

UNESCO environmental DNA (eDNA) Expeditions in marine World Heritage sites

Biodiversity survey for Ningaloo Coast

Interim Results
Not for public distribution



Credit: Department of Biodiversity, Conservation and Attractions.

About eDNA Expeditions

UNESCO's eDNA Expeditions is a global, citizen science initiative that is conducted with the intention to measure marine biodiversity and predict the impact climate change on marine community composition across UNESCO World Heritage marine sites.

eDNA is a cost effective and minimally invasive method to measure biodiversity in any given area. Marine species continuously shed DNA into the water around them in the form of waste, mucus, or cells. By extracting this DNA from water samples, and subsequently multiplying and sequencing specific regions within these DNA strands, a wide variety of species can be detected without removing any organisms from their environment. The regions in the DNA targeted for sequencing are selected depending on the scope of the study: while some markers are suitable to obtain a broad overview of biodiversity across many groups of species, other markers are particularly suited to get high resolution insight for a more specific taxonomic group such as fish. The UNESCO eDNA Expeditions initiative combines a number of markers tailored for marine vertebrates (fish, mammals, and turtles). A general marker was added to also allow detection of species from other groups such as invertebrates, which can give a broader insight in the marine species diversity in a given area.

Between September 2022 and May 2023, UNESCO organized eDNA sampling campaigns in 21 marine World Heritage sites across 17 countries around the world. At every World Heritage site, about 20 samples were collected from different habitats. Over 250 young people participated in the local sampling expeditions. They were guided by local experts and park management staff, using protocols and eDNA sampling equipment provided by UNESCO.

Biodiversity inventories generated from the samples are being combined with existing species distribution data from public biodiversity databases such as the Ocean Biodiversity Information System (OBIS) in view of obtaining a comprehensive overview of marine life across marine World Heritage sites. Through the use of climate scenarios and species distribution models, an estimate will be made of the impact of climate change, in particular rising temperatures, on local biodiversity and its potential future distribution patterns.

More information about the initiative and a press kit are available on the UNESCO website: <https://www.unesco.org/en/edna-expeditions>.

Results

Sampling and sample processing

eDNA sampling was conducted in Ningaloo Coast in May 2023. A total of 20 samples were collected at 5 locations in the park covering different habitats: bundegi_beach, jurabi_coastal_park, mangrove_bay, osprey_bay, and oyster_stacks (Figure 1). Up to 1,800 mL of seawater was filtered through filter cartridges containing a filter with a 0.8 μm pore size. After sampling, the filter cartridges were flushed with preservation liquid and shipped to UNESCO. DNA from the samples was extracted and amplified, and subsequently sent to the sequencing facility at KU Leuven in Belgium, a specialized university eDNA lab contracted by UNESCO for this work. PCR amplification was done using five primer pairs selected to capture as much biodiversity as possible in the target groups of the study: fish, mammals, and turtles.

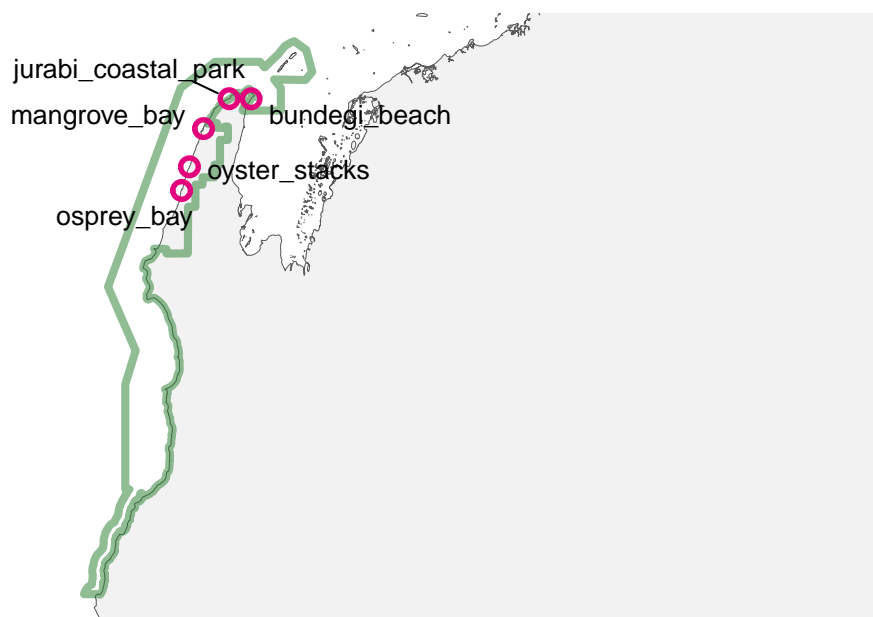


Figure 1: Map of the sampling locations.

DNA sequencing

Sequencing of the DNA from 20 samples resulted in over 50 million sequence reads, from which we collected 59,159 unique sequences or ASVs (Tables 1 and 2).

reads	asvs
50215440	59159

Table 1: Reads, ASVs, and species across all samples.

Species identification

The marker sequences obtained from sequencing were matched with sequence reference databases built using public data available from the National Center for Biotechnology Information (NCBI). This resulted in the identification of 698 species, including 307 fish species, 1 mammalian species, and 1 turtle species (Table 3). Species from other groups, such as algae, molluscs, crustaceans, sponges, and cnidarians, were also detected (Figures 2 and 3). This number of species detected represents about 21% of the 4,977 species known from Ningaloo Coast in the OBIS database. Of the 698 species detected, 264 are not among the species previously

locality	materialSampleID	sampleSize	reads	asvs	species
Bundegi Beach	EE0464	1740	854864	554	18
Bundegi Beach	EE0467	900	2163031	4450	141
Bundegi Beach	EE0469	1620	3135883	2966	120
Bundegi Beach	EE0486	1500	2749648	6491	154
Jurabi Coastal Park	EE0327	1800	2366629	13225	315
Jurabi Coastal Park	EE0462	1440	1192468	9957	222
Jurabi Coastal Park	EE0468	1740	2524373	13878	280
Jurabi Coastal Park	EE0481	1620	1927346	11415	227
Mangrove Bay	EE0377	720	2578516	7793	155
Mangrove Bay	EE0457	1800	2419752	874	23
Mangrove Bay	EE0470	1800	3213460	9844	175
Mangrove Bay	EE0485	1620	3631608	8573	159
Osprey Bay	EE0482	1620	3536822	14217	223
Osprey Bay	EE0483	1500	3113581	15373	181
Osprey Bay	EE0484	1800	2807367	13111	217
Oyster stacks	EE0458	1620	2107018	11919	217
Oyster stacks	EE0463	1500	1870784	9753	184
Oyster stacks	EE0465	1500	2740951	10512	203
Oyster stacks	EE0466	1500	2337522	12263	214
Oyster stacks	EE0471	1800	2943817	11800	206

Table 2: Reads, ASVs, and species by sample.

reported from Ningaloo Coast to the UNESCO OBIS database. 26 of the detected species are listed as threatened on the IUCN Red List (Table 4). A full list of species is added at the end of this report.

group	eDNA species	total species	fraction
fish	307	1475	0.21
mammals	1	16	0.06
turtles	1	5	0.20

Table 3: Number of species in the three target groups, from the OBIS database and from eDNA sampling.

category	eDNA species	total species	fraction
CR	4	12	0.33
EN	7	24	0.29
VU	15	89	0.17

Table 4: Number of species by IUCN Red List category, from the OBIS database and from eDNA sampling.

