

Identification of Protected Corals

Final Report

*Prepared for Conservation Services Programme, Department of
Conservation*

RFP: 4650 INT2015-03 IDENTIFICATION AND STORAGE OF COLD-WATER CORALS



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Cover image: At-sea digital image taken by MPI Observer of black coral (COB). Identified by expert Rob Stewart (NIWA) as *Dendropathes* spp. (DDP), Family Schizopathidae.

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Executive summary

The Conservation Services Programme, within the Marine Species and Threats team, Department of Conservation, recognise that Government Fisheries Observers on commercial fishing vessels are not always able to identify protected cold-water corals at sea with high precision (especially down to the species level), with the confirmation of bycaught species requiring identification from a coral taxonomist in the majority of cases.

Building on the description of the protected coral specimens identified and presented in the April and July 2017 Progress Reports, this Final Report summarises the sample identifications for the year ending 31 October 2017, and includes coral identifications made by visiting gorgonian octocoral expert Dr Phil Alderslade (CSIRO). A total of 169 specimens were identified to finest taxonomic level possible and appropriate updates made to the Centralised Observer Database (*COD*). Sample processing is on going and the number of coral tissue samples held in storage for future genetic studies now numbers 26.

The identification of protected corals from digital images provided by Observers are also described. There were 163 images identified and 112 protected coral images geo-referenced. Efforts were made to use trip number and image properties (date, time), to help populate the data poor images with georeferenced information. The instructions to Government Observers on methods to capture images at-sea will be stressed via the MPI Observer Programme.

Interactions between corals collected and fishing gear are summarised. Several protected coral samples have been returned from both within the New Zealand Exclusive Economic Zone as well as the High Seas Fisheries Management Areas. Of the samples received, and digital images processed, bottom trawling in all regions has contributed to the highest counts of coral mortality. Coral by-catch samples were also returned from long line tows but in lower numbers.

Recommendations are made in this report to help improve the at-sea image data labelling and to automate the image geo-referencing workflow. Potentially the process of geo-referencing could be made more robust by adding business rules for metadata validation. We also highlight the numbers of protected corals that have been identified from the High Seas regions.

1 Background

The 2010 amendment of Schedule 7A of the Wildlife Act 1953 protects all hard corals, including: black corals (all species in the order Antipatharia); gorgonian octocorals in the order Alcyonacea (previously known as Order Gorgonacea); stony corals (all species in the order Scleractinia); and hydrocorals (all species in the family Stylasteridae). These groups all have ecological significance in the New Zealand region and the various forms, including reef-like scleractinian or stony corals, are important bioengineers that provide refuge and structural habitat for a diverse species community. These corals are vulnerable to human pressures such as fishing (Clark & Rowden 2009; Clark et al 2010; Williams et al 2010), mineral extraction, ocean acidification, and global warming.

Identifying coral bycatch that was unable to be fully identified by Observers is seen as a priority for conservation managers as it provides:

- vital baseline information that can help to better inform research and marine protection such as predictive modelling (Anderson et al 2014), benthic risk assessments (Clark et al 2014), and management of benthic marine protected species
- information on the interaction between commercial fishing vessels and protected cold-water corals in New Zealand waters (Tracey et al 2011), and
- allows for a more comprehensive mitigation framework to be implemented in future in order to protect cold-water corals in New Zealand waters.

An additional benefit of the collection, identification and storage of bycaught cold-water corals is an increase in the number of protected cold-water coral species samples housed in the NIWA Invertebrate Collection (NIC), one of New Zealand's National taxonomic collections. This allows for more robust studies on cold-water corals in future such as those to support morphological and molecular descriptions, and for biological research to investigate for example age and growth, and age validation to assess recovery (e.g., see *POP2017-07: The age and growth of New Zealand protected corals at high risk*).

Progress for the service requirements were summarised in Tracey et al (2017a; b). Methods were prepared and presented, and instructions were provided to Observers on deep-sea commercial fishing vessels for when cold-water coral specimens are bycaught in commercial fishery operations – i.e., the required data recording, sub-sampling or image collection of the corals. Also presented were the number of protected coral samples provided, the number identified, and the number of coral tissue samples that have been taken and held in storage for future genetic studies. The Contract states that no more than 200 protected coral samples and no more than 200 specimen images are to be identified per annum.

This Final Report presents the interactions between corals collected and fishing gear by summarising the coral count by Observer Fisheries Management Area (FMA) as well as presenting the number of trawl and long line tows that have taken corals as by-catch, hence contributing to coral mortality. An update of the numbers of protected corals identified to lowest taxonomic level is provided – for both returned specimens and digital images. The updated numbers include the additional sample identifications made by visiting gorgonian octocoral expert taxonomist Dr Phil Alderslade (CSIRO), who visited the NIC in May 2017, a *gratis* black coral identification provided in September 2017 from Dennis Opresko (Smithsonian Institution), and identifications of fauna in 163 observer collected

digital images. Where possible, the identified protected coral images were georeferenced to show provenance.

2 Methods

2.1 Specific Objectives

2.1.1 Service Requirements

The specific objectives of the Conservation Services Programme requirements are:

1. Identify cold-water coral bycatch that cannot be identified by Government fisheries observers to the finest taxonomic level (assign codes to coral specimens to the species level wherever possible; when this is not possible, identify specimens to genus or family level).

To the extent possible, the contractor will identify potential interactions between corals collected and fishing gear, and identify factors that may have contributed to coral mortality. Data will be reported by fishery stratum (fishing method, fishery area, and where possible, target species)

2. Record all identified coral specimens and store in an appropriate taxonomic collection.
3. Ensure a sub-sample of each specimen is taken for future genetic analysis.
4. Bring international cold-water coral taxonomic expertise to New Zealand for identification of specific coral groups.

2.1.2 Specific objectives

In Schedule 1 the specific objectives in Contract INT2015-03 are:

1. To determine, through examination of returned cold-water coral specimens and photos, the taxon, and where possible the provenance of cold-water corals killed in New Zealand fisheries (for returned dead specimens).
2. To collect sub-samples of all protected cold-water coral specimens for genetic analysis in future.

2.2 Objective 1: To determine, through examination of returned cold-water coral specimens and photos, the taxon, and where possible the provenance of cold-water corals killed in New Zealand fisheries (for returned dead specimens).

A presentation of the Methods for this project was provided to the CSP Technical Working Group on the 16th of November, 2016 (Tracey et al 2016), and subsequently accepted. The presentation included a description of methods to instruct Observers on the at-sea recording and collection of deep-sea corals, details of the planned expert examination of specimens and images returned by Observers, and an update of progress in loading of identified coral catch data into NIWA and Ministry

for Primary Industries (MPI) databases (Objective 1). Also included were details on methods for collection of sub-samples of returned cold-water coral specimens for genetic analysis in the future, (Objective 2).

Progress for the service requirements were summarised in Tracey et al (2017a; b). Methods for the key activities to meet the final stages of this project are provided below and include:

- the identification of gorgonian octocorals
- loading data into the MPI Observer database *COD*, and
- digital photo processing.

Since the July 2017 reporting (Tracey et al 2017b), the focus has been on sorting and processing Observer protected coral samples, collecting tissue samples for molecular analyses, processing the digital images, and arranging the coral taxonomic expert's visit for March, 2018 (Drs Stephen Cairns, (Smithsonian Institution) and Marcelo Kitahara (Universidade Federal de São Paulo)). During their visit next year, the experts will focus on the identification of scleractinian stony corals, stylasterid hydrocorals, and Primnoid octocorals, primarily of the genus *Thouarella* spp.

2.2.1 Identification of corals returned to NIWA

The cold-water coral bycatch that could not be identified by Observers at-sea were returned to NIWA (whole specimens or sub-samples of the specimens) for identification to the finest taxonomic level. A similar method used to process by-catch collected by Government fisheries observers under MPI Project DAE2015-05, (Tracey & Mills, 2016a), was followed. Experts identified all corals to the species level wherever possible and when this was not possible, to genus or family level.

The corals were thawed, sorted into main groups and initially identified to coarse taxonomic level (mostly to order and family level). The tasks of fixing and preserving samples, providing containment, documenting samples (station numbering, labelling), sorting (dividing samples into major or minor taxonomic groups – 'taxa' – in the laboratory), were all carried out under the MPI data management project DAT2016-01E. Data were entered into the web-interfaced NIWA Observer Samples Database (*OSD*), then returned to frozen storage, fixed in ethanol, or dried where appropriate.

A catalogue of all samples/specimens received in NIWA was provided to the NIWA Invertebrate Collection (NIC) Manager. Data from *OSD* were uploaded into the NIC database *Specify* and the specimens were curated and examined at NIWA to determine their taxonomic identification.

The identification methods followed NIWA procedures for identifying fauna and biological specimens housed in the NIC. NIWA currently manages specimens according to the: "Guidelines for the care of natural history collections". NIWA also has its own collection policy document: "NIWA Marine Invertebrate Collection Policy and Procedures", which also guided the process. Specimens retained are held in stewardship for DOC.

To meet the Final Report requirements, NIWA coral experts and Dr Phil Alderslade (CSIRO) carried out the identifications of gorgonian octocorals, and the updated species names and counts were entered into *Specify* database. Identifications by Dr Alderslade included corals in the families Chrysogorgiidae, Corallidae, Isididae, Paragorgiidae, and Plexauridae.

A second priority for the project was to identify research trawl-collected protected corals. Four protected corals have been returned to date from trawl surveys carried out since July 31 2016, and

these along with an additional historical specimen from a 1995 research trawl survey, were identified for this project.

2.2.2 Loading data into COD

To help identify potential interactions between corals collected and fishing gear, and identify factors that may have contributed to coral mortality, the loading of identified coral catch data into NIWA and MPI databases took place toward the end of the reporting period.

Sample information for 160 observer records extracted from *Specify* were provided to the COD database manager for loading. Updating catch records took place following that described in Tracey & Sanders (2010). Sample data are loaded into a COD database 'load' table, *z_invertebrate_samples*. The data is then used to update catch records in the stage and report tables, *y_benthic*, *y_trw_new_observer_greenweight*, *y_lfs_catch*, *y_ctn_catch* and *x_fishing_event_catch*.

High Seas samples were not able to be differentiated from within zone samples at the time of arrival at NIWA for processing. Trip data are provided on sacks of frozen material but no information on general location is given. As such, High Seas samples were processed as part of this project.

2.2.3 Photographing corals at-sea

The at-sea instructions to Observers document (Tracey & Mills, 2016b) was prepared and provided to CSP and, following their approval, forwarded to the Observer Services Unit of the MPI Observer Programme in early 2017. The section on the digital collection of photographic images at-sea instructions were emphasised and expanded for this project. Specifically, the instructions state that images are to be captured in good light using a plain grey background if possible and a size scale, with the specimen label showing trip and tow numbers included in the image. The name of the Observer taking the image was to be retained as this is important to include in the geo-referencing particularly for acknowledgements, feedback to the observer, training, or if the images are used for other purposes, e.g., guide production.

2.2.4 Digital photo processing

The digital photo images and associated details collected by Observers were obtained from a CSP Group representative from the MPI Observer Programme and uploaded to NIWA's FTP site in April 2017. There were 456 image files provided to NIWA late April, 2017, and 163 were processed to meet the July 2017 reporting period (Tracey et al 2017b). In January 2018, the on-going processing of the digital images will be reported on.

The identification of protected corals in the photos was carried out by various experts (Phil Alderslade (CSIRO), Di Tracey, Rob Stewart, Diana Macpherson, and Peter Marriott (NIWA)), and the images were then georeferenced to show provenance (where possible). The image metadata is provided via a handwritten label which the Observer includes in the photograph. Data were collated manually. The process of geo-referencing the images was to add information to the metadata file for each image – e.g., the species name to the finest taxon possible (species, genus or family level), trip and tow number, three-letter MPI species code, keywords relevant to the subject of the image, NIC catalogue number (where applicable), image rating (1-5; 1=best of, 5=adequate), and the observer name. Using the ACDSee Pro 3 (version 3.0) software the metadata information for each image was added manually into the relevant field or by assigning a value from a drop down 'picklist', and then embedded in the image file. A descriptive data output and summary output table was then produced

with appended location data and other required information sourced from *COD* - e.g., position, depth, along with target species, Observer Fisheries Management Area.

2.3 Objective 2: To collect sub-samples of all protected cold-water coral specimens for genetic analysis in the future.

Tissue samples were taken from all protected coral samples provided to NIWA by observers in 2017 and stored with a unique label in standard vials in 99% high grade absolute ethanol. The Progress Reports (Tracey et al 2017a; b) summarised the collection method and numbers of accumulated issue samples for genetic analyses. There are now 26 samples held in storage in readiness for molecular studies, and collection is on-going.

3 Results

The specific objectives of the Conservation Services Programme requirements have been followed. Specimens and images of cold-water protected coral bycatch that could not be identified by Government fisheries observers were returned to NIWA for expert identification. The identified samples have been collected opportunistically from commercial fishing activity and help to highlight interactions between fishing and protected corals. Details of the coral bycatch, hence mortality, by fishery stratum (fishing method, fishery area and where possible target species) are provided.

