

Supplementary Material

Table S1. Scleractinian species recorded in the Marshall Islands on the current survey, in addition to published records from historical surveys.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Acanthastrea brevis</i> Milne Edwards & Haime, 1849	x*	x	x	x		x	G56252				
<i>Acanthastrea echinata</i> (Dana, 1846)	x*	x	x	x	x	x	G56255	x	x	x	x
<i>Acanthastrea hemprichii</i> (Ehrenberg, 1834)	x*	x		x		x	G56253-54				
<i>Acanthastrea hillae</i> Wells, 1955	x										x
<i>Acropora abrotanoides</i> (Lamarck, 1816)	x	x		x	x	x		2x [as <i>danai</i> and <i>irregularis</i>]	2x [also as <i>danai</i>]	X [as <i>danai</i>]	x
<i>Acropora aculeus</i> (Dana, 1846)	x*	x*	x*	x*	x	x	G56184-86, G56207-08, G56235, G57257 - 61	x		x	x
<i>Acropora acuminata</i> (Verrill, 1864)	x*	x*	x	x*	x		G56179-83, G57294-96, G57325	x	2x [also as <i>diffusa</i>]	x	x
<i>Acropora anthocercis</i> (Brook, 1893)						x					x (but not in Wallace, 1999)
<i>Acropora aspera</i> (Dana, 1846)	x*	x					G56156		x [as <i>hebes</i>]	x	x
<i>Acropora austera</i> (Dana, 1846)	x*	x*	x	x*	x	x	G56195-96, G57139-53, G57326-28	x		x	x
<i>Acropora awi</i> Wallace & Wolstenholme, 1998				x*			G57241				
<i>Acropora bushyensis</i> Veron & Wallace, 1984	x*						G56198				
<i>Acropora cerealis</i> (Dana, 1846)	x*	x*	x*	x*	x	x	G5618-93, G56225, G57248-56	x	3x [as <i>cymbicyathus</i> , <i>hystrix</i> , <i>tizardi</i>]	x	x
<i>Acropora chesterfieldensis</i> Veron & Wallace, 1984	x*	x*	x				G56147, G57311-12				x (but not in Wallace, 1999)
<i>Acropora clathrata</i> (Brook, 1891)						x					x (but not in Wallace, 1999)
<i>Acropora cytherea</i> (Dana, 1846)	x*	x*	x*	x	x	x	G56160, G56204-06, G57243	x	2x [as <i>corymbosa</i> , <i>reticulata</i>]	x	x
<i>Acropora digitifera</i> (Dana, 1846)	x*	x*	x*	x*	x	x	G56153, G56166, G57193-207	x	2x [also as <i>brevicollis</i>]	x	x
<i>Acropora divaricata</i> (Dana, 1846)	x	x		x*	x	x	G57281-82				x (but not in Wallace, 1999)
<i>Acropora donei</i> Veron & Wallace, 1984	x*	x*	x*				G56157, G57242, G57316				x
<i>Acropora echinata</i> (Dana, 1846)		x						x	2x [also as <i>procumbens</i>]	x	x
<i>Acropora elseyi</i> (Brook, 1892)		x*	x	x		x	G56214-15				x
<i>Acropora florida</i> (Dana, 1846)	x	x*	x	x		x	G57322		x [as <i>polymorpha</i>]	x	x
<i>Acropora gemmifera</i> (Brook, 1892)	x*	x*	x	x	x	x	G56197, G56213	x		x	x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Acropora glauca</i> (Brook, 1893)								x			x
<i>Acropora gomezi</i> Veron, 2000	x [as <i>abrolhosensis</i>]	x*					G57236-38				
<i>Acropora grandis</i> (Brook, 1892)	x	x*		x			G57293	x		x [as cf.]	x
<i>Acropora granulosa</i> (Milne Edwards & Haime, 1860)	x*	x*		x*	x	x	G56140-41, G57208-18			x	x
<i>Acropora horrida</i> (Dana, 1846)	x	x*	x	x*	x	x	G56222, G57219-24, G57317-19, G57332-34	x	x [as <i>inermis</i>]	x	x
<i>Acropora humilis</i> (Dana, 1846)	x*	x	x	x	x	x	G56199	x	x	x	x
<i>Acropora hyacinthus</i> (Dana, 1846)	x*	x*		x	x	x	G56145-46, G56203, G57239-40	x (also as <i>surculosa</i>)	3x [also as <i>conferta</i> , <i>surculosa</i>]	x	x
<i>Acropora intermedia</i> (Brook, 1891)		x			x	x		x (as <i>nobilis</i>)			x
<i>Acropora kimbeensis</i> Wallace, 1999	x*	x*		x*	x	x	G56194, G56212, G57262, G57263-64				
<i>Acropora latistella</i> (Brook, 1891)	x*	x			x	x	G56173-74, G56326				x
<i>Acropora loisetteae</i> Wallace, 1994	x*	x*	x*				G57232, G56217, G57125-38				
<i>Acropora longicyathus</i> (Milne Edwards & Haime, 1860)	x*	x*				x	G56154, G57331	x (as <i>syringodes</i>)	x (as <i>syringodes</i>)	x [as <i>syringodes</i>]	x
<i>Acropora loripes</i> (Brook, 1892)	x*	x*	x*	x*	x	x	G56164-65, G56211, G57169-80	x	2x [as <i>ramiculosa</i> (unres.), <i>rosaria</i> (unres.)]	x	x
<i>Acropora lovelli</i> Veron and Wallace, 1984	x*	x*	x*	x*	x*	x	G56170-72, G57166-68, G57329-30	x	x [as <i>tubicinaria</i>]	x [as <i>tubicinaria</i>]	x
<i>Acropora lutkeni</i> Crossland, 1952	x*	x*		x*	x	x	G56142-44, G56149, G56233-34, G57321, G57324				x
<i>Acropora millepora</i> (Ehrenberg, 1834)				x		x		x		x	x
<i>Acropora microclados</i> (Ehrenberg, 1834)	x*	x		x			G56159				x (but not in Wallace, 1999)
<i>Acropora monticulosa</i> (Brüggemann, 1879)	x	x	x	x		x					x (but not in Wallace, 1999)
<i>Acropora microphthalma</i> (Verrill, 1869)		x		x*			G57339	x	x	x	x
<i>Acropora muricata</i> (Linnaeus, 1758)	x*	x	x	x	x	x	G56200-02	x (as <i>formosa</i>)	3x [as <i>formosa</i> , <i>virgata</i> , <i>arbuscula</i> (unres.)]	x [as <i>formosa</i>]	x [as <i>formosa</i>]

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Acropora nana</i> (Studer, 1878)	x	x*		x			G56226-27		x		x
<i>Acropora nasuta</i> (Dana, 1846)	x*	x*	x		x	x	G56175-78, G57286-87	x	2x [also as <i>nasuta crassilabia</i>]	x	x
<i>Acropora palmerae</i> Wells 1954									x	x	x
<i>Acropora paniculata</i> (Verrill, 1864)	x*	x*				x			x	x	x
<i>Acropora polystoma</i> (Brook, 1891)								x			x
<i>Acropora pulchra</i> (Brook, 1891)			x*				G57233		x		x
<i>Acropora rongelapensis</i> Richards & Wallace, 2004		x*				x*	G57574 (Holotype), G57575-76 (Paratypes), G53999				
<i>Acropora robusta</i> (Dana, 1846)	x*	x*	x	x		x	G56167, G57297	x	2x [as <i>conigera</i> , <i>nobilis</i>]	x	x
<i>Acropora rotumana</i> (Gardiner, 1898)							~ this species was recorded at Arno Atoll and proposed to be elevated out of synonymy with <i>A. abrotanoides</i> in Richards et al., 2010		x		
<i>Acropora sameonsis</i> (Brook, 1891)	x*	x		x	x	x	G56152			x	x
<i>Acropora sarmentosa</i> (Brook, 1892)						x					x (but not in Wallace, 1999)
<i>Acropora secale</i> (Studer, 1878)	x	x	x	x*		x	G57283-84, G57320	x (as <i>diversa</i>)	x [as <i>diversa</i>]	x	x
<i>Acropora selago</i> (Studer, 1878)	x	x*		x		x	G56209	x	x [as <i>delicatula</i>]		x
<i>Acropora solitaryensis</i> Veron & Wallace, 1984	x	x*		x*			G56210, G57285				x (but not in Wallace, 1999)
<i>Acropora squarrosa</i> (Ehrenberg, 1834)								x (dubious record - most likely <i>A. loripes</i>)	x (dubious record - most likely <i>A. loripes</i>)		
<i>Acropora speciosa</i> (Quelch, 1886)	x*	x	x	x			G56318		x [as <i>rayneri</i>]		x
<i>Acropora spicifera</i> (Dana, 1846)									x		x
<i>Acropora striata</i> (Verrill, 1864)	x*	x*	x*	x*	x	x	G56162-63, G56228-30, G57162-65, G57313-15	x	x	x	x
<i>Acropora subglabra</i> (Brook, 1891)		x		x	x	x					x (but not in Wallace, 1999)

