

Marine BioBlitz Sunshine Coast

29 – 31 August 2024

Event Summary

Sunshine Coast Council hosted the inaugural Sunshine Coast Marine Bioblitz, celebrating marine biodiversity, community partnerships and accessible citizen science.

The event was a collaborative effort from scientists, conservationists, traditional custodians, artists and community members to document and celebrate the marine biodiversity of the UNESCO Biosphere Reserve and promote citizen science within the community.

Citizen scientists participated in observing and learning about local wildlife by partaking in the Marine BioBlitz, a period of biological surveying in an attempt to record all living species within inter-tidal zones, rock pools, estuaries, wetlands, open ocean and reef.

Over 840 citizen scientists worked with experts and STEM professionals to collect biodiversity data on local marine species in a variety of workshops, tours, dives, snorkels and more - from seasoned marine biologists or lovers of the ocean.

Subject matter experts and scientists facilitated citizen science training on data collection for each of the eighteen different guided expeditions hosted during the event.

The data collected during the Marine Bioblitz has provided important biodiversity data that can be used to assist with ecosystem monitoring, contribute to scientific papers, and management decisions. Collaboration with citizen scientists and experts truly amplifies the work of those in the environmental industries and increases our connection and understanding of our local environment.

The level of participation throughout the duration of the event has shown the passionate community interested in learning about our biosphere reserve and protecting marine environments. The event was a great opportunity to celebrate our coastal and marine environments and role as citizen scientists within our Biosphere community.

Thank you to all our event partners, subject matter experts and sponsors for your support.

Fast Facts

2,051 Observations

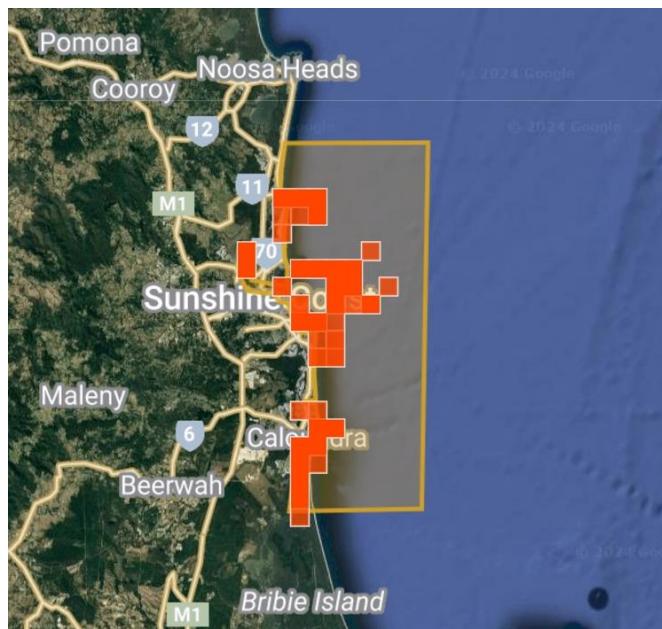
558 Species

234 Identifiers

110 Observers

147 Project Members

Scientific data collection occurred across 50km of coastline, with observations recorded from northern Pumicestone Passage to Coolum Beach and up to 15 km offshore.



Marine Bioblitz survey area, Sunshine Coast.

The Marine Bioblitz was proudly supported by Sunshine Coast Council's Environment Levy and the Queensland Government Engaging Science Grants.

Species Spotlights

Most observed species

Green sea turtle (*Chelonia mydas*)



Image: Al-thornton

Most observed fish species

East-Australian Stripey (*Microcanthus joyceae*)



Image: Jenneibs

Most observed coral species

Green Snakelock Anemone (*Aulactinia veratra*)



Image: Fuschia Darling

Most observed mollusc species

White-speckled Seahare (*Aplysia argus*)

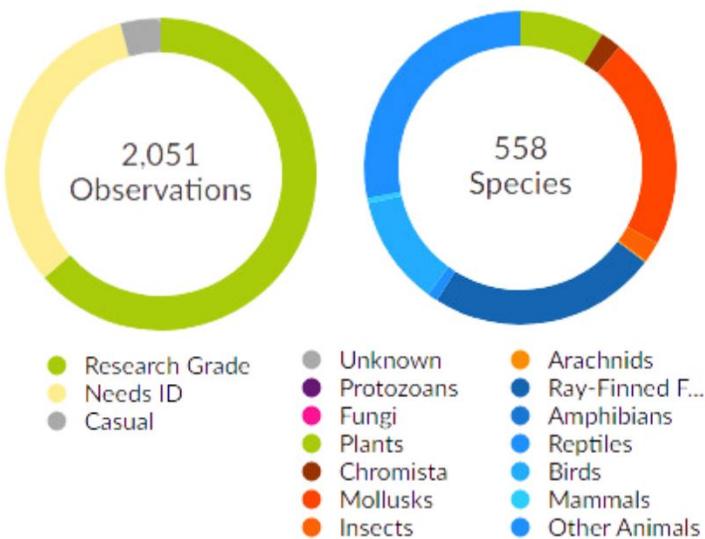


Image: Lynsh

iNaturalist Results

All biodiversity data collected during the event was uploaded to [Sunshine Coast Marine BioBlitz · iNaturalist Project](#). iNaturalist was chosen as it is the most popular biodiversity citizen science platform globally and brings citizen observers and experts together to discuss observations and crowdsource species identifications. This online collaboration facilitated the involvement of 234 online identifiers.

Of the total observations, 64% were classified as research grade via the Data Quality Assessment in iNaturalist (when the community agrees on species-level ID or lower). *Data extracted 12 December 2024.



