodermata | | Bathyplores moseleyi | BAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Cosmasterias dyscrita | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0828 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Goniocidarid parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Gracilechinus multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | |
|---------------|--------------------------|-----------------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0330 | 0.1478 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0828 |
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 | 0.0000 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0495 | 0.0493 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0165 | 0.0000 |
| Echinodermata | Starfish | Asteroidea & ophiuroidea | SFI | 0.0000 | 0.1108 | 0.0056 | 0.0163 | 0.0993 | 0.0666 | 0.0992 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Cross-fish | Sclasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Echinothuriidae & Phormosomatidae | TAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0330 | 0.1724 |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0166 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 0.0000 | 0.0000 | 0.0000 | 0.0165 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Octopus mernoo | OME | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Opisthoteuthis spp. | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1444 | 0.0000 |
| Mollusca | | Penion chathamensis | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Veprichlamys kiwaensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Knobbly sandpaper sponge | Ancorina novaezelandiae | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Glass sponge | | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Sponges | Porifera | ONG | 0.0000 | 0.0513 | 0.0000 | 0.0000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Fleshy club sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| Phylum | Common name | Scientific name | species | 2003_MN | 2004_MN | 2005_MN | 2006_MN | 2007_MN | 2008_MN | 2010_MN | 2011_MN | 2012_MN |
|---------------|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0055 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Sabre prawn | Camplyonotus rathbunae | CAM | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0109 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Two-spined crab | Carcinoplax victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0219 | 0.0000 | 0.0248 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0233 | 0.0000 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Lipkius holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0083 |
| Arthropoda | Hermit crab | Parapagurus dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | scampi | Metanephrops challengeri | SCI | 0.5321 | 0.1836 | 0.1994 | 0.0662 | 0.1638 | 0.0500 | 0.3000 | 0.0401 | 0.1578 |
| Arthropoda | Hermit crab | Sympagurus dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0233 | 0.0000 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Friiled crab | Trichopeltarion fantasticum | TFA | 0.0055 | 0.0000 | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bryozoa | Bryozoa | Bryozoa | COZ | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.3606 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0833 | 0.1333 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0778 | 0.0000 | 0.0417 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0658 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0331 | 0.0100 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0000 | 0.0000 | 0.0166 | 0.0000 | 0.0251 | 0.0167 | 0.0000 | 0.0000 | 0.0166 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0219 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Araeosoma coriaceum | ACO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0282 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Bathyplores moseleyi | BAM | 0.0055 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0233 | 0.0000 |
| Echinodermata | | Cosmasterias dyscrita | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.1242 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Goniocidarid parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Gracilechinus multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0.0000 | 0.0167 | 0.0000 | 0.0331 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0055 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | |
|---------------|--------------------------|-----------------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0169 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0084 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0219 | 0.0000 | 0.0332 | 0.1987 | 0.0584 | 0.0333 | 0.0000 | 0.0465 | 0.0177 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Asteroidea & ophiuroidea | SFI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Echinothuriidae & Phormosomatidae | TAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0.0055 | 0.0000 | 0.0415 | 0.0000 | 0.0184 | 0.0167 | 0.0000 | 0.0676 | 0.0673 |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0109 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0667 | 0.0000 | 0.0000 | 0.0094 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0219 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Octopus mernoo | OME | 0.0055 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Opisthoteuthis spp. | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Penion chathamensis | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Veprichlamys kiwaensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Knobbly sandpaper sponge | Ancorina novaezelandiae | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.7907 | 0.0000 |
| Porifera | Glass sponge | | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Sponges | Porifera | ONG | 0.1311 | 0.0000 | 0.1073 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 |
| Porifera | Fleshy club sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0169 | 0.0000 |

Benthic species recorded for subarea MO (Figure 3) and year from middle depth research trawling. Average catch standardised to kg.mile⁻¹.