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954^	Devaney and Lang 1987□	Veron 2000¥ (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Acropora subulata</i> (Dana, 1846)	x*	x		x	x	x	G56155				x
<i>Acropora tenella</i> (Brook)									x	x	x
<i>Acropora tenuis</i> (Dana, 1846)	x*	x*		x	x	x	G56161, G56231-32	x	2x [also as <i>kenti</i>]	x	x
<i>Acropora teres</i> Verrill									2x [also as <i>teres</i> <i>distans</i>]	x	
<i>Acropora tortuosa</i> (Dana, 1846)	x*	x*	x*	x*	x		G56150-51, G57154-61, G57225-31, G57335-38		x [as <i>implicata</i>]		x
<i>Acropora valida</i> (Dana, 1846)	x*	x*	x*	x	x	x	G56148, G57273-80		2x [also as <i>variabilis</i>]	x	x
<i>Acropora vauhani</i> (Wells, 1954)	x	x*				x	G56218-21, G57181-83	x	2x [also as <i>prostrata</i>]	x	x
<i>Acropora verweyi</i> Veron & Wallace, 1984		x*					G56223-24				x
<i>Acropora yongei</i> Veron and Wallace, 1984								x			x
<i>Alveopora allingi</i> Hoffmeister, 1925									x		
<i>Alveopora catalai</i> Wells, 1968						x					x
<i>Alveopora spongiosa</i> Dana, 1846									x [as <i>fijiensis</i>]		x
<i>Alveopora fenestrata</i> (Lamarck, 1816)	x*		x				G56265-66				x
<i>Alveopora ocellata</i> Wells, 1954									x		x
<i>Alveopora verrilliana</i> Dana, 1872										x	x
<i>Anacropora forbesi</i> Ridley, 1884		x*			x		G57184	x	3x [also as <i>A.</i> <i>gracilis</i> , <i>A. reptans</i>]		x
<i>Anacropora reticulata</i> Veron & Wallace, 1984					x		See photo				
<i>Astreopora cucullata</i> Lamberts, 1980										x	x
<i>Astreopora expansa</i> Brüggemann, 1877	x										x
<i>Astreopora gracilis</i> Bernard, 1896	x	x	x	x	x			x	2x [as cf., also as <i>A.</i> <i>tabulata</i>]	x	x
<i>Astreopora listeri</i> Bernard, 1896	x				x	x		x	2x [also as <i>A.</i> <i>punctifera</i>]	x	x
<i>Astreopora myriophthalma</i> (Lamarck, 1816)	x	x	x	x	x	x		x	2x [also as <i>profunda</i>]	x	x
<i>Astreopora ocellata</i> Bernard, 1896	x	x		x					x		x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Astreopora scabra</i> Lamberts, 1982										x	
<i>Astreopora suggesta</i> Wells, 1954		x							x	x	x
<i>Barrattoia amicornum</i> (Milne Edwards & Haime, 1850)										x[as <i>Favia amicornum</i> complex]	x
<i>Barabattoia laddi</i> (Wells, 1954)	x								x [as <i>Bikiniastrea laddi</i>]		x
<i>Cantharellus jebbi</i> Hoeksema, 1993		x*					G57292				
<i>Caulastrea furcata</i> Dana, 1846	x*	x					G57291			x	x
<i>Coelosseris mayeri</i> Vaughan, 1918		x		x	x	x					x
<i>Coscinarea crassa</i> Veron & Pichon, 1980		x									
<i>Coscinaraea column</i> (Dana, 1846)	x*	x	x	x	x	x	G56258	x	x	x	x
<i>Coscinaraea monile</i> (Forskål, 1775)		x*					G56302				
<i>Ctenactis crassa</i> (Dana, 1846)	x	x		x	x					X [as <i>Herpolitha simplex</i>]	x
<i>Ctenactis echinata</i> (Pallas, 1766)	x					x			x [as <i>Fungia echinata</i>]	x [as <i>Fungia echinata</i>]	x
<i>Cycloseris erosa</i> (Doderlein, 1901)										x	
<i>Cycloseris fragilis</i> (Alcock, 1893)									2x [also as <i>patelliformis</i>]		
<i>Cycloseris tenuis</i> (Dana, 1846)		x*					G56498				x
<i>Cycloseris vaughani</i> (Boschma, 1923)	x								2x [also as <i>hexagonalis</i>]	x [as <i>hexagonalis</i>]	x
<i>Cyphastrea agassizi</i> (Vaughan, 1907)	x*						G56272				
<i>Cyphastrea chalcidicum</i> (Forskål, 1775)				x					x	x	x
<i>Cyphastrea microphthalma</i> (Lamarck, 1816)		x	x	x	x	x		x		x	x
<i>Cyphastrea ocellina</i> (Dana, 1846)										x	x
<i>Cyphastrea serialia</i> (Forskål, 1775)	x*	x	x	x			G56271	x	x	x	x
<i>Cycloseris cyclolites</i> (Lamarck, 1801)	x			x							

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954^	Devaney and Lang 1987□	Veron 2000¥ (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Cycloseris distorta</i> (Minchelin, 1843)									X [as <i>Cycloseris distorta</i>]		x
<i>Diploastrea heliopora</i> (Lamarck, 1816)									x		x
<i>Echinophyllia aspera</i> (Ellis and Solander, 1788)	x*	x	x*	x*		x	G56244, G57301-02		x	x	x
<i>Echinophyllia orpheensis</i> Veron & Pichon, 1980		x*	x*	x			G57303-05				
<i>Echinophyllia patula</i> (Hodgson & Ross, 1981)	x*	x	x				G56322				
<i>Echinophyllia taylorae</i> Veron, 2000		x									
<i>Echinopora lamellosa</i> (Esper, 1795)	x*	x*	x	x		x	G56249-51, G56312-14	x	x	x	x
<i>Euphyllia ancora</i> Veron & Pichon, 1980				x			See photo				
<i>Euphyllia glabrescens</i> (Chamisso & Eysenhardt, 1821)	x	x						x	x	x	x
<i>Favia fava</i> (Forskål, 1775)	x	x		x					x		x
<i>Favia helianthoides</i> Wells, 1954									x	x[as <i>Favia amicorum</i> complex]	x
<i>Favia maritima</i> (Nemanzo, 1971)					x						x
<i>Favia matthaii</i> Vaughan, 1918	x	x*	x	x	x	x	G57342	x		x[as <i>Favia amicorum</i> complex]	x
<i>Favia pallida</i> (Dana, 1846)	x*	x		x	x	x	G56245	x	x	x	x
<i>Favia rotumana</i> (Gardiner, 1899)	x	x		x					x		x
<i>Favia rotundata</i> (Veron & Pichon, 1977)	x	x*	x	x	x	x	G56500, G56503	x		x	x
<i>Favia stelligera</i> (Dana, 1846)	x*	x*	x	x	x	x	G56247-48, G56310-11	x	x	x	x
<i>Favia speciosa</i> Dana, 1846	x	x	x			x		x	x	x	x
<i>Favites bestae</i> Veron, 2000	x			x							x
<i>Favites abdita</i> (Ellis and Solander, 1786)	x	x		x	x	x			x		x
<i>Favites pentagona</i> (Esper, 1974)	x	x	x	x							x
<i>Favites chinensis</i> (Verrill, 1866)	x*	x	x	x			G56259			x [as <i>yaimnarii</i>]	x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Favites complanata</i> (Ehrenberg, 1834)	x	x		x		x					x
<i>Favites flexuosa</i> (Dana, 1846)	x	x		x				x	2x [also as <i>virens</i>]	x	x
<i>Favites halicora</i> (Ehrenberg, 1834)	x	x	x	x		x		x	x	x	x
<i>Favites russelli</i> (Wells, 1954)	x	x		x					x [as <i>Plesiastrea russelli</i>]	x	x
<i>Fungia concinna</i> Verrill, 1864	x*	x		x			G56321	x	2x [also as <i>concinna serrulata</i>]	x [as <i>Fungia (Verillofungia) concinna</i>]	x
<i>Fungia fungities</i> (Linnaeus, 1758)				x	x		G56270, G56323	x	5x [as <i>dentata</i> , <i>haimei</i> , <i>stylifer</i> , <i>agariciformi</i> , <i>confertifolia</i>]	x	x
<i>Fungia granulosa</i> Klunzinger, 1879	x	x	x		x						x
<i>Fungia horrida</i> Dana, 1846	x*	x*	x			x	G56308, G57300, G56246	x			x
<i>Fungia paumotensis</i> Stutchbury, 1833	x	x	x	x	x	x	G56309, G56499	x		x	x
<i>Fungia repanda</i> Dana, 1846	x	x		x	x	x		x	x	x [as <i>Fungia (Verillofungia) repanda</i>]	x
<i>Fungia scruposa</i> Klunzinger, 1879	x*	x	x	x			G57299				x
<i>Fungia scutaria</i> Lamarck, 1801	x*	x*	x*	x*		x	G56319-20, G57191, G57310	x	x	x	x
<i>Galaxea astreata</i> (Lamarck, 1816)	x	x	x	x	x						x
<i>Galaxea fascicularis</i> (Linnaeus, 1767)	x	x		x					x		x
<i>Galaxea horrescens</i> (Dana, 1846)	x	x		x		x			x [as <i>Archelia horrescens</i>]	x [as <i>Archelia horrescens</i>]	x
<i>Gardinoseris planulata</i> (Dana, 1846)	x	x*	x	x		x	G56502		x [as <i>Pavona (Polyastra) planulata</i>]	x	x
<i>Goniastrea aspera</i> Verrill, 1905	x	x		x		x					x
<i>Goniastrea australensis</i> (Milne Edwards and Haime, 1857)					x						x
<i>Goniastrea edwardsi</i> Chevalier, 1971	x*	x	x	x		x	G56267	x			x
<i>Goniastrea pectinata</i> (Ehrenberg, 1834)	x*	x	x	x	x	x	G56268-69	x	x	x	x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Goniastrea favulus</i> Dana 1846											x
<i>Goniastrea retiformis</i> (Lamarck, 1816)	x	x			x	x		x	x	x	x
<i>Goniopora columna</i> Dana	x							x			x
<i>Goniopora djiboutiensis</i> Vaughan 1907									x [as <i>Goniopora pulvinula</i>]		x
<i>Goniopora lobata</i> Milne, Edwards & Haime, 1860						x	G56239	x	x [as <i>traceyi</i>]		x
<i>Goniopora minor</i> Crossland, 1952	x		x	x*		x	G57266				x
<i>Goniopora somaliensis</i> Vaughan, 1907	x*	x				x	G56240		x		x
<i>Goniopora tenuidens</i> (Quelch, 1886)						x				x	x
<i>Halomitra pileus</i> (Linnaeus, 1758)	x	x		x		x		x	x [as <i>H. philippinensis</i>]	x	x
<i>Herpolitha limax</i> (Houttuyn, 1772)	x	x	x	x	x	x	G56493	x	x	x	x
<i>Hydnophora exesa</i> (Pallas, 1766)	x*	x		x*	x		G56241, G57187		x	x	x
<i>Hydnophora microconos</i> (Lamarck, 1816)	x	x	x	x				x	x	x	x
<i>Hydnophora pilosa</i> (Veron, 1985)	x	x		x		x				x	x
<i>Hydnophora rigida</i> (Dana, 1846)		x*					G57190, G57343-44		x		x
<i>Isopora brueggemanni</i> (Brook, 1893)								x			x
<i>Isopora crateriformis</i> (Gardiner, 1898)						x					
<i>Isopora cuneata</i> (Dana, 1846)	x	x	x					x	x [as <i>Acropora cuneata</i>]	x [as <i>Acropora cuneata</i>]	x
<i>Isopora palifera</i> (Lamarck, 1816)	x*	x*	x	x	x	x	G56168-69, G56216	x	x [as <i>Acropora palifera</i>]	x [as <i>Acropora palifera</i>]	x
<i>Leptastrea pruinosa</i> Crossland, 1952	x*	x*				x	G56274-76, G56305			x	x
<i>Leptastrea purpurea</i> (Dana, 1846)	x	x*					G57268	x	x	x	x
<i>Leptastrea transversa</i> Klunzinger, 1879		x*	x	x	x	x	G56303-04, G57267	x	x	x	x
<i>Leptoria phrygia</i> (Ellis & Solander, 1786)		x		x				x	2x [also as <i>gracilis</i>]	x	x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954^	Devaney and Lang 1987□	Veron 2000¥ (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Leptoseris explanata</i> Yabe & Sugiyama, 1941	x	x	x								x
<i>Leptoseris gardineri</i> van der Horst									x		x
<i>Leptoseris hawaiiensis</i> Vaughan, 1907	x	x*	x	x			G56273, G57288		x	x	x
<i>Leptoseris incrustans</i> (Quelch, 1886)		x							x		x
<i>Leptoseris mycetoseroides</i> Wells, 1954	x	x	x	x		x		x	x	x	x
<i>Leptoseris papyracea</i> (Dana, 1846)									x		x
<i>Leptoseris yabei</i> (Pillai & Sheer, 1976)		x		x*			G57289				x
<i>Leptoseris scabra</i> Vaughan, 1907									x		x
<i>Leptoseris solida</i> (Quelch, 1886)									x		
<i>Lithophyllum undulatum</i> Rehberg, 1892	x	x									
<i>Lobophyllia corymbosa</i> (Forksål, 1775)		x	x	x		x		x	x	x	x
<i>Lobophyllia dentatus</i> Veron, 2000			x								
<i>Lobophyllia hattai</i> Yabe, Sugiyama and Sugiyama, 1936								x			x
<i>Lobophyllia hemprichii</i> (Ehrenberg, 1834)	x*	x	x	x		x	G56243	x	2x [also as <i>costata</i>]		x
<i>Lobophyllia pachysepta</i> Chevalier, 1975	x	x		x							x
<i>Madracis</i> sp.									x		
<i>Merulina ampliata</i> (Ellis and Solander, 1786)	x	x*	x	x*	x	x	G57246-47		x	x	x
<i>Montastrea annuligera</i> (Milne, Edwards & Haime, 1849)										x	x
<i>Montastrea curta</i> (Dana, 1846)	x*	x	x	x	x	x	G56256-57, G57341	x		x	x
<i>Montastrea salebrosa</i> (Nemanzo, 1959)	x*	x	x		x		G57340				
<i>Montastrea valenciennesi</i> (Milne, Edwards & Haime, 1848)	x			x				x	x [as <i>Favia valenciennesi</i>]		x
<i>Montipora aequituberculata</i> Bernard, 1897	x*	x		x	x		G56279	x		x	x
<i>Montipora angulata</i> (Lamarck, 1816)		x		x							
<i>Montipora australiensis</i> Bernard, 1897										x	
<i>Montipora cactus</i> Bernard, 1897									x [as <i>M. caetus</i>]		
<i>Montipora caliculata</i> (Dana, 1846)	x*			x			G56283-84	x	x	x	x