Species of concern (IUCN Red List)

Critically endangered

Eastern Curlew (*Numenius madagascariensis*)
Hawksbill Sea Turtle (*Eretmochelys imbricata*)
Grey nurse Shark (*Carcharias taurus*)

Endangered

Green Sea Turtle (*Chelonia mydas*)
Lord Coral (*Micromussa lordhowensis*)
Table Coral (*Acropora solitaryensis*)

Vulnerable

White-spotted Eagle Ray (*Aetobatus ocellatus*)

Near threatened

Rainford's Butterflyfish (*Chaetodon rainfordi*)
Brown-banded Bamboo Shark (*Chiloscyllium punctatum*)
Chevron Butterflyfish (*Chaetodon trifascialis*)

Citizen Science Spotlights

Multiple citizen science projects were trialled or launched at the event, with a focus on citizen science for diverse abilities at BaseCamp by UniSC. New projects include:

- Dolphin spotter, a land-based citizen science program facilitated by UniSC researchers Dr Alexis Levengood and Georgina Hume. Hosted a 1-day training workshop prior to the event attended by over 40 citizen scientists of all ages.
- Marine Eco acoustics masterclass, hosted by sound artist and researcher from UniSC Dr Leah Barclay. Hosted a 1-day training workshop where over 30 citizen scientists learnt the theory behind bioacoustics technology, then a vessel-based workshop where participants applied the skills and knowledge learnt to gather real-life samples and listen to live bioacoustics.
- Underwater digital twin, photogrammetry of Mudjimba Island reef: UniSC researcher Dr Javier Leon developed a citizen science project for participants to collect photogrammetry data for creating a 3D map of the coral reef structure at Mudjimba Island. From these models, accurate measurements of the reef can be made, allowing for changes to be tracked over time.

Happywhale: Citizen scientists photographed a female humpback whale identified through [Happywhale](#) (HW-MN1100092), who was first observed in Hervey Bay in 2004, observed again on the east coast of Australia at Eden, NSW and Hervey Bay in 2010, 2017 and now in 2024 on the Sunshine Coast.

Spot a Shark: Using photo identification, citizen scientists recorded a new grey nurse shark individual named 'Jasper' in [Spot a Shark](#)'s catalogue, adding to important information to track shark health, location, and population trends.

The top 3 iNaturalist observers:

Lynsh
Jenneibs
Pablo Fuenzalida

The top 3 iNaturalist identifiers were:

Samuel Westbrook
Adrian Gale
Raeleen Drapper



Underwater Digital Twin Mapping Project at Mudjimba Island.

Image: Ste Everington



Marine Eco-acoustics Masterclass on board Sunreef, Mooloolaba



Photo identification of a new Grey nurse shark named 'Jasper' through Spot a Shark. Image: Ste Everington.

Environmental DNA (eDNA)

In addition to observational data collected during the bioblitz, eDNA samples were collected from two sites of interest within the study area, Mudjimba Island and Nurse Rock ($n=6$ replicates per site). Citizen scientists were invited to participate in an eDNA workshop hosted during the event where they were trained in eDNA sampling methods with hands-on processing of the eDNA samples.

The purpose of this workshop and sample collection was to use a non-invasive technique to survey the biodiversity of taxa from plankton to mammals within these ecosystems, and for future monitoring.

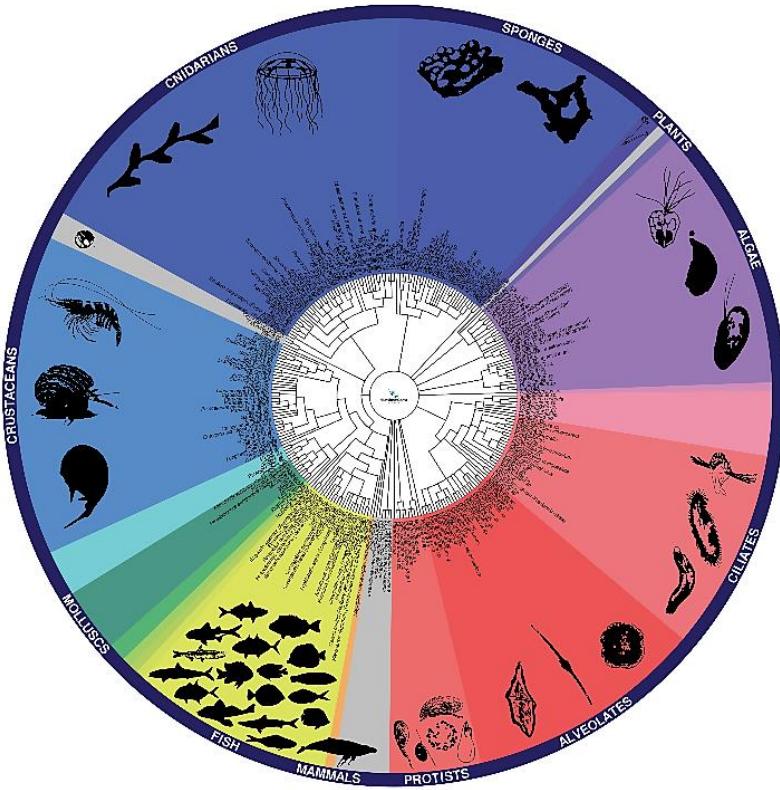
Analysis detected 986 species at Mudjimba Island and 894 species at Nurse Rock.

While this metabarcoding approach is powerful in detecting a large variety of taxa, often not all species can be detected due to various sampling and environmental reasons.

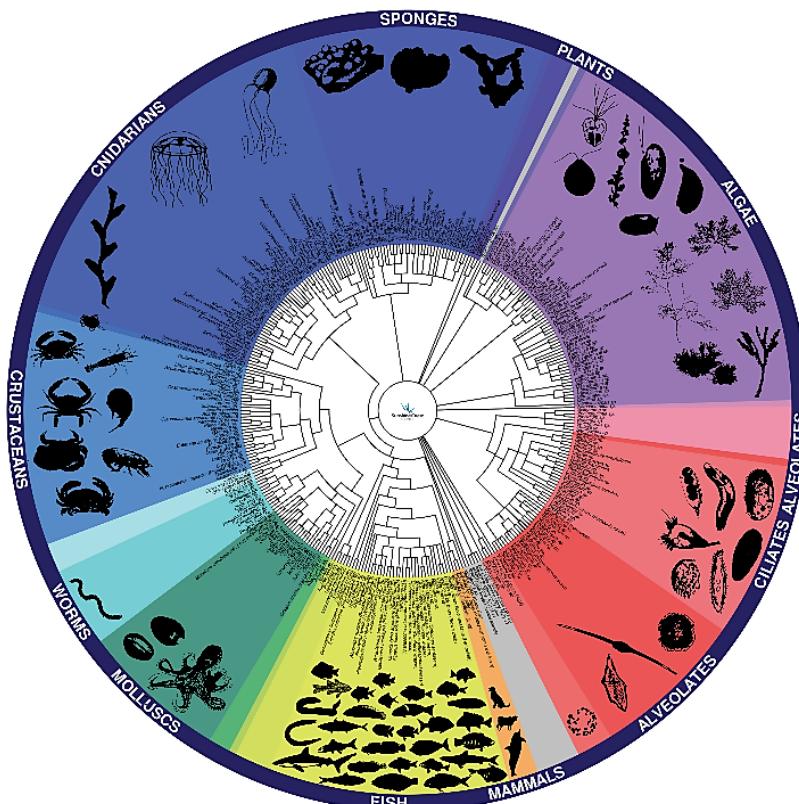
Each site comprised of 30 different groups of taxa. All eDNA data analysed by [WilderLab](#) was made publicly available online.



