



Citation

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<u>Data Field</u>	<u>Year collected</u>	<u>Currently collected?</u>	<u>Metadata</u>
Batch	ALL	Y	Batch identifies the survey event. There are 20 total batches with 15 late summer surveys, 4 winter surveys and 1 intermediate survey in May of 2010.
			Batch Identifiers use 'A', 'B', and 'C' to distinguish different surveys within the same year.
			<u>Batch number / Batch Identifier / Survey Months</u>
			1 / 2005 / (Aug-Sep)
			2 / 2006A / (Jan-Mar) - Post bleaching winter survey (Not included this report)
			3 / 2006B / (Aug-Oct)
			4 / 2007 / (Aug-Oct)
			5 / 2008 / (Aug-Nov)
			6 / 2009 / (Aug-Nov)
			7 / 2010A / (Jan-Feb) - Cold water event survey (Not included this report)
			8 / 2010B / (May) - Post cold water event survey (Not included this report)
			9 / 2010C / (Aug-Sep)
			10 / 2011 / (Aug-Sep)
			11 / 2012 / (Aug-Sep)
			12 / 2013 / (Sep-Oct)
			13 / 2014 / (Sep-Oct)
			14 / 2015A / (Feb) - Post bleaching winter survey (Not included this report)
			15 / 2015B / (Jul-Oct)
			16 / 2016A / (Feb-Mar) - Post bleaching winter survey (Not included this report)
			17 / 2016B / (Sep-Oct)
			18 / 2017A / (Aug-Oct)
			19 / 2017B / (Aug-Oct) - IRMA Rapid Response Research Cruise (Not included this report)
			20 / 2018 / (Aug-Oct)
			21 / 2019 / (Aug-Oct)
			22 / 2020 / (Aug-Sep)
Site	ALL	Y	Alphabetical Batch-identifier ("A" in 2005 to "U" in 2020) followed by a four digit numerical code for each site.
			1000 numbers = Primary sample sites
			2000 numbers = Secondary or "backup" sites when a primary site is not appropriate habitat or the secondary site is more convenient.
			3000 & 4000 numbers = Strategic Sites or sites that were not included the original list of assigned sites and the location was chosen in the field.
			####-2 numbers = Sample sites that were duplicate numbers in the same Batch dataset and had to be assigned a "-2" to differentiate them from one another (i.e. 1035-2).
			2017-IRMA sites are not included in this report. These sites were also not randomly selected but still utilize 1000s and 2000s. These sites were sampled in October 2017 during a research cruise to document hurricane impacts. This effort only sampled sites in the Florida Keys. For more information on this effort, contact Jennifer Stein (Jennifer.Stein@MyFWC.com).

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Site cont.			2019-MQ sites included in this report were collected in the Marquesas subregion in August 2019. Due to the lack of benthic habitat data in the Marquesas, these sites were pre-selected based on known coral habitat and were not apart of the stratified random sample draw.
			2020-MQ20 sites included in this report were collected in the Marquesas subregion in August 2020. Due to the lack of benthic habitat data in the Marquesas, these sites were pre-selected based on known coral habitat and were not apart of the stratified random sample draw.
			Total survey area per site: 2005-2020 20m ² (two transects). If one transect is missing from the dataset, it is due to no corals >4cm observed on the missing transect. However, since the transect was surveyed, 20m ² should remain the total survey area at each site.
			During the 2020 DRM season, two additional belt transects were completed at each survey site (transects 3 and 4). Transects 3 and 4 only targeted 10 coral species known to be susceptible to SCTLTD. Data from Transects 3 and 4 are not included in this report. Please contact Jennifer.Stein@myfwc.com to request data from Transects 3 and 4.
Transect	ALL	Y	Transect dimensions: 1m width x 10m length = 10m ² .
			From 2005-2019, two belt transects were completed at each site. If there is only one transect for a site within the dataset, it is due to no corals >4cm (excluding <i>Millepora</i> spp.) observed along the other transect.
			Starting in 2020, four belt transects were completed at each site. Along Transects 1 and 2, all coral species >4cm were recorded. Along Transects 3 and 4, only ten coral species known to be susceptible to Stony Coral Tissue Loss Disease >4cm were recorded. Those ten coral species are as follows: <i>Colpopyllia natans</i> , <i>Dichocoenia stokesii</i> , <i>Diploria labyrinthiformis</i> , <i>Meandrina meandrites</i> , <i>Mussa angulosa</i> , <i>Mycetophyllia aliciae</i> , <i>M. ferox</i> , <i>M. lamarckiana</i> , <i>Pseudodiploria clivosa</i> , <i>P. strigosa</i> .
			Data from Transects 3 and 4 is not included in this report since it only targets 10 coral species and should not be analyzed with all species data from Transects 1 and 2. To obtain data from Transects 3 and 4 please email Jennifer.Stein@myfwc.com.
Date	ALL	Y	Date of survey. (MM/DD/YYYY)
Latitude	ALL	Y	Decimal Degrees. The coordinates may change from those originally assigned to a sample site if a surveyor chooses to move the location to appropriate habitat.
Longitude	ALL	Y	Decimal Degrees. The coordinates may change from those originally assigned to a sample site if a surveyor chooses to move the location to appropriate habitat.
			NOTE: If the location of the survey is moved farther than 50 meters from the original sample location, the new survey site will be assigned a Strategic Site number by the online data entry system (3000's).
Depth	ALL	Y	Depth of transect in feet.
			NOTE: From 2005-2017 two depth measurements were collected along each transect at a site. Starting in 2018, it was reduced to only one measurement per transect.
			The depth values in this report from 2005-2017 are a single measurement and not an average of both.
Subregion	ALL	Y	Latitudinal framework to divide up the reef for surveying.
			<u>Subregion / Years Surveyed / Notes</u>