All identified coral specimens have been stored in the NIWA Invertebrate Collection (NIC). Sub-samples of each specimen continue to be taken for future genetic analysis and these too are in storage in the NIC. Dr Phil Alderslade visited NIWA for a period of 10 days in May 2017 to identify specimens in his specific coral group – gorgonian octocorals.

All specific objectives have been completed for the final reporting period, 2016/17 year. Dr Phil Alderslade was funded from this project along with additional support for identification, database, and administration costs from the NIWA 'Enhancing Collections' budget provided. In the reporting year, up to October 2017, all coral identifications and associated data were loaded into the MPI database *COD*, images provided by DOC from the Observers were examined and geo-referenced.

3.1 Objective 1: Identification of corals

A summary of the number of corals identified by protected coral group is presented in Table 3-1. Between March 2016 and October 2017 only 46 samples were collected and returned to NIWA for identification possibly due to the emphasis on collecting digital images for identification purposes. The remaining samples in this table (n= 130) are historical, collected between 2009 and 2015, and held in storage at NIWA awaiting identification.

Appendix A presents in spreadsheet form a list of species identified, with associated details extracted from *Specify*. The column headings include:

- Trip_code
- Station_no
- NIC catalogue number

- OSD Number if available
- Observer ID label if available
- Phylum
- Order
- Family
- Genus
- Species
- Determiner - Expert identifiers name (most recent expert ID)
- Determined date
- Count
- Collection Date
- Latitude (truncated to 1 d.p.)
- Longitude (truncated to 1 d.p.)
- Depth start
- Depth finish

Experts have identified to date 23 black corals, 74 gorgonian octocorals, 11 hydrocorals, and 59 scleractinian stony corals (Table 3-1). Rob Tilney of Clement & Associates Ltd provided two stony coral and one black coral samples to Di Tracey, NIWA for identification (Industry Voyage, Chatham Rise). The gorgonian octocorals identified by Dr Alderslade (N= 72 specimen lots), included some new and intriguing species and genera. Among these were the first confirmation of the plexaurid sea fan coral *Clematissa* in the New Zealand region; a new species of *Rosgorgia* which is a recently described Antarctic genus of the Family Subergorgiidae, better known from the tropical Indo-West Pacific; and two new species of the bubblegum coral *Paragorgia*, confirming how species-rich this particular genus is in our region (14 species are already known, 6 of which are likely endemic). Other species identification highlights were:

- A new genus that is related to *Helicogorgia*, currently classified as being in the family Chrysogorgiidae, was identified. This family designation of this genus may be incorrect, and the new material will help clarify this.
- A species of *Narella* that is additional to those described from the NIWA collections by Dr Stephen Cairns (Smithsonian Institution).
- the first record of plexaurid sea fan genus *Anthomuricea*.

An identification update for an Observer collected black coral, *Lillipathes cf. ritamariae*, (NIWA 88617, TRIP3883/55), was provided by Dr. Dennis Opresko (Smithsonian Institution) in September 2017, (see Appendix A), as part of a project he is independently working on to determine the presence, morphology and genetics of the antipatharian genus *Telopathes* in New Zealand waters. The identification update for this black coral will be included in the next COD update.

Tracey et al (2017a) summarised the protected coral species identified up to April 2017. These included gorgonian octocorals (genus *Corallium*) commonly confused with the pink stylasterid hydrocoral *Errina*, black corals *Leiopathes* and *Bathypathes*, and a diverse range of Hydrocorals: several genera of the white forms - *Conopora*, *Crypthelia*, *Lepidopora*, *Stylaster*, and *Errina*. The scleractinian corals comprised both the branching and cup forms, the most common being the branching corals *Solenosmilia variabilis*, *Enallopsammia rostrata*, and *Madrepora oculata*. The cup coral samples included two species of *Caryophyllia* (*C. lamellifera* and *C. profunda*), *Desmophyllum dianthus*, and *Flabellum knoxi*.

Table 3-1: Sample summary of the number of specimens identified by experts (all NIWA except for Phil Alderslade (CSIRO)) for each of the Protected Coral Groups along with a count of samples selected for genetic analyses. See Appendix A for a detailed species list.

| Protected Coral Group | Number of identified samples | Determiner | Number of genetic subsamples |
|---|------------------------------|--|------------------------------|
| Black corals (all species in the order Antipatharia) | 23 | Rob Stewart/Dennis Opresko | 10 |
| Gorgonian corals (all species in the order Alcyonacea previously known as Order Gorgonacea) | 74 | Phil Alderslade/Peter Marriott/Sadie Mills | 6 |
| Hydrocorals (all species in the family Stylasteridae) | 11 | Peter Marriott | 4 |
| Stony corals (all species in the order Scleractinia) | 61 | Di Tracey | 6 |
| Total number of samples | 169 | | 26 |

3.1.1 Loading into COD

The species identifications and all associated data from the Specify extract (Appendix A) were loaded into the MPI database *COD*. The data loading process is described in previous reports (Tracey & Mills 2016a). An extract of the samples loaded into *COD* is appended (Appendix B), and includes information such as corresponding fishing method, fishery area, and where possible, target species data field. This information helps identify potential interactions between the corals collected and fishing gear, and identify factors that may have contributed to coral mortality.

COD database record updates and additions are summarised below:

- 67 records where the initial identification matched a catch species and the expert identification differed were updated.
- In several instances there was more than one identified species for one UNI record, in these cases the first record was updated. Some tows had greater than one UNI/UNX records, records were updated for the matching number of expert identifications available.
- 42 records in *COD* catch did not require updating as the MPI species code recorded was the same as the expert identification MPI code.
- 47 new records were added to (insert into) the catch tables. New records occur when no data was entered by the observer and this usually occurs with the historical samples or when more than one species is associated with a coral record (e.g., a coral associate)
- 4 samples could not be used due to missing or invalid trip number/tow numbers or lack of available catch effort data recorded in *COD*.

Data summaries are provided below and include a count by Observer Area code and Observer Fisheries Management Areas (FMAs) (Table 3-2), and a count of tows by gear method and target species (Table

3-3). There were 166 samples taken from the FMAs inside the EEZ and 56 samples taken from the various High Seas (ET) regions. For the High Seas sample counts, four samples could not be linked to the CE data and so were omitted. Sample counts represent samples collected in 2016-17 as well as the historical samples.

Table 3-2: Protected coral count by Observer Fisheries Management Area. High Seas (ET) samples came from areas HOWE, CET, WANB, LOUR – see table description.

| <u>Area</u> | <u>Description</u> | <u>Count of Samples</u> |
|-------------|-----------------------------------|-------------------------|
| SOE | South-East (FMA4) | 31 |
| SUB | Sub-Antarctic (FMA6) | 22 |
| HOWE | Lord Howe Rise (ET) | 18 |
| AKE | Auckland East (FMA1) | 18 |
| CET | Challenger Plateau (ET) | 15 |
| SEC | South-East Coast (FMA3) | 11 |
| WANB | Wanganella Bank (ET) | 10 |
| SOU | Southland (FMA5) | 7 |
| TMAR | Tasmanian Ridge (ET) | 7 |
| LOUR | Louisville Ridge (ET) | 6 |
| AKW | Auckland West (FMA9) | 6 |
| SOI | Southern Offshore Islands (FMA6A) | 3 |
| CEE | Central East (FMA2) | 2 |

Of the samples received, the highest counts of coral mortality have been identified from bottom trawls. Some bottom long-line fisheries also impacted corals, specifically those vessels targeting bass groper and bluenose (n=12). Bottom trawls targeting the deepsea species orange roughly, smooth oreo, black oreo, and oreo unspecified, had the highest counts of protected corals as by-catch (n=102).

Table 3-3: Count of tows by target fishery and fishing gear method where protected corals were sampled.

| <u>Target Fishery (common name)</u> | <u>MPI code</u> | <u>Fishing method</u> | <u>Count of tows</u> |
|-------------------------------------|-----------------|-----------------------|----------------------|
| Orange roughy | ORH | Trawl | 65 |
| Smooth oreo | SSO | Trawl | 20 |
| Black oreo | BOE | Trawl | 12 |
| Alfonsino | BYS | Trawl | 11 |
| Bass groper | BAS | Bottom Lining | 10 |
| Hoki | HOK | Trawl | 5 |
| Oreos | OEO | Trawl | 5 |
| Scampi | SCI | Trawl | 5 |
| White warehou | WWA | Trawl | 4 |
| Hapuku & bass | HPB | Trawl | 4 |
| Arrow squid | SQU | Trawl | 3 |
| Bluenose | BNS | Bottom Lining | 2 |
| Tarakihi | TAR | Trawl | 2 |
| Alfonsino & long-finned beryx | BYX | Trawl | 2 |
| Ling | LIN | Trawl | 2 |
| Silver warehou | SWA | Trawl | 1 |
| Bluenose | BNS | Trawl | 1 |
| Trevally | TRE | Trawl | 1 |
| Hake | HAK | Trawl | 1 |

3.1.2 Digital photos

The digital photo images and associated details collected by Observers were obtained from a CSP Group representative from the MPI Observer Programme and uploaded to NIWA's FTP site. There were 456 image files provided and 163 able processed up to end of July 2017. The images processed subsequently will be reported on as required, in January 2018. Of the 163 images, 119 were protected coral images and were identified to the finest taxon level possible, and 112 of these were georeferenced to show provenance. Seven coral images and one non-coral image could not be attributed to a fishing event due to missing/invalid station number or incomplete MPI photographic logs/'Benthic Materials' form data, and therefore were not georeferenced. The remaining images were of non-protected coral taxa, e.g., bryozoans, sponges, and hydroids (n=44). We note that some of these groups can be easily confused with protected corals.

Many of the images were of excellent standard of impressive coral specimens, and included a label in the image with all required data. However, while the instructions to Observers include statements such as “the image is to include the specimen label showing trip and tow numbers”, we noted that in several of the images provided to NIWA, some included non-corals and several lacked tow data information. Examples are shown in Figure 3.1 of both the digital images of correctly labelled and un-labelled photos. Efforts were made to use information such as the TRIP number and the date and the time stamp of image capture, (extracted from the digital image properties), to help obtain tow details from the *COD* database in order to populate the image database. Although this was a time-consuming task, we were mostly successful in obtaining the required geo-reference information from the *COD* database. The image data are currently held in spreadsheet form (Appendix C), and in a secure drive at NIWA. A potential repository for these images is the NIWA official repository image database Atlas [<https://atlas.niwa.co.nzpublic.jsp/>]. Further discussion with the Client will take place to progress the final destination of the stored images. Some approvals will be required from MPI as part of this process.

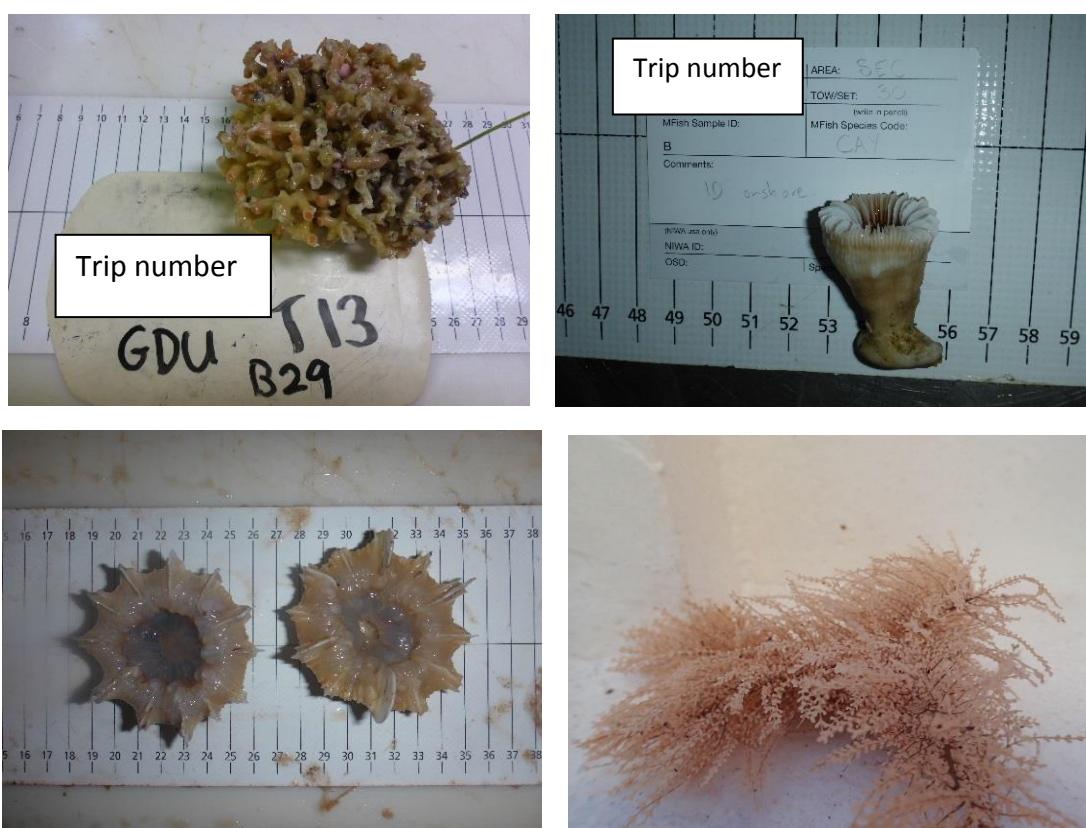


Figure 3-1: Digital images of protected corals taken at-sea and showing correctly labelled (top) as well as un-labelled (bottom) specimen photos.