eDNA sample collection. Image: Ste Everington



Mudjimba Island eDNA Wheel of Life
all species identified (excl. bacteria)



Nurse Rock eDNA Wheel of Life
all species identified (excl. bacteria)

iNaturalist Species Observations

Group	Scientific name	Common name	Count
Actinopterygii	<i>Abudefduf bengalensis</i>	Bengal Sergeant	3
Actinopterygii	<i>Abudefduf sordidus</i>	Blackspot Sergeant	1
Actinopterygii	<i>Abudefduf vaigiensis</i>	Indo-Pacific Sergeant Major	2
Actinopterygii	<i>Acanthopagrus australis</i>	Yellowfin Bream	2
Actinopterygii	<i>Acanthurus</i>	Surgeonfishes, Unicornfishes and Tangs	1
Actinopterygii	<i>Acanthurus dussumieri</i>	Pencil Surgeonfish	4
Actinopterygii	<i>Aluterus scriptus</i>	Scrawled Filefish	1
Actinopterygii	<i>Amphiprion akindynos</i>	Barrier Reef Anemonefish	3
Actinopterygii	<i>Amphiprion latezonatus</i>	Wideband Anemonefish	1
Actinopterygii	<i>Anampsese caeruleopunctatus</i>	Diamond Wrasse	1
Actinopterygii	<i>Anampsese neoguinaicus</i>	Blackback Wrasse	2
Actinopterygii	<i>Arothron hispidus</i>	Stars And Stripes Puffer	5
Actinopterygii	<i>Arothron stellatus</i>	Starry Puffer	3
Actinopterygii	<i>Aulostomus chinensis</i>	Pacific Trumpetfish	1
Actinopterygii	<i>Balistoides conspicillum</i>	Clown Triggerfish	1
Actinopterygii	<i>Bathygobius fuscus</i>	Dusky Frillgoby	1
Actinopterygii	<i>Canthigaster axiologus</i>	Pacific Crown Toby	1
Actinopterygii	<i>Canthigaster valentini</i>	Blacksaddle Toby	6
Actinopterygii	<i>Caranginae</i>	Jacks and Pompanos	2
Actinopterygii	<i>Caranx ignobilis</i>	Giant Trevally	1
Actinopterygii	<i>Caranx melampygus</i>	Bluefin Trevally	3
Actinopterygii	<i>Caranx papuensis</i>	Brassy Trevally	3
Actinopterygii	<i>Caranx sexfasciatus</i>	Bigeye Trevally	2
Actinopterygii	<i>Centropyge tibicen</i>	Keyhole Angelfish	1
Actinopterygii	<i>Cephalopholis miniata</i>	Coral Rockcod	11
Actinopterygii	<i>Chaetodon auriga</i>	Threadfin Butterflyfish	2
Actinopterygii	<i>Chaetodon citrinellus</i>	Citron Butterflyfish	1
Actinopterygii	<i>Chaetodon flavirostris</i>	Dusky Butterflyfish	7
Actinopterygii	<i>Chaetodon guentheri</i>	Gunther's Butterflyfish	3
Actinopterygii	<i>Chaetodon lineolatus</i>	Lined Butterflyfish	1
Actinopterygii	<i>Chaetodon rainfordi</i>	Rainford's Butterflyfish	5
Actinopterygii	<i>Chaetodon trifascialis</i>	Chevron Butterflyfish	1
Actinopterygii	<i>Chaetodon vagabundus</i>	Vagabond Butterflyfish	1
Actinopterygii	<i>Chaetodontoplus meredithi</i>	Queensland Yellowtail Angelfish	5
Actinopterygii	<i>Chelmon rostratus</i>	Copperband Butterflyfish	1
Actinopterygii	<i>Choerodon fasciatus</i>	Harlequin Tuskfish	6
Actinopterygii	<i>Cirrhitichthys aprinus</i>	Blotched Hawkfish	7
Actinopterygii	<i>Cirrhitichthys oxycephalus</i>	Spotted Hawkfish	4
Actinopterygii	<i>Coradion altivelis</i>	Highfin Coralfish	2
Actinopterygii	<i>Dascyllus trimaculatus</i>	Threespot Humbug	1
Actinopterygii	<i>Dendrochirus zebra</i>	Zebra Lionfish	3
Actinopterygii	<i>Diagramma labiosum</i>	Grey Sweetlips	1
Actinopterygii	<i>Diagramma pictum</i>	Painted Sweetlips	1
Actinopterygii	<i>Diodon hystrix</i>	Spotted Porcupinefish	3
Actinopterygii	<i>Diploprion bifasciatus</i>	Barred Soapfish	1
Actinopterygii	<i>Echidna nebulosa</i>	Snowflake Moray	1