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Subregion Cont.			<u>Martin</u> / 2005, 2006, 2008-2012, 2014-2016, 2020
			<u>Palm Beach</u> / 2005-2013 / Starting in 2014, the Palm Beach Subregion was divided into North Palm Beach and South Palm Beach Subregions.
			<u>North Palm Beach</u> / 2014, 2019-2020 / Starting in 2014, the Palm Beach Subregion was divided into North Palm Beach and South Palm Beach Subregions.
			<u>South Palm Beach</u> / 2014-2016, 2018-2020 / Starting in 2014, the Palm Beach Subregion was divided into North Palm Beach and South Palm Beach Subregions.
			<u>Deerfield</u> / 2014-2016, 2019 / Starting in 2014, the Deerfield Subregion was split from the Broward Subregion to become its own Subregion.
			<u>Broward</u> / 2005-2013 / Starting in 2014, the Broward Subregion was merged with Miami to become the Broward-Miami Subregion.
			<u>Broward-Miami</u> / 2014-2020 / Starting in 2014, the Broward Subregion was merged with Miami to become the Broward-Miami Subregion.
			<u>Biscayne</u> / 2005-2020
			<u>Upper Keys</u> / 2005-2020 / Starting in 2017, the Upper Keys was divided into Upper Keys and Middle-Upper Keys Transition.
			<u>Mid-Upper Keys Transition</u> / 2017-2020 / Starting in 2017, the Upper Keys was divided into Upper Keys and Middle-Upper Keys Transition.
			<u>Middle Keys</u> / 2005-2020
			<u>Lower Keys</u> / 2005-2020
			<u>Marquesas</u> / 2007, 2019-2020
			<u>Tortugas--Dry Tortugas NP</u> / 2007, 2009, 2011, 2012, 2014-2020 / DRM surveys in the Dry Tortugas area started in 2007.
			<u>Tortugas--Tortugas Bank</u> / 2007 / Only surveyed in 2007.
Zone	ALL	Y	Cross-shelf framework to divide up the reef for surveying. Zones are based on distance from shore and depth.
Habitat	ALL	Y	Habitat distinction within the Subregion and Zones.
			<u>Code and Habitat Description</u>
			CONT_HR = Contiguous reef, high relief
			CONT_LR = Contiguous reef, low relief
			CONT_MR = Contiguous reef, moderate relief
			CPDP_LR = Colonized pavement, deep, low relief
			CPSH_HR = Colonized pavement, shallow, high relief
			CPSH_LR = Colonized pavement, shallow, low relief
			ISOL_HR = Isolated reef structures, high relief
			ISOL_LR = Isolated reef structures, low relief
			ISOL_MR = Isolated reef structures, moderate relief
			LIRI_HR = Linear reef, inner reef line, high relief
			LIRI_LR = Linear reef, inner reef line, low relief
			LIRM_HR = Linear reef, middle reef line, high relief
			LIRM_LR = Linear reef, middle reef line, low relief
			LIRO_HR = Linear reef, outer reef line, high relief
			LIRO_LR = Linear reef, outer reef line, low relief
			OTHR_NA = Other non-reef habitat
			PTDP_HR = Patch reefs, deep, high relief