Data summaries for the images are provided below and include a count by Fisheries Management Areas (Table 3-4) and a count of tows by target species (Table 3-5). There were 56 samples photographed from the High Seas (ET) areas (LOUR, HOWE, and CET). Many of the bottom trawls targeting orange roughly collected digital images of protected corals (n=64). Other trawl fisheries causing reasonably high coral mortality included those targeting arrow squid (n=16), the two alfonsino species (n=13), jack mackerel (n=12), and hake (n=10). Bottom long lining targeting ling, snapper, and bluenose took corals as by-catch.

Table 3-4: Count of images by Observer and Fisheries Management Area.

| <u>Area</u> | <u>Description</u> | <u>Count of Samples</u> |
|-------------|-----------------------------------|-------------------------|
| LOUR | Louisville Ridge (ET) | 37 |
| SOU | Southland (FMA5) | 24 |
| CET | Challenger Plateau (ET) | 16 |
| AKW | Auckland West (FMA9) | 15 |
| CHA | Challenger (FMA7) | 12 |
| SOE | South-East (FMA4) | 12 |
| SUB | Sub-Antarctic (FMA6) | 11 |
| CEW | Central West (FMA8) | 9 |
| AKE | Auckland East (FMA1) | 7 |
| SEC | South-East Coast (FMA3) | 5 |
| SOI | Southern Offshore Islands (FMA6A) | 4 |
| HOWE | Lord Howe Rise (ET) | 3 |

Table 3-5: Count of tows from which images were taken, by fishing gear method and target fishery.

| <u>Target Fishery (common name)</u> | <u>MPI code</u> | <u>Fishing method</u> | <u>Count of tows</u> |
|-------------------------------------|-----------------|-----------------------|----------------------|
| Orange roughy | ORH | Trawl | 64 |
| Arrow squid | SQU | Trawl | 16 |
| Alfonsino & long-finned beryx | BYX | Trawl | 13 |
| Jack mackerel | JMA | Trawl | 12 |
| Hake | HAK | Trawl | 10 |
| Ling | LIN | Bottom Lining | 8 |
| Snapper | SNA | Bottom Lining | 7 |
| White warehou | WWA | Trawl | 7 |
| Hapuku & bass | HPB | Trawl | 7 |
| Hoki | HOK | Trawl | 4 |
| Ling | LIN | Trawl | 3 |
| Silver warehou | SWA | Trawl | 2 |
| Bluenose | BNS | Bottom Lining | 1 |
| Scampi | SCI | Trawl | 1 |

3.2 Specific objective 2: Sub-samples of protected coral specimens for genetic analysis

Tissue sub-samples taken during the sample sorting process is on-going with the number of tissue samples processed and stored currently at 26.

4 Summary conclusions

The objective to identify the protected coral specimen samples was met, and the process was reasonably efficient as the methods have been on-going and standardised for several years. More than 160 specimen lots were received and examined between October 2016 to 2017, and these included some taxonomic highlights, such as new species and genera.

The identified samples have been collected opportunistically from commercial fishing activity and received by NIWA when Observers are uncertain of their identification of the coral specimen, the specimen has been caught outside the given depth range or distribution, or was rare or unusual. The data can be used to highlight interactions between fishing and protected corals and factors such as bottom trawling have been identified as impacting corals and causing mortality (Clark & Rowden 2009; Clark et al 2010; Williams et al 2010).

Of the samples received, there were 102 bottom trawls targeting three key deepsea species that recorded protected corals as by-catch and bottom long-line activity also caught corals. The accuracy of the Observer identifications at sea have not been analysed in detail but there were 42 records that did not require an update of the original observer identification in *COD* and we note that several samples identified by experts were from historical samples stored in the NIC. The information will be used to help better inform research and marine protection and is intended to allow for a more comprehensive mitigation framework to be implemented in future in order to protect cold-water corals in New Zealand waters. These identifications also contribute significantly to our understanding of this important coral group, expand our New Zealand's biodiversity science data, and fill knowledge gaps.

A large number of Observer-collected digital photographs were processed to identify the images to finest level possible, even though the task was reasonably labour intensive due to the factors outlined below. Despite this, we were able to process 163 images up until the end of July. Where image station data were missing because of the specimen image having no label, considerable effort was made to trace the trip, image date and time details back to information stored in the *COD* database in order to obtain the required meta-data for geo-referencing. There were also instances where a number of non-protected corals images were provided (e.g., of sponges, bryozoans, wood, hydroids, soft corals, sea pens), and as all images had to be examined, these non-protected coral images added to the processing time. Samples and or duplicates of the protected coral sample images were often provided. Duplications can easily be dealt with and it is useful for the experts carrying out the identifications to have a close-up image provided along with the overall colony image, but when an overall deck shot, a colony image, and a zoomed in image of the same colony is provided, it is time consuming to analyse and annotate all three images. An update of the numbers of images processed will be given in January 2018. Given the required image metadata is provided via a handwritten label which the observer includes in the photograph, collating these data will be a manual process for the foreseeable future unless GPS referenced cameras are to become standard.

We propose some changes to the workflow that we hope will be considered. Processing the images could be largely automated to both simplify the work, and potentially make the process more robust by adding business rules for metadata validation. The output from a user working through the photographs will be a spreadsheet (CSV text file) containing the basic image metadata (with one row per image), including: trip code; station; date etc. NIWA can develop a script which reads this file, row by row, and for each row interrogates the *COD* database for the tow times, positions, depths, etc for that tow. The script can also include checks are carried out for inconsistencies e.g., matching the date/time data from the image with the tow data, and the depth can be cross checked against a NIWA bathymetry model to help ensure depth data accuracy. This script would output a CSV file suitable for an Atlas database bulk upload, so the user could use this file for an upload of all the images in a single transaction. MPI approval is needed for the user running the script to access the *COD* database. We note that this is being carried out by proxy at present, in a manual operation, so this recommended approach is not inherently any less secure than the current approach.

5 Recommendations

- **Briefings:** We suggest direct liaison with CSP Group, DOC and the Observer Services Unit, MPI take place early in the second year of the project to ensure that the at-sea instructions on photographing specimens are followed more closely by Observers.
- **Image database storage:** We suggest an improved image database storage system for the Observer collected digital images and we have outlined the processing methods applied by NIWA and what is required to load the data into NIWA's Atlas database. Some approvals will be required from MPI as part of this process.
- **High Seas samples:** The High Seas outside the NZ EEZ coral samples were processed as part of this project even though CSP do not currently fund their identification. Samples have been identified primarily due to labelling issues when samples are received at NIWA for processing. TRIP data are provided on sacks of frozen material but no information on general location is given, and hence the subsequent difficulty in sorting the High Seas samples from those returned to NIWA from inside the zone. We suggest a variation to future contracts to cover the costs of the High Seas (South Pacific Regional Fisheries Management Organisation (SPRFMO) samples. This also applies to processing the digital image data, several (n=56) came from High Seas areas.
- **The backlog of unidentified protected coral samples** was reduced this year (n=130) due to a decreasing number of observer sample specimens returned to identify (possibly because of an increase in digital images being collected), and few research trawl survey samples. While decreasing in number, some historical research trawl and observer samples held at NIWA remain unidentified. We recommend that this backlog continues to be addressed.

6 Acknowledgements

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Appendix A Specify database summary of sample data provided by species for the observer collected data