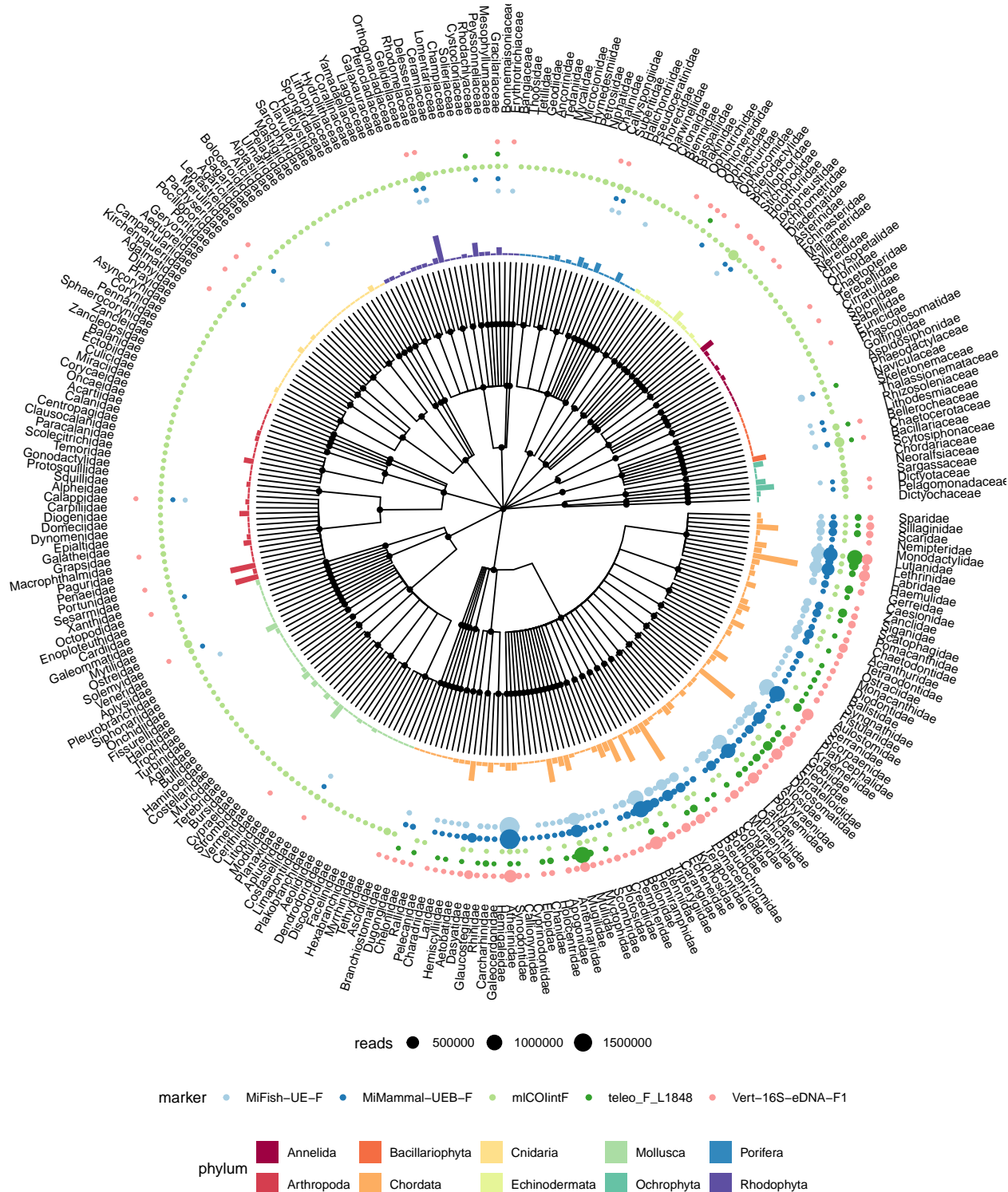


Figure 2: Number of DNA reads (bubbles) and species detected (bars) by family.

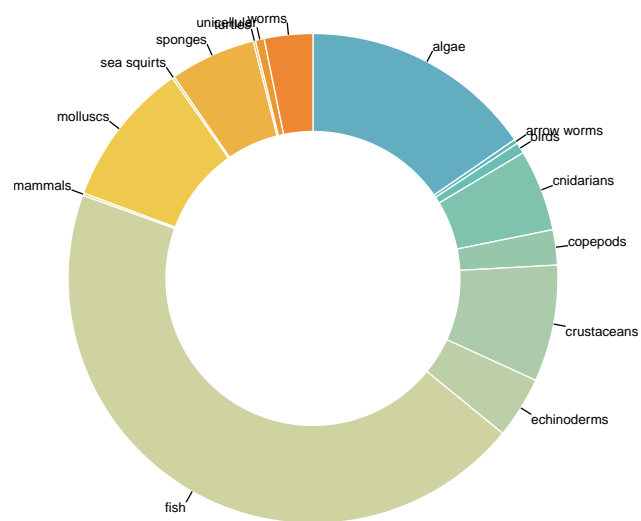


Figure 3: Distribution of detected species across groups.

phylum	class	species	group	category	new	vernacular
Amoebozoa	Discosea	Neoparamoeba aestuarina	unicellular		yes	
Amoebozoa	Discosea	Parvamoeba rugata	unicellular		yes	
Annelida	Polychaeta	Chaetopterus variopedatus	worms		yes	parchment worm, grand chétoptère
Annelida	Polychaeta	Eunice afra	worms		yes	
Annelida	Polychaeta	Eusyllis lamelligera	worms		yes	
Annelida	Polychaeta	Malacoceros indicus	worms		yes	
Annelida	Polychaeta	Odontosyllis freycinetensis	worms		yes	
Annelida	Polychaeta	Opisthosyllis viridis	worms			
Annelida	Polychaeta	Paraopisthosyllis alternocirra	worms			
Annelida	Polychaeta	Parasabella aberrans	worms			
Annelida	Polychaeta	Perinereis nuntia	worms		yes	
Annelida	Polychaeta	Phyllochaetopterus verrilli	worms		yes	
Annelida	Polychaeta	Pseudonereis anomala	worms			
Annelida	Polychaeta	Scoloplos dayi	worms		yes	
Annelida	Polychaeta	Syllis edensis	worms		yes	
Annelida	Polychaeta	Syllis lutea	worms		yes	
Annelida	Polychaeta	Thelepus australiensis	worms			
Annelida	Polychaeta	Timarete ceciliae	worms		yes	
Annelida	Polychaeta	Timarete punctata	worms		yes	
Annelida	Polychaeta	Treptopale paromolos	worms			
Annelida	Polychaeta	Trypanosyllis luzonensis	worms			
Annelida		Aspidosiphon (Paraspidosiphon) laevis	worms		yes	
Annelida		Nephasoma (Nephasoma) rimicola	worms		yes	
Annelida		Phascolosoma (Phascolosoma) stephensoni	worms		yes	
Arthropoda	Copepoda	Acartia (Acanthacartia) tonsa	copepods			
Arthropoda	Copepoda	Acartia (Acartia) negligens	copepods			
Arthropoda	Copepoda	Acrocalanus gracilis	copepods		yes	
Arthropoda	Copepoda	Bestiolina similis	copepods		yes	
Arthropoda	Copepoda	Calocalanus pavo	copepods			
Arthropoda	Copepoda	Centropages furcatus	copepods			
Arthropoda	Copepoda	Clausocalanus furcatus	copepods			
Arthropoda	Copepoda	Farranula gibbula	copepods			
Arthropoda	Copepoda	Macrosetella gracilis	copepods		yes	
Arthropoda	Copepoda	Oncaea media	copepods			
Arthropoda	Copepoda	Oncaea scottodicarloi	copepods			
Arthropoda	Copepoda	Paracalanus denudatus	copepods		yes	
Arthropoda	Copepoda	Paracalanus indicus	copepods			
Arthropoda	Copepoda	Scolecithrix danae	copepods		yes	
Arthropoda	Copepoda	Temora turbinata	copepods			
Arthropoda	Copepoda	Undinula vulgaris	copepods			
Arthropoda	Hexapoda	Blattella germanica			yes	
Arthropoda	Hexapoda	Culex sitiens			yes	
Arthropoda	Malacostraca	Alima pacifica	crustaceans		yes	
Arthropoda	Malacostraca	Alpheus diadema	crustaceans			
Arthropoda	Malacostraca	Atergatis floridus	crustaceans			
Arthropoda	Malacostraca	Calappa gallus	crustaceans			rough box crab
Arthropoda	Malacostraca	Calappa hepatica	crustaceans			smooth box crab
Arthropoda	Malacostraca	Calcinus latens	crustaceans			hidden hermit
Arthropoda	Malacostraca	Calcinus vachoni	crustaceans			
Arthropoda	Malacostraca	Caphyra loevis	crustaceans			