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Habitat cont.			PTDP_LR = Patch reefs, deep, low relief
			PTSH_HR = Patch reefs, shallow, high relief
			PTSH_LR = Patch reefs, shallow, low relief
			RGDP_HR = Reef ridge, deep, high relief
			RGSH_HR = Reef ridge, shallow, high relief
			RGSH_LR = Reef ridge, shallow, low relief
			RUBB_LR = Reef rubble, low relief
			SAND_NA = Sand
			SGRS_NA = Seagrass
			SPGR_HR = Spur-groove reef, high relief
			SPGR_LR = Spur-groove reef, low relief
			UCHB_LR = Unconsolidated hardbottom, low relief
			UNCR_UN = Unclassified reef
			UNDF_UN = Undefined, unknown
Species	ALL	Y	Four letter code to identify coral species. First letter = First letter of Genus, Following letters = First three letters of Species. If Species is unknown, the four digit code will be the first four letters of the Genus.
			The species codes are listed separately at the end of this document 'Coral Species Code'
			NOTE: Starting in 2018, Millepora spp. were no longer recorded during DRM surveys and are not included in this report.
			Starting in 2020, four belt transects were completed at each site. Along Transects 3 and 4, only ten species were targeted. Those species are outlined in the 'Transect' section of this metadata report.
Width	ALL	Y	Maximum diameter of coral colony from a planar view. Measured in centimeters. Only corals > 4 cm are included in this report.
Height	ALL	Y	Maximum perpendicular measurement (height) of coral colony. Measured in centimeters. NULL = No Entry. Only corals > 4 cm are included in this report.
Bleaching	ALL	Y	Identifies symptoms of stress that results in loss of coral tissue color.
			<u>Codes and Descriptions</u>
			(P) = Pale (Tissue color is lighter than normal healthy tissue)
			(PB) = Partially Bleached (Portions of the coral have a complete loss of color)
			(BL) = Bleached (100% of coral tissue has lost its color and appears white)
Old Mort 'Old'	ALL	Y	Percent of the coral colony that has died and is covered with turf algae or macroalgae.
Total RM 'Recent'	2005-2017	N	Percent of the coral colony with recent mortality that has not been colonized by turf algae, macroalgae or other organisms. For 2018-2020, this value is the sum of 'Other Recent Mortality' and 'Disease Recent Mortality'.
Other RM 'oPercRecMort'	2018-2020	Y	Percent of the coral colony with recent mortality not from disease that has not been colonized by turf algae, macroalgae or other organisms. Other causes of recent mortality may be biotic or abiotic. Prior to 2018 values are NULL.
Dis RM 'dPercRecMort'	2018-2020	Y	Percent of the coral colony with recent mortality from disease that has not been colonized by turf algae, macroalgae or other organisms. Prior to 2018 values are NULL.
TL Pattern	2018, 2019	N	If recent mortality from disease is observed, the surveyor will describe the pattern of the lesion(s).

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The below data fields are not included in this report			
To obtain data from fields listed below, please contact Jennifer Stein (Jennifer.Stein@MyFWC.com).			
Surveyor	ALL	Y	Primary data collector for a transect.
Shared	ALL	Y	Did the primary data collector for a transect have help from another surveyor? If so, the other surveyor will need to enter data for that transect or allow the primary surveyor to enter their data for them.
Buddy	ALL	Y	Dive buddy for the primary surveyor
Habitat Type "fhabitat"	2018-2020	Y	fhabitat = field habitat. One of four distinctions identified by the surveyor underwater to help in refining the grid file for better site allocation in future surveys.
			NOTE: This field is different from the 'Habitat' field assigned by the data entry system.
			Isolated Reef
			Reef Rubble
			Contiguous Reef Other
			Contiguous Reef Spur and Grove
Rugosity Msmts 1 - 10	2018-2020	Y	Ten rugosity measurements are collected along each transect. One rugosity measurement is collected within each square meter of a transect. Measurements are in centimeters. Rugosity measurements are only collected along Transects 1 and 2. No rugosity was collected along Transects 3 and 4 in 2020.
Diadema Present	2006-2020	Y	Presence / absence of Diadema in the visible area surrounding your transect.
ACER Present	2006-2020	Y	Presence / absence of <i>Acropora cervicornis</i> in the visible area surrounding your transect.
APAL Present	2006-2020	Y	Presence / absence of <i>Acropora palmata</i> in the visible area surrounding your transect.
DCYL Present	2006-2020	Y	Presence / absence of <i>Dendrogyra cylindricus</i> in the visible area surrounding your transect.
MALC - NB, P, PB, BL - Count	2015-2017	N	Starting in 2015, Millepora spp. were tallied in one of the four bleaching categories. Prior to 2015, Millepora spp. were recorded and measured the same as all other coral species within the belt transects. In 2018, recording Millepora spp. were eliminated from the survey.
			NB = Millepora spp. was not bleached.
			P = Millepora spp. was pale.
			PB = Millepora spp. was partially bleached.
			BL = Millepora spp. was fully bleached.
Isolates	2005-2017	N	The number of isolated areas of live tissue on a single colony separated by old mortality. NOTE: Starting in 2018, this data was no longer collected.
Impacts	2017 only	N	This field was added in 2017 to document impacts from Hurricane Irma. This data is not included in the query.
			<u>Codes and Impact Descriptions</u>
			(A) = Abrasion
			(D) = Dislodged
			(B) = Broken
			(S) = Sediment Cover
Comments	2005-2020	Y	Surveyor could provide additional information on a coral colony.