Actinopterygii	<i>Ecsenius bicolor</i>	Bicolor Combtooth Blenny	2
Actinopterygii	<i>Elacatinus oceanops</i>	Neon Goby	1
Actinopterygii	<i>Epinephelus coioides</i>	Goldspotted Rockcod	3
Actinopterygii	<i>Epinephelus fasciatus</i>	Blacktip Rockcod	6
Actinopterygii	<i>Epinephelus quoyanus</i>	Longfin Rockcod	1
Actinopterygii	<i>Epinephelus undulatusstriatus</i>	Maori Rockcod	2
Actinopterygii	<i>Forcipiger flavissimus</i>	Forceps Butterflyfish	3
Actinopterygii	<i>Glaucosoma scapulare</i>	Pearl Perch	1
Actinopterygii	<i>Gomphosus varius</i>	Birdnose Wrasse	2
Actinopterygii	<i>Goniistius vestitus</i>	Eastern Morwong	8
Actinopterygii	<i>Halichoeres hortulanus</i>	Checkerboard Wrasse	2
Actinopterygii	<i>Hemiramphus robustus</i>	Three-by-two Garfish	1
Actinopterygii	<i>Heniochus acuminatus</i>	Longfin Bannerfish	4
Actinopterygii	<i>Heniochus varius</i>	Horned Bannerfish	2
Actinopterygii	<i>Istiblennius meleagris</i>	Peacock Rockskipper	1
Actinopterygii	<i>Labroides dimidiatus</i>	Bluestreak Cleaner Wrasse	4
Actinopterygii	<i>Lutjanus</i>	Common Snappers	1
Actinopterygii	<i>Lutjanus argentimaculatus</i>	Mangrove Jack	1
Actinopterygii	<i>Lutjanus russellii</i>	Moses' Snapper	1
Actinopterygii	<i>Microcanthus joyceae</i>	East-Australian Stripey	12
Actinopterygii	<i>Monodactylus argenteus</i>	Diamondfish	3
Actinopterygii	<i>Neoglyphidodon melas</i>	Black Damsel	1
Actinopterygii	<i>Neoglyphidodon nigroris</i>	Scarface Damsel	1
Actinopterygii	<i>Neoniphon sammara</i>	Slender Squirrfish	1
Actinopterygii	<i>Ostorhinchus limenus</i>	Sydney Cardinalfish	1
Actinopterygii	<i>Ostracion cubicum</i>	Yellow Boxfish	3
Actinopterygii	<i>Ostracion meleagris</i>	Black Boxfish	1
Actinopterygii	<i>Paracirrhites arcatus</i>	Ringeye Hawkfish	1
Actinopterygii	<i>Paralutereres prionurus</i>	Blacksaddle Filefish	1
Actinopterygii	<i>Parapercis</i>	Grubfish and Sandperch	1
Actinopterygii	<i>Parma oligolepis</i>	Bigscale Scalyfin	3
Actinopterygii	<i>Parupeneus spilurus</i>	Blacksaddle Goatfish	3
Actinopterygii	<i>Pempheris</i>	Bullseye	1
Actinopterygii	<i>Pentapodus paradiseus</i>	Paradise Threadfin Bream	2
Actinopterygii	<i>Platax pinnatus</i>	Dusky Batfish	1
Actinopterygii	<i>Platax teira</i>	Longfin Batfish	3
Actinopterygii	<i>Platycaranx chrysophrys</i>	Longnose Trevally	2
Actinopterygii	<i>Plectorhinchus gibbosus</i>	Brown Sweetlips	1
Actinopterygii	<i>Plectroglyphidodon apicalis</i>	Australian Gregory	1
Actinopterygii	<i>Plectroglyphidodon dickii</i>	Dick's Damsel	1
Actinopterygii	<i>Pomacanthus semicirculatus</i>	Blue Angelfish	1
Actinopterygii	<i>Pomacentrus moluccensis</i>	Lemon Damsel	1
Actinopterygii	<i>Priacanthus hamrur</i>	Lunartail Bigeye	1
Actinopterygii	<i>Prionurus</i>	Sawtail Surgeonfishes	1
Actinopterygii	<i>Prionurus microlepidotus</i>	Australian Sawtail	4
Actinopterygii	<i>Pseudanthias cheirospilos</i>	Pacific lyretail anthias	1
Actinopterygii	<i>Pseudanthias rubrizonatus</i>	Lilac-tip Basslet	3
Actinopterygii	<i>Pseudanthias rubrolineatus</i>	Nipponic Anthias	1

Actinopterygii	<i>Pseudolabrus guentheri</i>	Gunther's Wrasse	4
Actinopterygii	<i>Pterocaesio digramma</i>	Doubleline Fusilier	1
Actinopterygii	<i>Pterois volitans</i>	Common Lionfish	6
Actinopterygii	<i>Rhabdosargus sarba</i>	Tarwhine	2
Actinopterygii	<i>Sargocentron caudimaculatum</i>	Whitetail Squirrelfish	1
Actinopterygii	<i>Scarus ghobban</i>	Blue-barred Parrotfish	2
Actinopterygii	<i>Scolopsis temporalis</i>	Rainbow Monocle Bream	1
Actinopterygii	<i>Scorpaena jacksoniensis</i>	Eastern Red Scorpionfish	3
Actinopterygii	<i>Sebastapistes cyanostigma</i>	Yellowspotted Scorpionfish	1
Actinopterygii	<i>Siganus</i>	Rabbitfishes	1
Actinopterygii	<i>Siganus fuscescens</i>	Black Rabbitfish	2
Actinopterygii	<i>Siphonia majimai</i>	Striped Siphonfish	1
Actinopterygii	<i>Sphyraena viridensis</i>	Yellowmouth Barracuda	1
Actinopterygii	<i>Sufflamen chrysopterum</i>	Flagtail Triggerfish	3
Actinopterygii	<i>Thalassoma hardwicke</i>	Sixbar Wrasse	1
Actinopterygii	<i>Thalassoma lunare</i>	Moon Wrasse	3
Actinopterygii	<i>Thalassoma lutescens</i>	Green Moon Wrasse	9
Actinopterygii	<i>Thalassoma nigrofasciatum</i>	Blackbarred Wrasse	3
Actinopterygii	<i>Turram fulvoguttatum</i>	Yellow Spotted Trevally	1
Actinopterygii	<i>Tylosurus crocodilus</i>	Crocodile Longtom	1
Actinopterygii	<i>Zanclus cornutus</i>	Moorish Idol	5
Annelida	<i>Sabellastarte</i>	Fan worms Feather Duster Worms	1
Annelida	<i>Sabellastarte australiensis</i>	Southern Fanworm	2
Annelida	<i>Sabellinae</i>		1
Annelida	<i>Spirobranchus</i>	Christmas Tree Worms	4
Annelida	<i>Spirobranchus corniculatus</i>	Indo-Pacific Christmas Tree Worm	1
Arthropoda	<i>Charybdis annulata</i>	Banded-leg swimming crab	6
Arthropoda	<i>Clibanarius longitarsus</i>	Long-legged Hermit Crab	1
Arthropoda	<i>Clibanarius virescens</i>	Yellow-footed Hermit Crab	23
Arthropoda	<i>Dardanus lagopodes</i>	Hairy Red Hermit Crab	1
Arthropoda	<i>Grapsus albolineatus</i>	Mottled Lightfoot Crab	7
Arthropoda	<i>Grapsus tenuicrustatus</i>	Thin-shelled Rock Crab	1
Arthropoda	<i>Leptograpsus variegatus</i>	Purple Rock Crab	6
Arthropoda	<i>Ligia exotica</i>	Wharf Louse	3
Arthropoda	<i>Mictyris longicarpus</i>	Light-blue Soldier Crab	1
Arthropoda	<i>Pagurus decimbranchiae</i>		1
Arthropoda	<i>Palaemon dolospinus</i>		1
Arthropoda	<i>Panulirus versicolor</i>	Painted Spiny Lobster	2
Arthropoda	<i>Plagusia squamosa</i>	Scaly Rock Crab	4
Arthropoda	<i>Scopimera inflata</i>	Sand Bubbler	1
Arthropoda	<i>Stenopus hispidus</i>	Banded Coral Shrimp	6
Arthropoda	<i>Tesseropora rosea</i>	Rose-coloured Barnacle	11
Arthropoda	<i>Thalamita crenata</i>	Crenate Swimming Crab	1
Asciidiacea	<i>Aplidium solidum</i>	Sea Pork	1
Asciidiacea	<i>Cnemidocarpa stolonifera</i>		2
Asciidiacea	<i>Eudistoma elongatum</i>	Australian Droplet Tunicate	24
Asciidiacea	<i>Herdmania momus</i>	Red-throated ascidian	2
Asciidiacea	<i>Leptoclinides</i>	Grey colonial ascidian	1