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------|---------|----------|----------|------------|------------------|---------------------------|----------------------|--------------------|-----------------|--------------|------------|----------|-----------|---------|---------|
| 44360 | | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | <i>Acanthogorgia</i> | | Phil Alderslade | 17/05/2017 | 1 | 11/10/2007 | -46.7 | 170.5 | 855 | 940 |
| 42486 | 92 | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | <i>Acanthogorgia</i> | | Phil Alderslade | 17/05/2017 | 1 | 17/07/2008 | -49.9 | 175.6 | 900 | |
| 88639 | 2703 | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | <i>Acanthogorgia</i> | | Phil Alderslade | 18/05/2017 | 1 | 9/11/2013 | -32.5 | 167.5 | 104 | 94 |
| 62915 | | Cnidaria | Anthozoa | Alcyonacea | Anthothelidae | <i>?Anthothela</i> | | Phil Alderslade | 16/05/2017 | 1 | 12/11/2008 | -44.5 | -178.6 | 785 | 880 |
| 65905 | 1058 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | | Phil Alderslade | 22/05/2017 | 1 | 10/07/2010 | -34.4 | 174.2 | 918 | 1077 |
| 69540 | 1264 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | | Phil Alderslade | 22/05/2017 | 1 | 5/12/2010 | -42.9 | 177.6 | 465 | 437 |
| 69533 | 1257 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | | Phil Alderslade | 22/05/2017 | 1 | 29/12/2010 | -34 | 168.1 | 912 | 997 |
| 95226 | 3267 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | | Phil Alderslade | 16/05/2017 | 1 | 14/12/2015 | -35.9 | 165.6 | 686 | 1090 |
| 121481 | 1273 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | <i>?curvata</i> | Phil Alderslade | 22/05/2017 | 1 | 24/12/2010 | -33.6 | 167.8 | 1104 | 959 |
| 69549 | 1273 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Chrysogorgia</i> | <i>?tetrasticha</i> | Phil Alderslade | 22/05/2017 | 1 | 24/12/2010 | -33.6 | 167.8 | 1104 | 959 |
| 106525 | 3501 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Metallogorgia</i> | <i>macrospina</i> | Phil Alderslade | 16/05/2017 | 1 | 21/10/2016 | -34.1 | 162.5 | 493 | 864 |
| 69550 | 1274 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Metallogorgia</i> | <i>melanotrichos</i> | Phil Alderslade | 22/05/2017 | 1 | 31/12/2010 | -35.6 | 166 | 851 | 1141 |
| 65904 | 1057 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Pseudochrysogorgia</i> | n. sp. | Phil Alderslade | 22/05/2017 | 1 | 10/07/2010 | -34.4 | 174.2 | 918 | 1077 |
| 121413 | 116 | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | <i>Radicipes</i> | | Phil Alderslade | 24/05/2017 | 4 | 6/12/2016 | -51.9 | 173.1 | 612 | 621 |
| 95179 | 3201 | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | <i>Corallium</i> | | Peter Marriott | 23/03/2017 | 1 | 30/07/2015 | -48.8 | 166.4 | 503 | |
| 14394 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 15/08/1998 | -47.2 | 148.7 | 936 | |
| 14396 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 7/08/1998 | -47.5 | 148.9 | 1031 | |
| 14397 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 15/08/1998 | -47.2 | 148.7 | 936 | |
| 14392 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 4/09/1998 | -47.5 | 148.9 | 1086 | |
| 14393 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 6/09/1998 | -47.5 | 148.8 | 890 | |
| 14389 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 9/10/1998 | -47.2 | 148.7 | 1022 | |
| 14412 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 11/10/1998 | -47.5 | 148.8 | 911 | |
| 14390 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 11/12/1998 | -48.6 | 165 | 1056 | |
| 14400 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 11/12/1998 | -48.6 | 165 | 1056 | |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------------|------------|----------|----------|------------|---------------|--------------------|-----------------------|--------------------|--------------------|-----------------|------------|----------|-----------|---------|------------|
| 14403 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 28/03/1999 | -34.8 | 171.7 | 1007 | |
| 14405 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 28/03/1999 | -34.8 | 171.7 | 1007 | |
| 14414 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 17/05/2017 | 1 | 28/03/1999 | -34.8 | 171.7 | 1007 | |
| 121552 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 26/05/2017 | 1 | 2/10/2003 | -34.7 | 171.8 | 1204 | |
| 66241 | 34 | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 18/05/2017 | 1 | 13/07/2009 | -37.3 | 167.4 | 782 | 782 |
| 66246 | 358 | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 18/05/2017 | 1 | 12/09/2009 | -45.3 | 171.8 | 883 | 1074 |
| 66312 | 386 | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 18/05/2017 | 1 | 23/11/2009 | -48.7 | 175.3 | 836 | 822 |
| 65918 | 1071 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Isidella</i> | | Phil Alderslade | 19/05/2017 | 1 | 10/11/2008 | -46.4 | 171.2 | 1050 | 1151 |
| 66214 | 539 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Isidella</i> | | Phil Alderslade | 19/05/2017 | 1 | 9/01/2010 | -44.5 | -178.7 | 670 | 920 |
| 69519 | 1238 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 2/11/2010 | -37.4 | 176.4 | 370 | |
| 65993 | 1209 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Keratoisis</i> | | Phil Alderslade | 18/05/2017 | 1 | 5/11/2010 | -45 | 174.2 | 1024 | 1030 |
| 88593 | 2603 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 16/07/2013 | -47 | 165.7 | 484 | 721 |
| 95183 | 3205 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>?Keratoisis</i> | | Phil Alderslade | 16/05/2017 | 1 | 16/07/2015 | -38.4 | -168.1 | 263 | 298 |
| 95129 | 3118 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Acanella</i> | | Phil Alderslade | 16/05/2017 | 1 | | | | | |
| 95240 | 3281 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Acanella</i> | | Phil Alderslade | 16/05/2017 | 1 | 16/11/2015 | -37.4 | 169 | 1046 | 1039 |
| 14399 | | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 17/05/2017 | 1 | 30/11/1998 | -48.6 | 165 | 940 | 1180 |
| 66201 | 441 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 17/05/2017 | 1 | 25/09/2009 | -53.5 | 140 | 1274 | 998 |
| 66212 | 537 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 24/12/2009 | -48.7 | 164.8 | 431 | 363 |
| 66213 | 538 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 23/12/2009 | -46.8 | 170.6 | | |
| 88588 | 2598 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 15/06/2010 | -34 | 167.5 | 746 | 938 |
| 69552 | 1276 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 27/12/2010 | -34.2 | 162.6 | 431 | 645 |
| 69580 | 1311 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 19/05/2017 | 1 | 30/12/2010 | -33.6 | 167.8 | 841 | 1049 |
| 95223 | 3264 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 16/05/2017 | 1 | 14/12/2015 | -35.9 | 165.6 | 686 | 1090 |
| 106530 | 3509 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | | Phil Alderslade | 16/05/2017 | 1 | 10/10/2016 | -47.3 | 178.8 | 787 | |
| 121403 | 37 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Keratoisis</i> | <i>hikurangiensis</i> | Phil Alderslade | 24/05/2017 | 1 | 16/08/2016 | -41.9 | 169.8 | 965 | 963 |
| 65903 | 1056 | Cnidaria | Anthozoa | Alcyonacea | Isididae | <i>Lepidisis</i> | <i>solitaria</i> | Phil Alderslade | 19/05/2017 | 1 | 10/07/2010 | -34.4 | 174.2 | 918 | 1077 |
| 65917 | 1070 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>alisonae</i> | Phil Alderslade | 18/05/2017 | 1 | 16/11/2008 | -50 | 175 | 884 | 970 |
| 65926 | 1079 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>alisonae</i> | Phil Alderslade | 17/05/2017 | 1 | 16/11/2008 | -50 | 175.1 | | 916 |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------------|------------|----------|----------|--------------|----------------|----------------------|---------------------|--------------------|--------------------|-----------------|------------|----------|-----------|---------|------------|
| 65926 | 1079 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>alisonae</i> | Phil Alderslade | 17/05/2017 | 1 | 16/11/2008 | -50 | 175.1 | | 916 |
| 66270 | 477 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>arborea</i> | Phil Alderslade | 17/05/2017 | 1 | 24/11/2009 | -44.6 | -177.6 | 996 | |
| 65991 | 1207 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>arborea</i> | Phil Alderslade | 19/05/2017 | 1 | 18/11/2010 | -44.3 | 179.3 | 1036 | |
| 106531 | 3510 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>cf. alisonae</i> | Phil Alderslade | 16/05/2017 | 1 | 15/10/2016 | -47.4 | 178.8 | 930 | 918 |
| 65896 | 1049 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>coralloides</i> | Phil Alderslade | 18/05/2017 | 1 | 29/06/2010 | -34 | 168.2 | 836 | 955 |
| 65949 | 1124 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | <i>coralloides</i> | Phil Alderslade | 18/05/2017 | 1 | 1/09/2010 | -34.1 | 162.7 | 541 | 596 |
| 69538 | 1262 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | n. sp. α | Phil Alderslade | 19/05/2017 | 1 | 30/12/2010 | -33.6 | 167.8 | 776 | 998 |
| 88589 | 2599 | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | <i>Paragorgia</i> | n. sp. β | Phil Alderslade | 18/05/2017 | 1 | 15/06/2010 | -34 | 167.5 | 746 | 938 |
| 95221 | 3262 | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | <i>Anthomuricea</i> | | Phil Alderslade | 16/05/2017 | 1 | 14/12/2015 | -35.9 | 165.6 | 686 | 1090 |
| 95184 | 3206 | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | <i>Clematissa</i> | sp. A | Phil Alderslade | 16/05/2017 | 1 | 16/07/2015 | -38.4 | -168.1 | 263 | 298 |
| 69602 | 1335 | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | <i>Clematissa</i> | sp. B | Phil Alderslade | 17/05/2017 | 1 | 17/12/2010 | -32.7 | 167.6 | 354 | 385 |
| 11305 | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 17/05/2017 | 1 | 1/08/1997 | -37 | 176.7 | 976 | |
| 67863 | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>?Paranarella</i> | | Phil Alderslade | 19/05/2017 | 1 | 14/11/2006 | -49.3 | 176.3 | 1192 | 1300 |
| 65916 | 1069 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>?Thouarella</i> | | Phil Alderslade | 24/05/2017 | 1 | 14/11/2008 | -49.5 | 175.7 | 702 | 1060 |
| 95235 | 3276 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Calyptrophora</i> | <i>inornata</i> | Phil Alderslade | 16/05/2017 | 1 | 27/11/2015 | -37.4 | 167.5 | 730 | 946 |
| 113999 | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Dasystemella</i> | <i>acanthina</i> | Phil Alderslade | 23/05/2017 | 2 | 8/10/1995 | -44.7 | 174.9 | 818 | 800 |
| 106505 | 3493 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Narella</i> | | Phil Alderslade | 23/05/2017 | 1 | 21/10/2016 | -34 | 162.6 | 504 | 703 |
| 106527 | 3503 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Narella</i> | | Phil Alderslade | 23/05/2017 | 1 | 19/10/2016 | -34 | 162.6 | 505 | 743 |
| 67863 | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>?Paranarella</i> | | Phil Alderslade | 19/05/2017 | 1 | 14/11/2006 | -49.3 | 176.3 | 1192 | 1300 |
| 106532 | 3511 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Primnoa</i> | <i>notialis</i> | Phil Alderslade | 23/05/2017 | 1 | 11/10/2016 | -47.3 | 178.9 | 911 | |
| 65921 | 1074 | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | <i>Thouarella</i> | | Phil Alderslade | 24/05/2017 | 1 | 13/11/2008 | -49.3 | 176.3 | 1300 | 1278 |
| 66318 | 457 | Cnidaria | Anthozoa | Alcyonacea | Subergorgiidae | <i>Rosgorgia</i> | | Phil Alderslade | 22/05/2017 | 1 | 28/09/2009 | -50.1 | 174.9 | 996 | 1011 |
| 106524 | 3500 | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | <i>Leiopathes</i> | | Rob Stewart | 15/03/2017 | 1 | 19/10/2016 | -34 | 162.6 | 503 | 726 |
| 95182 | 3204 | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | <i>Leiopathes</i> | <i>acanthophora</i> | Rob Stewart | 20/03/2017 | 1 | 16/07/2015 | -38.4 | -168.1 | 263 | 298 |
| 95231 | 3272 | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | <i>Leiopathes</i> | <i>acanthophora</i> | Rob Stewart | 20/03/2017 | 1 | 27/11/2015 | -37.4 | 167.5 | 730 | 946 |
| 95239 | 3280 | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | <i>Leiopathes</i> | <i>cf. bullosa</i> | Rob Stewart | 20/03/2017 | 1 | 16/11/2015 | -37.4 | 169 | 1046 | 1039 |
| 69596 | 1329 | Cnidaria | Anthozoa | Antipatharia | Myriopathidae | <i>Antipathella</i> | | Rob Stewart | 27/03/2017 | 1 | 15/12/2010 | -32.5 | 166.8 | 367 | 356 |
| 106533 | 3514 | Cnidaria | Anthozoa | Antipatharia | Myriopathidae | <i>Antipathella</i> | | Rob Stewart | 15/03/2017 | 1 | | | | | |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------|---------|----------|----------|--------------|-----------------|----------------------|-----------------------|-------------|-----------------|--------------|------------|----------|-----------|---------|---------|
| 106520 | 3496 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>?Bathypathes</i> | | Rob Stewart | 15/03/2017 | 1 | 19/10/2016 | -34 | 162.6 | 503 | 726 |
| 88591 | 2601 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 27/03/2017 | 1 | 24/05/2010 | -37.5 | 169.3 | 987 | |
| 95181 | 3203 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 20/03/2017 | 1 | 16/07/2015 | -38.4 | -168.1 | 263 | 298 |
| 95232 | 3273 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 20/03/2017 | 1 | 27/11/2015 | -37.4 | 167.5 | 730 | 946 |
| 106519 | 3495 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 15/03/2017 | 1 | 7/10/2016 | -37.6 | 169.6 | 959 | 1066 |
| 106521 | 3497 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 15/03/2017 | 1 | 20/10/2016 | -34.2 | 162.7 | 420 | 772 |
| 106522 | 3498 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 15/03/2017 | 1 | 19/10/2016 | -34 | 162.6 | 499 | 733 |
| 106523 | 3499 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | | Rob Stewart | 15/03/2017 | 1 | 21/10/2016 | -34 | 162.6 | 504 | 703 |
| 106518 | 3494 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Bathypathes</i> | <i>cf. alternata</i> | Rob Stewart | 15/03/2017 | 1 | 20/10/2016 | -34.2 | 162.6 | 419 | 770 |
| 88592 | 2602 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Lillipathes</i> | | Rob Stewart | 27/03/2017 | 1 | | | | | |
| 88617 | 2665 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Lillipathes</i> | <i>cf. ritamariae</i> | Opresko | 26/09/2017 | 1 | 20/10/2013 | -34.2 | 162.7 | 478 | 685 |
| 69647 | 1431 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Parantipathes</i> | | Rob Stewart | 27/03/2017 | 1 | 10/01/2009 | -42.7 | -177.5 | 1251 | 1265 |
| 95234 | 3275 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Parantipathes</i> | | Rob Stewart | 20/03/2017 | 1 | 27/11/2015 | -37.4 | 167.5 | 730 | 946 |
| 88612 | 2611 | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | <i>Stauropathes</i> | | Rob Stewart | 27/03/2017 | 1 | 11/07/2013 | -35.4 | 165.3 | 931 | 935 |
| 95177 | 3194 | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | <i>?Tylopathes</i> | | Rob Stewart | 20/03/2017 | 1 | 11/08/2015 | -34.6 | 169 | 566 | 419 |
| 95227 | 3268 | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | <i>Triadopathes</i> | | Rob Stewart | 20/03/2017 | 1 | 14/12/2015 | -35.9 | 165.6 | 686 | 1090 |
| 95237 | 3278 | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | <i>Triadopathes</i> | | Rob Stewart | 20/03/2017 | 1 | 27/11/2015 | -37.4 | 167.5 | 730 | 946 |
| 61979 | 653 | Cnidaria | Anthozoa | Scleractinia | | | | Di Tracey | 1/05/2017 | 1 | 22/02/2010 | -49.2 | 164.3 | 820 | 1107 |
| 66445 | 272 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | | Di Tracey | 1/05/2017 | 1 | 8/10/2009 | -44.5 | -174.9 | 1006 | 1081 |
| 106534 | 3519 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | | Di Tracey | 7/03/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 95153 | 3150 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | <i>lamellifera</i> | Di Tracey | 1/05/2017 | 6 | 4/05/2015 | -37 | 176.2 | | |
| 119690 | 3525 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | <i>lamellifera</i> | Di Tracey | 1/05/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 95152 | 3149 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | <i>profunda</i> | Di Tracey | 1/05/2017 | 1 | 26/04/2015 | -37.7 | 176.9 | | |
| 106482 | 3401 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Caryophyllia</i> | <i>profunda</i> | Di Tracey | 1/05/2017 | 1 | 14/06/2016 | -44.1 | 175.9 | 210 | 215 |
| 66439 | 32 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | May-17 | 1 | 29/07/2009 | -33.7 | 167.1 | 633 | 836 |
| 66443 | 230 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | May-17 | 5 | 19/10/2009 | -44.5 | -178.6 | 730 | 936 |
| 66444 | 264 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 1 | 8/10/2009 | -44.5 | -174.9 | 1040 | 1048 |
| 66446 | 288 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 1 | 24/08/2009 | -43.4 | 176.1 | 374 | 389 |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------|---------|----------|----------|--------------|------------------|------------------------|-------------------|------------|-----------------|--------------|------------|----------|-----------|---------|---------|
| 66448 | 353 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 1 | 24/10/2009 | -44.3 | -174.6 | 1263 | 1316 |
| 66451 | 545 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | May-17 | 3 | 10/01/2010 | -44.5 | -178.6 | | 944 |
| 66452 | 546 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | Apr-17 | 3 | 10/01/2010 | -44.5 | -178.7 | 660 | 940 |
| 95180 | 3202 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 6 | 30/07/2015 | -48.8 | 166.4 | 503 | |
| 95186 | 3208 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 1 | 12/07/2015 | -41.9 | -163.7 | 909 | 883 |
| 106502 | 3490 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 7/03/2017 | 4 | 18/10/2016 | -49 | 166.6 | 560 | 558 |
| 106541 | 3532 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 1/05/2017 | 1 | | | | | |
| 106555 | 3557 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Desmophyllum</i> | <i>dianthus</i> | Di Tracey | 18/05/2017 | 1 | | | | | |
| 113819 | | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Goniocorella</i> | <i>dumosa</i> | Di Tracey | 3/08/2016 | 1 | 21/06/2016 | -42.8 | -176.9 | 745 | 920 |
| 113821 | | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Goniocorella</i> | <i>dumosa</i> | Di Tracey | 30/06/2016 | 1 | 30/06/2016 | -42.6 | -179.9 | 1043 | 1230 |
| 69625 | 1395 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Goniocorella</i> | <i>dumosa</i> | Di Tracey | 1/05/2017 | 1 | 2/11/2010 | -37.4 | 176.4 | 370 | |
| 66377 | 232 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 22/10/2009 | -44.7 | -175.4 | 1090 | 1303 |
| 66387 | 354 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 24/10/2009 | -44.3 | -174.6 | 1263 | 1316 |
| 66391 | 368 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 9/10/2009 | -44.2 | -174.5 | 745 | 1197 |
| 65596 | 374 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | 1/05/2017 | 1 | | | | | |
| 66394 | 400 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 17/11/2009 | -50.1 | 163.5 | 1075 | 1210 |
| 66397 | 501 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 30/11/2009 | -44.6 | -175.1 | 1007 | |
| 66398 | 518 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 28/12/2009 | -50.2 | 165.8 | 695 | |
| 66399 | 519 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 27/12/2009 | -50.2 | 163.7 | 1000 | |
| 66400 | 520 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | 1/05/2017 | 1 | 27/12/2009 | -50.3 | 163.6 | 617 | |
| 66401 | 521 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 16/01/2010 | -44.2 | -174.5 | 1220 | 1400 |
| 66402 | 524 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 27/12/2009 | -50 | 163.7 | 930 | 1123 |
| 65996 | 1214 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 28/09/2010 | -40.6 | 176.9 | | |
| 69508 | 1227 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | Apr-17 | 1 | 27/11/2010 | -37.7 | 179.3 | 1064 | 1201 |
| 95185 | 3207 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Solenosmilia</i> | <i>variabilis</i> | Di Tracey | 1/05/2017 | 1 | 12/07/2015 | -41.9 | -163.7 | 909 | 883 |
| 106526 | 3502 | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | <i>Stephanocyathus</i> | | Di Tracey | 7/03/2017 | 1 | 10/10/2016 | -37.2 | 167.2 | 1027 | 985 |
| 65470 | 262 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | Apr-17 | 1 | 23/10/2009 | -44.5 | -174.9 | 1020 | 1091 |
| 65473 | 352 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | Apr-17 | 1 | 24/10/2009 | -44.3 | -174.6 | 1263 | 1316 |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------|---------|----------|----------|---------------|------------------|----------------------|---------------------|--------------------|-----------------|--------------|------------|----------|-----------|---------|---------|
| 120561 | 488 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | 1/05/2017 | 1 | 24/11/2009 | -44.5 | -178.6 | 710 | |
| 61900 | 552 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | Apr-17 | 1 | 12/02/2010 | -37.3 | 168.1 | | 922 |
| 65657 | 1015 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | Apr-17 | 1 | 25/11/2008 | -47.5 | 177.9 | 606 | 942 |
| 65986 | 1202 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | 1/05/2017 | 1 | 23/11/2010 | -38.3 | 168.4 | 293 | 303 |
| 106528 | 3504 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | 7/03/2017 | 1 | 20/10/2016 | -34.2 | 162.7 | 420 | 772 |
| 106529 | 3505 | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | <i>Enallopsammia</i> | <i>rostrata</i> | Di Tracey | 7/03/2017 | 1 | 9/10/2016 | -37.1 | 167 | 960 | 1114 |
| 106504 | 3492 | Cnidaria | Anthozoa | Scleractinia | Flabellidae | <i>Flabellum</i> | | Di Tracey | 7/03/2017 | 1 | 19/10/2016 | -50.9 | 167.7 | | |
| 95112 | 3069 | Cnidaria | Anthozoa | Scleractinia | Flabellidae | <i>Flabellum</i> | <i>knoxii</i> | Di Tracey | 1/05/2017 | 1 | 8/12/2014 | -44.2 | 173.5 | 300 | 292 |
| 106475 | 3392 | Cnidaria | Anthozoa | Scleractinia | Flabellidae | <i>Flabellum</i> | <i>knoxii</i> | Di Tracey | 1/05/2017 | 1 | 14/05/2016 | -43.3 | 174.2 | 580 | 570 |
| 106476 | 3395 | Cnidaria | Anthozoa | Scleractinia | Flabellidae | <i>Flabellum</i> | <i>knoxii</i> | Di Tracey | 1/05/2017 | 5 | 15/06/2016 | -44.6 | 172.7 | 323 | 110 |
| 106542 | 3533 | Cnidaria | Anthozoa | Scleractinia | Flabellidae | <i>Flabellum</i> | <i>knoxii</i> | Di Tracey | 1/05/2017 | 1 | | | | | |
| 65494 | 212 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 2 | 26/10/2009 | -44.5 | 178.6 | 730 | 913 |
| 65495 | 216 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 23/10/2009 | -44.3 | -174.6 | 1067 | 1067 |
| 65498 | 276 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 26/10/2009 | -44.5 | 178.6 | 730 | 913 |
| 65499 | 301 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 21/09/2009 | -47.3 | 178.8 | 770 | 870 |
| 65501 | 363 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 18/09/2009 | -44.6 | 173.3 | 746 | 740 |
| 65502 | 488 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | 1/05/2017 | 1 | 24/11/2009 | -44.5 | -178.6 | 710 | |
| 65505 | 517 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 14/01/2010 | -43.8 | -174.3 | 800 | 1062 |
| 65507 | 526 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | 1/05/2017 | 1 | 10/01/2010 | -44.5 | -178.7 | 660 | 940 |
| 65648 | 1024 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | 1/05/2017 | 1 | 23/11/2008 | -47.6 | 177.9 | 981 | 969 |
| 65994 | 1210 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey | Apr-17 | 1 | 5/11/2010 | -44.8 | 172.5 | 929 | 1008 |
| 69541 | 1265 | Cnidaria | Anthozoa | Scleractinia | Oculinidae | <i>Madrepora</i> | <i>oculata</i> | Di Tracey Peter | Apr-17 | 1 | 30/11/2010 | -42.9 | 178.4 | 481 | 479 |
| 95243 | 3290 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Conopora</i> | <i>laevis</i> | Marriott Peter | 20/03/2017 | 1 | 25/12/2015 | -49.1 | 166.6 | 570 | |
| 106503 | 3491 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Conopora</i> | <i>verrucosa</i> | Marriott Peter | 4/04/2017 | 1 | 18/10/2016 | -49 | 166.6 | 560 | 558 |
| 106536 | 3521 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Crypthelia</i> | <i>polypoma</i> | Marriott Peter | 17/03/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 119714 | 3525 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Crypthelia</i> | <i>polypoma</i> | Marriott Peter | 4/04/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 106535 | 3520 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Errina</i> | <i>chathamensis</i> | Marriott Peter | 17/03/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 65562 | 268 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Errina</i> | <i>cheilopora</i> | Marriott | 17/03/2017 | 3 | 8/10/2009 | -44.5 | -174.9 | 1006 | 1081 |

