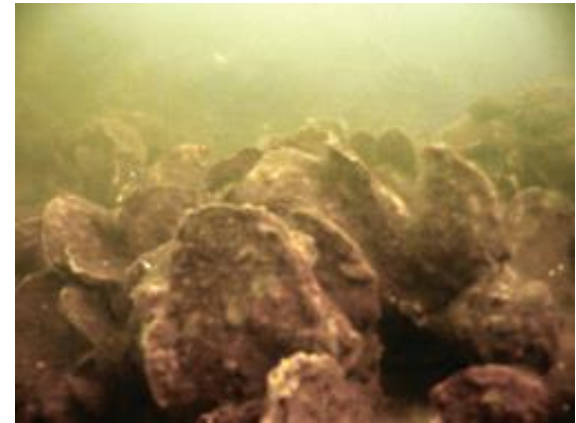


Implementing Restoration, Research and Enhancement Projects

Troy Alphin and Martin Posey
UNC Wilmington

Importance of Objective in Placement and Design

- Fisheries support
- Habitat
- Water quality
- Shoreline Stabilization
- Larval supply and population support

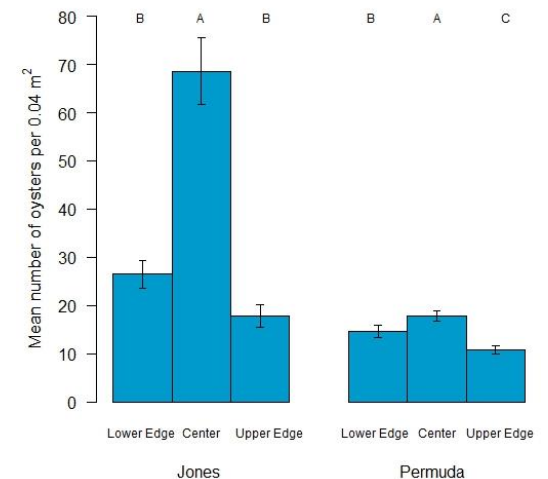
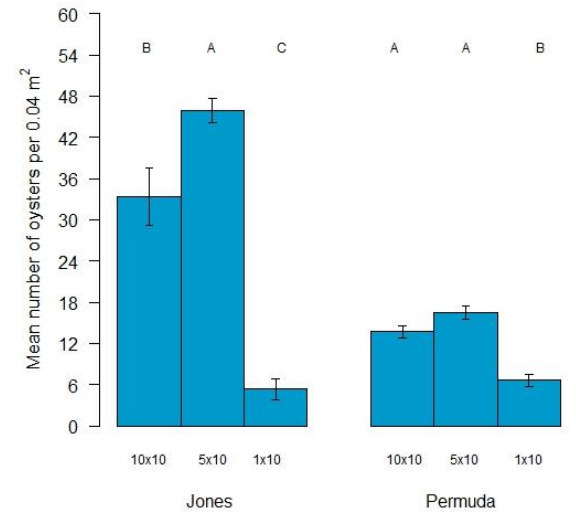


Implementation Considerations

- Objectives
- Environmental parameters and substrate
- Larval supply, proximity to other reefs
- Location, especially relative to objectives
- Planting and target density
- Complexity and arrangement
- Landscape aspects of reef (size and shape of reef; proximity to other habitats, orientation to flow, fragmentation, other ...)

Landscape Factors

- Size, edge, shape
 - ARRA project; ongoing comparative work
- Complexity
 - Smaller restoration efforts of targeted design
 - Trophic dynamics
- Density
 - Structural aspects and persistence



Regional Approach

- Differing objectives, environmental factors, and landscape factors may impact design approaches, specific siting, and success criteria
- Within a region, need to consider diversity of projects that have been implemented
- Within a region, need to consider summative scale of different project types.
- May benefit from broad scale management approaches

Siting Tool

- Guidance for aquaculture site selection
 - New to industry; new to region
- Important factors
 - Classification, depth, salinity, existing leases, adjacent land use, bottom type, other information as available on a statewide or regional basis
 - Regional considerations
 - Development of suitability index