Asidiacea	<i>Phallusia julinea</i>		2
Asidiacea	<i>Polycarpa papillata</i>		1
Asidiacea	<i>Pycnoclavella diminuta</i>		1
Asidiacea	<i>Pyura praeputialis</i>	Cunjevoi	20
Asidiacea	<i>Ritterella dispar</i>		4
Aves	<i>Alectura lathami</i>	Australian Brush-turkey	2
Aves	<i>Anas gracilis</i>	Grey Teal	1
Aves	<i>Anhinga novaehollandiae</i>	Australasian Darter	4
Aves	<i>Anthochaera chrysoptera</i>	Little Wattlebird	1
Aves	<i>Ardea alba</i>	Great Egret	3
Aves	<i>Ardea alba modesta</i>	Eastern Great Egret	1
Aves	<i>Chroicocephalus novaehollandiae</i>	Silver Gull	4
Aves	<i>Cracticus nigrogularis</i>	Pied Butcherbird	1
Aves	<i>Cracticus torquatus</i>	Grey Butcherbird	1
Aves	<i>Cygnus atratus</i>	Black Swan	1
Aves	<i>Egretta garzetta</i>	Little Egret	1
Aves	<i>Egretta novaehollandiae</i>	White-faced Heron	8
Aves	<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater	1
Aves	<i>Gelochelidon macrotarsa</i>	Australian Tern	1
Aves	<i>Gymnorhina tibicen</i>	Australian Magpie	1
Aves	<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	2
Aves	<i>Haematopus longirostris</i>	Pied Oystercatcher	1
Aves	<i>Haliastur indus</i>	Brahminy Kite	3
Aves	<i>Haliastur sphenurus</i>	Whistling Kite	3
Aves	<i>Himantopus leucocephalus</i>	Pied Stilt	1
Aves	<i>Icthyophaga leucogaster</i>	White-bellied Sea-Eagle	4
Aves	<i>Numenius madagascariensis</i>	Eastern Curlew	3
Aves	<i>Pandion haliaetus</i>	Osprey	1
Aves	<i>Pandion haliaetus cristatus</i>	Australasian Osprey	1
Aves	<i>Passer domesticus</i>	House Sparrow	1
Aves	<i>Pelecanus conspicillatus</i>	Australian Pelican	10
Aves	<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant	4
Aves	<i>Phalacrocorax varius</i>	Pied Cormorant	4
Aves	<i>Philemon corniculatus</i>	Noisy Friarbird	1
Aves	<i>Platalea regia</i>	Royal Spoonbill	3
Aves	<i>Thalasseus</i>	Crested Terns	1
Aves	<i>Thalasseus bergii</i>	Great Crested Tern	8
Aves	<i>Threskiornis molucca</i>	Australian White Ibis	5
Aves	<i>Vanellus miles novaehollandiae</i>	Black-shouldered Masked Lapwing	1
Bryozoa	<i>Biflustra</i>		1
Bryozoa	<i>Watersipora subtorquata</i>	Red-rust Bryozoan	2
Chromista	<i>Achnanthes longipes</i>		1
Chromista	<i>Campylodiscus clypeus</i>		1
Chromista	<i>Dictyota dichotoma</i>	Forked ribbons	1
Chromista	<i>Hyalodiscus pustulatus</i>		1
Chromista	<i>Melosira nummuloides</i>		1
Chromista	<i>Padina</i>	Mermaid's Fan Seaweeds	1
Cnidaria	<i>Acropora</i>	Table, Elkhorn, and Staghorn Corals	2