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phylum	class	species	group	category	new	vernacular
Arthropoda	Malacostraca	Carpilius convexus	crustaceans			convex reef crab
Arthropoda	Malacostraca	Chaenostoma boscii	crustaceans		yes	
Arthropoda	Malacostraca	Charybdis (Charybdis) annulata	crustaceans			
Arthropoda	Malacostraca	Chlorodiella laevissima	crustaceans			
Arthropoda	Malacostraca	Clibanarius virescens	crustaceans			
Arthropoda	Malacostraca	Cycloachelous suborbicularis	crustaceans		yes	
Arthropoda	Malacostraca	Dardanus deformis	crustaceans			pale anemone hermit
Arthropoda	Malacostraca	Dardanus woodmasoni	crustaceans			
Arthropoda	Malacostraca	Domecia glabra	crustaceans			
Arthropoda	Malacostraca	Etisus bifrontalis	crustaceans			
Arthropoda	Malacostraca	Etisus electra	crustaceans			
Arthropoda	Malacostraca	Galathea imitata	crustaceans			
Arthropoda	Malacostraca	Galathea platycheles	crustaceans			
Arthropoda	Malacostraca	Gonodactylaceus falcatus	crustaceans			Philippine mantis shrimp
Arthropoda	Malacostraca	Grapsus albolineatus	crustaceans			mottled lightfoot crab
Arthropoda	Malacostraca	Grapsus tenuicrustatus	crustaceans			Natal lightfoot crab
Arthropoda	Malacostraca	Haptosquilla glyptocercus	crustaceans			
Arthropoda	Malacostraca	Haptosquilla stoliura	crustaceans			
Arthropoda	Malacostraca	Hirsutodynomene spinosa	crustaceans			
Arthropoda	Malacostraca	Liocarpilodes integerrimus	crustaceans			
Arthropoda	Malacostraca	Liomera bella	crustaceans		yes	pretty liomera
Arthropoda	Malacostraca	Liomera rugata	crustaceans		yes	corrugated liomera
Arthropoda	Malacostraca	Menaethius monoceros	crustaceans			
Arthropoda	Malacostraca	Metapenaeus monoceros	crustaceans		yes	speckled shrimp
Arthropoda	Malacostraca	Metopograpsus frontalis	crustaceans			
Arthropoda	Malacostraca	Neosarmatium meinerti	crustaceans			
Arthropoda	Malacostraca	Pachygrapsus minutus	crustaceans			
Arthropoda	Malacostraca	Pagurus hirtimanus	crustaceans			
Arthropoda	Malacostraca	Paractaea rufopunctata	crustaceans			nodose rubble crab
Arthropoda	Malacostraca	Parasesarma austrawati	crustaceans		yes	
Arthropoda	Malacostraca	Pilodius areolatus	crustaceans			areolated xanthid crab
Arthropoda	Malacostraca	Pilodius pilumnoides	crustaceans			
Arthropoda	Malacostraca	Portunus pubescens	crustaceans			
Arthropoda	Malacostraca	Scylla serrata	crustaceans			giant mud crab
Arthropoda	Malacostraca	Thalamita admete	crustaceans			
Arthropoda	Malacostraca	Thalamita coeruleipes	crustaceans			
Arthropoda	Malacostraca	Thalamita crenata	crustaceans			crenate swimming crab
Arthropoda	Malacostraca	Thalamita danae	crustaceans			
Arthropoda	Malacostraca	Thalamita gatavakensis	crustaceans			
Arthropoda	Malacostraca	Thalamita integra	crustaceans			
Arthropoda	Malacostraca	Thalamita parvidens	crustaceans			
Arthropoda	Malacostraca	Xanthias lamarckii	crustaceans			
Arthropoda	Malacostraca	Xiphonectes guinotae	crustaceans		yes	
Arthropoda	Malacostraca	Zosimus aeneus	crustaceans			
Arthropoda	Thecostraca	Armatobalanus quadrivittatus	crustaceans			
Bacillariophyta	Bacillariophyceae	Bellerochea polymorpha	algae		yes	
Bacillariophyta	Bacillariophyceae	Chaetoceros didymus	algae			
Bacillariophyta	Bacillariophyceae	Cylindrotheca closterium	algae			
Bacillariophyta	Bacillariophyceae	Helicotheca tamesis	algae			
Bacillariophyta	Bacillariophyceae	Navicula tsukamotoi	algae		yes	

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phylum	class	species	group	category	new	vernacular
Bacillariophyta	Bacillariophyceae	Nitzschia alba	algae		yes	
Bacillariophyta	Bacillariophyceae	Phaeodactylum tricornutum	algae			
Bacillariophyta	Bacillariophyceae	Pseudo-nitzschia cuspidata	algae		yes	
Bacillariophyta	Bacillariophyceae	Pseudo-nitzschia kodamae	algae		yes	
Bacillariophyta	Bacillariophyceae	Pseudo-nitzschia lundholmiae	algae		yes	
Bacillariophyta	Bacillariophyceae	Pseudo-nitzschia sabit	algae		yes	
Bacillariophyta	Bacillariophyceae	Pseudo-nitzschia subpacifica	algae			
Bacillariophyta	Bacillariophyceae	Skeletonema menzelii	algae			
Bacillariophyta	Bacillariophyceae	Sundstroemia setigera	algae			
Bacillariophyta	Bacillariophyceae	Thalassionema nitzschioides	algae		yes	
Basidiomycota	Agaricomycetes	Schizophyllum commune			yes	
Chaetognatha	Sagittoidea	Aidanosagitta neglecta	arrow worms			
Chaetognatha	Sagittoidea	Flaccisagitta enflata	arrow worms			
Chlorarachniophyta	Chlorarachniophyceae	Bigelowiella natans			yes	
Chlorophyta	Chloropicophyceae	Chloroparvula pacifica	algae		yes	
Chlorophyta	Mamiellophyceae	Micromonas commoda	algae		yes	
Chlorophyta	Mamiellophyceae	Micromonas pusilla	algae		yes	
Chlorophyta		Chloropicon laureae	algae		yes	
Chlorophyta		Chloropicon mariensis	algae		yes	
Chlorophyta		Chloropicon primus	algae		yes	
Chlorophyta		Chloropicon roscoffensis	algae		yes	
Chlorophyta		Chloropicon sieburthii	algae		yes	
Chordata	Ascidacea	Ascidia ahodori	sea squirts		yes	
Chordata	Aves	Haematopus ostralegus	birds	NT		Eurasian oyster catcher, huïtrier pie
Chordata	Aves	Hypotaenidia philippensis	birds	LC	yes	
Chordata	Aves	Pelecanus conspicillatus	birds	LC		Australian pelican, pélican à lunettes
Chordata	Aves	Sterna bergii	birds			greater crested tern, Sterne huppée
Chordata	Aves	Sterna maxima	birds		yes	royal tern, sterne royale
Chordata	Elasmobranchii	Aetobatus flagellum	fish	EN	yes	
Chordata	Elasmobranchii	Aetobatus narinari	fish	EN	yes	spotted eagle ray
Chordata	Elasmobranchii	Carcharhinus amblyrhynchos	fish	EN		grey reef shark
Chordata	Elasmobranchii	Carcharhinus caudus	fish	LC		
Chordata	Elasmobranchii	Carcharhinus melanopterus	fish	VU		blacktip reef shark
Chordata	Elasmobranchii	Chiloscyllium punctatum	fish	NT		brownbanded bamboo shark, requin-chabot bambou
Chordata	Elasmobranchii	Galeocerdo cuvier	fish	NT	yes	tiger shark
Chordata	Elasmobranchii	Glaucostegus granulatus	fish	CR	yes	
Chordata	Elasmobranchii	Glaucostegus typus	fish	CR		
Chordata	Elasmobranchii	Hemigaleus australiensis	fish	LC		
Chordata	Elasmobranchii	Hemigaleus microstoma	fish	VU		
Chordata	Elasmobranchii	Hemiscyllium ocellatum	fish	LC	yes	epaulette shark, requin-chabot ocellé
Chordata	Elasmobranchii	Himantura uarnak	fish	EN		honeycomb stingray
Chordata	Elasmobranchii	Negaprion acutidens	fish	EN		sicklefin lemon shark
Chordata	Elasmobranchii	Neotrygon kuhlii	fish	DD		Blue spotted stingray
Chordata	Elasmobranchii	Neotrygon leylandi	fish	LC		
Chordata	Elasmobranchii	Pastinachus ater	fish	VU		
Chordata	Elasmobranchii	Pastinachus sephen	fish	NT		
Chordata	Elasmobranchii	Pateobatis fai	fish	VU		
Chordata	Elasmobranchii	Pateobatis jenkinsii	fish	VU		
Chordata	Elasmobranchii	Rhynchobatus australiae	fish	CR	yes	
Chordata	Elasmobranchii	Rhynchobatus djiddensis	fish	CR	yes	whitespotted wedgefish