| Phylum | Common name | Scientific name | species | 1992_MO | 1993_MO | 1994_MO | 1995_MO | 1996_MO | 1997_MO | 1998_MO | 1999_MO |
|---------------|--------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Sabre prawn | Campylonotus rathbunae | CAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0089 | 0.0166 | 0.0066 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Two-spined crab | Carcinoplax victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Lipkius holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0175 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Parapagurus dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | scampi | Metanephrops challengeri | SCI | 0.0380 | 0.0582 | 0.0597 | 0.0000 | 0.0000 | 0.1166 | 0.1200 | 0.2318 |
| Arthropoda | Hermit crab | Sympagurus dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0000 | 0.0000 | 0.0066 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Frilled crab | Trichopeltarion fantasticum | TFA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bryozoa | Bryozoa | Bryozoa | COZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0877 | 0.0000 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Araeosoma coriaceum | ACO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Bathyplores moseleyi | BAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Cosmasterias dyscrita | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Goniocidarid parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Gracilechinus multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | |
|---------------|--------------------------|-----------------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0000 | 0.0414 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Asteroidea & ophiuroidea | SFI | 0.0000 | 0.0250 | 0.0859 | 0.0000 | 0.0000 | 0.0502 | 0.0000 | 0.0000 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Echinothuriidae & Phormosomatidae | TAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0000 | 0.0000 | 0.0132 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.9414 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Octopus mernoo | OME | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Opisthoteuthis spp. | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Penion chathamensis | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Veprichlamys kiwaensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Knobbly sandpaper sponge | Ancorina novaezelandiae | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Glass sponge | | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Sponges | Porifera | ONG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Fleshy club sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| Phylum | Common name | Scientific name | species | 2000_MO | 2001_MO | 2002_MO | 2003_MO | 2006_MO | 2007_MO | 2009_MO | 2010_MO | 2012_MO |
|---------------|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Sabre prawn | Camplyonotus rathbunae | CAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0000 | 0.0000 | 0.0111 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Two-spined crab | Carcinoplax victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0068 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0000 | 0.0500 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 | 0.0000 | 0.0111 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0196 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Lipkius holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Parapagurus dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | scampi | Metanephrops challengerii | SCI | 0.0997 | 0.2333 | 0.1445 | 0.2990 | 0.0333 | 0.0333 | 0.0067 | 0.0111 | 0.0221 |
| Arthropoda | Hermit crab | Sympagurus dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0133 | 0.0000 | 0.0110 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Friiled crab | Trichopeltarion fantasticum | TFA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0294 | 0.0000 | 0.0110 |
| Bryozoa | Bryozoa | Bryozoa | COZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.0000 | 0.0000 | 0.0838 | 0.1329 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0833 | 0.0000 | 0.1024 | 0.0000 | 0.1439 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0556 | 0.0000 | 0.1618 | 0.0332 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0110 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0200 | 0.0000 | 0.0111 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Araeosoma coriaceum | ACO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0978 | 0.0000 | 0.0111 | 0.0332 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 |
| Echinodermata | | Bathyplores moseleyi | BAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0667 | 0.0265 | 0.0501 | 0.0000 |
| Echinodermata | | Cosmasterias dyscrita | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0167 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0132 | 0.0111 | 0.0000 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.1667 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0736 | 0.0000 | 0.0111 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Goniocidarid parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Gracilechinus multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0067 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0.0000 | 0.0000 | 0.0000 | 0.0997 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0664 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0000 | 0.0000 | 0.0000 | 0.1993 | 0.0000 | 0.0000 | 0.0861 | 0.0332 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0000 | 0.0000 | 0.3777 | 0.0664 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | |
|---------------|--------------------------|-----------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0933 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0000 | 0.0000 | 0.0556 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0251 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0000 | 0.1000 | 0.0557 | 0.0332 | 0.0833 | 0.0000 | 0.0200 | 0.0251 | 0.0110 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0664 | 0.0000 | 0.0892 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Asteroidea & ophiuroidea | SFI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0752 | 0.0000 |
| Echinodermata | | Echinothuriidae & | | | | | | | | | | |
| Echinodermata | Tam O Shanter | Phormosomatidae | TAM | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0.0000 | 0.0000 | 0.1056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0664 |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0067 | 0.0000 | 0.0000 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0111 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 0.0112 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Octopus mernoo | OME | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Opisthoteuthis spp. | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Penion chathamensis | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0199 | 0.0000 | 0.0110 |
| Mollusca | | Veprichlamys kiwaensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Knobbly sandpaper sponge | Ancorina novaezelandiae | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Glass sponge | | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Sponges | Porifera | ONG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Fleshy club sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0790 | 0.0000 | 0.0000 |

