

Table S1. Sites surveyed during scientific cruises at the Maldives from 1997 to 2019. Site names follow Godfrey (2006)\* or local usage. Atolls and sites within atolls are ordered alphabetically.

Atoll	Sites	Years	Coordinates
Ari	Alikoirah	2001	3°56.521' N; 72°52.790' E
Ari	Badhibinhau	2012	3°52.572' N; 72°49.811' E
Ari	Bathalaa Maagaa Kan Beyru	2000, 2017, 2019	4°03.267' N; 72°57.425' E
Ari	Bathalaa Maagaa Kan Etheru	2001, 2017, 2019	4°03.548' N; 72°56.532' E
Ari	Berucolo Falhu	2001	4°02.565' N; 72°44.505' E
Ari	Bodu Thila Kandu	2001	4°02.466' N; 72°57.009' E
Ari	Bulhalafushi (Bulhaalhohi)	2004	3°44.294' N; 72°43.767' E
Ari	Cristina Thila	2009, 2010	4°13.932' N; 72°46.280' E
Ari	Dangethi House Reef	2004, 2017	3°36.172' N; 72°56.102' E
Ari	Dangethi House Reef South	2004, 2006	3°34.679' N; 72°57.028' E
Ari	Das Kurani Thila	2009	4°13.046' N; 72°45.835' E
Ari	Dega Thila	2003, 2004	3°50.663' N; 72°45.028' E
Ari	Dhefahfalhu	2003	4°04.916' N; 72°57.179' E
Ari	Dhinnolhu Finolhu	2000	4°08.412' N; 72°43.685' E
Ari	Dhonkadhhaa Hau	2012	3°32.564' N; 72°48.327' E
Ari	Dinolugaa Thila Gangehi	2009	4°10.182' N; 72°44.900' E
Ari	Eboodhoo	2004	3°48.819' N; 72°45.135' E
Ari	Ellaidhoo Kandu	1997, 2016	3°59.881' N; 72°57.525' E
Ari	Faanu Madugau	2001, 2003, 2006, 2016, 2017, 2019	3°55.527' N; 72°57.478' E
Ari	Faanu Madugau Naghili Thila	2000, 2003	3°55.831' N; 72°56.462' E
Ari	Farudhiggaa Thila	2004	3°55.527' N; 72°57.478' E
Ari	Fish Head	2001, 2004	3°56.537' N; 72°54.732' E
Ari	Fushi Falhu Reef	2016	3°56.817' N; 72°57.472' E
Ari	Fussaru Reef	2016	4°01.663' N; 72°57.561' E
Ari	Gangehi Falhu	2009	4°13.175' N; 72°45.293' E
Ari	Gangehi Kandu	2009	4°13.055' N; 72°44.444' E
Ari	Gangehi North	2009	4°13.268' N; 72°45.334' E
Ari	Halaveli House Reef	1997	4°02.457' N; 72°55.309' E
Ari	Halaveli Wreck	1997, 2016	4°03.220' N; 72°54.743' E
Ari	Himendhoo Dhekunu Kandu	1997	3°56.641' N; 72°42.330' E
Ari	Kadhohudhoo	2012	4°00.259' N; 72°52.830' E
Ari	Kalhahandhi Huraa	1997	3°48.128' N; 72°42.636' E
Ari	Kamdunma Giri	2009	4°13.819' N; 72°46.132' E
Ari	Kandualhi Efferata	2009	4°13.022' N; 72°44.645' E
Ari	Kandualhi Mifferata	2009	4°13.054' N; 72°44.876' E
Ari	Kari Beyru Thila	1997	4°05.727' N; 72°56.987' E
Ari	Kubulabhi Beyru	2010	3°54.645' N; 72°57.497' E
Ari	Kubulabhi Etheru	2017, 2019	3°55.020' N; 72°55.998' E
Ari	Kuda Giri Bodufoludhoo	2007, 2010	4°11.154' N; 72°47.196' E
Ari	Kudadhoo Faru	2003	3°48.749' N; 72°57.934' E
Ari	Maa Faru	2003	4°06.287' N; 72°42.851' E
Ari	Maalholu Uthuru	2000	4°00.265' N; 72°43.463' E
Ari	Maalholu Uthuru Kandu	2000	4°00.289' N; 72°42.589' E
Ari	Maalhoss Thila	1997	4°00.029' N; 72°43.620' E