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Juv. Coral Abundance (3 Families)	2020	Y	Starting in 2020, juvenile coral abundances of three target families was collected along four belt transects (1, 2, 3, 4). The three target families are as follows: Mussinae, Faviinae, and Meandrinidae.
			These three coral families are known to be susceptible to SCTLTD.
			Please contact Jennifer.Stein@myfwc.com for more information.
Below are the species listed in the database			
Coral Species Codes (Former names are not used in the DRM database)			
Coral Species Codes			ACER = Acropora cervicornis
			APAL = Acropora palmata
			APRO = Acropora prolifera
			ACRO = Acropora sp.
			AAGA = Agaricia agaricites (Former name: Undaria agaricites)
			AFRA = Agaricia fragilis
			AGRA = Agaricia grahamae
			AHUM = Agaricia humilis (Former name: Undaria humilis)
			ALAM = Agaricia lamarcki
			AGAR = Agaricia sp.
			ATEN = Agaricia tenuifolia (Former name: Undaria tenuifolia)
			AUND = Agaricia undata
			CARB = Cladacora arbuscula
			CNAT = Colpophyllia natans
			DCYL = Dendrogyra cylindrus
			DSTO = Dichocoenia stokesi
			DLAB = Diploria labyrinthiformis
			DIPL = Diploria sp.
			EFAS = Eusmilia fastigiata
			FFRA = Favia fragum
			HCUC = Helioseris cucullata (Former name: Leptoseris cucullata)
			IRIG = Isophyllia rigida (Former name: Isophyllastraea rigida)
			ISIN = Isophyllia sinuosa
			ISOP = Isophyllia sp.
			MAUR = Madracis auretenra (Former name: Madracis mirabilis)
			MDEC = Madracis decactis
			MFOR = Madracis formosa
			MPHA = Madracis pharensis
			MSEN = Madracis senaria
			MADR = Madracis sp.
			MARE = Manicina areolata
			MJAC = Meandrina jacksoni
			MMEA = Meandrina meandrites
			MEAN = Meandrina sp.
			MALC = Millepora alcicornis (Not included in this report)
			MCOM = Millepora complanata (Not included in this report)
			MILL = Millepora sp. (Not included in this report)
			MCAV = Montastraea cavernosa
			MANG = Mussa angulosa

<u>Data Field</u>	<u>Year collected</u>	<u>Currently collected?</u>	<u>Metadata</u>
			MALI = Mycetophyllia aliciae
			MFER = Mycetophyllia ferox
			MLAM = Mycetophyllia lamarckiana (Includes former: Mycetophyllia danaana)
			MYCE = Mycetophyllia sp.
			ODIF = Oculina diffusa
			OCUL = Oculina sp.
			OVAR = Oculina varicosa
			OANN = Orbicella annularis (Former name: Montastrea annularis)
			OFAV = Orbicella faveolata (Former name: Montastrea faveolata)
			OFRA = Orbicella franksi (Former name: Montastrea franksi)
			ORBI = Orbicella sp.
			PAME = Phyllangia americana
			PAST = Porites astreoides
			PBRA = Porites cf. branneri
			PDIV = Porites divaricata
			PFUR = Porites furcata
			PPOR = Porites porites
			PORI = Porites sp.
			PCLI = Pseudodiploria clivosa (Former name: Diploria clivosa)
			PSEU = Pseudodiploria sp.
			PSTR = Pseudodiploria strigosa (Former name: Diploria strigosa)
			SCUB = Scolymia cubensis
			SLAC = Scolymia lacera
			SCOL = Scolymia sp.
			SWEL = Scolymia wellsi
			SRAD = Siderastrea radians
			SSID = Siderastrea siderea
			SIDE = Siderastrea sp.
			SBOU = Solenastrea bournoni
			SHYA = Solenastrea hyades
			SOLE = Solenastrea sp.
			SINT = Stephanocoenia intersepta
			UNKN = Unknown species