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954^	Devaney and Lang 1987□	Veron 2000¥ (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Montipora capitata</i> Dana, 1846	x	x	x								x
<i>Montipora circumvallata</i> (Ehrenberg, 1834)									x		
<i>Montipora cocosensis</i> Vaughan, 1918	x*						G56285				
<i>Montipora crassituberculata</i> Bernard, 1897	x*	x*	x*	x			G56278, G57306-07				x
<i>Montipora danae</i> (Milne Edwards & Haime, 1851)	x	x	x	x	x	x			x	x	x
<i>Montipora digitata</i> (Dana, 1846)				x*		x	G57185			x	x
<i>Montipora efflorescens</i> Bernard, 1897	x*	x		x	x		G56277				x
<i>Montipora floweri</i> Wells, 1954									x	x	x
<i>Montipora foliosa</i> (Pallas, 1766)	x*	x					G56280	x	x [as <i>minuta</i>]	x	x
<i>Montipora foveolata</i> (Dana, 1846)		x	x	x	x	x		x	2x [also as <i>socialis</i>]	x	x
<i>Montipora gaimardi</i> Bernard, 1897									x		
<i>Montipora hispida</i> (Dana, 1846)										x	x
<i>Montipora hoffmeisteri</i> Wells, 1954								x	x	x	x
<i>Montipora incrassata</i> (Dana, 1846)	x*	x	x	x	x	x	G56286, G56494				x
<i>Montipora informis</i> Bernard, 1897		x						x	2x [also as <i>granulata</i>]	x	x
<i>Montipora lobulata</i> Bernard, 1897										x	
<i>Montipora millepora</i> Crossland 1952									2x [as. <i>M. conicula</i> , <i>M. subtilis</i>]	x [as <i>conicula</i>]	x
<i>Montipora mollis</i> Bernard, 1897		x	x								x
<i>Montipora monasteriata</i> (Forskål, 1775)		x						x		x	x
<i>Montipora nodosa</i> (Dana, 1846)	x	x		x						x	x
<i>Montipora patula</i> Verrill 1864									x		
<i>Montipora peltiformis</i> Bernard, 1897		x	x	x	x	x					x
<i>Montipora stellata</i> Bernard, 1897									x [as <i>M. solanderi</i>]		
<i>Montipora tuberosa</i> (Lamarck, 1816)	x*	x	x		x	x	G56282	x	x	x	x
<i>Montipora turgescens</i> Bernard, 1897	x	x	x	x	x				x		x
<i>Montipora undata</i> Bernard, 1897		x		x		x			x [as <i>colei</i>]		x

Table S1. Cont.

[illegible]

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954^	Devaney and Lang 1987□	Veron 2000¥ (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Platygyra daedalea</i> (Ellis & Solander, 1786)	x	x*		x				x	x [as <i>rustica</i>]	x	x
<i>Platygyra lamellina</i> (Ehrenberg, 1834)					x	x		x		x	x
<i>Platygyra pini</i> Chevalier, 1975	x*	x	x	x		x	G56237-38	x		x	x
<i>Platygyra ryukyuensis</i> Yabe & Sugiyama, 1936	x*	x	x	x		x	G56236				x
<i>Platygyra sinensis</i> (Milne, Edwards & Haime, 1849)	x	x	x	x	x	x		x	x	x	x
<i>Plerogyra sinuosa</i> (Dana, 1846)	x	x								x	x
<i>Plesiastrea versipora</i> Wells, 1954									2x [also as <i>lilli</i>]	x	x
<i>Pocillopora damicornis</i> (Linnaeus, 1758)	x*	x*	x	x	x	x	G56316-17, G56495, G56501	2x [also as <i>brevicornis</i>]	3x [also as <i>brevicornis</i> , <i>setchelli</i>]	x	x
<i>Pocillopora elegans</i> Dana 1846									x	x	
<i>Pocillopora eydouxi</i> Milne Edwards and Haime, 1860	x	x	x	x	x	x		x	x	x	x
<i>Pocillopora lingulata</i> Dana 1846									x		
<i>Pocillopora meandrina</i> Dana, 1846	x	x	x	x	x	x		x	x [as <i>meandrina nobilis</i>]	x	x
<i>Pocillopora verrucosa</i> (Ellis & Solander, 1786)	x	x	x	x	x	x		x	2x [also as <i>danae</i>]	x	x
<i>Podobacia crustacea</i> (Pallas, 1776)										x	x
<i>Podobacia motuporensis</i> Veron, 1990		x*					G56301				x
<i>Polyphyllia talpina</i> (Lamarck, 1801)	x*						G56324	x			
<i>Porites annae</i> Crossland, 1952					x						x
<i>Porites australiensis</i> Vaughan, 1918	x	x	x	x	x	x			x [as <i>fragosa</i>]	x	x
<i>Porites cylindrica</i> Dana, 1846	x	x	x	x	x	x		x	x [as <i>andrewsi</i>]	x	x
<i>Porites horizontalata</i> Hoffmeister, 1925	x*	x*		x			G56287, G56299		x [as <i>Porites</i> (<i>Synaraea</i>) <i>horizontalata</i>]		X
<i>Porites lichen</i> Dana, 1846	x	x*	x	x		x	G56297-98	x	x	x	X
<i>Porites lobata</i> Dana, 1846	x	x	x	x	x	x		x	x	x	X
<i>Porites lutea</i> Milne, Edwards & Haime, 1851	x*	x	x	x	x	x	G56291-92	x	x	x	X

Table S1. Cont.