| NIWA Cat. No. | OSD No. | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Sample Count | Date | Latitude | Longitude | Depth 1 | Depth 2 |
|---------------------|------------|----------|----------|---------------|---------------|-------------------|-----------------------|-------------------|--------------------|-----------------|------------|----------|-----------|---------|------------|
| 95252 | 3322 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Errina</i> | <i>laevigata</i> | Peter Marriott | 23/03/2017 | 1 | 8/03/2016 | -49.9 | 166.2 | 202 | |
| 119713 | 3525 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Errina</i> | <i>novaezelandiae</i> | Peter Marriott | 4/04/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 106537 | 3525 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Lepidopora</i> | <i>polystichopora</i> | Peter Marriott | 4/04/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 106538 | 3529 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Stylaster</i> | <i>eguchii</i> | Peter Marriott | 17/03/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |
| 119712 | 3525 | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | <i>Stylaster</i> | <i>horologium</i> | Peter Marriott | 4/04/2017 | 1 | 28/01/2017 | -35.6 | 175.8 | | |

Appendix B COD extract spreadsheet produced after data loading

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|--------------|-------------------|---------------|----------|-----------------|--------------|----------------|
| 11305 | PRI | ORH | AKE | Cnidaria | Anthozoa | Alcyonacea | Primnoidae indet. | | | Phil Alderslade | 1 | |
| 14396 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14394 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14397 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14392 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14393 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14389 | ISI | SSO | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14412 | ISI | ORH | TMAR | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14399 | BOO | OEO | SOU | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | |
| 14390 | ISI | OEO | SOU | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14400 | ISI | OEO | SOU | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14414 | ISI | ORH | AKW | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14403 | ISI | ORH | AKW | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 14405 | ISI | ORH | AKW | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 121552 | ISI | | | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | |
| 67863 | PRI | OEO | SUB | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Paranarella | | Phil Alderslade | 1 | |
| 44360 | SOC | SSO | SEC | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | Acanthogorgia | | Phil Alderslade | 1 | 11/10/2007 |
| 42486 | SOC | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | Acanthogorgia | | Phil Alderslade | 1 | 17/07/2008 |
| 62915 | SOC | ORH | SOE | Cnidaria | Anthozoa | Alcyonacea | Anthothelidae | Anthothela | | Phil Alderslade | 1 | 12/11/2008 |
| 65918 | ISI | SSO | SEC | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 1 | 10/11/2008 |
| 65921 | THO | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 1 | 13/11/2008 |
| 65916 | THO | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 1 | 14/11/2008 |
| 65926 | PAB | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | alisonae | Phil Alderslade | 1 | 16/11/2008 |
| 65917 | PAB | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | alisonae | Phil Alderslade | 1 | 16/11/2008 |
| 65648 | MOC | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 23/11/2008 |
| 65657 | ERO | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 25/11/2008 |

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|---------------|------------------|---------------|------------|-----------------|--------------|----------------|
| 69647 | PTP | ORH | SOE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Parantipathes | | Rob Stewart | 1 | 10/01/2009 |
| 66241 | ISI | ORH | CET | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | 13/07/2009 |
| 66439 | DDI | ORH | WANB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 29/07/2009 |
| 66246 | ISI | SSO | SEC | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | 12/09/2009 |
| 65501 | MOC | BOE | SEC | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 18/09/2009 |
| 65499 | MOC | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 21/09/2009 |
| 66318 | SOC | BOE | SUB | Cnidaria | Anthozoa | Alcyonacea | Subergorgiidae | Rosgorgia | | Phil Alderslade | 1 | 28/09/2009 |
| 66446 | DDI | SCI | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 24/08/2009 |
| 65596 | SVA | | | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | |
| 66201 | BOO | | | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | |
| 66445 | CAY | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | | Di Tracey | 1 | 8/10/2009 |
| 65562 | ERR | ORH | SOE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Errina | cheilopora | Peter Marriott | 3 | 8/10/2009 |
| 66444 | DDI | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 8/10/2009 |
| 66391 | SVA | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 9/10/2009 |
| 66443 | DDI | SSO | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 5 | 19/10/2009 |
| 66377 | SVA | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 22/10/2009 |
| 65470 | ERO | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 23/10/2009 |
| 65495 | MOC | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 23/10/2009 |
| 66448 | DDI | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 24/10/2009 |
| 65473 | ERO | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 24/10/2009 |
| 66387 | SVA | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 24/10/2009 |
| 65494 | MOC | SSO | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 2 | 26/10/2009 |
| 65498 | MOC | SSO | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 26/10/2009 |
| 66394 | SVA | OEO | SUB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 17/11/2009 |
| 66312 | ISI | ORH | SUB | Cnidaria | Anthozoa | Alcyonacea | Isididae indet. | | | Phil Alderslade | 1 | 23/11/2009 |
| 120561 | ERO | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 24/11/2009 |
| 65502 | MOC | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 24/11/2009 |
| 66270 | PAB | SSO | SOE | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | arborea | Phil Alderslade | 1 | 24/11/2009 |
| 66397 | SVA | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 30/11/2009 |