Cnidaria	<i>Acropora solitaryensis</i>	Table Coral	1
Cnidaria	<i>Actinia tenebrosa</i>	Waratah Anemone	21
Cnidaria	<i>Aglaophenia</i>	Ostrich-Plume Hydroids	1
Cnidaria	<i>Anemonia mutabilis</i>	Rock Anenome	5
Cnidaria	<i>Anthopleura handi</i>	Sea Anenome	1
Cnidaria	<i>Aulactinia veratra</i>	Green snakelock anemone	23
Cnidaria	<i>Capnella</i>	Kenya Tree Corals	1
Cnidaria	<i>Carioja riisei</i>	Snowflake Coral	5
Cnidaria	<i>Cladiella</i>	Colt Corals, Finger Leather Corals	4
Cnidaria	<i>Dendronephthya</i>	Carnation Corals	2
Cnidaria	<i>Dichotella gemmacea</i>	Carnation Corals	1
Cnidaria	<i>Dipsastraea</i>	Knob Coral	1
Cnidaria	<i>Entacmaea quadricolor</i>	Bubble-tip Anemone	4
Cnidaria	<i>Goniopora</i>	Flowerpot Corals	1
Cnidaria	<i>Gyraeactis sesere</i>	Colonial Anemone	6
Cnidaria	<i>Heteranthus verruculatus</i>	Sand Anemone	1
Cnidaria	<i>Homophyllia bowerbanki</i>	Bowerbank's Cup Coral	7
Cnidaria	<i>Junceella fragilis</i>	Fragile Sea Whip	1
Cnidaria	<i>Latissimia opalia</i>		6
Cnidaria	<i>Litophyton</i>	Broccoli Coral	1
Cnidaria	<i>Lobophytum</i>	Devil's Hand Corals	1
Cnidaria	<i>Lohowia koosi</i>		1
Cnidaria	<i>Macrorhynchia</i>	Feather hydroids	1
Cnidaria	<i>Macrorhynchia philippina</i>	Stinging Bush Hydroid	2
Cnidaria	<i>Melithaea</i>	Nodular gorgonians	2
Cnidaria	<i>Melithaea zimmeri</i>	Zimmer's Sea Fan	1
Cnidaria	<i>Micromussa lordhowensis</i>	Lord Coral	2
Cnidaria	<i>Moolabalia nevillecolemani</i>	Octocorals	2
Cnidaria	<i>Neospongodes</i>		1
Cnidaria	<i>Oulactis muscosa</i>	Speckled rock anemone	10
Cnidaria	<i>Palythoa mutuki</i>	Green Button Polyp	4
Cnidaria	<i>Palythoa tuberculosa</i>	Sea Mat	2
Cnidaria	<i>Paragoniastrea australensis</i>	Lesser Star Coral	3
Cnidaria	<i>Pennaria disticha</i>	Christmas Tree Hydroid	1
Cnidaria	<i>Pocillopora aliciae</i>	Branching Corals	3
Cnidaria	<i>Sarcophyton</i>	Toadstool Leather Corals	6
Cnidaria	<i>Sclerophyllum</i>	Finger Leather	4
Cnidaria	<i>Tubastraera aurea</i>	Sunshine Coral	1
Cnidaria	<i>Tubastraera coccinea</i>	Orange Cup Coral	9
Cnidaria	<i>Turbinaria mesenterina</i>	Salad Coral	2
Cnidaria	<i>Xenia</i>	Xenia, Pulse Corals	1
Ctenophora	<i>Beroe</i>	Cigar Comb Jellies	1
Echinodermata	<i>Amphipholis squamata</i>	Dwarf Brittle Star	1
Echinodermata	<i>Cenometra bella</i>	Beautiful Feather Star	1
Echinodermata	<i>Comatella nigra</i>	Black Feather Star	1
Echinodermata	<i>Diadema savignyi</i>	Savigny's Longspine Sea Urchin	1
Echinodermata	<i>Diadema setosum</i>	Black Longspine Urchin	1
Echinodermata	<i>Echinaster callosus</i>	Nodular Sea Star	1

Echinodermata	<i>Echinaster luzonicus</i>	Luzon Sea Star	2
Echinodermata	<i>Echinometra mathaei</i>	Indo-Pacific Rock-boring Urchin	1
Echinodermata	<i>Echinothrix calamaris</i>	Banded Sea Urchin	2
Echinodermata	<i>Fromia indica</i>	Indian Sea Star	5
Echinodermata	<i>Heliocidaris erythrogramma</i>	Western Pacific purple sea urchin	2
Echinodermata	<i>Henricia leviuscula</i>	Pacific Blood Star	1
Echinodermata	<i>Holothuria atra</i>	Lollyfish Sea Cucumber	1
Echinodermata	<i>Holothuria difficilis</i>	Difficult Sea Cucumber	1
Echinodermata	<i>Holothuria hilla</i>	Light-spotted Sea Cucumber	1
Echinodermata	<i>Holothuria leucospilota</i>	Black Sea Cucumber	36
Echinodermata	<i>Linckia guildingii</i>	Guilding's Sea Star	2
Echinodermata	<i>Linckia laevigata</i>	Guilding's Sea Star	1
Echinodermata	<i>Nardoa</i>	Sea Stars	1
Echinodermata	<i>Nardoa variolata</i>	Button Star	1
Echinodermata	<i>Ophidiaster</i>	Sea Stars	1
Echinodermata	<i>Ophiocoma scolopendrina</i>	Lagoon Brittle Star	2
Echinodermata	<i>Ophiocoma scolopendrina</i>	Lagoon Brittle Star	1
Echinodermata	<i>Phyllacanthus parvispinus</i>	Eastern pencil urchin	1
Echinodermata	<i>Tripneustes gratilla</i>	Collector Urchin	1
Elasmobranchii	<i>Aetobatus ocellatus</i>	White-spotted Eagle Ray	2
Elasmobranchii	<i>Carcharias taurus</i>	Grey Nurse Shark	7
Elasmobranchii	<i>Chiloscyllium punctatum</i>	Brown-banded Bamboo Shark	3
Elasmobranchii	<i>Orectolobus maculatus</i>	Spotted Wobbegong	6
Elasmobranchii	<i>Orectolobus ornatus</i>	Ornate Wobbegong	7
Insecta	<i>Aconophora compressa</i>	Lantana treehopper	2
Insecta	<i>Apis mellifera</i>	European Honey Bee	1
Insecta	<i>Aspidimorpha deusta</i>	Tortoise Beetle	1
Insecta	<i>Euploea core</i>	Common Crow	1
Insecta	<i>Lethocerus insulanus</i>	Giant Water Bug	1
Insecta	<i>Micraspis frenata</i>	Striped Ladybird	1
Insecta	<i>Paropsides calypso</i>	Lilly Pilly leaf beetle	1
Insecta	<i>Tectocoris diophthalmus</i>	Hibiscus Harlequin Bug	1
Mammalia	<i>Delphinus delphis</i>	Common Dolphin	3
Mammalia	<i>Megaptera novaeangliae</i>	Humpback Whale	6
Mollusca	<i>Aplysia argus</i>	White-speckled Seahare	31
Mollusca	<i>Aplysia concava</i>	Dwarf Sea Hare	1
Mollusca	<i>Aplysia juliana</i>	Walking Seahare	1
Mollusca	<i>Arakawaria marginalba</i>	Mulberry Whelk	22
Mollusca	<i>Ardeadoris rubroannulata</i>	Nudibranchs	1
Mollusca	<i>Ascarosepion plangon</i>	Mourning Cuttlefish	2
Mollusca	<i>Atrina</i>	Pen Shells	1
Mollusca	<i>Austrocochlea porcata</i>	Zebra Top Snail	24
Mollusca	<i>Austrolittorina unifasciata</i>	Little Blue Periwinkle	10
Mollusca	<i>Barbatia pistachia</i>	Banded Ark	3
Mollusca	<i>Batillaria australis</i>	Australian Mud Whelk	2
Mollusca	<i>Bembicium nanum</i>	Striped-mouth Connivink	8
Mollusca	<i>Bistolida kieneri</i>	Kiener's Cowry	1