Scleractinian Species-Authority	This Study							Former Studies			
	Bikini	Rongelap	Ailinginae	Mili	Rongerik	Majuro	Museum of Tropical Queensland Queensland Accession Numbers	Maragos 1988 #	Wells 1954 [^]	Devaney and Lang 1987 [□]	Veron 2000 [¥] (with notes from Wallace 1999 for <i>Acropora</i>)
<i>Porites monticulosa</i> Dana, 1846									x [as <i>Porites</i> (<i>Synaraea</i>) <i>monticulosa</i>]	x [as <i>Porites</i> (<i>Synaraea</i>) <i>monticulosa</i>]	
<i>Porites murrayensis</i> Vaughan, 1918								x	x		x
<i>Porites nigrescens</i> Dana, 1846						x					x
<i>Porites rus</i> (Forskål, 1775)	x*	x	x	x		x	G56289-90, G56293	x	x [as <i>Porites</i> (<i>Synaraea</i>) <i>hawaiiensis</i>]	x	x
<i>Porites solida</i> Forskål, 1775								x			x
<i>Porites vaughani</i> Crossland, 1952	x*	x	x	x			G56288				x
<i>Psammocora contigua</i> Esper 1797	x									x	x
<i>Psammocora digitata</i> Milne, Edwards and Haime, 1851									x [as <i>Psammocora</i> (<i>stepha</i> <i>naria</i>) <i>togianensis</i>]	x	x
<i>Psammocora explanulata</i> Horst, 1922	x	x*		x		x	G56300, G57309		x	x	x
<i>Psammocora haimeana</i> Milne Edwards and Haime, 1851	x	x	x		x	x		x	x [as <i>Plesioseris</i> <i>haimeana</i>]		x
<i>Psammocora nierstraszi</i> Horst, 1921	x*	x		x		x	G56296	x	x	x	x
<i>Psammocora profundacella</i> Gardiner, 1898	x*	x	x			x	G56294-95	x		x	x
<i>Psammocora superficialis</i> Gardiner, 1898		x	x	x					x		x
<i>Pseudosiderastrea tayami</i> Yabe and Sugiyama, 1935	x	x	x	x	x				x [as <i>Turbinaria</i> <i>tayamai</i>]		x
<i>Sandalolitha robusta</i> Quelch 1886								x	x [as <i>Parahalomitra</i> <i>robusta</i>]		x
<i>Sandalolitha dentata</i> Quelch 1884									x [as <i>Parahalomitra</i> <i>dentata</i>]		x
<i>Scapophyllia cylindrica</i> Milne Edwards & Haime, 184	x*	x	x	x	x		G56242	x	x	x	x
<i>Scolymia vitensis</i> Brüggemann, 1877	x	x	x			x				x	x
<i>Seriatopora aculeata</i> Quelch, 1886		x		x*		x	G57188				
<i>Seriatopora calendrium</i> Ehrenberg, 1834	x	x	x		x						x
<i>Seriatopora dentritica</i> Veron, 2000		x*		x*		x	G56315, G57189				
<i>Seriatopora hystrix</i> Dana, 1846	x	x*	x	x	x	x	G56497, G57192	x	2x [also as <i>angulata</i>]	x	x

Table S1. Cont.

[illegible]

Non-scleractinian corals

<i>Distichopora fisheri</i> Broch									x		
<i>Distichopora violacea</i> (Pallas)	x	x*	x				G57271-72	x	x		
<i>Stylaster</i> sp.	x*	x	x	x	x	x	G57269-70	x	3x [<i>asper</i> , <i>elegans</i> , <i>eximius</i>]		
<i>Errina</i> sp.									x		
<i>Tubipora musica</i> Linnaeus 1958	x	x	x	x	x			x	x		
<i>Heliopora coerulea</i> Pallas 1766	x*	x		x	x	x	G56496	x	x		
<i>Millepora platyphyllia</i> Hemprich & Ehrenberg		x			x			x	x		
<i>Millepora exaesa</i> (Forskål, 1775)	x	x	x	x	x	x		x	x		
<i>Millepora dichotoma</i> (Forskål, 1775)								x			
<i>Millepora tenera</i> Boschma	x								x		

Maragos surveyed Bikar Atoll, Bok-ak Atoll, Tōke Atoll, Jemo Island, Wōtto Atoll, Rongerik Atoll, Adkup Atoll.

^ Wells surveyed Bikini Atoll, Rongelap Atoll, Rongerik Atoll, Enewetak Atoll, Jaluit Atoll, Nugol Atoll, Kwajalein Atoll, Arno Atoll, Wotke Atoll, Namorik Atoll, Ailuk Atoll, Pokak Atoll, Ebon Atoll, Likiep Atoll.

□ Devaney and Lang surveyed Enewetak Atoll

¥ The location/s and whether skeletal specimens exist to verify the distribution records in Veron is not known.

NOTE: Twenty-two species recorded by Wells (W); Maragos (M) or Devaney and Lang (D) are not considered valid species and a taxonomic history could not be traced hence they are not included on the species list. These records are: *Acropora disticha* (W); *Coscinareaea ostreaeformis* van der Horst (W); *Fungia incisa* Doederlein (W); *Goniopora gracilis* (Bassett-Smith) (W); *Fungia* (*Danafungia*) *valida* Verrill (M)(D); *Goniopora mucosa* Wells, 1954 (W); *Montipora* cf. *complanata* (Lamarck) (W); *Seriatopora angulata* Klunzinger (M); *Sclerhelia alcocki* Wells, 1954 (W); *Montipora benyi* Bernard (D); *Montipora conicula* Wells 1954 (D); *Montipora ehrenbergii* Verrill (D); *Montipora granulosa* Bernard (D); *Montipora marshallensis* Wells 1954 (M)(D); *Montipora* cf. *pallida* Bernard (W); *Montipora* cf. *studerii* Vaughan (W); *Montipora granulosa* Bernard (W); *Montipora* cf. *myriophthalma* Bernard (W)(D); *Pavona divaricata* Lamarck (W); *Pocillopora* cf. *solida* Quelch (W); *Porites iwayamaensis* Eguchi (W); *Porites matthaii* Wells, 1954 (W).

Table S2. Site locality details. Latitude and longitude are presented in degree.decimal format (geographical, WGS84), habitat type and date of survey and site diversity are also summarized.

Latitude	Longitude	Site Name	Atoll	Habitat Type	Date	Diversity
7.147326	171.026506	Maj1	Majuro	Outer exposed reef	6-Jun-10	41
7.089044	171.129486	Maj2	Majuro	Outer exposed reef	6-Jun-10	59
7.066964	171.274774	Maj3	Majuro	Lagoon slope	15-Jun-10	21
7.123253	171.35631	Maj4	Majuro	Lagoon slope	7-Jun-10	8
7.103624	171.38224	Maj5	Majuro	Outer exposed reef	9-Jun-10	33
7.079354	171.343472	Maj6	Majuro	Outer exposed reef	9-Jun-10	37
7.158668	171.163085	Maj7	Majuro	Lagoon slope	10-Jun-10	40
7.123253	171.35629	Maj8	Majuro	Lagoon slope	7-Jun-10	18
7.221025	171.056227	Maj9	Majuro	Outer exposed reef	11-Jun-10	47
7.192273	171.093613	Maj10	Majuro	Lagoon bommie	11-Jun-10	60
7.114926	171.094738	Maj11	Majuro	Lagoon slope	12-Jun-10	36
7.066318	171.28767	Maj12	Majuro	Outer exposed reef	13-Jun-10	42
7.157113	171.203093	Maj13	Majuro	Pass	22-Jun-10	50
7.101144	171.265011	Maj14	Majuro	Lagoon bommie	22-Jun-10	12
6.2241	171.8075	M1	Mili	Lagoon slope	26-Jun-03	58
6.2328	171.8061	M2	Mili	Pass	26-Jun-03	57
6.2368	171.8998	M3	Mili	Pass	27-Jun-03	63
6.263	171.9167	M4	Mili	Outer exposed reef	27-Jun-03	56
6.2236	171.9544	M5	Mili	Lagoon slope	28-Jun-03	43
6.2322	171.9589	M6	Mili	Outer exposed reef	28-Jun-03	47
6.2118	171.9851	M7	Mili	Outer exposed reef	29-Jun-03	59
6.2107	171.957	M8	Mili	Lagoon slope	29-Jun-03	50
6.2066	171.7128	M9	Mili	Outer exposed reef	30-Jun-03	41
6.1837	171.7222	M10	Mili	Outer exposed reef	30-Jun-03	41

Table S2. Cont.

