UConn Climate Corps

• An academic one semester course for juniors and seniors

• An interdisciplinary study of climate change focusing on indicators, impacts, policy, vulnerability and adaptation at the local municipal scale

• Easy to say what should be done, but how does local government make decisions and what are the roadblocks to moving forward?

Second semester:
Optional independent study in which students work singly or in teams with municipalities/state/NGO’s on vulnerability assessments or other adaptation priorities
Independent Study Projects (teams of 1 to 4 students)

- Resilience management plan for a coastal land trust property
- Vulnerability Assessments (SLR flooding) for towns
- Prioritization of Community Rating System actions
- Outreach related to flooding in inland communities
- Stormwater management and disconnects
- Beach management plans for resilience
- CRS resources webpage
- Resilience planning for businesses
- Brownfield sites and sea level rise analysis
- Marinas and flood risk analysis
- Coastal forests and resilience

To date: 36 students participating in the Independent Study
With the Climate Corps:

- Brownfield Corps – Fall 2018
- Stormwater Corps – Spring 2020
- NSF funding for 4 years
Moving with the Marsh: Buffers for Marsh Migration
Dodge Paddock Beal Preserve
LISS Futures Fund Project
January 2018 to October 2019
History (See Avalonia's website):
- Paddock
- Pottery works
- Sawmill
- Historic stone wall

Habitats:
- Tidal wetlands
- Berm/"Dune"
- Tidal creek
- Rocky intertidal
- Coastal meadow

Uses:
- Resilience
- Education
- Enjoyment
- Walkers
- Schools groups
- Neighbors

Photo: April 2018
Marsh Migration Buffer

Beth Sullivan worked with local garden clubs and nurseries to remove raspberries, bulbs and perennials during spring 2018.

Soil was turned over and raked. Covered with black plastic for summer 2018 to kill remaining plants and seed bank.
Spring 2019 – planted trees, shrubs and perennials
native, mostly salt tolerant plants
Plantings:
New England Wetland Plants Inc: New England Coastal Salt Tolerant Grass Mix:
Elymus canadensis, Festuca rubra, Panicum amarum, Panicum virgatum, Andropogon gerardii, Sorghastrum nutans,
Juncus tenuis

Prides Corner Farm Inc
Potted plants:
Amelanchier laevis, Cornus racemosa, Asclepias incarnata, Lobelia cardinalis, Comptonia peregrina, Vernonia
novaboracensis

Earth Tones Native Plants
Potted Plants:
Amelanchier canadensis, Andropogon gerardii, Aronia arbutifolia, Ilex verticillata, Morella caroliniensis, Nyssa
sylvatica, Panicum virgatum, Physocarpus opulifolius, Prunus maritima, Sorghastrum nutans Vaccinium angustifolium,
Vaccinium corymbosum

Seeds of Success (Native Plant Trust)/USDA NRCS Cape May Plant Materials Center:
Seeds: Panicum virgatum, Schizachyrium scopari, Solidago altissima, Spartina pectinata, Viburnum dentatum, Iva
frutescens, Schoenoplectus pungens, Eragrostis spectabilis, Carex comosa

Hibiscus moscheutos (marsh mallow) and Baccharis halimifolia (groundsel tree) seeded in naturally by September.
• There were 140 volunteers participating in various work days and events at Dodge Paddock over the 18 month grant period, contributing almost 1000 hours.

• CT DEEP provided input and site work, attended numerous meetings and participated in discussions on site work and future plans.
USDA NRCS test pit #3
Waypoint: 565
Depth of organic material: 0 cm
Estimated Seasonal High-Water Table: 10 cm
Final depth of pit: 90 cm
Taxon name: Matunuck taxadjunct
Taxonomic class: Coarse-loamy, mixed, mesic, Typic Endoaquents
Vegetation: Panicum virgatum, Hibiscus moschuetos, Solidago sempervirens

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<th>Depth (cm)</th>
<th>Horizon</th>
<th>USDA Texture</th>
<th>Matrix Color</th>
<th>Rock Fragments/Consistency</th>
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<td>sandy loam</td>
<td>10YR 2/1</td>
<td>very friable</td>
<td>moist; weak medium</td>
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Additional 22 soil samples were analyzed by UConn Soil Nutrient Analysis Lab
May 2019

Plants labeled as part of education and outreach
Blogs, news articles, presentations
Annual monitoring is ongoing