Benthic species recorded for subarea MW (Figure 3) and year from middle depth research trawling. Average catch standardised to kg.mile⁻¹.

| Phylum | Common name | Scientific name | species | 1992_MW | 1993_MW | 1994_MW | 1995_MW | 1996_MW | 1997_MW | 1998_MW | 1999_MW | 2000_MW | 2001_MW | 2002_MW |
|---------------|--------------------|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | Camplyonotus | | | | | | | | | | | | |
| Arthropoda | Sabre prawn | rathbunae | CAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0000 | 0.0102 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0334 | 0.0200 | 0.0056 |
| | | Carcinoplax | | | | | | | | | | | | |
| Arthropoda | Two-spined crab | victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0066 | 0.0000 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | | Lipkuis holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | Parapagurus | | | | | | | | | | | | |
| Arthropoda | Hermit crab | dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0133 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | Metanephrops | | | | | | | | | | | | |
| Arthropoda | scampi | challengeri | SCI | 0.0527 | 0.0502 | 0.1156 | 0.1110 | 0.0112 | 0.0330 | 0.0831 | 0.1342 | 0.0333 | 0.2595 | 0.3357 |
| | | Sympagurus | | | | | | | | | | | | |
| Arthropoda | Hermit crab | dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0067 | 0.0721 |
| | | Trichopeltarion | | | | | | | | | | | | |
| Arthropoda | Friiled crab | fantasticum | TFA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bryozoa | Bryozoa | Bryozoa | COZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.0415 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0132 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0000 | 0.0133 | 0.0000 | 0.0000 | 0.1785 | 0.0000 | 0.0000 | 0.0549 | 0.0000 | 0.3997 | 0.1056 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | Goniocorella | | | | | | | | | | | | |
| Cnidaria | Bushy hard coral | dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0166 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | Araeosoma | | | | | | | | | | | | |
| Echinodermata | Tam O Shanter | coriaceum | ACO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0121 | 0.1171 | 0.0000 | 0.0443 |
| | | Bathyplores | | | | | | | | | | | | |
| Echinodermata | | moseleyi | BAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Cosmasterias | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0933 | 0.0000 |