Latitude	Longitude	Site Name	Atoll	Habitat Type	Date	Diversity
6.2142	171.8077	M11	Mili	Lagoon slope	1-Jul-03	47
6.2171	171.8095	M12	Mili	Lagoon bommie	1-Jul-03	45
6.1924	171.9723	M13	Mili	Lagoon bommie	2-Jul-03	59
6.1937	171.9771	M14	Mili	Lagoon slope	2-Jul-03	45
6.2351	172.0781	M15	Mili	Outer exposed reef	3-Jul-03	30
6.0153	172.0492	M16	Mili	Outer exposed reef	3-Jul-03	36
6.0148	172.06	M17	Mili	Pass	4-Jul-03	35
6.0004	172.0754	M18	Mili	Outer exposed reef	4-Jul-03	41
6.0567	171.9967	M19	Mili	Lagoon bommie	5-Jul-03	46
6.0695	172.0329	M20	Mili	Lagoon bommie	5-Jul-03	34
11.18253333	166.2856667	A1	Ailinginae	Outer exposed reef	18-Jul-03	61
11.16391667	166.2878667	A2	Ailinginae	Lagoon slope	18-Jul-03	73
11.13073333	166.35175	A3	Ailinginae	Pass	18-Jul-03	62
11.15838333	166.3047667	A4	Ailinginae	Outer exposed reef	19-Jul-03	48
11.1443	166.3024833	A5	Ailinginae	Lagoon slope	19-Jul-03	55
11.1535	166.4711	A6	Ailinginae	Lagoon bommie	19-Jul-03	36
11.13206667	166.5218667	A7	Ailinginae	Lagoon slope	20-Jul-03	43
11.15345	166.8365	R1	Rongelap	Pass	2-Aug-02	59
11.15658333	166.8857667	R2	Rongelap	Outer exposed reef	2-Aug-02	50
11.17905	166.8957333	R3	Rongelap	Lagoon slope	3-Aug-02	37
11.15168333	166.8386833	R4	Rongelap	Outer exposed reef	4-Aug-02	58
11.14896667	166.84305	R5	Rongelap	Outer exposed reef	5-Aug-02	53
11.15778333	166.8666833	R6	Rongelap	Lagoon slope	6-Aug-02	37
11.15726667	166.8820667	R7	Rongelap	Lagoon slope	6-Aug-02	56

Table S2. Cont.

Latitude	Longitude	Site Name	Atoll	Habitat Type	Date	Diversity
11.17383333	166.8959167	R8	Rongelap	Outer exposed reef	7-Aug-02	30
11.15203333	166.8375167	R9	Rongelap	Lagoon slope	8-Aug-02	66
11.1551	166.8901333	R10	Rongelap	Outer exposed reef	9-Aug-02	61
11.154	166.8437833	R11	Rongelap	Lagoon slope	9-Aug-02	34
11.15273333	166.8368333	R12	Rongelap	Lagoon slope	10-Aug-02	64
11.19161667	166.7237833	R13	Rongelap	Outer exposed reef	15-Aug-02	69
11.16825	166.77995	R14	Rongelap	Pass	15-Aug-02	59
11.29663333	166.8970667	R15	Rongelap	Lagoon bommie	9-Jul-03	75
11.3538	166.92345	R16	Rongelap	Lagoon slope	10-Jul-03	55
11.25513333	166.8941833	R17	Rongelap	Outer exposed reef	10-Jul-03	57
11.3436	166.9217333	R18	Rongelap	Outer exposed reef	11-Jul-03	66
11.28876667	166.8854167	R19	Rongelap	Outer exposed reef	11-Jul-03	47
11.3434	166.8084167	R20	Rongelap	Lagoon bommie	11-Jul-03	48
11.31636667	166.8022833	R21	Rongelap	Lagoon bommie	12-Jul-03	68
11.36366667	167.0065333	R22	Rongelap	Outer exposed reef	13-Jul-03	70
11.36688333	166.9656167	R23	Rongelap	Outer exposed reef	13-Jul-03	51
11.37096667	166.9658333	R24	Rongelap	Lagoon slope	13-Jul-03	50
11.39293333	166.9971833	R25	Rongelap	Lagoon slope	14-Jul-03	56
11.41925	166.9715667	R26	Rongelap	Lagoon bommie	14-Jul-03	37
11.4446	167.0477667	R27	Rongelap	Lagoon slope	15-Jul-03	38
11.44123333	167.0375833	R28	Rongelap	Lagoon slope	15-Jul-03	71
11.20945	166.68305	R29	Rongelap	Outer exposed reef	20-Jul-03	60
11.21081667	166.7042333	R30	Rongelap	Pass	21-Jul-03	64
11.194	166.7195833	R31	Rongelap	Outer exposed reef	21-Jul-03	78

Table S2. Cont.

Latitude	Longitude	Site Name	Atoll	Habitat Type	Date	Diversity
11.21116667	166.67485	R32	Rongelap	Lagoon slope	21-Jul-03	51
11.23998333	166.6215	R33	Rongelap	Outer exposed reef	22-Jul-03	60
11.35656667	166.6384833	R34	Rongelap	Pass	22-Jul-03	71
11.30243333	166.6583	R35	Rongelap	Lagoon bommie	23-Jul-03	58
11.21458333	166.7159167	R36	Rongelap	Lagoon slope	23-Jul-03	65
11.32773333	166.6185333	R37	Rongelap	Outer exposed reef	23-Jul-03	61
11.46113333	166.67005	R38	Rongelap	Outer exposed reef	24-Jul-03	67
11.4675	166.7405833	R39	Rongelap	Outer exposed reef	24-Jul-03	74
11.46753333	166.7920667	R40	Rongelap	Pass	25-Jul-03	68
11.48183333	166.8476333	R41	Rongelap	Lagoon bommie	25-Jul-03	66
11.5292985	165.5597698	B1	Bikini	Lagoon	20-Jul-02	34
11.6351385	165.5565727	B2	Bikini	Outer exposed reef	21-Jul-02	16
11.61251133	165.5533057	B3	Bikini	Outer exposed reef	21-Jul-02	21
11.54865867	165.5638413	B4	Bikini	Outer exposed reef	22-Jul-02	35
11.67780167	165.4280305	B5	Bikini	Lagoon slope	22-Jul-02	40
11.5072775	165.4137503	B6	Bikini	Pass	23-Jul-02	32
11.5264285	165.5591852	B7	Bikini	Lagoon bommie	23-Jul-02	24
11.68497383	165.4081928	B8	Bikini	Lagoon slope	24-Jul-02	37
11.49905917	165.3363418	B9	Bikini	Outer exposed reef	25-Jul-02	45
11.55470433	165.5553978	B10	Bikini	Lagoon bommie	25-Jul-02	31
11.69405583	165.2867155	B11	Bikini	H-bomb crater patch reef	26-Jul-02	36
11.68087017	165.4176395	B12	Bikini	Lagoon bommie	27-Jul-02	41
11.62932333	165.5306357	B13	Bikini	Lagoon slope	27-Jul-02	41
11.515115	165.4172372	B14	Bikini	Outer exposed reef	28-Jul-02	47

Table S2. Cont.

Latitude	Longitude	Site Name	Atoll	Habitat Type	Date	Diversity
11.63771867	165.5057018	B15	Bikini	Lagoon slope	28-Jul-02	42
11.5026265	165.359044	B16	Bikini	Pass	29-Jul-02	40
11.59711111	165.548	B17	Bikini	Lagoon slope	29-Jul-02	27
11.5971211	165.4341	B18	Bikini	Wreck	30-Jul-02	32
11.58198	165.221101	B19	Bikini	Pass	30-Jul-02	39
11.376102	167.49531	RK1	Rongerik	Lagoon slope	25-Aug-09	43
11.293201	167.467483	RK2	Rongerik	Outer exposed reef	25-Aug-09	49
11.39981	167.444101	RK3	Rongerik	Lagoon slope	26-Aug-09	50

Table S3. Local distribution/abundance and threatened global/regional status of scleractinian corals recorded in the 2002–2010 surveys. Highlighted in yellow are those species of imminent conservation concern because they are *Vulnerable* at both global and regional scales. Highlighted in red and green are situations where there is a major discrepancy between global and regional conservation status. Red = species that are classified as *Least Concern* at a global scale but are *Vulnerable* at a regional scale. Green = species that are *Vulnerable* at the global scale, but *Least Concern* at the regional scale.

Scleractinian Species-Authority	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Acanthastrea brevis</i> Milne Edwards & Haime, 1849	48	1.35	V	LC
<i>Acanthastrea echinata</i> (Dana, 1846)	16	1.5	LC	LC
<i>Acanthastrea hemprichii</i> (Ehrenberg, 1834)	20	1.25	V	LC
<i>Acanthastrea hillae</i> Wells, 1955	4	1.5	NT	V
<i>Acropora abrotanoides</i> (Lamarck, 1816)	15	6.99	LC	LC
<i>Acropora aculeus</i> (Dana, 1846)	22	1.59	V	LC
<i>Acropora acuminata</i> (Verrill, 1864)	19	1.68	V	LC
<i>Acropora anthocercis</i> (Brook, 1893)	2	6	V	V
<i>Acropora aspera</i> (Dana, 1846)	2	1	V	V
<i>Acropora austera</i> (Dana, 1846)	45	6.27	NT	LC
<i>Acropora awi</i> Wallace & Wolstenholme, 1998	1	3	V	V
<i>Acropora bushyensis</i> Veron & Wallace, 1984	2	2	LC	V
<i>Acropora cerealis</i> (Dana, 1846)	45	1.89	LC	LC
<i>Acropora chesterfieldensis</i> Veron & Wallace, 1984	8	1.75	LC	NT
<i>Acropora clathrata</i> (Brook, 1891)	4	6.75	LC	V
<i>Acropora cytherea</i> (Dana, 1846)	58	6.93	LC	LC
<i>Acropora digitifera</i> (Dana, 1846)	52	7.56	NT	LC
<i>Acropora divaricata</i> (Dana, 1846)	14	7.5	NT	LC
<i>Acropora donei</i> Veron & Wallace, 1984	7	1.43	V	NT
<i>Acropora echinata</i> (Dana, 1846)	17	1.71	V	LC
<i>Acropora elseyi</i> (Brook, 1892)	7	1	LC	NT
<i>Acropora florida</i> (Dana, 1846)	35	1.77	NT	LC
<i>Acropora gemmifera</i> (Brook, 1892)	48	6.18	LC	LC