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|--------------|------------------|--------------------|-------------|-----------------|--------------|----------------|
| 66213 | BOO | SSO | SEC | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 23/12/2009 |
| 66212 | BOO | WWA | SOU | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 24/12/2009 |
| 66402 | SVA | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 27/12/2009 |
| 66399 | SVA | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 27/12/2009 |
| 66400 | SVA | SSO | SUB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 27/12/2009 |
| 66398 | SVA | SSO | SOI | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 28/12/2009 |
| 66214 | ISI | BOE | SOE | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 1 | 9/01/2010 |
| 66451 | DDI | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 3 | 10/01/2010 |
| 66452 | DDI | BOE | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 3 | 10/01/2010 |
| 65507 | MOC | BOE | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 10/01/2010 |
| 65505 | MOC | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 14/01/2010 |
| 66401 | SVA | ORH | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 16/01/2010 |
| 61900 | ERO | ORH | CET | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 12/02/2010 |
| 61979 | SIA | BOE | SUB | Cnidaria | Anthozoa | Scleractinia | | | | Di Tracey | 1 | 22/02/2010 |
| 88591 | BTP | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 24/05/2010 |
| 88588 | BOO | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 15/06/2010 |
| 88589 | PAB | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | n. sp. B | Phil Alderslade | 1 | 15/06/2010 |
| 65896 | PAB | ORH | AKW | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | coralloides | Phil Alderslade | 1 | 29/06/2010 |
| 65905 | CHR | ORH | AKE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | | Phil Alderslade | 1 | 10/07/2010 |
| 65903 | LLE | ORH | AKE | Cnidaria | Anthozoa | Alcyonacea | Isididae | Lepidisis | solitaria | Phil Alderslade | 1 | 10/07/2010 |
| 65904 | SOC | ORH | AKE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Pseudochrysogorgia | n. sp. | Phil Alderslade | 1 | 10/07/2010 |
| 88592 | LIL | | | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Lillipathes | | Rob Stewart | 1 | |
| 65949 | PAB | BYX | HOWE | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | coralloides | Phil Alderslade | 1 | 1/09/2010 |
| 65996 | SVA | SCI | CEE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 28/09/2010 |
| 69519 | BOO | SCI | AKE | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 2/11/2010 |
| 69625 | GDU | SCI | AKE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 1 | 2/11/2010 |
| 65994 | MOC | SSO | SEC | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 5/11/2010 |
| 65993 | BOO | BOE | SEC | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 5/11/2010 |
| 65991 | PAB | SSO | SOE | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | arborea | Phil Alderslade | 1 | 18/11/2010 |

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|--------------|------------------|---------------|---------------|-----------------|--------------|----------------|
| 69541 | MOC | HOK | SOE | Cnidaria | Anthozoa | Scleractinia | Oculinidae | Madrepora | oculata | Di Tracey | 1 | 30/11/2010 |
| 69540 | CHR | HOK | SOE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | | Phil Alderslade | 1 | 6/12/2010 |
| 69508 | SVA | ORH | CEE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 27/11/2010 |
| 65986 | ERO | BNS | CET | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 24/11/2010 |
| 121481 | CHR | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | curvata | Phil Alderslade | 1 | 24/12/2010 |
| 69549 | CHR | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | tetrasticha | Phil Alderslade | 1 | 24/12/2010 |
| 69552 | BOO | BYS | HOWE | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 27/12/2010 |
| 69550 | MTL | ORH | HOWE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Metallogorgia | melanotrichos | Phil Alderslade | 1 | 31/12/2010 |
| 69596 | AHL | BNS | WANB | Cnidaria | Anthozoa | Antipatharia | Myriopathidae | Antipathella | | Rob Stewart | 1 | 15/12/2010 |
| 69602 | PLE | BNS | WANB | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Clematissa | sp. B | Phil Alderslade | 1 | 17/12/2010 |
| 69533 | CHR | ORH | AKW | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | | Phil Alderslade | 1 | 29/12/2010 |
| 69580 | BOO | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 30/12/2010 |
| 69538 | PAB | ORH | WANB | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | n. sp. | Phil Alderslade | 1 | 30/12/2010 |
| 88593 | BOO | WWA | SOU | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 16/07/2013 |
| 88612 | COB | ORH | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Stauropathes | | Rob Stewart | 1 | 11/07/2013 |
| 88639 | SOC | BAS | WANB | Cnidaria | Anthozoa | Alcyonacea | Acanthogorgiidae | Acanthogorgia | | Phil Alderslade | 1 | 9/11/2013 |
| 95112 | COF | SWA | SEC | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | knoxii | Di Tracey | 1 | 9/12/2014 |
| 95152 | CAY | TAR | AKE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | profunda | Di Tracey | 1 | 26/04/2015 |
| 95153 | CAY | TAR | AKE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | lamellifera | Di Tracey | 6 | 4/05/2015 |
| 95129 | ACN | ORH | CET | Cnidaria | Anthozoa | Alcyonacea | Isididae | Acanella | | Phil Alderslade | 1 | 10/04/2015 |
| 95186 | DDI | ORH | LOUR | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 12/07/2015 |
| 95185 | SVA | ORH | LOUR | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1 | 12/07/2015 |
| 95183 | BOO | HPB | LOUR | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 16/07/2015 |
| 95181 | BTP | HPB | LOUR | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 16/07/2015 |
| 95182 | LEI | HPB | LOUR | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | acanthophora | Rob Stewart | 1 | 16/07/2015 |
| 95184 | PLE | HPB | LOUR | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Clematissa | sp. A | Phil Alderslade | 1 | 16/07/2015 |
| 95179 | CLL | WWA | SOU | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Peter Marriott | 1 | 30/07/2015 |
| 95180 | DDI | WWA | SOU | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 6 | 30/07/2015 |
| 95177 | COB | BYX | AKW | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | Tylopathes | | Rob Stewart | 1 | 11/08/2015 |

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|---------------|------------------|-----------------|--------------|-----------------|--------------|----------------|
| 95240 | ACN | ORH | CET | Cnidaria | Anthozoa | Alcyonacea | Isididae | Acanella | | Phil Alderslade | 1 | 16/11/2015 |
| 95239 | LEI | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | cf. bullosa | Rob Stewart | 1 | 16/11/2015 |
| 95232 | BTP | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 27/11/2015 |
| 95235 | CTP | ORH | CET | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Calyptrophora | inornata | Phil Alderslade | 1 | 27/11/2015 |
| 95231 | LEI | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | acanthophora | Rob Stewart | 1 | 27/11/2015 |
| 95234 | PTP | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Parantipathes | | Rob Stewart | 1 | 27/11/2015 |
| 95237 | TDP | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | Triadopathes | | Rob Stewart | 1 | 27/11/2015 |
| 95223 | BOO | ORH | HOWE | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 14/12/2015 |
| 95226 | CHR | ORH | HOWE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | | Phil Alderslade | 1 | 14/12/2015 |
| 95221 | PLE | ORH | HOWE | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Anthomuricea | | Phil Alderslade | 1 | 14/12/2015 |
| 95227 | TDP | ORH | HOWE | Cnidaria | Anthozoa | Antipatharia | Stylopathidae | Triadopathes | | Rob Stewart | 1 | 14/12/2015 |
| 95243 | COO | HAK | SUB | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Conopora | laevis | Peter Marriott | 1 | 25/12/2015 |
| 95252 | ERR | SQU | SOI | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Errina | laevigata | Peter Marriott | 1 | 8/03/2016 |
| 106475 | COF | HOK | SEC | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | knoxii | Di Tracey | 1 | 15/05/2016 |
| 106482 | CAY | SQU | SEC | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | profunda | Di Tracey | 1 | 14/06/2016 |
| 106476 | COF | SQU | SEC | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | knoxii | Di Tracey | 5 | 15/06/2016 |
| 106530 | BOO | ORH | SUB | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 1 | 10/10/2016 |
| 106532 | PMN | SSO | SUB | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Primnoa | notialis | Phil Alderslade | 1 | 11/10/2016 |
| 106531 | PAB | SSO | SUB | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | cf. alisonae | Phil Alderslade | 1 | 15/10/2016 |
| 106504 | COF | SCI | SOI | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | | Di Tracey | 1 | 19/10/2016 |
| 106519 | BTP | ORH | CET | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 7/10/2016 |
| 106529 | ERO | ORH | CET | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 9/10/2016 |
| 106526 | SIA | ORH | CET | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Stephanocyathus | | Di Tracey | 1 | 10/10/2016 |
| 106527 | NAR | BYS | HOWE | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Narella | | Phil Alderslade | 1 | 19/10/2016 |
| 106520 | BTP | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 19/10/2016 |
| 106524 | LEI | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | | Rob Stewart | 1 | 19/10/2016 |
| 106522 | BTP | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 19/10/2016 |
| 106521 | BTP | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 20/10/2016 |
| 106528 | ERO | BYS | HOWE | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Enallopsammia | rostrata | Di Tracey | 1 | 20/10/2016 |

| NIWA Cat. no. | MPI species Code | Target species | FMA | Phylum | Class | Order | Family | Genus | Species | Determiner | Sample count | Event End Date |
|---------------|------------------|----------------|------|----------|----------|---------------|-----------------|---------------|----------------|-----------------|--------------|----------------|
| 106518 | BTP | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | cf. alternata | Rob Stewart | 1 | 21/10/2016 |
| 106525 | MTL | BYS | HOWE | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Metallogorgia | macrospina | Phil Alderslade | 1 | 21/10/2016 |
| 106523 | BTP | BYS | HOWE | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 1 | 21/10/2016 |
| 106505 | NAR | BYS | HOWE | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Narella | | Phil Alderslade | 1 | 21/10/2016 |
| 106503 | COO | LIN | SUB | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Conopora | verrucosa | Peter Marriott | 1 | 19/10/2016 |
| 106502 | DDI | LIN | SUB | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 4 | 19/10/2016 |
| 106533 | AHL | TRE | AKE | Cnidaria | Anthozoa | Antipatharia | Myriopathidae | Antipathella | | Rob Stewart | 1 | 20/02/2017 |
| 106534 | CAY | BAS | AKE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | | Di Tracey | 1 | 29/01/2017 |
| 119690 | CAY | BAS | AKE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | lamellifera | Di Tracey | 1 | 29/01/2017 |
| 106536 | CRY | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Crypthelia | polypoma | Peter Marriott | 1 | 29/01/2017 |
| 119714 | CRY | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Crypthelia | polypoma | Peter Marriott | 1 | 29/01/2017 |
| 119713 | ERR | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Errina | novaezelandiae | Peter Marriott | 1 | 29/01/2017 |
| 106535 | ERR | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Errina | chathamensis | Peter Marriott | 1 | 29/01/2017 |
| 106537 | LPP | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Lepidopora | polystichopora | Peter Marriott | 1 | 29/01/2017 |
| 119712 | STL | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Stylaster | horologium | Peter Marriott | 1 | 29/01/2017 |
| 106538 | STL | BAS | AKE | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Stylaster | eguchii | Peter Marriott | 1 | 29/01/2017 |
| 106542 | COF | HOK | SOE | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | knoxii | Di Tracey | 1 | 20/02/2017 |
| 106541 | DDI | HOK | SOE | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1 | 24/02/2017 |