| | | | | | | | | | | | | | | |
|---------------|-----------------------|-----------------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | dyscrita | | | | | | | | | | | | |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1533 | 0.0111 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0733 | 0.0000 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0105 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0067 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0067 | 0.0056 |
| Echinodermata | Sea urchin | Goniocidaris parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gracilechinus multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian | HTH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0667 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0266 | 0.1232 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0865 | 0.1347 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0000 | 0.0133 | 0.0000 | 0.0000 | 0.0221 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0400 | 0.0431 |
| Echinodermata | Starfish | | SFI | 0.0000 | 0.1005 | 0.1327 | 0.1099 | 0.0888 | 0.1336 | 0.0334 | 0.0417 | 0.0000 | 0.0267 | 0.0000 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Echinothuriidae & Phormosomatidae | TAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1133 | 0.0000 |
| Echinodermata | Rat-Tail star | Zoroaster spp. | ZOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0733 | 0.0000 |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0134 | 0.0000 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | |
|----------|------------------|---------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0100 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | Pinnoctopus | OCT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6400 | 0.0000 |
| Mollusca | | cordiformis | OME | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Octopus mernoo | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Opisthoteuthis spp. | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Penion chathamensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Knobbly | Veprichlamys | | | | | | | | | | | | |
| Porifera | sandpaper sponge | kiwaensis | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Glass sponge | Ancorina | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular | novaezelandiae | | | | | | | | | | | | |
| Porifera | sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Sponges | Porifera | ONG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1933 | 0.0000 |
| Porifera | Fleshy club | | | | | | | | | | | | | |
| Porifera | sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| Phylum | Common name | Scientific name | species | 2003_MW | 2004_MW | 2005_MW | 2006_MW | 2007_MW | 2008_MW | 2009_MW | 2010_MW | 2011_MW | 2012_MW |
|---------------|--------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annelida | | Polychaeta | POL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Sabre prawn | Camplionotus rathbunae | CAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0055 | 0.0000 | 0.0000 |
| Arthropoda | Crab | | CRB | 0.0074 | 0.0167 | 0.0000 | 0.0253 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Two-spined crab | Carcinoplax victoriensis | CVI | 0.0000 | 0.0000 | 0.0000 | 0.0083 | 0.0000 | 0.0000 | 0.9333 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Antlered crab | Dagnaudus petterdi | DAP | 0.0148 | 0.0000 | 0.0000 | 0.0166 | 0.0000 | 0.0000 | 0.0000 | 0.0055 | 0.0000 | 0.0000 |
| Arthropoda | | Funchalia spp. | FUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Jackknife prawn | Haliporoides sibogae | HSI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0164 | 0.0000 |
| Arthropoda | | Lipkius holthuisi | LHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Squat lobster | Munida gregaria | MUN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Decapod | | NAT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Paguroidea | PAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Hermit crab | Parapagurus dimorphus | PDI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Prawn killer | Ibacus alticrenatus | PRK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | scampi | Metanephrops challengeri | SCI | 0.4016 | 0.1667 | 0.1167 | 0.1337 | 0.1333 | 0.0836 | 0.1026 | 0.0776 | 0.0332 | 0.1482 |
| Arthropoda | Hermit crab | Sympagurus dimorphus | SDM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0243 |
| Arthropoda | Spiny masking crab | Teratomaia richardsoni | SMK | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0055 | 0.0000 | 0.0000 |
| Arthropoda | Giant masking crab | Leptomithrax australis | SSC | 0.0037 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Arthropoda | Frilled crab | Trichopeltarion fantasticum | TFA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0115 | 0.0111 | 0.0166 | 0.0166 |
| Bryozoa | Bryozoa | | COZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Chordata | | Pyrosoma atlanticum | PYR | 0.1993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0055 | 0.0000 | 0.0243 |
| Chordata | Salps | | SAL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Actinostolidae | ACS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0667 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Anemone | Anthozoa | ANT | 0.0773 | 0.1000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Bolocera spp. | BOC | 0.0000 | 0.0000 | 0.0000 | 0.0084 | 0.0000 | 0.0000 | 0.0000 | 0.0111 | 0.0000 | 0.0000 |
| Cnidaria | Coral | | COU | 0.0369 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Bushy hard coral | Goniocorella dumosa | GDU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Deepsea anemone | Hormathiidae | HMT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | Pennatulacea | PTU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0166 | 0.0164 | 0.0000 |
| Cnidaria | | Scleractinia | SIA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0115 | 0.0000 | 0.0000 | 0.0000 |
| Cnidaria | Sea pen | | SPN | 0.0110 | 0.0167 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0111 | 0.0000 | 0.0000 |
| Cnidaria | Bottlebrush coral | Thouarella spp. | THO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Tam O Shanter | Araeosoma coriaceum | ACO | 0.0110 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | | ASR | 0.0405 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Bathylotes moseleyi | BAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0833 | 0.0000 | 0.1132 | 0.0111 | 0.0000 | 0.1456 |
| Echinodermata | | Cosmasterias dyscrita | CDY | 0.0000 | 0.0000 | 0.0000 | 0.0498 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sun star | Crossaster multispinus | CJA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Dermechinus horridus | DHO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Dipsacaster magnificus | DMG | 0.0000 | 0.0667 | 0.0000 | 0.0000 | 0.0667 | 0.0502 | 0.0000 | 0.0166 | 0.0000 | 0.0000 |
| Echinodermata | | | ECH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | | ECN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gorgonocephalus spp. | GOR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Goniocidaris parasol | GPA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Gracilechinus | | | | | | | | | | | |
| Echinodermata | Sea urchin | multidentatus | GRM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea cucumber | Holothurian unidentified | HTH | 0.0406 | 0.0167 | 0.0333 | 0.0759 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Trojan starfish | Hippasteria phrygiana | HTR | 0.0074 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0669 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Laetmogone spp. | LAG | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 | 0.0442 | 0.2467 | 0.0000 |