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Acropora gomezi</i> Veron, 2000	2	1.5	DD	V
<i>Acropora grandis</i> (Brook, 1892)	9	1.33	LC	NT
<i>Acropora granulosa</i> (Milne Edwards & Haime, 1860)	30	2.2	NT	LC
<i>Acropora horrida</i> (Dana, 1846)	14	1.29	V	LC
<i>Acropora humilis</i> (Dana, 1846)	34	1.65	NT	LC
<i>Acropora hyacinthus</i> (Dana, 1846)	42	1.76	NT	LC
<i>Acropora intermedia</i> (Brook, 1891)	13	7.38	LC	LC
<i>Acropora kimbeensis</i> Wallace, 1999	6	1.5	V	NT
<i>Acropora latistella</i> (Brook, 1891)	16	7.68	LC	LC
<i>Acropora loisetteae</i> Wallace, 1994	4	8.25	V	V
<i>Acropora longicyathus</i> (Milne Edwards & Haime, 1860)	8	1.75	LC	NT
<i>Acropora loripes</i> (Brook, 1892)	52	7.14	NT	LC
<i>Acropora lovelli</i> Veron and Wallace, 1984	14	1.57	V	LC
<i>Acropora lutkeni</i> Crossland, 1952	24	1.29	NT	LC
<i>Acropora microclados</i> (Ehrenberg, 1834)	4	1.5	V	V
<i>Acropora microphthalma</i> (Verrill, 1869)	15	2.2	LC	LC
<i>Acropora millepora</i> (Ehrenberg, 1834)	11	1.27	NT	LC
<i>Acropora monticulosa</i> (Brüggemann, 1879)	31	1.77	NT	LC
<i>Acropora muricata</i> (Linneaus, 1758)	35	6.87	NT	LC
<i>Acropora nana</i> (Studer, 1878)	22	1.91	NT	LC
<i>Acropora nasuta</i> (Dana, 1846)	85	8.25	NT	LC
<i>Acropora paniculata</i> (Verrill, 1864)	8	1.75	V	NT
<i>Acropora pulchra</i> (Brook, 1891)	2	1.5	LC	V
<i>Acropora robusta</i> (Dana, 1846)	34	1.32	LC	LC
<i>Acropora rongelapensis</i> Richards & Wallace, 2004	3	1	DD	V
<i>Acropora sameonsis</i> (Brook, 1891)	39	1.61	LC	LC

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Acropora sarmentosa</i> (Brook, 1892)	1	1	LC	V
<i>Acropora secale</i> (Studer, 1878)	40	1.87	NT	LC
<i>Acropora selago</i> (Studer, 1878)	15	6.21	NT	LC
<i>Acropora solitaryensis</i> Veron & Wallace, 1984	7	1.147	V	NT
<i>Acropora speciosa</i> (Quelch, 1886)	15	1.8	V	LC
<i>Acropora striata</i> (Verrill, 1864)	45	1.937	V	LC
<i>Acropora subglabra</i> (Brook, 1891)	7	1.577	V	NT
<i>Acropora subulata</i> (Dana, 1846)	11	1.187	LC	LC
<i>Acropora tenuis</i> (Dana, 1846)	18	6.51	NT	LC
<i>Acropora tortuosa</i> (Dana, 1846)	14	1.86	LC	LC
<i>Acropora valida</i> (Dana, 1846)	47	1.85	LC	LC
<i>Acropora vauughani</i> (Wells, 1954)	11	1.54	V	LC
<i>Acropora verweyi</i> Veron & Wallace, 1984	21	1.76	V	LC
<i>Alveopora catalai</i> Wells, 1968	1	1.8	NT	V
<i>Alveopora fenestrata</i> (Lamarck, 1816)	6	1.17	V	NT
<i>Anacropora forbesi</i> Ridley, 1884	2	1.5	LC	V
<i>Anacropora reticulata</i> Veron & Wallace, 1984	1	1	V	V
<i>Astreopora expansa</i> Brüggemann, 1877	2	1	NT	V
<i>Astreopora gracilis</i> Bernard, 1896	25	1.4	LC	LC
<i>Astreopora listeri</i> Bernard, 1896	15	1.93	LC	LC
<i>Astreopora myriophthalma</i> (Lamarck, 1816)	76	7.53	LC	LC
<i>Astreopora ocellata</i> Bernard, 1896	12	1.41	LC	LC
<i>Astreopora suggesta</i> Wells, 1954	5	1.4	LC	V
<i>Barabattoia laddi</i> (Wells, 1954)	2	1	V	V
<i>Cantharellus jebbi</i> Hoeksema, 1993	2	1	LC	V
<i>Caulastrea furcata</i> Dana, 1846	5	1.6	LC	V

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Coelosera mayeri</i> Vaughan, 1918	23	1.56	LC	LC
<i>Coscinaraea columna</i> (Dana, 1846)	11	1.27	LC	LC
<i>Coscinaraea crassa</i> Veron & Pichon, 1980	6	1.67	NT	NT
<i>Coscinaraea monile</i> (Forskål, 1775)	5	1.6	LC	V
<i>Ctenactis crassa</i> (Dana, 1846)	15	1.47	LC	LC
<i>Ctenactis echinata</i> (Pallas, 1766)	11	1.6	LC	LC
<i>Cycloseris tenuis</i> (Dana, 1846)	2	1	LC	V
<i>Cyphastrea agassizi</i> (Vaughan, 1907)	1	1	V	V
<i>Cyphastrea chalcidicum</i> (Forskål, 1775)	6	6.51	LC	NT
<i>Cyphastrea microphthalma</i> (Lamarck, 1816)	35	1.6	LC	LC
<i>Cyphastrea serialia</i> (Forskål, 1775)	23	6.13	LC	LC
<i>Echinophyllia aspera</i> (Ellis and Solander, 1788)	38	1.32	LC	LC
<i>Echinophyllia orpheensis</i> Veron & Pichon, 1980	27	1.44	LC	LC
<i>Echinophyllia patula</i> (Hodgson & Ross, 1981)	3	1.33	LC	V
<i>Echinophyllia taylorae</i> Veron, 2000	1	1	NT	V
<i>Echinopora lamellosa</i> (Esper, 1795)	27	1.52	LC	LC
<i>Euphyllia ancora</i> Veron & Pichon, 1980	1	1	V	V
<i>Euphyllia glabrescens</i> (Chamisso & Eysenhardt, 1821)	8	6.39	NT	NT
<i>Favia favius</i> (Forskål, 1775)	16	1.44	LC	LC
<i>Favia maritima</i> (Nemanzo, 1971)	1	6	NT	V
<i>Favia matthaii</i> Vaughan, 1918	44	1.73	NT	LC
<i>Favia pallida</i> (Dana, 1846)	31	1.65	LC	LC
<i>Favia rotumana</i> (Gardiner, 1899)	13	1.31	LC	LC
<i>Favia rotundata</i> (Veron & Pichon, 1977)	31	1.35	NT	LC
<i>Favia speciosa</i> Dana, 1846	31	1.57	LC	LC
<i>Favia stelligera</i> (Dana, 1846)	40	1.75	NT	LC

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Favites abdita</i> (Ellis and Solander, 1786)	4	1.5	NT	V
<i>Favites bestae</i> Veron, 2000	6	1.33	NT	NT
<i>Favites chinensis</i> (Verrill, 1866)	28	1.54	NT	LC
<i>Favites complanata</i> (Ehrenberg, 1834)	3	1	NT	V
<i>Favites flexuosa</i> (Dana, 1846)	7	1.43	NT	NT
<i>Favites halicora</i> (Ehrenberg, 1834)	24	1.46	NT	LC
<i>Favites pentagona</i> (Esper, 1974)	19	1.37	LC	LC
<i>Favites russelli</i> (Wells, 1954)	8	1.5	NT	NT
<i>Fungia concinna</i> Verrill, 1864	10	1.3	LC	NT
<i>Fungia cyclolites</i> Lamarck, 1816	6	1.1	LC	NT
<i>Fungia fungities</i> (Linnaeus, 1758)	9	1.22	NT	NT
<i>Fungia granulosa</i> Klunzinger, 1879	21	1.86	LC	LC
<i>Fungia horrida</i> Dana, 1846	34	1.38	LC	LC
<i>Fungia paumotensis</i> Stutchbury, 1833	15	1.6	LC	LC
<i>Fungia repanda</i> Dana, 1846	25	1.84	LC	LC
<i>Fungia scruposa</i> Klunzinger, 1879	22	1.36	LC	LC
<i>Fungia scutaria</i> Lamarck, 1801	52	1.71	LC	LC
<i>Galaxea astreata</i> (Lamarck, 1816)	12	1.5	V	LC
<i>Galaxea fascicularis</i> (Linnaeus, 1767)	8	1.63	NT	NT
<i>Galaxea horrescens</i> (Dana, 1846)	14	1.86	LC	LC
<i>Gardinoseris planulata</i> (Dana, 1846)	53	6.3	LC	LC
<i>Goniastrea aspera</i> Verrill, 1905	20	1.7	LC	LC
<i>Goniastrea australensis</i> (Milne Edwards and Haime, 1857)	1	6	LC	V
<i>Goniastrea edwardsi</i> Chevalier, 1971	58	1.88	LC	LC
<i>Goniastrea favulus</i> Dana 1846	44	1.84	LC	LC
<i>Goniastrea pectinata</i> (Ehrenberg, 1834)	34	7.32	LC	LC