Appendix C Spreadsheet summary of digital images processed to date

| NIWA Cat. No. | Target species | FMA | Fishing method | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Event end | Latitude | Longitude | Depth 1 | Depth 2 | Image timestamp | Image rating |
|---------------|----------------|------|----------------|----------|----------|--------------|------------------|-----------------|--------------|-----------------|-----------------|------------------|----------|-----------|---------|---------|------------------|--------------|
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 15/06/2015 11:11 | -42.7 | 182.7 | 911 | 1045 | 15/06/2015 11:46 | 1 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 4/07/2015 14:10 | -40.7 | 194.6 | 670 | 1080 | 4/07/2015 15:06 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 4/07/2015 14:10 | -40.7 | 194.6 | 670 | 1080 | 4/07/2015 15:08 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | | | | Di Tracey | 16/05/2017 | 9/07/2015 20:42 | -41.4 | 195.7 | 778 | 790 | 9/07/2015 21:32 | 4 |
| | HOK | CHA | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | | Di Tracey | 16/05/2017 | 6/07/2015 5:30 | -41.9 | 170.2 | 696 | 631 | 6/07/2015 6:53 | 2 |
| | HOK | CHA | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | | Di Tracey | 16/05/2017 | 11/07/2015 11:55 | -41.1 | 170.8 | 488 | 488 | 11/07/2015 16:05 | 2 |
| | HOK | CHA | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Stephanocyathus | | Di Tracey | 16/05/2017 | 8/07/2015 5:29 | -41.7 | 170.2 | 719 | 682 | 8/07/2015 8:32 | 1 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 7/07/2015 2:46 | -47.3 | 165.8 | | | 7/07/2015 6:08 | 4 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 7/07/2015 2:46 | -47.3 | 165.8 | | | 7/07/2015 6:06 | 4 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 7/07/2015 2:46 | -47.3 | 165.8 | | | 7/07/2015 6:06 | 3 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Dendrophylliidae | Dendrophyllia | | Di Tracey | 16/05/2017 | 7/07/2015 2:46 | -47.3 | 165.8 | | | 7/07/2015 6:07 | 3 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 16/05/2017 | 7/07/2015 5:28 | -47.3 | 165.8 | | | 9/07/2015 14:25 | 4 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 7/07/2015 5:28 | -47.3 | 165.8 | | | 9/07/2015 14:25 | 4 |
| | ORH | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 8/07/2015 21:33 | -47.3 | 165.8 | | | 9/07/2015 14:41 | 4 |
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 21/07/2015 9:06 | -42.8 | 182.1 | | 1044 | 21/07/2015 17:37 | 3 |
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 21/07/2015 9:06 | -42.8 | 182.1 | | 1044 | 21/07/2015 17:37 | 3 |
| | LIN | CHA | BLL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 11/07/2015 13:03 | -40.7 | 171.4 | 286 | 336 | 11/07/2015 13:38 | 3 |
| | LIN | CHA | BLL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 11/07/2015 13:03 | -40.7 | 171.4 | 286 | 336 | 11/07/2015 13:38 | 3 |
| | LIN | CHA | BLL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 11/07/2015 13:03 | -40.7 | 171.4 | 286 | 336 | 11/07/2015 13:38 | 3 |
| | LIN | CHA | BLL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 11/07/2015 13:03 | -40.7 | 171.4 | 286 | 336 | 11/07/2015 13:38 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 13/07/2015 9:39 | -41.8 | 196.2 | | | 13/07/2015 10:28 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 16/07/2015 9:40 | -40.8 | 194.8 | | | 16/07/2015 10:42 | 1 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 16/07/2015 14:29 | -40.8 | 194.9 | 867 | 907 | 16/07/2015 15:12 | 1 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 17/07/2015 6:16 | -40.7 | 194.6 | 976 | 846 | 17/07/2015 7:30 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 7/07/2015 6:48 | -41.4 | 195.7 | 840 | 1240 | 7/07/2015 8:34 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 7/07/2015 6:48 | -41.4 | 195.7 | 840 | 1240 | 7/07/2015 8:32 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 8/07/2015 18:02 | -41.4 | 195.7 | 815 | 1043 | 8/07/2015 19:23 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 9/07/2015 17:14 | -41.8 | 196.3 | 1006 | | 9/07/2015 22:57 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 9/07/2015 22:02 | -41.8 | 196.3 | | | 9/07/2015 22:58 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 10/07/2015 22:49 | -41.8 | 196.3 | | | 10/07/2015 23:50 | 2 |
| 95186 | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1/05/2017 | 12/07/2015 19:15 | -41.8 | 196.3 | 878 | 874 | 12/07/2015 20:29 | 2 |
| 95185 | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 1/05/2017 | 12/07/2015 19:15 | -41.8 | 196.3 | 878 | 874 | 12/07/2015 20:29 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 12/07/2015 19:15 | -41.8 | 196.3 | 878 | 874 | 12/07/2015 20:55 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 15/07/2015 15:44 | -37.9 | 191.7 | 1060 | | 15/07/2015 16:41 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 15/07/2015 22:17 | -38.4 | 192.3 | | | 15/07/2015 23:08 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 15/07/2015 22:17 | -38.4 | 192.3 | | | 15/07/2015 23:07 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 16/07/2015 1:53 | -38.4 | 192.3 | 1287 | | 16/07/2015 3:20 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 16/07/2015 1:53 | -38.4 | 192.3 | 1287 | | 16/07/2015 3:21 | 2 |
| 95183 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | ? Keratoisis | | Phil Alderslade | 16/05/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:14 | 2 |
| 95184 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Clematissa | sp. A | Phil Alderslade | 16/05/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:22 | 4 |
| 95184 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Clematissa | sp. A | Phil Alderslade | 16/05/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:17 | 1 |
| 95182 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | acanthophora | Rob Stewart | 20/03/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:11 | 3 |
| | HPB | LOUR | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | | Di Tracey | 16/05/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:11 | 1 |

| NIWA Cat. No. | Target species | FMA | Fishing method | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Event end | Latitude | Longitude | Depth 1 | Depth 2 | Image timestamp | Image rating |
|---------------|----------------|------|----------------|----------|----------|---------------|-----------------|-----------------|--------------|------------------------|-----------------|------------------|----------|-----------|---------|---------|------------------|--------------|
| 95181 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 20/03/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:08 | 3 |
| 95181 | HPB | LOUR | TWL | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Rob Stewart | 20/03/2017 | 16/07/2015 7:35 | -38.4 | 191.9 | | | 16/07/2015 9:07 | 1 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 16/05/2017 | 27/07/2015 14:05 | -45.4 | 202.3 | | | 27/07/2015 15:20 | 2 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 31/07/2015 16:59 | -46.1 | 205.6 | 682 | | 31/07/2015 17:49 | 1 |
| | SCI | SOE | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 9/08/2015 12:58 | -43.2 | 176.3 | 350 | 350 | 9/08/2015 14:55 | 3 |
| 95179 | WWA | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Peter (Chazz) Marriott | 23/03/2017 | 30/07/2015 19:10 | -48.7 | 166.4 | 503 | | 30/07/2015 20:53 | 3 |
| 95179 | WWA | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Peter (Chazz) Marriott | 23/03/2017 | 30/07/2015 19:10 | -48.7 | 166.4 | 503 | | 30/07/2015 20:35 | 3 |
| 95180 | WWA | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1/05/2017 | 30/07/2015 19:10 | -48.7 | 166.4 | 503 | | 30/07/2015 20:53 | 3 |
| 95180 | WWA | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 1/05/2017 | 30/07/2015 19:10 | -48.7 | 166.4 | 503 | | 30/07/2015 20:35 | 3 |
| | ORH | AKW | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Stephanocyathus | | Di Tracey | 16/05/2017 | 28/07/2015 19:18 | -36 | 172.9 | 1051 | 991 | 28/07/2015 20:12 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 16/05/2017 | 9/08/2015 16:15 | -34.6 | 168.9 | 561 | 705 | 9/08/2015 17:54 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Acanella | | Phil Alderslade | 16/05/2017 | 9/08/2015 18:47 | -34.6 | 168.9 | 566 | 710 | 9/08/2015 20:16 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 10/08/2015 10:20 | -34.6 | 168.9 | 588 | 941 | 10/08/2015 12:13 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 10/08/2015 10:20 | -34.6 | 168.9 | 588 | 941 | 10/08/2015 12:13 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 10/08/2015 10:20 | -34.6 | 168.9 | 588 | 941 | 10/08/2015 12:13 | 3 |
| | BYX | AKW | TWL | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | | | Di Tracey | 16/05/2017 | 10/08/2015 13:22 | -34.6 | 168.9 | 587 | 782 | 10/08/2015 14:15 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | | | Phil Alderslade | 16/05/2017 | 10/08/2015 17:45 | -34.6 | 168.9 | 605 | 870 | 10/08/2015 18:37 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | | | Phil Alderslade | 16/05/2017 | 10/08/2015 17:45 | -34.6 | 168.9 | 605 | 870 | 10/08/2015 19:14 | 3 |
| | BYX | AKW | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | 10/08/2015 17:45 | -34.6 | 168.9 | 605 | 870 | 10/08/2015 18:39 | 3 |
| | LIN | SOE | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 22/09/2015 9:33 | -43.4 | 181.8 | 378 | 374 | 22/09/2015 10:39 | 3 |
| | LIN | SOE | BLL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 16/05/2017 | 16/10/2015 5:59 | -43.4 | 180.7 | 454 | 386 | 16/10/2015 7:49 | 1 |
| | LIN | SOE | BLL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 16/05/2017 | 16/10/2015 10:52 | -43.5 | 180.7 | 480 | 433 | 16/10/2015 11:30 | 3 |
| | LIN | SOE | BLL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 16/05/2017 | 16/10/2015 10:52 | -43.5 | 180.7 | 480 | 433 | 16/10/2015 11:29 | 2 |
| | LIN | SOE | BLL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 16/05/2017 | 16/10/2015 10:52 | -43.5 | 180.7 | 480 | 433 | 16/10/2015 11:25 | 2 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 9/10/2015 15:57 | -37.2 | 167.2 | 650 | | 9/10/2015 17:43 | 4 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 9/10/2015 15:57 | -37.2 | 167.2 | 650 | | 9/10/2015 17:43 | 3 |
| | BNS | CET | BLL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 9/10/2015 14:30 | -38.2 | 168.4 | 437 | 484 | 9/10/2015 16:57 | 3 |
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Di Tracey | 16/05/2017 | 10/01/2016 7:03 | -44.6 | 184.7 | 860 | | 10/01/2016 8:26 | 1 |
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Alcyonacea | Paragorgiidae | Paragorgia | | Phil Alderslade | 16/05/2017 | 18/01/2016 13:53 | -44.4 | 185.3 | 1387 | | 18/01/2016 16:54 | 1 |
| | LIN | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Di Tracey | 16/05/2017 | 19/11/2015 18:30 | -46.9 | 165.6 | 580 | | 19/11/2015 19:36 | 3 |
| | LIN | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Coralliidae | Corallium | | Di Tracey | 16/05/2017 | 19/11/2015 18:30 | -46.9 | 165.6 | 580 | | 19/11/2015 19:36 | 3 |
| 95240 | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Acanella | | Phil Alderslade | 16/05/2017 | 16/11/2015 12:07 | -37.3 | 169 | 1045 | | 16/11/2015 17:47 | 3 |
| 95240 | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Acanella | | Phil Alderslade | 16/05/2017 | 16/11/2015 12:07 | -37.3 | 169 | 1045 | | 16/11/2015 17:47 | 3 |
| 95239 | ORH | CET | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | cf. bullosa | Rob Stewart | 20/03/2017 | 16/11/2015 12:07 | -37.3 | 169 | 1045 | | 16/11/2015 17:43 | 3 |
| 95239 | ORH | CET | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | cf. bullosa | Rob Stewart | 20/03/2017 | 16/11/2015 12:07 | -37.3 | 169 | 1045 | | 16/11/2015 17:43 | 3 |
| 95235 | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Calyptrophora | inornata | Phil Alderslade | 16/05/2017 | 27/11/2015 6:42 | -37.4 | 167.4 | 963 | 925 | 27/11/2015 7:59 | 3 |
| 95231 | ORH | CET | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | acanthophora | Rob Stewart | 20/03/2017 | 27/11/2015 6:42 | -37.4 | 167.4 | 963 | 925 | 27/11/2015 8:05 | 4 |
| 95231 | ORH | CET | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | acanthophora | Rob Stewart | 20/03/2017 | 27/11/2015 6:42 | -37.4 | 167.4 | 963 | 925 | 27/11/2015 8:03 | 4 |
| 95226 | ORH | HOWE | TWL | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | Chrysogorgia | | Phil Alderslade | 16/05/2017 | 14/12/2015 18:37 | -35.9 | 165.5 | 1109 | 1063 | 14/12/2015 20:23 | 1 |
| 95223 | ORH | HOWE | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Keratoisis | | Phil Alderslade | 16/05/2017 | 14/12/2015 18:37 | -35.9 | 165.5 | 1109 | 1063 | 14/12/2015 19:18 | 3 |
| 95221 | ORH | HOWE | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | Anthomuricea | | Phil Alderslade | 16/05/2017 | 14/12/2015 18:37 | -35.9 | 165.5 | 1109 | 1063 | 14/12/2015 20:25 | 1 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Plexauridae | | | Phil Alderslade | 16/05/2017 | 17/12/2015 0:14 | -37.3 | 168.7 | 1055 | 1027 | 17/12/2015 1:34 | 3 |
| | ORH | LOUR | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | 2/01/2016 21:00 | -38.4 | 192.3 | 1142 | 1102 | 2/01/2016 22:07 | 2 |
| | | | | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Solenosmilia | variabilis | Di Tracey | 16/05/2017 | | | | | | 6/01/2016 9:44 | 3 |
| | HAK | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 11/12/2015 18:47 | -48.9 | 166.5 | 520 | 446 | 11/12/2015 20:16 | 1 |