Ari	Maavaru Faru Beyru	1997, 2012, 2017, 2019	3°52.588' N; 72°42.295' E
Ari	Maavaru Faru Etheru	2017, 2019	3°50.580' N; 72°44.183' E
Ari	Maayafushi	2003, 2012	4°05.199' N; 72°52.515' E
Ari	Maaya Thila	1997, 2001	4°05.513' N; 72°51.382' E
Ari	Madoogali	2003	4°05.727' N; 72°45.341' E
Ari	Mandhoo Beyru	2012	3°42.478' N; 72°41.906' E
Ari	Mathiveri Beyru	2009	4°13.058' N; 72°44.276' E
Ari	Miyaruga Thila	2009	4°10.382' N; 72°45.345' E
Ari	Moofushi Kandu	1997	3°52.760' N; 72°43.483' E
Ari	Mushimasingili	2006	3°58.029' N; 72°54.394' E
Ari	Ran Faru	2012	4°01.658' N; 72°42.200' E
Ari	Rashid Finolhu	2006	3°35.521' N; 72°52.100' E
Ari	Thundufushi Falhu	2003	3°47.338' N; 72°41.887' E
Ari	Toshiganduhau	2012	3°43.400' N; 72°48.124' E

Ari	Ukulas Beyru	2010	4°13.080' N; 72°52.995' E
Ari	Velidhoodhiggaa	2007, 2010	4°10.125' N; 72°47.325' E
Ari	Viligilee Falhu (Fesdu Wreck)	2000, 2016	3°59.357' N; 72°46.687' E
Felidhoo	Ablo Gha	2013	3°36.387' N; 73°26.877' E
Felidhoo	Alimathaa	1998	3°35.844' N; 73°29.771' E
Felidhoo	Anbaraa Reef	2018	3°22.288' N; 73°26.423' E
Felidhoo	Biology Faru	2006	3°36.304' N; 73°23.709' E
Felidhoo	Bolikey Falhu	2013, 2018	3°36.364' N; 73°30.465' E
Felidhoo	Devana Kandu	2002	3°34.959' N; 73°30.325' E
Felidhoo	Dhiggaluvashee Kuda Kandu Beyru	2005, 2014	3°38.103' N; 73°21.376' E
Felidhoo	Dhiggaluvashee Kuda Kandu Etheru	1998	3°37.664' N; 73°22.300' E
Felidhoo	Dhiggaru Falhu	2005, 2014	3°29.210' N; 73°41.762' E
Felidhoo	Dhigu Falhu	1998	3°28.031' N; 73°20.359' E
Felidhoo	Felidhoo Kandu Beyru	2015	3°41.010' N; 73°24.966' E
Felidhoo	Fotteyo	1998, 2002	3°30.313' N; 73°44.569' E
Felidhoo	Fotteyo Bodufushi	2005	3°27.048' N; 73°45.265' E
Felidhoo	Fufalhi Falhu	2006	3°39.213' N; 73°30.171' E
Felidhoo	Fushi Falhu Beyru	2018	3°27.957' N; 73°39.103' E
Felidhoo	Fushi Falhu Etheru	2015	3°39.853' N; 73°24.373' E
Felidhoo	Fushi Kandu	2014	3°21.984' N; 73°39.231' E
Felidhoo	Giulia Faru	2013	3°37.466' N; 73°27.154' E
Felidhoo	Goro Giri	2018	3°37.977' N; 73°23.218' E
Felidhoo	Hulhidhoo Giri	2002	3°29.433' N; 73°31.533' E
Felidhoo	Hulhidhoo Kandu	1998	3°29.859' N; 73°32.650' E
Felidhoo	Hurahu Kandu	1998	3°29.046' N; 73°42.018' E
Felidhoo	Kashavaru Falhu Beyru	2018	3°26.822' N; 73°35.763' E
Felidhoo	Kashavaru Falhu Etheru	2018	3°26.298' N; 73°36.025' E
Felidhoo	Kuda Aanuvvari Falhu	2005	3°22.313' N; 73°24.651' E
Felidhoo	Kudadhiggaru Falhu Beyru	2005, 2013	3°34.288' N; 73°30.417' E
Felidhoo	Kudadhiggaru Falhu Etheru	2005	3°33.811' N; 73°29.477' E
Felidhoo	Masaraa Falhu	2005, 2013	3°38.701' N; 73°21.747' E
Felidhoo	Miyaru Kandu	2002, 2015	3°35.868' N; 73°30.241' E
Felidhoo	Rakeedhoo	2014	3°19.057' N; 73°28.151' E