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phylum	class	species	group	category	new	vernacular
Chordata	Elasmobranchii	Taeniura lymma	fish	LC		reef stingray
Chordata	Elasmobranchii	Taeniurops meyeri	fish	VU		
Chordata	Elasmobranchii	Triaenodon obesus	fish	VU		whitetip reef shark
Chordata	Elasmobranchii	Urogymnus asperrimus	fish	VU		porcupine ray
Chordata	Leptocardii	Asymmetron lucayanum				
Chordata	Mammalia	Dugong dugon	mammals	VU		dugong
Chordata	Teleostei	Ablennes hians	fish	LC		flat needlefish
Chordata	Teleostei	Abudefduf bengalensis	fish	LC		
Chordata	Teleostei	Abudefduf sexfasciatus	fish	LC		scissortail sergeant
Chordata	Teleostei	Abudefduf sordidus	fish	LC		blackspot sergeant
Chordata	Teleostei	Abudefduf vaigiensis	fish	LC		Indo-Pacific sergeant
Chordata	Teleostei	Acanthopagrus australis	fish	LC	yes	
Chordata	Teleostei	Acanthurus blochii	fish	LC		ringtail surgeonfish
Chordata	Teleostei	Acanthurus dussumieri	fish	LC		eyestripe surgeonfish
Chordata	Teleostei	Acanthurus triostegus	fish	LC		convict surgeonfish
Chordata	Teleostei	Acentrogobius nebulosus	fish			
Chordata	Teleostei	Alepes vari	fish	LC		herring scad
Chordata	Teleostei	Amblygaster sirm	fish	LC	yes	spotted sardinella
Chordata	Teleostei	Amblygobius phalaena	fish	LC		
Chordata	Teleostei	Anampses caeruleopunctatus	fish	LC		bluespotted wrasse
Chordata	Teleostei	Anampses geographicus	fish	LC		geographic wrasse
Chordata	Teleostei	Antennarius pictus	fish	LC		painted angler
Chordata	Teleostei	Antennarius striatus	fish	LC		striated frogfish
Chordata	Teleostei	Apogon crassiceps	fish	LC		
Chordata	Teleostei	Apogonichthyoides timorensis	fish	LC		
Chordata	Teleostei	Apogonichthys perdix	fish			perdix cardinalfish
Chordata	Teleostei	Ariosoma scheelei	fish	LC	yes	tropical conger
Chordata	Teleostei	Arothron hispidus	fish	LC		bristly puffer
Chordata	Teleostei	Arothron manilensis	fish	LC		
Chordata	Teleostei	Arothron stellatus	fish	LC		blackspotted puffer
Chordata	Teleostei	Asterropteryx semipunctata	fish	LC		
Chordata	Teleostei	Atherinomorus lacunosus	fish	LC		robust silverside
Chordata	Teleostei	Atherinomorus vaigiensis	fish			
Chordata	Teleostei	Atule mate	fish	LC		yellowtail scad
Chordata	Teleostei	Aulostomus chinensis	fish	LC		Chinese trumpetfish
Chordata	Teleostei	Bathygobius cocosensis	fish	LC		
Chordata	Teleostei	Bathygobius fuscus	fish	LC		dusky frill-goby
Chordata	Teleostei	Bathygobius laddi	fish	LC		brownboy goby
Chordata	Teleostei	Blenniella chrysospilos	fish	LC		
Chordata	Teleostei	Bothus mancus	fish	LC		tropical flounder
Chordata	Teleostei	Bothus pantherinus	fish	LC		panther flounder
Chordata	Teleostei	Caesio caerulaurea	fish	LC		blue and gold fusilier
Chordata	Teleostei	Callechelys catostoma	fish	LC	yes	
Chordata	Teleostei	Callechelys marmorata	fish	LC		marbled snake eel
Chordata	Teleostei	Callionymus enneactis	fish			
Chordata	Teleostei	Calotomus carolinus	fish	LC		Carolines parrotfish
Chordata	Teleostei	Calotomus spinidens	fish	LC		spinytooth parrotfish
Chordata	Teleostei	Cantherhines pardalis	fish	LC		wier-net filefish
Chordata	Teleostei	Carangoides ferdau	fish	LC		blue trevally
Chordata	Teleostei	Carangoides fulvoguttatus	fish	LC		yellowspotted jack

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phylum	class	species	group	category	new	vernacular
Chordata	Teleostei	Caranx ignobilis	fish	LC		giant trevally
Chordata	Teleostei	Caranx sexfasciatus	fish	LC		bigeye trevally
Chordata	Teleostei	Ceratoscopelus warmingii	fish	LC	yes	Warming's lantern fish
Chordata	Teleostei	Chaetodermis penicilligerus	fish	LC		
Chordata	Teleostei	Chaetodon auriga	fish	LC		threadfin butterflyfish
Chordata	Teleostei	Chaetodon lunula	fish	LC		raccoon butterflyfish
Chordata	Teleostei	Chaetodon plebeius	fish	LC		
Chordata	Teleostei	Chaetodon trifascialis	fish	NT		chevron butterflyfish
Chordata	Teleostei	Chanos chanos	fish	LC		milkfish, chano
Chordata	Teleostei	Cheilinus chlorourus	fish	LC		floral wrasse
Chordata	Teleostei	Cheilio inermis	fish	LC		cigar wrasse
Chordata	Teleostei	Cheilodipterus quinquelineatus	fish	LC		fiveline cardinalfish
Chordata	Teleostei	Chlorurus sordidus	fish	LC		
Chordata	Teleostei	Choerodon schoenleinii	fish	NT		
Chordata	Teleostei	Chromis atripectoralis	fish	LC		black-axil chromis
Chordata	Teleostei	Chromis viridis	fish	LC		blue-green damselfish
Chordata	Teleostei	Chromis weberi	fish	LC		Weber's chromis
Chordata	Teleostei	Chromis xanthochira	fish	LC	yes	
Chordata	Teleostei	Cirripectes castaneus	fish	LC	yes	chestnut blenny
Chordata	Teleostei	Cirripectes filamentosus	fish	LC		filamentous blenny
Chordata	Teleostei	Conger cinereus	fish	LC		mustache conger
Chordata	Teleostei	Congrogadus subducens	fish	LC		
Chordata	Teleostei	Coris aygula	fish	LC		clown wrasse
Chordata	Teleostei	Coris caudimacula	fish	LC		spottail coris
Chordata	Teleostei	Coris dorsomacula	fish	LC		
Chordata	Teleostei	Craterocephalus mugiloides	fish			
Chordata	Teleostei	Crenimugil buehneri	fish			
Chordata	Teleostei	Crenimugil crenilabis	fish	LC	yes	fringelip mullet
Chordata	Teleostei	Crenimugil seheli	fish	LC		
Chordata	Teleostei	Cryptocentroides insignis	fish			
Chordata	Teleostei	Cryptocentrus caeruleomaculatus	fish	LC		
Chordata	Teleostei	Cryptocentrus melanopus	fish			
Chordata	Teleostei	Ctenochaetus striatus	fish	LC		lined bristletooth
Chordata	Teleostei	Cymolutes praetextatus	fish	LC		
Chordata	Teleostei	Cymolutes torquatus	fish	LC		finescale razorfish
Chordata	Teleostei	Dascyllus aruanus	fish	LC		banded dascyllus
Chordata	Teleostei	Dascyllus reticulatus	fish	LC		reticulate dascyllus
Chordata	Teleostei	Dascyllus trimaculatus	fish	LC		domino
Chordata	Teleostei	Diaphus watasei	fish	LC		
Chordata	Teleostei	Diodon holocanthus	fish	LC		balloonfish
Chordata	Teleostei	Diodon hystrix	fish	LC		spot-fin porcupinefish
Chordata	Teleostei	Dipterygionotus balteatus	fish	LC		mottled fusilier
Chordata	Teleostei	Echeneis naucrates	fish	LC		sharksucker
Chordata	Teleostei	Echidna nebulosa	fish	LC		snowflake moray
Chordata	Teleostei	Eleotris acanthopomus	fish	LC	yes	
Chordata	Teleostei	Elops hawaiiensis	fish	DD		
Chordata	Teleostei	Enneapterygius philippinus	fish	LC		
Chordata	Teleostei	Entomacrodus striatus	fish	LC		reef margin blenny
Chordata	Teleostei	Entomacrodus thalassinus	fish	LC		
Chordata	Teleostei	Epinephelus coioides	fish	LC		orange-spotted grouper

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phylum	class	species	group	category	new	vernacular
Chordata	Teleostei	Epinephelus corallicola	fish	LC		
Chordata	Teleostei	Epinephelus fuscoguttatus	fish	VU		brown-marbled grouper
Chordata	Teleostei	Epinephelus lanceolatus	fish	DD		giant grouper
Chordata	Teleostei	Epinephelus malabaricus	fish	LC		Malabar grouper
Chordata	Teleostei	Epinephelus quoyanus	fish	LC		longfin grouper
Chordata	Teleostei	Epinephelus rivulatus	fish	LC		halfmoon grouper
Chordata	Teleostei	Epinephelus tukula	fish	LC		potato grouper
Chordata	Teleostei	Eviota distigma	fish	LC		twospot dwarfgoby
Chordata	Teleostei	Eviota guttata	fish	LC		
Chordata	Teleostei	Fistularia commersonii	fish	LC		cornetfish
Chordata	Teleostei	Floridichthys carpio	fish	LC	yes	goldspotted killifish
Chordata	Teleostei	Gerres oyena	fish	LC		slenderspine mojarra
Chordata	Teleostei	Gerres subfasciatus	fish	LC		
Chordata	Teleostei	Glyptoparus delicatulus	fish	LC		delicate blenny
Chordata	Teleostei	Gnathanodon speciosus	fish	LC		golden trevally
Chordata	Teleostei	Gnatholepis anjerensis	fish	LC		
Chordata	Teleostei	Gnatholepis cauerensis	fish	LC		eyebars goby
Chordata	Teleostei	Gobiodon axillaris	fish	VU		
Chordata	Teleostei	Gobiodon citrinus	fish	LC		citron goby
Chordata	Teleostei	Gobiodon irregularis	fish	LC	yes	
Chordata	Teleostei	Gobiodon rivulatus	fish	LC	yes	
Chordata	Teleostei	Gobiopsis arenaria	fish			
Chordata	Teleostei	Gymnothorax flavimarginatus	fish	LC		yellowmargin moray
Chordata	Teleostei	Gymnothorax pictus	fish	LC		
Chordata	Teleostei	Gymnothorax pseudothyrsoides	fish	LC		
Chordata	Teleostei	Gymnothorax undulatus	fish	LC		undulated moray
Chordata	Teleostei	Halichoeres margaritaceus	fish	LC		
Chordata	Teleostei	Halichoeres nebulosus	fish	LC		nebulous wrasse
Chordata	Teleostei	Halichoeres trimaculatus	fish	LC		
Chordata	Teleostei	Hemigymnus melapterus	fish	LC		thicklip wrasse
Chordata	Teleostei	Hemiramphus far	fish			spotted halfbeak
Chordata	Teleostei	Hemiramphus robustus	fish			
Chordata	Teleostei	Herklotsichthys quadrimaculatus	fish	LC		fourspot sardine
Chordata	Teleostei	Hippocampus trimaculatus	fish	VU	yes	
Chordata	Teleostei	Hipposcarus longiceps	fish	LC		
Chordata	Teleostei	Histrio histrio	fish	LC		Sargassumfish
Chordata	Teleostei	Hypoatherina temminckii	fish			Samoa silverside
Chordata	Teleostei	Hyporhamphus affinis	fish			tropical halfbeak
Chordata	Teleostei	Hyporhamphus dussumieri	fish		yes	Dussumier's halfbeak
Chordata	Teleostei	Hyporhamphus quoyi	fish	LC		
Chordata	Teleostei	Istiblennius edentulus	fish	LC		rockskipper
Chordata	Teleostei	Istiblennius lineatus	fish	LC		
Chordata	Teleostei	Kraemeria cunicularia	fish	LC	yes	
Chordata	Teleostei	Kyphosus bigibbus	fish	LC		grey sea chub
Chordata	Teleostei	Kyphosus cornelii	fish			
Chordata	Teleostei	Kyphosus vaigiensis	fish	LC		brassy chub
Chordata	Teleostei	Leiopotherapon aheneus	fish	EN	yes	
Chordata	Teleostei	Leptoscarus vaigiensis	fish	LC		marbled parrotfish
Chordata	Teleostei	Lethrinus atkinsoni	fish	LC		
Chordata	Teleostei	Lethrinus laticaudis	fish	LC		

