

## DATA DICTIONARY:

InPort dataset title: Elkhorn coral demographic monitoring

InPort dataset catalog number: 22436

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### **FILE NAME: PlotLocations\_SurveyCoverage**

Region: Florida Keys; Curaçao; or Navassa  
Reef: The reef name where the plot is located  
Plot: Designation for individual plots at each reef site (three to five per site)  
Depth: Average depth of plot in meters  
Latitude: Coordinate of center stake for each 7m radius circular plot  
Longitude: Coordinate of center stake for each 7m radius circular plot  
TotalSurvey: The number of survey occasions conducted at that plot  
Q1-Q58: Each column represents a sequential survey event (along with the time it occurred; see Survey\_Dates file for exact date) and indicates the type of data collected in each

*A = tagged colonies measured*

*B = all colonies in the plot mapped and measured*

*C = all colonies from prior mapping survey re-identified, new colonies mapped; All measured*

*D = tagged colony condition(s) recorded*

*E = snail and damselfish counts*

### **FILE NAME: Survey\_Dates**

Region: Florida Keys; Curaçao; or Navassa  
Reef: The reef name where the plot is located  
Plot: Permanent plot designation  
Q: Quarterly survey number starting with Q01 in spring 2004  
Date: Date that survey of that plot occurred

### **FILE NAME: ColonyID**

Region: Florida Keys; Curaçao; or Navassa  
Reef: The reef name where the plot is located  
Plot: Permanent plot designation  
TagID: Designation for each monitored colony includes the plot name and a unique number for that plot. TagColony Ex: SI-t356; SI is the site abbreviation (Sand Island Reef), t### indicates a tagged colony (random subset of colonies that are surveyed for condition, snails and fish). MapCol Ex: SI-x45; x# indicates colonies that are mapped and measured once per year (y# and e# may also be used).  
Bearing: Compass direction (degrees) from plot center stake to colony location  
Distance: Distance along bearing from plot center stake to colony location (m)  
GenetID: Designation for unique multilocus genotype based on 5 microsatellite loci  
166: Two alleles possessed by the colony at microsatellite locus 166 (Baums et al. 2005)

181: Two alleles possessed by the colony at microsatellite locus 181 (Baums et al. 2005)  
 182: Two alleles possessed by the colony at microsatellite locus 182 (Baums et al. 2005)  
 192: Two alleles possessed by the colony at microsatellite locus 192 (Baums et al. 2005)  
 207: Two alleles possessed by the colony at microsatellite locus 207 (Baums et al. 2005)

# **FILE NAME: TagColony\_Data**

Region: Florida Keys; Curaçao; or Navassa  
 Reef: The reef name where the plot is located  
 Plot: Permanent plot designation  
 TagID: Colony designation (see ColonyID File)  
 Q: Quarterly survey number starting with Q01 in spring 2004  
 L: Length (maximum diameter of the colony in cm)  
 W: Width (maximum dimension measured perpendicular from L, in cm)  
 H: Height from base to top measured at the tallest point (cm)  
 % live: Visual estimation of the percent of the measured colony surface covered with live tissue  
 Colony Type: Measured colony structure categorized as follows

*EC = encrusting colony: encrusting tissue and no branching structure*

*JC = Juvenile colony: at least one small live branch (including protobranches), no dead branches and maximum dimension < 40cm*

*BC = branching colony: least two live branches and minimum dimension > 40cm*

*RC = remnant colony: branching structure, but has less than two branches covered with live tissue*

*AF = attached (fused to the substrate) fragment*

*SF = stable fragment; not obviously fused to substrate but either wedged or large enough that it is not likely to move*

*LF = loose fragment: not fused to the substrate and likely to move*

*EF = epoxied fragment rescued after a disturbance (rescued at same site as plot)*

*FU= fused with another live colony and no longer surveyed as a separate colony*

*D = at least part of the colony's skeleton found with no live tissue remaining*

*FI = fissioned: surveyed as a new colony when a portion of the coral has disconnected from the original colony*

*G = no skeleton or live tissue remaining where the colony was originally located*

Isolates: Number of isolated tissue patches present on the colony (separated by dead skeleton); (only available in Florida; for Q34 and later)

RM rank: extent of recent mortality relative to the dead area of the colony

*0 = absent; no recent mortality*

*1 = present, ≤5% of the colony's dead area is recently dead*

*2 = 10-20% of the colony's dead area is recently dead*

*3 = 25-45% of the colony's dead area is recently dead*

*4 = 50-75% of the colony's dead area is recently dead*

*5 = ≥80% of the colony's dead area is recently dead*

RM1 to RM3: Attribution of observed recent mortality; if multiple attributions for recent mortality are observed, up to three RM Types are assigned in rank order of magnitude

*WBD = white band disease*  
*WPx = white pox disease*  
*RTL = rapid tissue loss*  
*FS = snail feeding scar*  
*PFB = parrotfish bites*  
*CB = ciliate band*  
*CL= Cliona sp. lesion*  
*FP = fish poop*  
*BL= bleaching-associated mortality*  
*Abr = abrasion*  
*Unkn = unknown cause*  
*Oth = other*

Snail Count: # of corallivorous snails (*Coralliophila abbreviata*) present on the colony; not counted (blank) on long dead colonies.

Dmsl Rank: Rank of degree of live tissue affected by threespot damselfish (chimneys, turfs, or nests)

*0 = none*

*1 = less than 1/3 of the top sides of the branches are affected*

*2 = between 1/3 and 2/3 affected*

*3 = greater than 2/3 affected*

TS df: # adult threespot damselfish, *Stegastes planifrons*, occupying a live colony; not counted (blank) on dead colonies

YT df: # yellowtail damselfish, *Microspathodon chrysurus*, observed associated with a live colony; not counted (blank) on dead colonies

TS df juv: # juvenile *S. planifrons* occupying a live colony; not counted (blank) on dead colonies

YT df Juv: # juvenile *M. chrysurus* associated with a live colony; not counted (blank) on dead colonies

## **FILE NAME: MapColony\_Data**

Region: Florida Keys; Curaçao; or Navassa

Reef: The reef name where the plot is located

Plot: Permanent plot designation

TagID: Colony designation (see ColonyID File)

Q: Quarterly survey number starting with Q01 in spring 2004

L: Length (maximum diameter of the colony in cm)

W: Width (maximum dimension measured perpendicular from L, in cm)

H: Height from base to top measured at the tallest point (cm)

% live: Visual estimation of the percent of the measured colony surface covered with live tissue

Colony Type: Measured colony structure categorized as follows

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*FU = fused with another live colony and no longer surveyed as a separate colony*  
*D = at least part of the colony's skeleton found with no live tissue remaining*  
*FI = fissioned: surveyed as a new colony when a portion of the coral has disconnected from the original colony*  
*G = no skeleton or live tissue remaining where the colony was originally located*

Isolates:            Number of physiologically isolated tissue patches present on the colony skeleton; (only available in Florida, for Q34 and later)

#### **FILE NAME: DeNovoMapColony\_Data**

*In cases where a severe disturbance precluded re-identifying previously mapped colonies (i.e. data type B but not C for a particular plot in file **PlotLocations\_SurveyCoverage**) all attached colonies in the plot were measured and are given in this table.*

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 L:                  Length (maximum diameter of the colony in cm)  
 W:                  Width (maximum dimension measured perpendicular from L, in cm)  
 H:                  Height from base to top measured at the tallest point (cm)  
 % live:            Visual estimation of the percent of the measured colony surface covered with live tissue  
 Colony Type:    Measured colony structure categorized as follows

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