Felidhoo	Rakeedhoo Kandu	2002	3°18.550' N; 73°28.283' E
Felidhoo	Tava Faru Alimatha	2002	3°35.167' N; 73°29.333' E
Felidhoo	Vashugiri	2014	3°37.725' N; 73°22.750' E
Felidhoo	Vattaru Falhu	1998	3°13.197' N; 73°25.158' E
Felidhoo	Vattarurah Beyru	1998	3°13.188' N; 73°25.639' E
Felidhoo	Vattarurah Etheru	2002	3°13.450' N; 73°25.900' E
Gaafu Alifu	Kadheddhu Beyru	2009	0°29.447' N; 72°59.075' E
Gaafu Alifu	Koamas Giri	2009	0°33.707' N; 73°14.430' E
Gaafu Alifu	Kooddoo Beyru	2009	0°44.368' N; 73°26.355' E
Gaafu Alifu	Kuredhdhoo Finolhu	2009	0°39.498' N; 73°26.096' E
Gaafu Alifu	Mahadhdhoo Beyru	2009	0°34.996' N; 73°31.119' E
Gaafu Alifu	Nilandhoo Beyru	2009	0°38.108' N; 73°27.232' E
Gaafu Alifu	Tippe Giri	2009	0°38.146' N; 73°26.245' E
Gaafu Alifu	Wiringgili House Reef	2009	0°45.050' N; 73°25.906' E
North Malé	Deco Faru	2008	4°38.480' N; 73°26.647' E
North Malé	Farukolhufushi Back Faru	1999	4°14.404' N; 73°33.274' E
North Malé	Gaafaru Kandu	1999	4°41.682' N; 73°26.833' E
North Malé	Gaafaru Kandu Beyru	1999	4°41.759' N; 73°27.109' E
North Malé	Himmafushi Kandu	1999	4°18.835' N; 73°34.735' E
North Malé	Hulumale Beyru	2015, 2016	4°14.238' N; 73°33.322' E
North Malé	Jamal Thila	2013	4°19.900' N; 73°22.600' E
North Malé	Koddipparu Ikea Kuda Giri	2008	4°19.264' N; 73°22.631' E
North Malé	Kudabados	2008	4°15.973' N; 73°30.098' E
North Malé	Kuda Kalhi (Banana Reef)	2015, 2016, 2018, 2019	4°14.032' N; 73°31.945' E
North Malé	Kuda Vattaru	2010	4°15.709' N; 73°22.851' E
North Malé	Maabadhi (Prisca Head)	1999	4°29.172' N; 73°41.736' E
North Malé	Mai Falhu	1999, 2008	4°37.322' N; 73°34.804' E
North Malé	Meerufenfushi	2001	4°27.240' N; 73°42.536' E
North Malé	Muli Falhu	1999	4°40.097' N; 73°33.082' E
North Malé	Olhahali	1999	4°41.478' N; 73°27.248' E

North Malé	Rasfari	2001, 2007	4°24.315' N; 73°22.029' E
North Malé	Reethi Rah	2008	4°30.635' N; 73°26.026' E
North Malé	Thulusdhoo	1999	4°22.535' N; 73°39.316' E
North Malé	Valentina Faru	2013	4°19.764' N; 73°24.009' E
Rasdho	Kuramathi Beyru	2010	4°15.388' N; 72°58.878' E
Rasdho	Madivaru	1997, 2000, 2001, 2010	4°16.215' N; 73°00.405' E
Rasdho	Madivaru Finolhu	1997, 2001	4°16.441' N; 72°59.664' E
Rasdho	Madivaru Kandu	1997, 2000	4°15.881' N; 73°00.081' E
Rasdho	Rasdho Kandu	1997	4°15.863' N; 72°59.893' E
South Malé	Ali Kuda Faru	2007	4°05.485' N; 73°25.614' E
South Malé	Bambine Faru (Olhuveli)	2003	3°50.590' N; 73°27.733' E
South Malé	Boldhuffaru Beyru	2007, 2012	4°05.565' N; 73°23.139' E
South Malé	Bolifushi	2004	4°06.226' N; 73°23.506' E
South Malé	Cocoa Corner	2015	3°58.568' N; 73°30.549' E
South Malé	Eboodho Finolhu	2003	4°05.282' N; 73°30.910' E