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites n=104	mean local abundance per 2500m2	Global Status	Regional Status
<i>Goniastrea retiformis</i> (Lamarck, 1816)	51	1.82	NT	LC
<i>Goniopora lobata</i> Milne, Edwards & Haime, 1860	34	7.23	NT	LC
<i>Goniopora minor</i> Crossland, 1952	3	1.33	NT	V
<i>Goniopora somaliensis</i> Vaughan, 1907	10	1.6	LC	NT
<i>Goniopora tenuidens</i> (Quelch, 1886)	1	1	LC	V
<i>Halomitra pileus</i> (Linnaeus, 1758)	16	1.375	LC	LC
<i>Herpolitha limax</i> (Houttuyn, 1772)	49	1.55	LC	LC
<i>Hydnophora exesa</i> (Pallas, 1766)	26	1.42	NT	LC
<i>Hydnophora microconos</i> (Lamarck, 1816)	12	1.5	NT	LC
<i>Hydnophora pilosa</i> (Veron, 1985)	18	1.39	LC	LC
<i>Hydnophora rigida</i> (Dana, 1846)	7	1.43	LC	NT
<i>Isopora crateriformis</i> (Gardiner, 1898)	1	1	V	V
<i>Isopora cuneata</i> (Dana, 1846)	15	1.6	V	LC
<i>Isopora palifera</i> (Lamarck, 1816)	55	18.6	NT	LC
<i>Leptastrea pruinosa</i> Crossland, 1952	24	1.375	LC	LC
<i>Leptastrea purpurea</i> (Dana, 1846)	3	1.33	LC	V
<i>Leptastrea transversa</i> Klunzinger, 1879	41	1.41	LC	LC
<i>Leptoria phrygia</i> (Ellis & Solander, 1786)	4	1	NT	V
<i>Leptoseris explanata</i> Yabe & Sugiyama, 1941	4	1.5	LC	V
<i>Leptoseris hawaiiensis</i> Vaughan, 1907	24	1.71	LC	LC
<i>Leptoseris incrustans</i> (Quelch, 1886)	3	1.33	V	V
<i>Leptoseris mycetoseroides</i> Wells, 1954	42	1.76	LC	LC
<i>Leptoseris yabei</i> (Pillai & Sheer, 1976)	12	1.5	V	LC
<i>Lithophyllon mokai</i> Hoeksema, 1989	3	1	LC	V
<i>Lobophyllia corymbosa</i> (Forskål, 1775)	31	1.23	LC	LC
<i>Lobophyllia dentatus</i> Veron, 2000	3	1.33	V	V

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Lobophyllia hemprichii</i> (Ehrenberg, 1834)	42	1.26	LC	LC
<i>Lobophyllia pachysepta</i> Chevalier, 1975	9	1.22	NT	NT
<i>Merulina ampliata</i> (Ellis and Solander, 1786)	47	1.74	LC	LC
<i>Montastrea curta</i> (Dana, 1846)	33	1.85	LC	LC
<i>Montastrea salebrosa</i> (Nemenzo, 1959)	27	1.56	V	LC
<i>Montastrea valenciennesi</i> (Milne, Edwards & Haime, 1848)	20	1.4	NT	LC
<i>Montipora aequituberculata</i> Bernard, 1897	34	1.85	LC	LC
<i>Montipora angulata</i> (Lamarck, 1816)	15	1.27	V	LC
<i>Montipora caliculata</i> (Dana, 1846)	12	1.67	V	LC
<i>Montipora capitata</i> Dana, 1846	2	1	NT	V
<i>Montipora cocosensis</i> Vaughan, 1918	1	6	V	V
<i>Montipora crassituberculata</i> Bernard, 1897	30	1.77	V	LC
<i>Montipora danae</i> (Milne Edwards & Haime, 1851)	25	1.88	LC	LC
<i>Montipora digitata</i> (Dana, 1846)	1	1	LC	V
<i>Montipora efflorescens</i> Bernard, 1897	14	1.43	NT	LC
<i>Montipora foliosa</i> (Pallas, 1766)	17	1.65	NT	LC
<i>Montipora foveolata</i> (Dana, 1846)	36	1.58	NT	LC
<i>Montipora incrassata</i> (Dana, 1846)	28	1.75	NT	LC
<i>Montipora informis</i> Bernard, 1897	6	1.83	LC	NT
<i>Montipora mollis</i> Bernard, 1897	13	1.31	LC	LC
<i>Montipora monasteriata</i> (Forskål, 1775)	7	1.14	LC	NT
<i>Montipora nodosa</i> (Dana, 1846)	9	1.56	NT	NT
<i>Montipora peltiformis</i> Bernard, 1897	36	1.69	NT	LC
<i>Montipora tuberculosa</i> (Lamarck, 1816)	49	6.06	LC	LC
<i>Montipora turgescens</i> Bernard, 1897	31	6.87	LC	LC
<i>Montipora undata</i> Bernard, 1897	10	1.5	NT	NT

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Montipora venosa</i> (Ehrenberg, 1834)	5	1.4	NT	V
<i>Montipora verrucosa</i> (Lamarck, 1816)	41	1.68	LC	LC
<i>Oulphyllia crispa</i> (Lamarck, 1816)	48	1.5625	NT	LC
<i>Oxypora lacera</i> (Verrill, 1864)	1	1	LC	V
<i>Pachyseris speciosa</i> (Dana, 1846)	24	1.96	LC	LC
<i>Pavona cactus</i> (Forksål, 1775)	14	1.43	V	LC
<i>Pavona clavus</i> (Dana, 1846)	22	1.5	LC	LC
<i>Pavona duerdeni</i> Vaughan, 1907	52	1.94	LC	LC
<i>Pavona frondifera</i> (Lamarck, 1816)	1	6	LC	V
<i>Pavona maldivensis</i> (Gardiner, 1905)	30	1.87	LC	LC
<i>Pavona varians</i> Verrill, 1864	66	1.944	LC	LC
<i>Pavona venosa</i> (Ehrenberg, 1834)	48	1.625	V	LC
<i>Pectinia africanus</i> Veron, 2000	2	1	V	V
<i>Pectinia paeonia</i> (Dana, 1846)	4	1.25	NT	V
<i>Platygyra daedalea</i> (Ellis & Solander, 1786)	8	1.375	LC	NT
<i>Platygyra lamellina</i> (Ehrenberg, 1834)	2	1	NT	V
<i>Platygyra pini</i> Chevalier, 1975	32	1.52	LC	LC
<i>Platygyra ryukyuensis</i> Yabe & Sugiyama, 1936	59	1.55	NT	LC
<i>Platygyra sinensis</i> (Milne, Edwards & Haime, 1849)	25	1.48	LC	LC
<i>Plerogyra sinuosa</i> (Dana, 1846)	10	1.3	NT	NT
<i>Pocillopora damicornis</i> (Linnaeus, 1758)	51	6.54	LC	LC
<i>Pocillopora eydouxi</i> Milne Edwards and Haime, 1860	61	1.87	NT	LC
<i>Pocillopora meandrina</i> Dana, 1846	37	1.73	LC	LC
<i>Pocillopora verrucosa</i> (Ellis & Solander, 1786)	80	8.55	LC	LC
<i>Podobacia motuporensis</i> Veron, 1990	6	1.17	NT	NT
<i>Polyphyllia talpina</i> (Lamarck, 1801)	3	1.33	LC	V

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Porites annae</i> Crossland, 1952	1	6	NT	V
<i>Porites australiensis</i> Vaughan, 1918	39	6.09	LC	LC
<i>Porites cylindrica</i> Dana, 1846	59	8.28	NT	LC
<i>Porites horizontalata</i> Hoffmeister, 1925	11	1.91	V	LC
<i>Porites lichen</i> Dana, 1846	28	6.33	LC	LC
<i>Porites lobata</i> Dana, 1846	44	6.33	NT	LC
<i>Porites lutea</i> Milne, Edwards & Haime, 1851	66	8.76	LC	LC
<i>Porites nigrescens</i> Dana, 1846	2	1	V	V
<i>Porites rus</i> (Forksål, 1775)	28	8.79	LC	LC
<i>Porites vaughani</i> Crossland, 1952	39	1.74	LC	LC
<i>Psammocora contigua</i> Esper 1797	1	1	NT	V
<i>Psammocora explanulata</i> Horst, 1922	9	1.11	LC	NT
<i>Psammocora haimeana</i> Milne Edwards and Haime, 1851	33	1.48	LC	LC
<i>Psammocora nierstraszi</i> Horst, 1921	31	1.16	LC	LC
<i>Psammocora profundacella</i> Gardiner, 1898	20	1.15	LC	LC
<i>Psammocora superficialis</i> Gardiner, 1898	19	1.16	LC	LC
<i>Pseudosiderastrea tayami</i> Yabe and Sugiyama, 1935	27	1.85	NT	LC
<i>Scapophyllia cylindrica</i> Milne Edwards & Haime, 184	40	1.23	LC	LC
<i>Scolymia vitensis</i> Brüggemann, 1877	8	1.38	NT	NT
<i>Seriatopora aculeata</i> Quelch, 1886	23	1.78	V	LC
<i>Seriatopora calendrium</i> Ehrenberg, 1834	3	1	NT	V
<i>Seriatopora dentritica</i> Veron, 2000	18	6.51	V	LC
<i>Seriatopora hystrix</i> Dana, 1846	54	7.95	LC	LC
<i>Siderastrea savigniana</i> Milne, Edwards & Haime, 1850	14	1.36	LC	LC
<i>Stylocoeniella armata</i> (Ehrenberg 1834)	31	1.19	LC	LC

Table S3. Cont.