| | | | | | | | | | | | | | |
|---------------|--------------------------|-----------------------------------|-----|---------|--------|--------|--------|--------|---------|--------|--------|--------|---------|
| Echinodermata | Starfish | Mediaster sladeni | MSL | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Pentagonal tooth star | Odontaster spp. | ODT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pannychia moseleyi | PAM | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0334 | 0.0000 | 0.0000 | 0.0000 | 0.1942 |
| Echinodermata | | Pillsburiaster aoteanus | PAO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Sea urchin | Pseudechinus flemingi | PFL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Abyssal star | Plutonaster knoxi | PKN | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0055 | 0.0000 | 0.0000 |
| Echinodermata | | Plutonaster spp. | PLT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudostichopus mollis | PMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0166 |
| Echinodermata | Heart urchin | Paramaretia peloria | PMU | 0.0148 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Proserpinaster neozelanicus | PNE | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0229 | 0.0333 | 0.0000 | 0.0000 |
| Echinodermata | | Pseudechinaster rubens | PRU | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0502 | 0.0000 | 0.0000 | 0.0166 | 0.0000 |
| Echinodermata | Geometric star | Psilaster acuminatus | PSI | 0.0329 | 0.0000 | 0.0000 | 0.1255 | 0.1000 | 0.0000 | 0.0222 | 0.0332 | 0.0331 | 0.1546 |
| Echinodermata | Sea cucumber | Stichopus mollis | SCC | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Starfish | Asteroidea & ophiuroidea | SFI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Cross-fish | Sclerasterias mollis | SMO | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0667 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | Heart urchin | Spatangus multispinus | SPT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Echinodermata | | Echinothuriidae & Phormosomatidae | TAM | 0.0185 | 0.0167 | 0.0000 | 0.0499 | 0.0000 | 0.2007 | 0.0494 | 0.0000 | 0.0000 | 0.0243 |
| Echinodermata | Tam O Shanter | Zoroaster spp. | ZOR | 0.0330 | 0.0000 | 0.0000 | 0.0924 | 0.0167 | 0.0669 | 0.3924 | 0.0110 | 0.0000 | 0.1073 |
| Echinodermata | Rat-Tail star | | | | | | | | | | | | |
| Mollusca | Maurea | Calliostoma selectum | CSS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Fusitriton magellanicus | FMA | 0.0037 | 0.0000 | 0.0000 | 0.0166 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0166 | 0.0000 |
| Mollusca | Gastropods | Gastropoda | GAS | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Molluscs | | MOL | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Octopus | | OCP | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0056 | 0.0000 | 0.0000 |
| Mollusca | Octopus | Pinnoctopus cordiformis | OCT | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | | Octopus mernoo | OME | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mollusca | Umbrella octopus | Opisthoteuthis spp. | OPI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2833 | 0.0000 | 0.0000 | 0.0000 | 0.3947 | 0.0000 |
| Mollusca | | Penion chathamensis | PCH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0333 | 0.0000 | 0.0000 | 0.0166 | 0.0000 | 0.0332 |
| Mollusca | | Veprichlamys kiwaensis | VKI | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0167 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Knobbly sandpaper sponge | Ancorina novaezelandiae | ANZ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Glass sponge | | GLS | 0.0000 | 0.0000 | 0.0000 | 0.0498 | 0.0000 | 0.0000 | 0.0556 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Floppy tubular sponge | Hyalascus sp. | HYA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 83.6120 | 0.0000 | 0.0000 | 0.0000 | 12.1359 |
| Porifera | Sponges | Porifera | ONG | 21.4054 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 4.7601 | 0.0000 | 0.0000 | 0.0000 |
| Porifera | Fleshy club sponge | Suberites affinis | SUA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

APPENDIX 7: BENTHIC SPECIES FROM MPI OBSERVERS

Benthic species recorded for SCI 3 (Figure 3) by MFish observers on commercial scampi vessels.