South Malé	Fushidiggaru Etheru	1999	3°59.704' N; 73°30.819' E
South Malé	Fushidiggaru Falhu North	2008, 2013	4°04.710' N; 73°32.344' E
South Malé	Gulhiggaathuhuraa	2002	3°58.633' N; 73°29.650' E
South Malé	Guraidho Kuda Giri	2005, 2014, 2015, 2016	3°54.234' N; 73°26.688' E
South Malé	Kandooma Beyru	2008, 2016, 2018, 2019	3°54.008' N; 73°28.570' E
South Malé	Kandooma Pass	1999	3°54.557' N; 73°28.167' E
South Malé	Kuda Finolhu	2015	3°59.931' N; 73°23.613' E
South Malé	Kuda Giri Boduhuraa	2001, 2002	3°58.416' N; 73°29.638' E
South Malé	Kuda Giri Wreck	2001, 2007	3°58.436' N; 73°29.481' E
South Malé	Lhosfushi Kandu	1999, 2002	3°53.669' N; 73°28.315' E
South Malé	Maadhoo Falhu	2001, 2005, 2006, 2008	3°52.959' N; 73°28.085' E
South Malé	Maadhu Faru Beyru	2001, 2014, 2016, 2017	3°53.296' N; 73°28.186' E
South Malé	Maafushi	2008	3°56.757' N; 73°30.006' E
South Malé	Miyaru Faru	2006, 2007, 2008, 2014, 2015	4°02.594' N; 73°32.662' E
South Malé	Ran Faru	2003	3°55.686' N; 73°21.020' E
South Malé	Sexy Finolhu	2006	3°57.318' N; 73°27.500' E
South Malé	Vaadhoo Caves	2018	4°07.713' N; 73°27.329' E
South Malé	Vaagali Faru	2016	3°54.660' N; 73°22.631' E
South Malé	Velassaru	1999, 2001, 2003, 2005, 2012, 2017, 2019	4°07.356' N; 73°25.383' E
South Malé	Villivaru Kuda Giri	2002, 2008, 2015, 2017, 2018, 2019	3°54.148' N; 73°26.507' E
Thoddoo	Thoddoo East	2007	4°26.018' N; 72°57.995' E
Thoddoo	Thoddoo North-East	2007	4°26.551' N; 72°57.925' E

\* Godfrey, T. (2006). Dive Maldives: A Guide to the Maldives Archipelago. Third edition. Australia: Atoll Press.

Table S2. Percentage cover (in %, mean  $\pm$  s.e.) of live hard coral (HC), bleached coral (B), and recently dead coral (RDC) in the shallow reefs (5 m depth) surveyed in the Maldives during 2015, 2016, 2017, 2018, and 2019. L = lagoon reefs; O = ocean reefs. Site names follow Godfrey (2006) or local usage.

Year	Reef	Type	Code	HC (%)	B (%)	RDC (%)
2015	Fushi Falhu Etheru (Felidhoo)	L	4	71.3 $\pm$ 12.9	0	0
	Guraidhoo Kuda Giri (South Malé)	L	5	83.3 $\pm$ 10.3	0	0
	Kuda Finolhu (South Malé)	L	3	72 $\pm$ 12	0	0
	Kuda Kalhi (Banana Reef) (North Malé)	L	1	40 $\pm$ 10	0	0
	Villivaru Kuda Giri (South Malé)	L	2	50.7 $\pm$ 11	0	0
	Cocoa Corner (South Malé)	O	7	76 $\pm$ 9.6	0	0
	Felidhoo Kandu Beyru (Felidhoo)	O	8	75 $\pm$ 5.1	0	0
	Hulumale Beyru (North Malé)	O	6	40.7 $\pm$ 18.3	0	0
	Miyaru Faru (South Malé)	O	9	72.7 $\pm$ 8.9	0	0
	Miyaru Kandu (Felidhoo)	O	10	52.3 $\pm$ 7.5	0	0
2016	Guraidhoo Kuda Giri (South Malé)	L	5	12.3 $\pm$ 4.1	56 $\pm$ 17.8	10 $\pm$ 2.2
	Halaveli (Ari)	L	11	25.3 $\pm$ 9.9	34 $\pm$ 11	16.7 $\pm$ 1.7