Mollusca	<i>Biuve fulvipunctata</i>	White-speckled Headshield Slug	6
Mollusca	<i>Cabestana spengleri</i>	Spengler's Trumpet Snail	5
Mollusca	<i>Callistochiton antiquus</i>	Ancient Chiton	1
Mollusca	<i>Callistochiton antiquus</i>	Ancient Chiton	1
Mollusca	<i>Calpurnus verrucosus</i>	Little Egg Cowry	1
Mollusca	<i>Canarium mutabile</i>	Variable Stromb	1
Mollusca	<i>Cardita aviculina</i>		2
Mollusca	<i>Cellana</i>	Indo-Pacific Limpets	2
Mollusca	<i>Cellana tramoserica</i>	Variegated limpet	15
Mollusca	<i>Ceratosoma tenue</i>	Many-lobed Ceratosoma	1
Mollusca	<i>Charonia tritonis</i>	Giant Triton Snail	1
Mollusca	<i>Chicoreus ramosus</i>	Ramose Murex	2
Mollusca	<i>Chromodoris elisabethina</i>	Elisabeth's Chromodoris	2
Mollusca	<i>Clypeomorus petrosa</i>	Sand Creeper	10
Mollusca	<i>Conomurex luhuanus</i>	Strawberry Conch	1
Mollusca	<i>Conuber conicum</i>	Conical Moon Snail	1
Mollusca	<i>Conuber incei</i>	Ince's Snail	1
Mollusca	<i>Conus aristophanes</i>	Cone Snail	2
Mollusca	<i>Conus capitaneus</i>	The Captain Cone	1
Mollusca	<i>Conus chaldaeus</i>	Vermiculate Cone	2
Mollusca	<i>Conus coronatus</i>	Coronated Cone	8
Mollusca	<i>Conus ebraeus</i>	Black-and-white Cone Snail	6
Mollusca	<i>Conus lividus</i>	Livid Cone	2
Mollusca	<i>Conus nanus</i>	Nanus Cone	1
Mollusca	<i>Conus textile</i>	Textile Cone	1
Mollusca	<i>Creseis acicula</i>	Needle Sea Butterfly	1
Mollusca	<i>Cronia aurantiaca</i>	Pseudo-almond Purple	2
Mollusca	<i>Cypraea tigris</i>	Tiger Cowry	4
Mollusca	<i>Dicathais orbita</i>	Cart-Rut Shell	15
Mollusca	<i>Dolabrifera dolabrifera</i>	Warty Seacat	7
Mollusca	<i>Doriprismatica atromarginata</i>	Black-margined Nudibranch	5
Mollusca	<i>Echinolittorina vidua</i>	Common Granulate Periwinkle	1
Mollusca	<i>Erronea erronea</i>	Erroneous Cowry	4
Mollusca	<i>Erronea xanthodon</i>	Yellow-toothed Cowrie	2
Mollusca	<i>Gafrarium dispar</i>	Transverse Circe	2
Mollusca	<i>Glossodoris vespa</i>	Nudibranchs	5
Mollusca	<i>Goniobranchus splendidus</i>	Splendid Goniobranch	2
Mollusca	<i>Gymnodoris</i>	Dorid Nudibranchs	1
Mollusca	<i>Hexabranchus lacer</i>	Decumbent Spanish Dancer	1
Mollusca	<i>Hexabranchus sanguineus</i>	Spanish Dancer	1
Mollusca	<i>Hydatina physis</i>	Brown-lined Paperbubble	2
Mollusca	<i>Hyotissa hyotis</i>	Giant Honeycomb Oyster	1
Mollusca	<i>Hypselodoris jacksoni</i>	Nudibranchs	3
Mollusca	<i>Hypselodoris melanescia</i>	Nudibranchs	1
Mollusca	<i>Hypselodoris obscura</i>	Nudibranchs	2
Mollusca	<i>Hypselodoris tryoni</i>	Tryon's Hypselodoris	1
Mollusca	<i>Isognomon perna</i>	Brown Purse Shell	1
Mollusca	<i>Latona deltoides</i>	Pipi	1