<i>Scleractinian Species-Authority</i>	Total Sites	mean local abundance	Global	Regional
	n=104	per 2500m2	Status	Status
<i>Stylocoeniella guentheri</i> Bassett-Smith, 1890	45	1.82	LC	LC
<i>Stylophora pistillata</i> Esper, 1797	51	6.3	NT	LC
<i>Stylophora subseriata</i> (Ehrenberg, 1834)	1	1	LC	V
<i>Symphyllia radians</i> Milne, Edwards & Haime, 1849	15	1.4	LC	LC
<i>Symphyllia recta</i> (Dana, 1846)	18	1.11	LC	LC
<i>Symphyllia valencienessi</i> Milne Edwards & Haime, 1849	6	1	LC	NT
<i>Turbinaria frondens</i> (Dana 1846)	17	1.29	LC	LC
<i>Turbinaria mesenterina</i> (Lamarck, 1816)	2	1	V	V
<i>Turbinaria retiformis</i> Bernard, 1896	23	1.26	V	LC
<i>Turbinaria stellulata</i> (Lamarck, 1816)	1	1	V	V

Table S4. Expected species richness and corresponding proportions of species listed in an elevated category of threat at the global scale (VU–*Vulnerable*, NT–*Near Threatened*).

	# of sites (n)	Total species (S)	S (14 sites)	Expected richness (ES)	NT with S	VU with ES	NT with ES
Rongelap	41	196	157	184	0.284264	0.173913	0.304348
Bikini	19	168	148	242	0.300578	0.123967	0.214876
Mili	20	156	155	197	0.310127	0.126904	0.248731
Majuro	14	129	134	180	0.27907	0.116667	0.2

Figure S1. Permutated species accumulation curves, showing different slopes that correspond to more homogeneous distributions (e.g. Majuro—flatter slope) up to more heterogeneous distribution of corals (e.g. Ailinginae, steep initial slope).

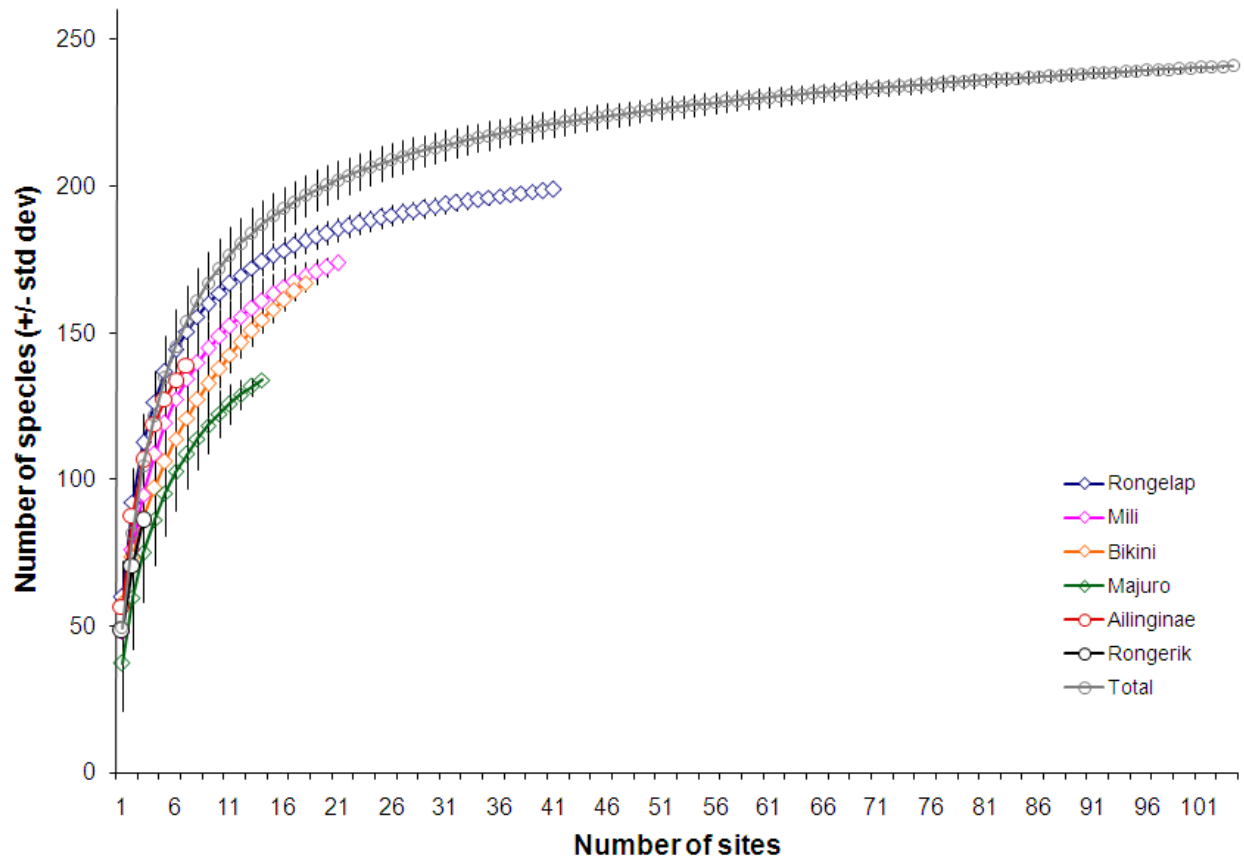


Figure S2. The ranked occupancy of coral species across the RMI that are globally classified as A). *Least Concern*; B). *Near Threatened*; and C). *Vulnerable*. Species in red are those that were recorded from 5 or less sites in the RMI.

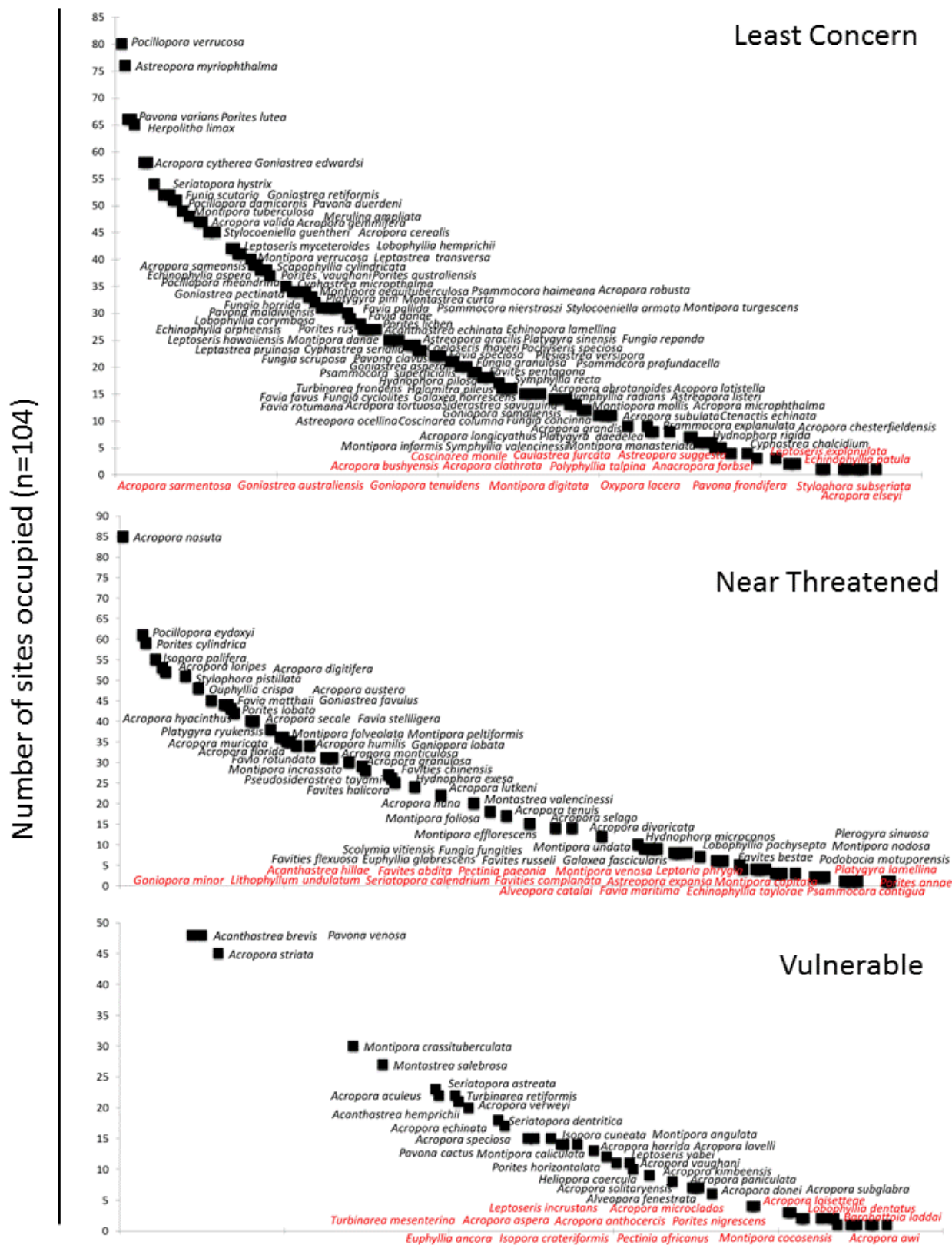


Figure S3. The ranked modal abundance category (+/- minimum and maximum abundance categories) of the 240 species recorded in this study.

