Anemone observation log including such as depth, species, and size from coastal reefs of Ormoc Bay, Leyte, Philippines, 2012-2018

Website: https://www.bco-dmo.org/dataset/781443
Data Type: Other Field Results
Version: 1
Version Date: 2019-11-06

Project
» RAPID: Mega-typhoon impacts on the metapopulation resilience of coral reef fishes (Reef Fish Resilience)

Contributors	Affiliation	Role
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Abstract
Anemone observation log including such as depth, species, and size from coastal reefs of Ormoc Bay, Leyte, Philippines, 2012-2018

Table of Contents

Coverage

Spatial Extent: **N**:11.0165 **E**:124.8083 **S**:10.6299 **W**:124.555
Temporal Extent: 2012 - 2018

Dataset Description

Dive log of anemone observations from the west coast of Leyte, the Philippines in the municipalities of Albuera (10.91667, 124.69667) and Bay Bay City (11.07611, 124.87528), 2012-2018.

Methods & Sampling

Anemone surveyor procedure:
- searches adjacent area for anemone tag (anemone could have moved a few feet since last encounter)
- records time, species, size of anemone, tag number if present
- watches anemone and counts the number of fish and estimates sizes (same procedure regardless of species)
- records species of fish, estimates sizes
- adds tag after the fact if one was missing or if there was only one zip tie tag (old system tag)
- flags anemone with flagging tape that it is ready to be hunted if APCL were present.

Data entry was made with Excel or Google sheets, depending on the internet connection.
Data cleaning was performed in R using the tidyverse package.

For species codes, see: https://www.bco-dmo.org/dataset/785633

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Data Files

File
anemone_log.csv(Comma Separated Values (.csv), 712.18 KB) MD5:c43d118581444bba3e772b5e0ad58875 Primary data file for dataset ID 781443

[ ]

Related Datasets

IsSupplementedBy

Pinsky, M., Stuart, M. (2020) **Codes used in 2018 data including anemone and clownfish species, clownfish tail color/shape and dive-type.** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2020-01-02 doi:10.26008/1912/bco-dmo.785633.1 [view at BCO-DMO]
Relationship Description: Taxon and dive-type codes used in 2018 sampling

[ ]

Parameters

Parameter	Description	Units
anem_table_id	unique identifier of observation event (whole number), links to the clownfish table	unitless
dive_table_id	unique dive identifier (whole number), links to the diveinfo table	unitless
anem_obs_time	time of observation event in Asia/Manila time zone, military time, (text) - this field is text for easier movement of data from SQL to R	unitless
anem_collector	initials of the person who filled out the data sheet (text)	unitless
depth_m	the depth of the anemone if recorded in meters	meters
depth_ft	the depth of the anemone if recorded in feet	feet

anem_spp	species code of anemone: ENQD = Entacmea quadricolor; STME = Stichodactyla mertensii; HECR = Heteractis cripsa; HEMG = H. magnifica; STHD = S. haddoni; HEAR = H. aurora; MADO = Macrodactyla doreensis; HEMA = H. malu, STGI = S. gigantea; ???? = a fish that cannot be traced to an anemone; EMPT = anemone tags found without an accompanying anemone	unitless
anem_dia	estimated diameter in cm of the anemone	centimeters
anem_obs	a unique identifier of anemones that have more than one observation, links to other rows in the anemones table	unitless
old_anem_id	the tag number of an anemone with only one old zip tie tag, a new tag should be installed, -9999 signifies unreadable	unitless
anem_id	the tag number identifying the anemone, -9999 signifies unreadable	unitless
anem_sample_id	the id of an anemone tissue sample, if collected (rarely)	unitless
anem_notes	any notes pertaining to the anemone	unitless
anem_correction	if a Y is present, a correction has been made to the data since data entry from the data sheet	unitless
anem_corr_date	the date of the most recent correction	unitless
anem_corr_editor	the editor of the most recent correction	unitless
anem_corr_message	which field was changed from what old value to what new value and why, based on what evidence. If another correction was already present, amend the message to include the date and correction editor of previous corrections	unitless

[table of contents | back to top]

Instruments

Dataset-specific Instrument Name	Biomark 601 PIT tag reader
Generic Instrument Name	tracking tag
Dataset-specific Description	Passive Integrated Transponder (PIT) tags help scientists track individual organisms by providing a reliable lifetime 'barcode' for an individual animal. PIT tags are dormant until activated; they therefore do not require any internal source of power throughout their lifespan.To activate the tag, a low-frequency radio signal is emitted by a scanning device that generates a close-range electromagnetic field. The tag then sends a unique alpha-numeric code back to the reader (Keck 1994). Scanners are available as handheld, portable, battery-powered models and as stationary, automated models that are usually used for automated scanning.
Generic Instrument Description	Devices attached to living organisms with the purpose of determining the location of those organisms as a function of time after tagging and release.

[table of contents | back to top]

Deployments

SCUBA_Pinsky_Leyte

Website	https://www.bco-dmo.org/deployment/642952
Platform	SCUBA Pinsky Leyte
Start Date	2012-05-05
End Date	2018-04-10
Description	Field seasons (SCUBA) in Leyte, Philippines to study coral reef fish resilience. West coast of Leyte, Philippines in the municipalities of Albuera (10.91667, 124.69667) and Bay Bay City (10.676940, 124.799170)

[table of contents | back to top]

Project Information

RAPID: Mega-typhoon impacts on the metapopulation resilience of coral reef fishes (Reef Fish Resilience)

Coverage: West coast of Leyte Island, Visayas, Philippines

Description from NSF award abstract:
When Typhoon Haiyan hit the Philippines it had sustained winds of 305 to 315 kph and was the strongest storm ever to make landfall. Storms are one of the most important disturbances to coral reef ecosystems. Previous research has primarily emphasized that habitat recovery is important for the recovery of reef fish communities after disturbance. We understand little, however, about the role of larval dispersal in mediating species responses to disturbance. Reef fish function as metapopulations connected by larval dispersal among reefs, and larval connectivity is therefore a critical process for their dynamics. A field site directly in Typhoon Haiyan's path provides an ideal opportunity to address the role of larval dispersal during recovery. Over the course of four field seasons (2008 to 2013), nearly two thousand clownfish were surveyed along 20km of coastline. Clownfish possess the same basic life history as most reef fish (sedentary adults and pelagic larvae), but are sufficiently rare and visible that genetic parentage methods can be used to follow larval dispersal. This study site is therefore a unique location in which to understand the metapopulation impacts of a massive

storm. This project will focus on three hypotheses: 1) Habitat destruction determines the short-term impacts of storms disturbance, 2) Metapopulation processes shape recolonization after disturbance, and 3) Disturbance allows rare competitors to increase in abundance. The project will address these questions with a combination of fixed and random transects to assess reef habitat and reef fish abundance and diversity, as well as detailed, spatially explicit surveys of anemones and clownfish. Genetic mark-recapture and parentage methods with yellowtail clownfish will pinpoint the origin of new recruits that recolonize the reef post-typhoon.

Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-1430218