| NIWA Cat. No. | Target species | FMA | Fishing method | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Event end | Latitude | Longitude | Depth 1 | Depth 2 | Image timestamp | Image rating |
|---------------|----------------|-----|----------------|------------|-------------|---------------|-----------------|-----------------|----------|-----------------|-----------------|------------------|----------|-----------|---------|---------|------------------|--------------|
| | HAK | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 11/12/2015 18:47 | -48.9 | 166.5 | 520 | 446 | 11/12/2015 20:17 | 1 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | | Di Tracey | 16/05/2017 | 12/12/2015 16:25 | -49 | 166.7 | 459 | 570 | 12/12/2015 17:37 | 1 |
| | WWA | SUB | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 18/12/2015 20:00 | -49 | 166.8 | 462 | 498 | 18/12/2015 21:19 | 1 |
| | WWA | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 18/12/2015 20:00 | -49 | 166.8 | 462 | 498 | 18/12/2015 21:11 | 1 |
| | WWA | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 18/12/2015 20:00 | -49 | 166.8 | 462 | 498 | 18/12/2015 21:08 | 1 |
| | WWA | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 18/12/2015 20:00 | -49 | 166.8 | 462 | 498 | 18/12/2015 21:08 | 1 |
| | WWA | SUB | TWL | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | Lepidotheca | | Di Tracey | 16/05/2017 | 18/12/2015 20:00 | -49 | 166.8 | 462 | 498 | 18/12/2015 21:18 | 1 |
| | JMA | CEW | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | | Di Tracey | 16/05/2017 | 15/01/2016 4:00 | -39.7 | 173.3 | 102 | | 1/01/2016 18:10 | 3 |
| | JMA | CEW | TWL | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | | Di Tracey | 16/05/2017 | 15/01/2016 4:00 | -39.7 | 173.3 | 102 | | 1/01/2016 18:09 | 2 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 18/01/2016 15:25 | -49 | 166.7 | 480 | 479 | 18/01/2016 16:38 | 2 |
| | SWA | SOU | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 29/01/2016 20:10 | -48.9 | 166.7 | 450 | 273 | 29/01/2016 22:48 | 3 |
| | ORH | SOE | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Goniocorella | dumosa | Di Tracey | 16/05/2017 | 19/01/2016 15:09 | -43.1 | 186.1 | | | 19/01/2016 16:26 | 1 |
| | | | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | | | | | | 17/01/2016 11:05 | 3 |
| | | | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | | | Phil Alderslade | 16/05/2017 | | | | | | 24/01/2016 1:05 | 3 |
| | | | | Cnidaria | Anthozoa | Antipatharia | Leiopathidae | Leiopathes | | Di Tracey | 16/05/2017 | | | | | | 20/01/2016 8:34 | 3 |
| | | | | Cnidaria | Anthozoa | Antipatharia | Schizopathidae | Bathypathes | | Di Tracey | 16/05/2017 | | | | | | 11/01/2016 7:51 | 3 |
| | | | | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Stephanocyathus | | Di Tracey | 16/05/2017 | | | | | | 24/01/2016 1:00 | 3 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 7/02/2016 15:50 | -49 | 166.7 | 554 | | 7/02/2016 20:23 | 3 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 12/02/2016 20:45 | -49 | 166.7 | 475 | 493 | 12/02/2016 21:27 | 3 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 19/02/2016 20:31 | -49 | 166.7 | 457 | 449 | 19/02/2016 22:03 | 3 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Desmophyllum | dianthus | Di Tracey | 16/05/2017 | 19/02/2016 20:31 | -49 | 166.7 | 457 | 449 | 19/02/2016 22:03 | 3 |
| | SWA | SOU | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 1/03/2016 12:25 | -48.8 | 166.4 | 450 | 345 | 1/03/2016 13:10 | 3 |
| | HAK | SUB | TWL | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | | Di Tracey | 16/05/2017 | 1/03/2016 20:15 | -49 | 166.7 | 480 | 465 | 1/03/2016 21:34 | 3 |
| | ORH | CHA | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Stephanocyathus | | Di Tracey | 16/05/2017 | 18/04/2016 10:28 | -40 | 167.9 | 890 | 927 | 18/04/2016 11:56 | 2 |
| | ORH | CHA | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | | | Phil Alderslade | 16/05/2017 | 19/04/2016 19:07 | -39.8 | 168.2 | 929 | 1007 | 19/04/2016 21:54 | 2 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | | | Phil Alderslade | 16/05/2017 | 20/04/2016 18:45 | -39.7 | 167.2 | 1100 | 1050 | 20/04/2016 20:11 | 2 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Chrysogorgiidae | | | Phil Alderslade | 16/05/2017 | 20/04/2016 18:45 | -39.7 | 167.2 | 1100 | 1050 | 20/04/2016 20:10 | 2 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 20/04/2016 18:45 | -39.7 | 167.2 | 1100 | 1050 | 20/04/2016 20:00 | 2 |
| | ORH | CET | TWL | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | 20/04/2016 18:45 | -39.7 | 167.2 | 1100 | 1050 | 20/04/2016 19:58 | 2 |
| | HOK | SEC | TWL | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | | Di Tracey | 16/05/2017 | 13/05/2016 14:00 | -42.9 | 173.7 | | 477 | 13/05/2016 19:43 | 2 |
| | | | | Cnidaria | Anthozoa | Alcyonacea | Primnoidae | Thouarella | | Phil Alderslade | 16/05/2017 | | | | | | 20/05/2016 20:46 | 3 |
| | WWA | SEC | TWL | Cnidaria | Anthozoa | Alcyonacea | Isididae | Isidella | | Phil Alderslade | 16/05/2017 | 26/06/2016 5:40 | -43.5 | 174.6 | 395 | 377 | 26/06/2016 13:27 | 3 |
| | SQU | SEC | TWL | Cnidaria | Hydrozoa | Anthoathecata | Stylasteridae | | | Di Tracey | 16/05/2017 | 13/06/2016 17:49 | -44.2 | 175.8 | 222 | 214 | 13/06/2016 20:51 | 1 |
| 106482 | SQU | SEC | TWL | Cnidaria | Anthozoa | Scleractinia | Caryophylliidae | Caryophyllia | profunda | Di Tracey | 1/05/2017 | 14/06/2016 17:48 | -44.1 | 175.8 | 210 | 203 | 14/06/2016 19:36 | 1 |
| 106476 | SQU | SEC | TWL | Cnidaria | Anthozoa | Scleractinia | Flabellidae | Flabellum | knoxii | Di Tracey | 1/05/2017 | 15/06/2016 18:09 | -44.6 | 172.6 | 323 | 338 | 15/06/2016 21:32 | 1 |
| | SNA | AKE | BLL | Annelida | Polychaeta | Sabellida | Serpulidae | | | Di Tracey | 16/05/2017 | 14/01/2016 5:58 | -36.1 | 174.9 | 50 | 50 | 14/01/2016 8:00 | 3 |
| | SNA | AKE | BLL | Annelida | Polychaeta | Sabellida | Serpulidae | | | Di Tracey | 16/05/2017 | 14/01/2016 5:58 | -36.1 | 174.9 | 50 | 50 | 14/01/2016 8:00 | 3 |
| | SNA | AKE | BLL | Annelida | Polychaeta | Sabellida | Serpulidae | | | Di Tracey | 16/05/2017 | 14/01/2016 5:58 | -36.1 | 174.9 | 50 | 50 | 14/01/2016 8:00 | 3 |
| | SNA | AKE | BLL | Annelida | Polychaeta | Sabellida | Serpulidae | | | Di Tracey | 16/05/2017 | 14/01/2016 5:58 | -36.1 | 174.9 | 50 | 50 | 14/01/2016 7:59 | 1 |
| | BYX | AKW | TWL | Arthropoda | Maxillopoda | | | | | Di Tracey | 16/05/2017 | 10/08/2015 13:22 | -34.6 | 168.9 | 587 | 782 | 10/08/2015 14:16 | 3 |
| | SNA | AKE | BLL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 17/12/2012 5:35 | -36.4 | 174.9 | 33 | 33 | 17/12/2012 9:17 | 3 |
| | SNA | AKE | BLL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 17/12/2012 5:35 | -36.4 | 174.9 | 33 | 33 | 17/12/2012 9:17 | 2 |
| | SNA | AKE | BLL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 17/12/2012 5:35 | -36.4 | 174.9 | 33 | 33 | 17/12/2012 9:17 | 2 |
| | SQU | SOU | TWL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 22/01/2016 20:00 | -48.2 | 168.2 | 150 | 146 | 22/01/2016 21:39 | 3 |
| | SQU | SOU | TWL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 22/01/2016 20:00 | -48.2 | 168.2 | 150 | 146 | 22/01/2016 21:39 | 3 |

| NIWA Cat. No. | Target species | FMA | Fishing method | Phylum | Class | Order | Family | Genus | Species | Determiner | Determined Date | Event end | Latitude | Longitude | Depth 1 | Depth 2 | Image timestamp | Image rating |
|---------------|----------------|------|----------------|---------------|----------------|---------------|----------------|--------------|----------------|------------------|-----------------|------------------|----------|-----------|---------|---------|------------------|--------------|
| | SQU | SOU | TWL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 18/02/2016 14:40 | -48.8 | 167.3 | 266 | 137 | 19/02/2016 17:51 | 1 |
| | SQU | SOI | TWL | Bryozoa | | | | | | Di Tracey | 16/05/2017 | 7/04/2016 17:09 | -50.4 | 167.5 | 162 | 151 | 7/04/2016 17:51 | 3 |
| | HAK | CHA | TWL | Cnidaria | Anthozoa | Pennatulacea | | | | Di Tracey | 16/05/2017 | 6/07/2015 17:22 | -41 | 170.4 | 643 | 628 | 6/07/2015 21:02 | 4 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/11/2015 10:34 | -39.8 | 173.5 | 83 | 77 | 26/11/2015 14:49 | 3 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/11/2015 10:34 | -39.8 | 173.5 | 83 | 77 | 26/11/2015 14:46 | 3 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/11/2015 10:34 | -39.8 | 173.5 | 83 | 77 | 26/11/2015 14:44 | 3 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/11/2015 10:34 | -39.8 | 173.5 | 83 | 77 | 26/11/2015 14:43 | 2 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 19/12/2015 10:10 | -38.6 | 173.8 | 109 | 94 | 19/12/2015 11:56 | 3 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 19/12/2015 10:10 | -38.6 | 173.8 | 109 | 94 | 19/12/2015 11:55 | 3 |
| | JMA | AKW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 21/12/2015 18:50 | -38.2 | 173.9 | 116 | 116 | 21/12/2015 19:45 | 3 |
| | JMA | CEW | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 18/12/2015 14:40 | -39.7 | 173.5 | 74 | 77 | 18/02/2016 19:29 | 3 |
| | JMA | CHA | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 17/01/2016 14:45 | -40.2 | 173.9 | 113 | 93 | 17/01/2016 17:48 | 1 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/01/2016 20:01 | -48.8 | 167.2 | 190 | 184 | 26/01/2016 21:50 | 3 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 26/01/2016 20:01 | -48.8 | 167.2 | 190 | 184 | 26/01/2016 21:49 | 1 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 30/01/2016 19:53 | -48.8 | 167 | 189 | 165 | 30/01/2016 21:21 | 3 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 30/01/2016 19:53 | -48.8 | 167 | 189 | 165 | 30/01/2016 21:20 | 1 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 31/01/2016 10:59 | -48.8 | 166.8 | 213 | 218 | 31/01/2016 12:47 | 3 |
| | SQU | SOU | TWL | Cnidaria | Hydrozoa | Leptothecata | Aglaopheniidae | | | Diana Macpherson | 17/07/2017 | 31/01/2016 10:59 | -48.8 | 166.8 | 213 | 218 | 31/01/2016 12:46 | 1 |
| | | | | Echinodermata | Crinoidea | | | | | Di Tracey | 16/05/2017 | | | | | | 24/01/2016 1:01 | 3 |
| 95175 | BYX | AKW | TWL | Echinodermata | Echinoidea | Cidaroida | Histocidaridae | Histocidaris | | Owen Anderson | 5/05/2016 | 9/08/2015 16:15 | -34.6 | 168.9 | 561 | 705 | 9/08/2015 17:54 | 2 |
| 95255 | SQU | SOI | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 24/02/2016 12:58 | -50.9 | 166.5 | 171 | 249 | 24/02/2016 17:23 | 3 |
| 95255 | SQU | SOI | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 24/02/2016 12:58 | -50.9 | 166.5 | 171 | 249 | 24/02/2016 17:23 | 3 |
| 95253 | SQU | SOI | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 19/03/2016 8:23 | -50 | 166.2 | 191 | 182 | 19/03/2016 16:21 | 3 |
| | JMA | CHA | TWL | Porifera | Demospongiae | | | | | Di Tracey | 16/05/2017 | 12/01/2016 12:00 | -40.4 | 173.9 | 97 | 95 | 12/01/2016 17:13 | 1 |
| 95236 | ORH | CET | TWL | Porifera | Hexactinellida | Hexactinosida | Tretodictyidae | Hexactinella | simplex | Michelle Kelly | 1/06/2016 | 27/11/2015 6:42 | -37.4 | 167.4 | 963 | 925 | 27/11/2015 7:59 | 3 |
| 95176 | BYX | AKW | TWL | Porifera | Hexactinellida | Lyssacosida | Rosellidae | Caulophacus | incertae sedis | Henry Reiswig | 15/09/2015 | 11/08/2015 8:43 | -34.6 | 168.9 | 566 | 981 | 11/08/2015 8:03 | 3 |
| | BYX | AKW | TWL | Porifera | Hexactinellida | Lyssacosida | Rosellidae | Caulophacus | | Di Tracey | 16/05/2017 | 11/08/2015 8:43 | -34.6 | 168.9 | 566 | 981 | 11/08/2015 8:04 | 3 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 4/07/2015 14:10 | -40.7 | 194.6 | 670 | 1080 | 4/07/2015 15:07 | 3 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 4/07/2015 14:10 | -40.7 | 194.6 | 670 | 1080 | 4/07/2015 15:07 | 3 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 10/07/2015 22:49 | -41.8 | 196.3 | | | 10/07/2015 23:53 | 3 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 10/07/2015 22:49 | -41.8 | 196.3 | | | 10/07/2015 23:51 | 2 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 11/07/2015 19:57 | -41.4 | 195.7 | 807 | 1038 | 11/07/2015 21:12 | 3 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 11/07/2015 19:57 | -41.4 | 195.7 | 807 | 1038 | 11/07/2015 21:11 | 2 |
| | ORH | LOUR | TWL | Porifera | | | | | | Di Tracey | 16/05/2017 | 4/01/2016 9:32 | -40.7 | 194.6 | 935 | 953 | 4/01/2016 10:08 | 2 |