Mollusca	<i>Liolophura gaimardi</i>	Chiton	19
Mollusca	<i>Lyncina vitellus</i>	Calf Cowry	1
Mollusca	<i>Mauritia arabica</i>	Arabian Cowry	2
Mollusca	<i>Mauritia eglantina</i>	Eglantine Cowry	1
Mollusca	<i>Menathais tuberosa</i>	Humped Rocksnail	1
Mollusca	<i>Miamira flavidostata</i>	Nudibranchs	1
Mollusca	<i>Monetaria annulus</i>	Gold Ring Cowry	9
Mollusca	<i>Monetaria caputserpentis</i>	Snakehead Cowrie	20
Mollusca	<i>Monoplex parthenopeus</i>	Giant Hairy Triton Snail	2
Mollusca	<i>Naria erosa</i>	Eroded Cowry	1
Mollusca	<i>Nassa serta</i>	Sertum Rock Shell	1
Mollusca	<i>Nassarius albescens</i>	Whitish Dogwhelk	5
Mollusca	<i>Nerita albicilla</i>	Blotched Nerite	5
Mollusca	<i>Nerita balteata</i>	Lined Nerite	1
Mollusca	<i>Nerita melanotragus</i>	Black nerite	15
Mollusca	<i>Nerita plicata</i>	Pleated Nerite	1
Mollusca	<i>Octopus</i>		1
Mollusca	<i>Octopus cyanea</i>	Day Octopus	2
Mollusca	<i>Onithochiton quercinus</i>	Oak Chiton	11
Mollusca	<i>Ovula ovum</i>	Common Egg Cowry	6
Mollusca	<i>Palmadusta clandestina</i>	Clandestine Cowrie	1
Mollusca	<i>Pardalinops testudinarius</i>	Tortoise Dove Shell	2
Mollusca	<i>Pecten fumatus</i>	Commercial Scallop	1
Mollusca	<i>Phalium areola</i>	Checkerboard Bonnet Snail	2
Mollusca	<i>Phalium bandatum</i>	Banded Bonnet Snail	1
Mollusca	<i>Phasianotrochus eximius</i>	Kelp Shell	1
Mollusca	<i>Phyllidia elegans</i>	Elegant Phyllidia	1
Mollusca	<i>Phyllidia ocellata</i>	Ocellate Phyllidia	1
Mollusca	<i>Phyllidia varicosa</i>	Varicose Wart Slug	5
Mollusca	<i>Phyllidiella</i>	Nudibranchs	1
Mollusca	<i>Phylloidesmium crypticum</i>	Nudibranchs	1
Mollusca	<i>Pinctada margaritifera</i>	Black-lip Pearl Shell	1
Mollusca	<i>Planaxis sulcatus</i>	Tropical Periwinkle	2
Mollusca	<i>Pollia fumosa</i>	The Smokey Goblet	1
Mollusca	<i>Purpuradusta gracilis</i>	graceful cowrie	1
Mollusca	<i>Pyrene flava</i>	Yellow Dove Shell	1
Mollusca	<i>Quasimitra variabilis</i>	Variable Mitre	1
Mollusca	<i>Rhinoclavis sinensis</i>	Obelisk Creeper	5
Mollusca	<i>Saccostrea cucullata</i>	Hooded oyster	5
Mollusca	<i>Saccostrea glomerata</i>	Sydney Rock Oyster	1
Mollusca	<i>Sagaminopteron</i>	Nudibranchs	1
Mollusca	<i>Scutus antipodes</i>	Elephant Snail	3
Mollusca	<i>Sebadoris fragilis</i>	Nudibranchs	1
Mollusca	<i>Sepioteuthis lessoniana</i>	Bigfin Reef Squid	1
Mollusca	<i>Siphonaria denticulata</i>	Limpets	4
Mollusca	<i>Spurilla brasiliiana</i>	Brazilian Aeolid	6
Mollusca	<i>Talparia talpa</i>	Mole Cowrie	2
Mollusca	<i>Thuridilla</i>	Nudibranchs	3

Mollusca	<i>Trichomya hirsuta</i>	Hairy Mussel	3
Mollusca	<i>Tridacninae</i>	Giant Clams	1
Mollusca	<i>Tritoniopsis elegans</i>	Nudibranchs	2
Mollusca	<i>Vetricardium multispinosum</i>	Many-spined Heart Cockle	1
Nemertea	<i>Baseodiscus delineatus</i>	Ribbon Worm	1
Plantae	<i>Alectryon coriaceus</i>	Beach Bird's Eye	1
Plantae	<i>Asparagopsis taxiformis</i>	Red Sea Plume	1
Plantae	<i>Asparagus aethiopicus</i>	Ground Asparagus	1
Plantae	<i>Banksia integrifolia</i>	Coastal Banksia	1
Plantae	<i>Cakile maritima</i>	European Searocket	1
Plantae	<i>Casuarina equisetifolia</i>	Beach Sheoak	3
Plantae	<i>Commelina cyanea</i>	Scurvy Weed	2
Plantae	<i>Crassocephalum crepidioides</i>	Redflower Ragleaf	1
Plantae	<i>Crinum pedunculatum</i>	Mangrove Lily	1
Plantae	<i>Delisea pulchra</i>		1
Plantae	<i>Desmodium incanum</i>	Creeping Beggarweed	1
Plantae	<i>Halimeda discoidea</i>	Money Plant	2
Plantae	<i>Hibiscus tiliaceus</i>	Sea Hibiscus	1
Plantae	<i>Hydrocotyle bonariensis</i>	Largeleaf Pennywort	1
Plantae	<i>Ipomoea cairica</i>	Mile-a-minute vine	1
Plantae	<i>Ipomoea pes-caprae</i>	Beach Morning Glory	2
Plantae	<i>Macaranga tanarius</i>	Blush Macaranga	2
Plantae	<i>Macroptilium atropurpureum</i>	Purple Bush-Bean	1
Plantae	<i>Pandanus tectorius</i>	pandanus	2
Plantae	<i>Passiflora pallida</i>	corkystem passionvine	1
Plantae	<i>Rhaphiolepis indica</i>	Indian Hawthorn	1
Plantae	<i>Smilax australis</i>	Austral Sarsaparilla	1
Plantae	<i>Tetragonia tetragonoides</i>	Warrigal Greens	3
Plantae	<i>Valonia ventricosa</i>	Sailor's Eyeball Alga	1
Plantae	<i>Wollastonaria uniflora</i>	Beach Sunflower	1
Platyhelminthes	<i>Pseudoceros indicus</i>	Flatworm	3
Porifera	<i>Agelas</i>	Orange Elephant Ear Sponge	1
Porifera	<i>Cliona orientalis</i>	Boring Sponge	1
Porifera	<i>Dactylia</i>		1
Porifera	<i>Haliclona cinerea</i>	Mudflat Sponge	2
Porifera	<i>Ianthella quadrangulata</i>		1
Porifera	<i>Niphates</i>	Pink Vase Sponge	1
Porifera	<i>Pseudoceratina verrucosa</i>	Butter Pad Sponge	1
Porifera	<i>Xestospongia testudinaria</i>	Indo-Pacific Giant Barrel Sponge	2
Reptilia	<i>Chelonia mydas</i>	Green Sea Turtle	51
Reptilia	<i>Eretmochelys imbricata</i>	Hawksbill Sea Turtle	1
Reptilia	<i>Intellagama lesueurii</i>	Australian Water Dragon	2
Reptilia	<i>Lampropholis delicata</i>	Dark-flecked Garden Sunskink	1
Reptilia	<i>Varanus varius</i>	Lace Monitor	1
Total Research Grade Observations			946