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phylum	class	species	group	category	new	vernacular
Chordata	Teleostei	Lethrinus nebulosus	fish	LC		spangled emperor
Chordata	Teleostei	Lethrinus variegatus	fish	LC		variegated emperor
Chordata	Teleostei	Limnichthys fasciatus	fish	LC		
Chordata	Teleostei	Lutjanus argentimaculatus	fish	LC		river snapper
Chordata	Teleostei	Lutjanus carponotatus	fish	LC		
Chordata	Teleostei	Lutjanus fulvivflamma	fish	LC		dory snapper
Chordata	Teleostei	Lutjanus monostigma	fish	LC		one-spot snapper
Chordata	Teleostei	Lutjanus russellii	fish	LC		
Chordata	Teleostei	Melichthys vidua	fish	LC		pinktail triggerfish
Chordata	Teleostei	Monacanthus chinensis	fish	LC		
Chordata	Teleostei	Monodactylus argenteus	fish	LC		mono
Chordata	Teleostei	Mugil cephalus	fish	LC		grey mullet, muge
Chordata	Teleostei	Mulloidichthys flavolineatus	fish	LC		yellowstripe goatfish
Chordata	Teleostei	Mulloidichthys vanicolensis	fish	LC		yellowfin goatfish
Chordata	Teleostei	Myripristis amaena	fish	LC	yes	
Chordata	Teleostei	Myrophis microchir	fish	LC	yes	
Chordata	Teleostei	Naso lopezi	fish	LC	yes	
Chordata	Teleostei	Naso unicornis	fish	LC		bluespine unicornfish
Chordata	Teleostei	Nemipterus bathybius	fish	LC		
Chordata	Teleostei	Neoglyphidodon melas	fish	LC		
Chordata	Teleostei	Ostorhinchus cookii	fish	LC		
Chordata	Teleostei	Ostorhinchus doederleini	fish	LC		
Chordata	Teleostei	Ostorhinchus fleurieu	fish			
Chordata	Teleostei	Ostorhinchus taeniophorus	fish			
Chordata	Teleostei	Ostorhinchus wassinki	fish			
Chordata	Teleostei	Ostracion meleagris	fish			whitespotted boxfish
Chordata	Teleostei	Oxymonacanthus longirostris	fish	VU		longnose filefish
Chordata	Teleostei	Paragobiodon xanthosoma	fish		yes	
Chordata	Teleostei	Paramonacanthus oblongus	fish	LC	yes	
Chordata	Teleostei	Paramonacanthus pusillus	fish	LC	yes	
Chordata	Teleostei	Parascorpaena aurita	fish	LC		
Chordata	Teleostei	Parastromateus niger	fish	LC		black pomfret
Chordata	Teleostei	Pardachirus pavoninus	fish	LC	yes	
Chordata	Teleostei	Parupeneus barberinoides	fish	LC		
Chordata	Teleostei	Parupeneus ciliatus	fish	LC	yes	whitesaddle goatfish
Chordata	Teleostei	Parupeneus indicus	fish	LC		Indian goatfish, rouget-barbet indien
Chordata	Teleostei	Parupeneus pleurostigma	fish	LC		sidespot goatfish
Chordata	Teleostei	Parupeneus spilurus	fish	LC		blackspot goatfish, rouget-barbet à tache noire
Chordata	Teleostei	Pelates quadrilineatus	fish			fourlined terapon
Chordata	Teleostei	Pempheris mangula	fish			
Chordata	Teleostei	Pempheris oualensis	fish			silver sweeper
Chordata	Teleostei	Pempheris schwenkii	fish			
Chordata	Teleostei	Pervagor janthinosoma	fish	LC		blackbar filefish
Chordata	Teleostei	Petroscirtes breviceps	fish	LC		
Chordata	Teleostei	Petroscirtes mitratus	fish	LC		floral blenny
Chordata	Teleostei	Pisodonophis boro	fish	LC	yes	rice-paddy eel
Chordata	Teleostei	Plagiotremus tapeinosoma	fish	LC		scale-eating blenny
Chordata	Teleostei	Planiliza macrolepis	fish	LC	yes	
Chordata	Teleostei	Platybelone argalus	fish	LC	yes	keeltail needlefish
Chordata	Teleostei	Platycephalus endrachtensis	fish			

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phylum	class	species	group	category	new	vernacular
Chordata	Teleostei	Plectorhinchus chrysotaenia	fish		yes	
Chordata	Teleostei	Plectorhinchus flavomaculatus	fish			lemonfish
Chordata	Teleostei	Plectorhinchus gibbosus	fish	LC		Harry Hotlips
Chordata	Teleostei	Plectorhinchus schotaf	fish	LC		minstrel sweetlips
Chordata	Teleostei	Plectroglyphidodon apicalis	fish		yes	
Chordata	Teleostei	Plectroglyphidodon fasciatus	fish	LC		
Chordata	Teleostei	Plectroglyphidodon leucozonus	fish	LC		
Chordata	Teleostei	Plotosus lineatus	fish			striped eel catfish
Chordata	Teleostei	Polydactylus plebeius	fish			striped threadfin, barbure rayé
Chordata	Teleostei	Pomacanthus semicirculatus	fish	LC		semicircle angelfish
Chordata	Teleostei	Pomacentrus coelestis	fish	LC		
Chordata	Teleostei	Pomacentrus moluccensis	fish	LC		
Chordata	Teleostei	Pomacentrus pavo	fish	LC	yes	sapphire damsel
Chordata	Teleostei	Pomacentrus vaiuli	fish	LC		
Chordata	Teleostei	Priolepis cincta	fish	LC		
Chordata	Teleostei	Pristiapogon fraenatus	fish	LC		
Chordata	Teleostei	Psammoperca waigiensis	fish			
Chordata	Teleostei	Pseudobalistes fuscus	fish	LC		blue triggerfish
Chordata	Teleostei	Pseudochromis cyanotaenia	fish	LC		
Chordata	Teleostei	Pseudochromis fuscus	fish	LC		
Chordata	Teleostei	Pterocaesio digramma	fish	LC		double-lined fusilier
Chordata	Teleostei	Rhabdamia gracilis	fish			luminous cardinalfish
Chordata	Teleostei	Rhabdosargus sarba	fish	LC		yellowfin bream
Chordata	Teleostei	Rhinecanthus aculeatus	fish	LC		white-banded triggerfish
Chordata	Teleostei	Salarias fasciatus	fish	LC		jewelled blenny
Chordata	Teleostei	Sardinops sagax	fish	LC	yes	California pilchard, pilchard sudaméricain
Chordata	Teleostei	Saurida nebulosa	fish	LC		clouded lizardfish
Chordata	Teleostei	Scarus ghobban	fish	LC		bluechin parrotfish
Chordata	Teleostei	Scarus prasiognathos	fish	LC		
Chordata	Teleostei	Scarus psittacus	fish	LC		palenose parrotfish
Chordata	Teleostei	Scarus rivulatus	fish	LC		
Chordata	Teleostei	Scarus rubroviolaceus	fish	LC		ember parrotfish
Chordata	Teleostei	Scarus schlegeli	fish	LC		
Chordata	Teleostei	Scolopsis bilineata	fish	LC		
Chordata	Teleostei	Scomberoides lysan	fish	LC		doublespotted queenfish
Chordata	Teleostei	Scomberoides tol	fish	LC		needlescaled queenfish
Chordata	Teleostei	Scomberomorus commerson	fish	NT		narrow-barred Spanish mackerel
Chordata	Teleostei	Scorpaenodes guamensis	fish	LC		Guam scorpionfish
Chordata	Teleostei	Scorpaenopsis venosa	fish	LC		raggy scorpionfish
Chordata	Teleostei	Selar crumenophthalmus	fish	LC		bigeye scad
Chordata	Teleostei	Selenotoca multifasciata	fish	LC		
Chordata	Teleostei	Siganus argenteus	fish	LC		forktail rabbitfish
Chordata	Teleostei	Siganus canaliculatus	fish	LC		white-spotted spinefoot
Chordata	Teleostei	Siganus doliatus	fish	LC		
Chordata	Teleostei	Siganus fuscescens	fish	LC		
Chordata	Teleostei	Siganus guttatus	fish	LC	yes	
Chordata	Teleostei	Sillago burrus	fish			
Chordata	Teleostei	Sillago maculata	fish			
Chordata	Teleostei	Sillago schomburgkii	fish			
Chordata	Teleostei	Siphamia fistulosa	fish		yes	