	Kuda Kalhi (Banana Reef) (North Malé)	L	1	15.7 $\pm$ 3.5	6 $\pm$ 2.1	28.3 $\pm$ 6
	Vaagali Faru (South Malé)	L	12	36.3 $\pm$ 6	22.7 $\pm$ 4.7	15 $\pm$ 5
	Viligilee Falhu (Fesdu Wreck) (Ari)	L	13	21 $\pm$ 3	31.7 $\pm$ 20.5	34 $\pm$ 17.1
	Ellaidhoo Kandu (Ari)	O	14	44.7 $\pm$ 1.5	15.1 $\pm$ 5	6 $\pm$ 2.1
	Faanu Mudugau Beyru (Ari)	O	15	22 $\pm$ 1.2	50.1 $\pm$ 8.7	16.7 $\pm$ 4.4
	Fushi Falhu Reef (Ari)	O	16	20.7 $\pm$ 2.7	45 $\pm$ 7.8	15 $\pm$ 7.6
	Hulumale Beyru (North Malé)	O	6	15.3 $\pm$ 3.7	56.7 $\pm$ 3.3	18.3 $\pm$ 1.7
	Kandhooma Beyru (South Malé)	O	17	7.7 $\pm$ 1.3	73.3 $\pm$ 16.7	3.3 $\pm$ 0.5
	Maadhu Faru Beyru (South Malé)	O	18	17.7 $\pm$ 3.3	5 $\pm$ 0.7	48.3 $\pm$ 11.8
2017	Bathalaa Maagaa Kan Etheru (Ari)	L	19	35 $\pm$ 2.9	0	33.3 $\pm$ 6
	Dangethi House Reef (Ari)	L	20	1 $\pm$ 1	5 $\pm$ 5	75 $\pm$ 8.7
	Kubulabhi Etheru (Ari)	L	21	7 $\pm$ 4.6	2.3 $\pm$ 1.4	76.7 $\pm$ 8.8
	Maavaru Faru Etheru (Ari)	L	22	7.3 $\pm$ 2.7	5 $\pm$ 2.9	50 $\pm$ 15.3
	Villivaru Kuda Giri (South Malé)	L	23	8 $\pm$ 3.9	4.3 $\pm$ 0.9	26.3 $\pm$ 4.1
	Bathalaa Maagaa Kan Beyru (Ari)	O	24	50.3 $\pm$ 1.5	0	18.3 $\pm$ 6
	Faanu Madugau Beyru (Ari)	O	15	70.3 $\pm$ 7.5	1.3 $\pm$ 0.7	10 $\pm$ 2.3
	Maadhu Faru Beyru (South Malé)	O	18	44.7 $\pm$ 2.2	0	10 $\pm$ 1.5
	Maavaru Faru Beyru (Ari)	O	25	53.3 $\pm$ 9.3	0	25 $\pm$ 7.6
	Velassaru (South Malé)	O	26	22 $\pm$ 1	0	43.3 $\pm$ 4.4
2018	Anbaraa Reef (Felidhoo)	L	27	49.3 $\pm$ 8.1	0	0
	Goro Ghiri (Felidhoo)	L	28	16.3 $\pm$ 3.3	0.7 $\pm$ 0.3	2.7 $\pm$ 1
	Kashavaru Falhu Etere (Felidhoo)	L	29	35.7 $\pm$ 3	0	4.3 $\pm$ 3
	Kuda Kalhi (Banana Reef) (North Malé)	L	1	12 $\pm$ 1	0	0
	Villivaru Kuda Giri (South Malé)	L	2	19 $\pm$ 4.2	2.7 $\pm$ 1.5	1.3 $\pm$ 0.7
	Bolikey Falhu (Felidhoo)	O	30	40 $\pm$ 4	1.3 $\pm$ 1	1.3 $\pm$ 0.7
	Fushi Falhu Beyru (Felidhoo)	O	31	49.7 $\pm$ 8.9	0.7 $\pm$ 0.7	1.7 $\pm$ 0.3
	Kandooma Beyru (South Malé)	O	17	17.3 $\pm$ 1.6	2.3 $\pm$ 1.1	1.7 $\pm$ 0.5
	Kashavaru Falhu Beyru (Felidhoo)	O	32	63 $\pm$ 3.5	2.3 $\pm$ 0.7	2.3 $\pm$ 0.3
	Vaadhoo Caves (South Malé)	O	33	22.6 $\pm$ 3.7	2.3 $\pm$ 0.4	2.3 $\pm$ 0.3
2019	Bathalaa Maagaa Kan Etheru (Ari)	L	19	56.7 $\pm$ 2.5	2.7 $\pm$ 0.6	0
	Kubulabhi Etheru (Ari)	L	21	18.3 $\pm$ 6.7	0	0
	Kuda Kalhi (Banana Reef) (North Malé)	L	1	18.7 $\pm$ 7.1	2.5 $\pm$ 0.7	0
	Maavaru Faru Etheru (Ari)	L	22	13 $\pm$ 7	0	0
	Villivaru Kuda Giri (South Malé)	L	2	37.7 $\pm$ 4	0	0
	Bathalaa Maagaa Kan Beyru (Ari)	O	24	52.3 $\pm$ 4	2.3 $\pm$ 0.6	0
	Faanu Madugau Beyru (Ari)	O	15	36.7 $\pm$ 13.1	4.7 $\pm$ 2.1	0
	Kandooma Beyru (South Malé)	O	17	34 $\pm$ 5.6	7.7 $\pm$ 4	0
	Maavaru Faru Beyru (Ari)	O	25	71.0 $\pm$ 12.2	0	0
	Velassaru (South Malé)	O	26	47.7 $\pm$ 6	0	0