

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-Q46: Each column represents a sequential survey event (see Survey_Dates file) and 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, t### indicates a tagged colony (random subset of colonies that are surveyed for condition, snails and fish), x# indicates colonies that are mapped and measured once per year.
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: TaggedColony_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

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

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

Unkn = unknown cause

Oth = other

- Bleach Rank: Bleaching severity ranked on a qualitative scale from 0 for normal colored tissue to 5 indicating completely bleached but intact tissue
- R: ring bleaching pattern (white ring-shaped areas of live tissue); present/absent
- W: wedge-shaped areas of bleached live tissue; present/absent
- 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: MappedColonies_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

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
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: DeNovoMappedColonies_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.*

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
 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

FILE NAME: SupplementalBleachingObs_Data

Additional surveys were conducted in fall 2014 to assess bleaching severity and tissue mortality.

Region: Florida Keys only
 Reef: The reef name where the plot is located
 Plot: Permanent plot designation
 Date: Date the colony was observed in supplemental bleaching survey
 TagID: Colony designation (see ColonyID File)
 % Live: Visual estimation of the proportion of colony surface covered with live tissue
 Tips: Bleaching severity ranked on a qualitative scale from 0 for normal colored tissue to 5 indicating completely bleached but intact tissue; Blanks indicate no live tissue was present for that portion of the colony.
 Top: Bleaching severity rank- (see above) observed on top surfaces of the colony
 Under: Bleaching severity rank- (see above) observed on undersides of the colony