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phylum	class	species	group	category	new	vernacular
Chordata	Teleostei	Sphyraena flavicauda	fish			yellowtail barracuda
Chordata	Teleostei	Sphyraena jello	fish			pickhandle barracuda
Chordata	Teleostei	Sphyraena obtusata	fish			obtuse barracuda
Chordata	Teleostei	Spratelloides delicatulus	fish	LC		delicate round herring
Chordata	Teleostei	Spratelloides gracilis	fish	LC		silverstriped round herring
Chordata	Teleostei	Stegastes lacrymatus	fish			
Chordata	Teleostei	Stegastes lividus	fish	LC		blunt snout gregory
Chordata	Teleostei	Stegastes nigricans	fish	LC		black damselfish
Chordata	Teleostei	Stethojulis bandanensis	fish	LC		
Chordata	Teleostei	Stethojulis interrupta	fish	LC		cutribbon wrasse
Chordata	Teleostei	Stethojulis strigiventer	fish	LC		three-ribbon rainbowfish
Chordata	Teleostei	Stethojulis terina	fish	LC	yes	
Chordata	Teleostei	Strongylura incisa	fish		yes	
Chordata	Teleostei	Strongylura leiura	fish		yes	banded needlefish
Chordata	Teleostei	Sunagocia otaitensis	fish	LC		
Chordata	Teleostei	Symphorus nematophorus	fish	LC		
Chordata	Teleostei	Synodus dermatogenys	fish	LC		
Chordata	Teleostei	Synodus jaculum	fish	LC		lighthouse lizardfish
Chordata	Teleostei	Synodus variegatus	fish	LC		common lizardfish
Chordata	Teleostei	Terapon jarbua	fish	LC		Jarbua terapon
Chordata	Teleostei	Terapon theraps	fish	LC		largescaled terapon
Chordata	Teleostei	Thalassoma amblycephalum	fish	LC		bluntheaded wrasse
Chordata	Teleostei	Thalassoma hardwicke	fish	LC		
Chordata	Teleostei	Thalassoma lunare	fish	LC		moon wrasse
Chordata	Teleostei	Thalassoma purpureum	fish	LC		surge wrasse
Chordata	Teleostei	Trachinotus anak	fish	DD	yes	
Chordata	Teleostei	Trachinotus baillonii	fish	LC		smallspotted dart
Chordata	Teleostei	Trachinotus blochii	fish	LC		snubnose pompano
Chordata	Teleostei	Trachinotus botla	fish	LC		largespotted dart
Chordata	Teleostei	Tylosurus acus	fish	LC	yes	agujon needlefish
Chordata	Teleostei	Tylosurus crocodilus	fish	LC		houndfish
Chordata	Teleostei	Tylosurus gavioloides	fish			
Chordata	Teleostei	Upeneus tragula	fish	LC		freckled goatfish
Chordata	Teleostei	Valenciennesia longipinnis	fish	LC		
Chordata	Teleostei	Xenojulis margaritacea	fish			
Chordata	Teleostei	Yongeichthys criniger	fish		yes	
Chordata	Teleostei	Zanclus cornutus	fish	LC		Moorish idol
Chordata		Chelonia mydas	turtles	EN		green turtle, tortue verte
Cnidaria	Hexacorallia	Boloceroideus mcmurricchi	cnidarians		yes	
Cnidaria	Hexacorallia	Exaiptasia diaphana	cnidarians		yes	
Cnidaria	Hexacorallia	Favites abdita	cnidarians	NT	yes	larger star coral
Cnidaria	Hexacorallia	Leptastrea purpurea	cnidarians	LC	yes	crust coral
Cnidaria	Hexacorallia	Pachyseris speciosa	cnidarians	LC	yes	serpent coral
Cnidaria	Hexacorallia	Pavona cactus	cnidarians	VU	yes	leaf coral
Cnidaria	Hexacorallia	Porites lutea	cnidarians	LC	yes	hump coral
Cnidaria	Hexacorallia	Sagartia lacerata	cnidarians		yes	
Cnidaria	Hexacorallia	Stylaraea punctata	cnidarians	DD	yes	
Cnidaria	Hexacorallia	Stylophora pistillata	cnidarians	NT	yes	hood coral
Cnidaria	Hexacorallia	Triactis producta	cnidarians		yes	crab anemone
Cnidaria	Hydrozoa	Aequorea australis	cnidarians			

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phylum	class	species	group	category	new	vernacular
Cnidaria	Hydrozoa	Asyncoryne ryniensis	cnidarians		yes	
Cnidaria	Hydrozoa	Campanularia hincksii	cnidarians		yes	
Cnidaria	Hydrozoa	Clytia gracilis	cnidarians		yes	
Cnidaria	Hydrozoa	Diphyes chamissonis	cnidarians		yes	
Cnidaria	Hydrozoa	Euphysilla pyramidata	cnidarians		yes	
Cnidaria	Hydrozoa	Kirchenpaueria halecioides	cnidarians		yes	
Cnidaria	Hydrozoa	Liriope tetraphylla	cnidarians		yes	
Cnidaria	Hydrozoa	Nanomia bijuga	cnidarians		yes	
Cnidaria	Hydrozoa	Obelia bidentata	cnidarians		yes	doubletoothed hydroid
Cnidaria	Hydrozoa	Pennaria disticha	cnidarians		yes	feather hydroid
Cnidaria	Hydrozoa	Rosacea flaccida	cnidarians		yes	
Cnidaria	Hydrozoa	Sphaerocoryne bedoti	cnidarians		yes	
Cnidaria	Hydrozoa	Stauridiosarsia nipponica	cnidarians		yes	
Cnidaria	Hydrozoa	Zanclea gallii	cnidarians		yes	
Cnidaria	Hydrozoa	Zancleopsis dichotoma	cnidarians		yes	
Cnidaria	Octocorallia	Clavularia crassa	cnidarians	LC	yes	
Cnidaria	Octocorallia	Lobophytum crassum	cnidarians		yes	
Cnidaria	Octocorallia	Sarcophyton ehrenbergi	cnidarians		yes	
Cnidaria	Octocorallia	Sclerophytum heterospiculatum	cnidarians		yes	
Cnidaria	Scyphozoa	Aurelia miyakei	cnidarians		yes	
Cnidaria	Scyphozoa	Mastigias papua	cnidarians		yes	golden medusa
Cnidaria	Scyphozoa	Pelagia noctiluca	cnidarians		yes	purplestripped jelly, méduse pélagique
Cnidaria	Staurozoa	Haliclystus inabai	cnidarians		yes	
Cryptophyta	Cryptophyceae	Hemiarma marina				
Ctenophora	Tentaculata	Haeckelia rubra	cnidarians		yes	
Ctenophora	Tentaculata	Vallicula multiformis	cnidarians		yes	
Echinodermata	Asteroidea	Aquilonastra anomala	echinoderms			
Echinodermata	Asteroidea	Echinaster luzonicus	echinoderms			Luzon seastar
Echinodermata	Asteroidea	Nepanthia belcheri	echinoderms			
Echinodermata	Crinoidea	Stephanometra indica	echinoderms			
Echinodermata	Echinoidea	Echinometra mathaei	echinoderms			rock-boring urchin
Echinodermata	Echinoidea	Echinostrephus molaris	echinoderms			
Echinodermata	Echinoidea	Echinothrix calamaris	echinoderms			banded sea urchin
Echinodermata	Echinoidea	Toxopneustes pileolus	echinoderms			
Echinodermata	Echinoidea	Tripneustes gratilla	echinoderms			collector urchin
Echinodermata	Holothuroidea	Actinopyga echinites	echinoderms	VU		
Echinodermata	Holothuroidea	Afrocucumis africana	echinoderms			
Echinodermata	Holothuroidea	Holothuria (Lessonothuria) lineata	echinoderms			
Echinodermata	Holothuroidea	Holothuria (Thymiosycia) arenicola	echinoderms			
Echinodermata	Holothuroidea	Holothuria atra	echinoderms	LC		
Echinodermata	Holothuroidea	Holothuria cinerascens	echinoderms	LC		
Echinodermata	Holothuroidea	Holothuria leucospilota	echinoderms	LC		
Echinodermata	Holothuroidea	Phyrella thyonoides	echinoderms			
Echinodermata	Holothuroidea	Stichopus chloronotus	echinoderms	LC		
Echinodermata	Ophiuroidea	Amphipholis squamata	echinoderms			dwarf brittle star
Echinodermata	Ophiuroidea	Amphiura (Amphiura) velox	echinoderms			
Echinodermata	Ophiuroidea	Breviturma brevipes	echinoderms		yes	
Echinodermata	Ophiuroidea	Breviturma dentata	echinoderms			
Echinodermata	Ophiuroidea	Macrophiothrix caenosa	echinoderms			
Echinodermata	Ophiuroidea	Macrophiothrix propinqua	echinoderms			