| Phylum | Common name | Scientific name | Code |
|---------------|------------------------------------|------------------------------------|------|
| Arthropoda | crab | | CRB |
| Arthropoda | Antlered crab | <i>Dagnaudus petterdi</i> | DAP |
| Arthropoda | pagurid | <i>Diacanthurus rubricatus</i> | DIR |
| Arthropoda | Friiled crab | <i>Trichopeltarion fantasticum</i> | TFA |
| Arthropoda | Jackknife prawn | <i>Haliporoides sibogae</i> | HSI |
| Arthropoda | scampi | <i>Metanephrops challengeri</i> | SCI |
| Arthropoda | Prawn killer | <i>Ibacus alticrenatus</i> | PRK |
| Arthropoda | Shovelnosed lobster | <i>Scyllarus</i> sp. | SHL |
| Echinodermata | <i>Proserpinaster neozelanicus</i> | <i>Proserpinaster neozelanicus</i> | PNE |
| Echinodermata | Heart urchin | <i>Spatangus multispinus</i> | SPT |
| Echinodermata | Tam O Shanter urchin | Echinothuriidae & Phormosomatidae | TAM |
| Mollusca | molluscs | | MOL |
| Mollusca | gastropods | Gastropoda | GAS |
| Mollusca | Golden Volute | <i>Provocator mirabilis</i> | GVO |

APPENDIX 8: SCAMPI BURROW IDENTIFICATION CRITERIA

Summary of characteristics of “highly characteristic” and “probable” burrows of *Metanephrops* as at October 2001 (based on all previous work and discussions) (Cryer et al. 2002).

- “Major” and “minor” openings to burrows are almost always different and separately characteristic. The major opening is defined as the one where any visible scampi would be expected to be seen.
- Most burrows seem to be linear, have two openings, and have covered tunnels 100–700 mm long. Burrows with more than two openings are rare. The width and length of the tunnel are only loosely correlated.
- Major openings tend to have the following characteristics (in approximate rank order):
 - well-maintained “tracks” on the sediment; the most characteristic of which lead away at right angles.
 - shallow rather than vertical tunnels
 - “fans” of excavated sediment (that may be a different colour or texture from surrounding sediments)
 - crescent-shaped entrance way
 - part of a linear system with an associated minor opening
 - smooth, flat bottoms
 - usually 50–180 mm wide at the base (increasing with occupant size)
- Minor opening tend to have the following characteristics (in approximate rank order):
 - often slit- or trench-like
 - lie directly in line with a major opening
 - well-maintained linear “tracks” on the sediment
 - smooth (not necessarily flat) bottoms
 - clean, linear sides (especially in highly characteristic burrows)
 - shallow rather than vertical tunnels (though many seem to be steep)
 - usually about half as wide as the major opening
- Burrows with single (major) openings are often deep or “sunken”. One to several small, steep holes can often be seen to the rear of these deep burrows but these holes are often not characteristic slit-like openings and may not appear to be regularly maintained nor large enough for use as an opening by an adult scampi.
- A linear tunnel with distinct major and minor openings, combined with a sediment “fan” at the major opening and runs on the sediment surface (especially if these run at a wide angle from the major opening and almost in line with the axis of the burrow from the minor opening) seems to be the most reliable combination of features to identify the burrows of *M. challengeri*.
- To be classed as “highly characteristic”, an opening should have most of the characters (especially those that are ranked highly) of a specified opening type (major or minor) and should be in a good to excellent apparent state of repair. State of repair is inferred from smooth, flat floors, and sharp edges to tunnels, openings, and tracks.
- To be classed as “probable”, an opening should seem more likely than not to be a scampi burrow, have some of the characteristics (especially those ranked highly) but may lack several. They may be in a moderate, but not poor, state of repair (as defined above).
- To avoid volatility in the burrow indices caused by changes in emergence or other behaviour, the presence of a scampi or other animal in or near a burrow should not influence the decision to count a burrow nor its characterization as highly characteristic as opposed to probable.
- All openings and scampi within a defined “countable area” are included in counts. Excluded from the countable area are areas too dark, too burnt out, or too occluded by suspended sediment to discern whether the apparent state of repair of a putative burrow (e.g., whether there is a fan of sediment or the bottom of the tunnel is flat and smooth).

- To account for edge effects, partly-visible scampi on the bottom and left edges of the image are ignored, those on the top and right edges are included. All partly-obscured burrow openings are ignored. Animals are treated differently from openings because counts of animals are used to calculate absolute (minimum) estimates of abundance and biomass whereas openings are used only to calculate relative indices.