LISMaRC Phase II Select Epifauna Taxa Abundance in the Long Island Sound Cable Fund Initiative Phase II area of eastern Long Island Sound during SEABOSS Operations (2017-2018)

METADATA

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Dataset Title: LISMaRC Phase II Select Epifauna Taxa Abundance in the Long Island Sound Cable Fund Initiative Phase II area of eastern Long Island Sound during SEABOSS Operations (2017-2018)

Filename: LISMaRC BenthicEcology 2017 18 EpifaunaSeaBossBlockSite SelectTaxa.shp

Online Linkage: http://www.marine-geo.org/portals/lis/

Abstract: The shapefile includes sample block- (SB) and site-specific (NB) percent cover of select taxa. Taxon percent cover were assessed for images collected during USGS SEABed Observation and Sampling System (SEABOSS) in November and December 2017 and May 2018. These are the complete records of block- and site-level taxa abundance.

Dataset purpose: This dataset provides detailed information on the epifaunal communities in the Phase II study area which can be used to map the spatial characteristics of these communities relative to several environmental features to meet the Long Island Sound Cable Fund's goal of ecological characterization of the Long Island Sound sea floor in conjunction with habitat mapping efforts.

Time period of content: These data were collected during May 2018.

Dataset Status: Complete

Update Frequency: None Planned

Theme Keywords: Benthic ecology, Epifauna, diversity, habitat, seafloor imaging, SEABOSS, ROV, Connecticut, New York, Long Island Sound, Fishers Island Sound, estuary, Long Island Sound Mapping and Research Collaborative, LISMaRC

Access Constraints: None

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Data should not be used for navigation purposes.

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Data Quality Considerations: see below

Attribute accuracy: All attributes were evaluated during data processing and analysis as standard quality control to ensure attributes contain accurate and relevant information and values.

Completeness: The information provided on epifaunal communities is complete

Positional accuracy: Shapefile object locations correspond to sample sites (NB) and the centroids of sample blocks (SB). Block and site locations were selected with the overall objective to sample as many of the different seafloor habitats that were evident in the side scan mosaic that had been previously developed for the study area.

Process Steps: Abundance was summarized as block- and site-specific mean percent cover of select epifaunal taxa as determined in images each analyzed image (n=1197). Images were captured using the United States Geological Survey's (USGS) Seabed Observation and Sampling System (SEABOSS; Valentine et al. 2000) between November 28 and December 3, 2017 (n=602) May 8 and 15, 2018 (n=595) on the RV Connecticut.

SEABOSS captured orthogonal images of the seafloor. These images were analyzed for percent cover of all living seafloor species (excluding fish) and biogenic features. Percent cover was quantified using a grid of square cells overlaid on each image (n=216 grid cells). Within each grid square, organisms and biogenic features were identified to lowest possible taxonomic level. The sum of these grid cells for each image and organism or biogenic feature is reported in this dataset.

Attributes:

Name: Sample block or site.

Astrng: Mean percent cover of Astrangia poculata.

Cln sp: Mean percent cover of Cliona spp.

Crymrp: Mean percent cover of Corymorpha pendula.

Crpdl f: Mean percent cover of Crepidula fornicata.

Ddmn_lc: Mean percent cover of Diadumene leucolena.

Ddmnm_v: Mean percent cover of Didemnum vexillum.

*Hydrz*__: *Mean percent cover of hydrozoan and bryozoan turfs.*

Laminrc: Mean percent cover of Laminariaceae.

Mytls d: Mean percent cover of Mytilus edulis.

Rhdphyt: Mean percent cover of Rhodophyta.

smpld: Sample blocks and sites sampled.

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