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phylum	class	species	group	category	new	vernacular
Echinodermata	Ophiuroidea	Ophiactis modesta	echinoderms		yes	
Echinodermata	Ophiuroidea	Ophiactis savignyi	echinoderms			
Echinodermata	Ophiuroidea	Ophiocomella ophiactoides	echinoderms		yes	
Echinodermata	Ophiuroidea	Ophionereis porrecta	echinoderms			
Haptophyta	Coccolithophyceae	Gephyrocapsa oceanica	algae		yes	
Haptophyta	Coccolithophyceae	Phaeocystis globosa	algae		yes	
Hemichordata	Enteropneusta	Ptychodera flava			yes	Hawaiian acorn worm
Mollusca	Bivalvia	Booneostrea subucula	molluscs			
Mollusca	Bivalvia	Brachidontes erosus	molluscs			
Mollusca	Bivalvia	Ephippodonta gigas	molluscs		yes	
Mollusca	Bivalvia	Fragum fragum	molluscs			
Mollusca	Bivalvia	Gomphina undulosa	molluscs			
Mollusca	Bivalvia	Solemya velesiana	molluscs		yes	
Mollusca	Cephalopoda	Abrialia andamanica	molluscs	LC	yes	Andaman enope squid
Mollusca	Cephalopoda	Callistoctopus luteus	molluscs	LC	yes	
Mollusca	Cephalopoda	Octopus cyanea	molluscs	LC		Cyane's octopus
Mollusca	Gastropoda	Aplysia argus	molluscs			
Mollusca	Gastropoda	Aplysia concava	molluscs			
Mollusca	Gastropoda	Aplysia parvula	molluscs			dwarf sea hare, petit lièvre de mer
Mollusca	Gastropoda	Bittium glareosum	molluscs			
Mollusca	Gastropoda	Biue fulvipunctata	molluscs		yes	
Mollusca	Gastropoda	Bulbaeolidia alba	molluscs		yes	
Mollusca	Gastropoda	Bulla quoyii	molluscs			
Mollusca	Gastropoda	Bulla vernicosa	molluscs		yes	
Mollusca	Gastropoda	Bullina lineata	molluscs			lined bubble snail
Mollusca	Gastropoda	Canarium mutabile	molluscs			
Mollusca	Gastropoda	Carminodoris grandiflora	molluscs		yes	
Mollusca	Gastropoda	Cerithium atromarginatum	molluscs			
Mollusca	Gastropoda	Cerithium egenum	molluscs			
Mollusca	Gastropoda	Cerithium punctatum	molluscs			
Mollusca	Gastropoda	Cerithium rostratum	molluscs			
Mollusca	Gastropoda	Cerithium zonatum	molluscs			
Mollusca	Gastropoda	Clypeomorus batillariaeformis	molluscs			
Mollusca	Gastropoda	Costasiella kuroshimae	molluscs			
Mollusca	Gastropoda	Cupolaconcha meroclista	molluscs		yes	
Mollusca	Gastropoda	Dendrodoris krusensternii	molluscs		yes	
Mollusca	Gastropoda	Diniatys dentifer	molluscs		yes	
Mollusca	Gastropoda	Dolabella auricularia	molluscs			wedge sea hare
Mollusca	Gastropoda	Dolabrifera dolabrifera	molluscs		yes	
Mollusca	Gastropoda	Drupa morum	molluscs			mulberry drupe
Mollusca	Gastropoda	Drupella cornus	molluscs			horn drupe
Mollusca	Gastropoda	Dulcerana granularis	molluscs			
Mollusca	Gastropoda	Elysia mercieri	molluscs		yes	
Mollusca	Gastropoda	Elysia ornata	molluscs			lettuce slug
Mollusca	Gastropoda	Ercolania annelyleorum	molluscs		yes	
Mollusca	Gastropoda	Haliotis asinina	molluscs	LC		ass's ear abalone
Mollusca	Gastropoda	Hexabanchus sanguineus	molluscs			Spanish dancer
Mollusca	Gastropoda	Hydatina physis	molluscs			striped bubble shell
Mollusca	Gastropoda	Indomodulus tectum	molluscs			
Mollusca	Gastropoda	Melibe viridis	molluscs		yes	

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phylum	class	species	group	category	new	vernacular
Mollusca	Gastropoda	Monetaria caputserpentis	molluscs			serpent's head cowry
Mollusca	Gastropoda	Myurella affinis	molluscs			
Mollusca	Gastropoda	Naria helvola	molluscs			
Mollusca	Gastropoda	Noumeaella rehderi	molluscs		yes	
Mollusca	Gastropoda	Peronia sydneyensis	molluscs		yes	
Mollusca	Gastropoda	Phanerophthalmus batangas	molluscs		yes	
Mollusca	Gastropoda	Phanerophthalmus cylindricus	molluscs		yes	
Mollusca	Gastropoda	Phanerophthalmus paulayi	molluscs		yes	
Mollusca	Gastropoda	Phyllodesmium crypticum	molluscs			
Mollusca	Gastropoda	Pinaxia versicolor	molluscs			
Mollusca	Gastropoda	Planaxis sulcatus	molluscs			tropical periwinkle
Mollusca	Gastropoda	Pleurobranchus varians	molluscs		yes	
Mollusca	Gastropoda	Rhinoclavis sinensis	molluscs			knobbed horn shell
Mollusca	Gastropoda	Scutus sinensis	molluscs		yes	
Mollusca	Gastropoda	Siphonaria zelandica	molluscs		yes	
Mollusca	Gastropoda	Staphylaea limacina	molluscs			
Mollusca	Gastropoda	Stomatia phymotis	molluscs			
Mollusca	Gastropoda	Styliferina goniochila	molluscs		yes	
Mollusca	Gastropoda	Stylocheilus striatus	molluscs		yes	
Mollusca	Gastropoda	Thylacodes variabilis	molluscs		yes	
Mollusca	Gastropoda	Tomoberthella martensi	molluscs			
Mollusca	Gastropoda	Turbo argyrostomus	molluscs			silver-mouthed turban
Mollusca	Gastropoda	Vexillum crocatum	molluscs		yes	
Myzozoa	Dinophyceae	Heterocapsa rotundata	unicellular		yes	
Myzozoa	Dinophyceae	Nusuttodinium poecilochroum	unicellular		yes	
Ochrophyta	Dictyochophyceae	Octactis octonaria	algae			
Ochrophyta	Pelagophyceae	Aureococcus anophagefferens	algae		yes	
Ochrophyta	Pelagophyceae	Pelagomonas calceolata	algae		yes	
Ochrophyta	Phaeophyceae	Canistrocarpus cervicornis	algae		yes	
Ochrophyta	Phaeophyceae	Colpomenia claytoniae	algae		yes	
Ochrophyta	Phaeophyceae	Colpomenia sinuosa	algae			
Ochrophyta	Phaeophyceae	Dictyota acutiloba	algae		yes	
Ochrophyta	Phaeophyceae	Dictyota bartayresiana	algae		yes	
Ochrophyta	Phaeophyceae	Dictyota ciliolata	algae		yes	
Ochrophyta	Phaeophyceae	Dictyota friabilis	algae			
Ochrophyta	Phaeophyceae	Dictyota mayae	algae		yes	
Ochrophyta	Phaeophyceae	Hydroclathrus clathratus	algae			
Ochrophyta	Phaeophyceae	Hydroclathrus tenuis	algae		yes	
Ochrophyta	Phaeophyceae	Lobophora rosacea	algae		yes	
Ochrophyta	Phaeophyceae	Lobophora sonderi	algae		yes	
Ochrophyta	Phaeophyceae	Neoralsia expansa	algae		yes	
Ochrophyta	Phaeophyceae	Padina gymnospora	algae		yes	
Ochrophyta	Phaeophyceae	Rosenvingea intricata	algae		yes	
Ochrophyta	Phaeophyceae	Sargassum aquifolium	algae			
Ochrophyta	Phaeophyceae	Sargassum oligocystum	algae			
Ochrophyta	Phaeophyceae	Sargassum polycystum	algae			
Ochrophyta	Phaeophyceae	Sirophysalis trinodis	algae			
Ochrophyta	Phaeophyceae	Spermatocnus paradoxus	algae		yes	
Ochrophyta	Phaeophyceae	Turbinaria conoides	algae			
Platyhelminthes		Paraplanocera oligoglena			yes	

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phylum	class	species	group	category	new	vernacular
Porifera	Demospongiae	Acanthotetilla celebensis	sponges		yes	
Porifera	Demospongiae	Amorphinopsis fenestrata	sponges		yes	
Porifera	Demospongiae	Callyspongia (Callyspongia) fallax	sponges		yes	
Porifera	Demospongiae	Callyspongia (Cladochalina) diffusa	sponges		yes	
Porifera	Demospongiae	Callyspongia (Cladochalina) plicifera	sponges		yes	
Porifera	Demospongiae	Chalinula molitba	sponges		yes	
Porifera	Demospongiae	Chelonaplysilla erecta	sponges		yes	
Porifera	Demospongiae	Cladocroce burapha	sponges		yes	
Porifera	Demospongiae	Clathria (Thalysias) reinwardti	sponges			
Porifera	Demospongiae	Clathria (Wilsonella) rugosa	sponges		yes	
Porifera	Demospongiae	Cliona vermifera	sponges		yes	orange boring sponge
Porifera	Demospongiae	Cliothisa aurivillii	sponges		yes	
Porifera	Demospongiae	Cliothisa delitrix	sponges		yes	
Porifera	Demospongiae	Fasciospongia cavernosa	sponges		yes	
Porifera	Demospongiae	Gelliodes wilsoni	sponges		yes	
Porifera	Demospongiae	Geodia californica	sponges		yes	
Porifera	Demospongiae	Halichondria (Halichondria) coerulea	sponges		yes	
Porifera	Demospongiae	Halichondria (Halichondria) okadai	sponges		yes	
Porifera	Demospongiae	Halichondria (Halichondria) panicea	sponges		yes	breadcrumb sponge
Porifera	Demospongiae	Haliclona (Gellius) amboinensis	sponges		yes	
Porifera	Demospongiae	Haliclona (Reniera) tubifera	sponges		yes	
Porifera	Demospongiae	Haliclona pigmentifera	sponges		yes	
Porifera	Demospongiae	Hymeniacidon flavia	sponges		yes	
Porifera	Demospongiae	Lithoplocamia lithistoides	sponges		yes	
Porifera	Demospongiae	Mycale (Carmia) cecilia	sponges		yes	
Porifera	Demospongiae	Mycale (Carmia) fibrexilis	sponges		yes	yellow flabby-sponge
Porifera	Demospongiae	Neofibularia hartmani	sponges		yes	
Porifera	Demospongiae	Neopetrosia chaliniformis	sponges			
Porifera	Demospongiae	Ophlitaspongia papilla	sponges		yes	
Porifera	Demospongiae	Petrosia (Petrosia) ficiiformis	sponges		yes	stony sponge, éponge pierre
Porifera	Demospongiae	Phorbas clathratus	sponges		yes	
Porifera	Demospongiae	Pione vastifica	sponges		yes	boring sponge, clone rouge
Porifera	Demospongiae	Pione velans	sponges			
Porifera	Demospongiae	Pseudoceratina purpurea	sponges			
Porifera	Demospongiae	Stryphnus mucronatus	sponges		yes	
Porifera	Demospongiae	Tedania (Tedania) tubulifera	sponges		yes	
Porifera	Demospongiae	Terpios hoshinota	sponges		yes	
Porifera	Demospongiae	Thoosa purpurea	sponges		yes	
Porifera	Homoscleromorpha	Plakina kanaky	sponges		yes	
Prasinodermatophyta	Prasinodermatophyceae	Prasinoderma coloniale			yes	
Rhodophyta	Bangiophyceae	Neoporphyra haitanensis	algae		yes	
Rhodophyta	Compsopogonophyceae	Erythrotrichia carnea	algae		yes	
Rhodophyta	Florideophyceae	Acanthophora dendroides	algae		yes	
Rhodophyta	Florideophyceae	Acanthophora spicifera	algae			
Rhodophyta	Florideophyceae	Aphanta ligulata	algae		yes	
Rhodophyta	Florideophyceae	Asparagopsis taxiformis	algae			
Rhodophyta	Florideophyceae	Centrocercus clavulatum	algae		yes	
Rhodophyta	Florideophyceae	Ceratodictyon scoparium	algae			
Rhodophyta	Florideophyceae	Champia parvula	algae			
Rhodophyta	Florideophyceae	Chondria armata	algae			

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phylum	class	species	group	category	new	vernacular
Rhodophyta	Florideophyceae	Chondria baileyana	algae		yes	
Rhodophyta	Florideophyceae	Chondria dangeardii	algae		yes	
Rhodophyta	Florideophyceae	Coelothrix irregularis	algae			
Rhodophyta	Florideophyceae	Dasya corymbifera	algae		yes	
Rhodophyta	Florideophyceae	Dichotomaria obtusata	algae			
Rhodophyta	Florideophyceae	Digenea simplex	algae			
Rhodophyta	Florideophyceae	Galaxaura rugosa	algae			
Rhodophyta	Florideophyceae	Ganonema farinosum	algae		yes	
Rhodophyta	Florideophyceae	Gelidiella acerosa	algae			
Rhodophyta	Florideophyceae	Gelidiella fanii	algae		yes	
Rhodophyta	Florideophyceae	Gelidiella ligulata	algae		yes	
Rhodophyta	Florideophyceae	Gracilaria eucheumatoides	algae		yes	
Rhodophyta	Florideophyceae	Gracilaria salicornia	algae		yes	
Rhodophyta	Florideophyceae	Herposiphonia pecten-veneris	algae		yes	
Rhodophyta	Florideophyceae	Herposiphonia pectinata	algae		yes	
Rhodophyta	Florideophyceae	Hydrolithon boergesenii	algae		yes	
Rhodophyta	Florideophyceae	Hydropuntia edulis	algae		yes	
Rhodophyta	Florideophyceae	Hydropuntia perplexa	algae		yes	
Rhodophyta	Florideophyceae	Hypnea cervicornis	algae		yes	
Rhodophyta	Florideophyceae	Hypnea charoides	algae		yes	
Rhodophyta	Florideophyceae	Hypnea nidulans	algae		yes	
Rhodophyta	Florideophyceae	Hypnea pannosa	algae			
Rhodophyta	Florideophyceae	Hypnea spinella	algae			
Rhodophyta	Florideophyceae	Hypnea stellulifera	algae		yes	
Rhodophyta	Florideophyceae	Hypnea valentiae	algae		yes	
Rhodophyta	Florideophyceae	Jania adhaerens	algae			
Rhodophyta	Florideophyceae	Jania rosea	algae			
Rhodophyta	Florideophyceae	Laurencia dendroidea	algae		yes	
Rhodophyta	Florideophyceae	Laurencia snackeyi	algae		yes	
Rhodophyta	Florideophyceae	Liagora ceranoides	algae		yes	
Rhodophyta	Florideophyceae	Lithophyllum kaiseri	algae		yes	
Rhodophyta	Florideophyceae	Lithophyllum okamurae	algae		yes	
Rhodophyta	Florideophyceae	Melanothamnus ferulaceus	algae			
Rhodophyta	Florideophyceae	Melyvonnea erubescens	algae		yes	
Rhodophyta	Florideophyceae	Neogoniolithon brassica-florida	algae		yes	
Rhodophyta	Florideophyceae	Neogoniolithon trichotomum	algae		yes	
Rhodophyta	Florideophyceae	Ohelopapa flexilis	algae		yes	
Rhodophyta	Florideophyceae	Palisada parvipapillata	algae		yes	
Rhodophyta	Florideophyceae	Polysiphonia scopulorum	algae		yes	
Rhodophyta	Florideophyceae	Pterocladia beachiae	algae		yes	
Rhodophyta	Florideophyceae	Pterocladia caerulescens	algae			
Rhodophyta	Florideophyceae	Ramicrusta appressa	algae		yes	
Rhodophyta	Florideophyceae	Ramicrusta textilis	algae		yes	
Rhodophyta	Florideophyceae	Rhodachlya hawaiiiana	algae		yes	
Rhodophyta	Florideophyceae	Rhodachlya madagascarensis	algae		yes	
Rhodophyta	Florideophyceae	Sarconema scinaoides	algae		yes	
Rhodophyta	Florideophyceae	Yamadaella caenomyce	algae		yes	
Xenacoelomorpha		Convolutriloba longifissura			yes	