



THE APALACHICOLA BAY SYSTEM INITIATIVE (ABSI)



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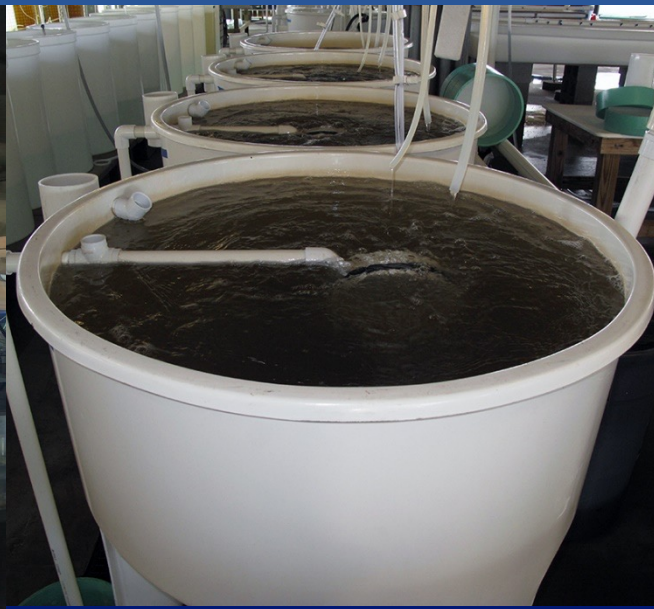
RESTORATION EXPERIMENTS

Test different materials and configurations for restoration



ABSI HATCHERY

Create spat on shell for restoration experiments



ABSI RESTORATION EXPERIMENT

Fishery closure provides opportunity to test materials without fishing impacts

Material types: granite, limestone rock, fossilized shell, shell

Material size: large (12"), medium (8"), small (<4"), shell

Reef footprint: large (acres), medium (< 100 ft²), small (<50 ft²)

Reef height: low (<1ft), medium (1-3 ft), high (3-4 ft)

'Seeding the reef': Add spat on shell to half the experiment

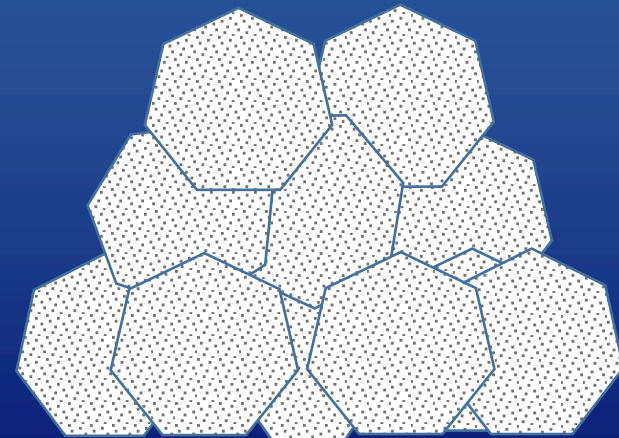
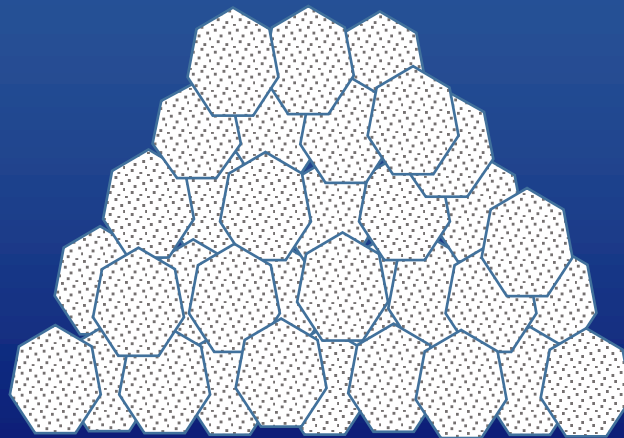
Materials

Shell and limerock

Natural oyster shell – good for spat settlement, can be harvested with tongs

Small limerock (4") creates mound, small spaces, many layers, can easily be harvested with tongs

Medium limerock (6-8") – creates stable structure, medium spaces, few layers, good for habitat development, can be harvested once oysters develop.



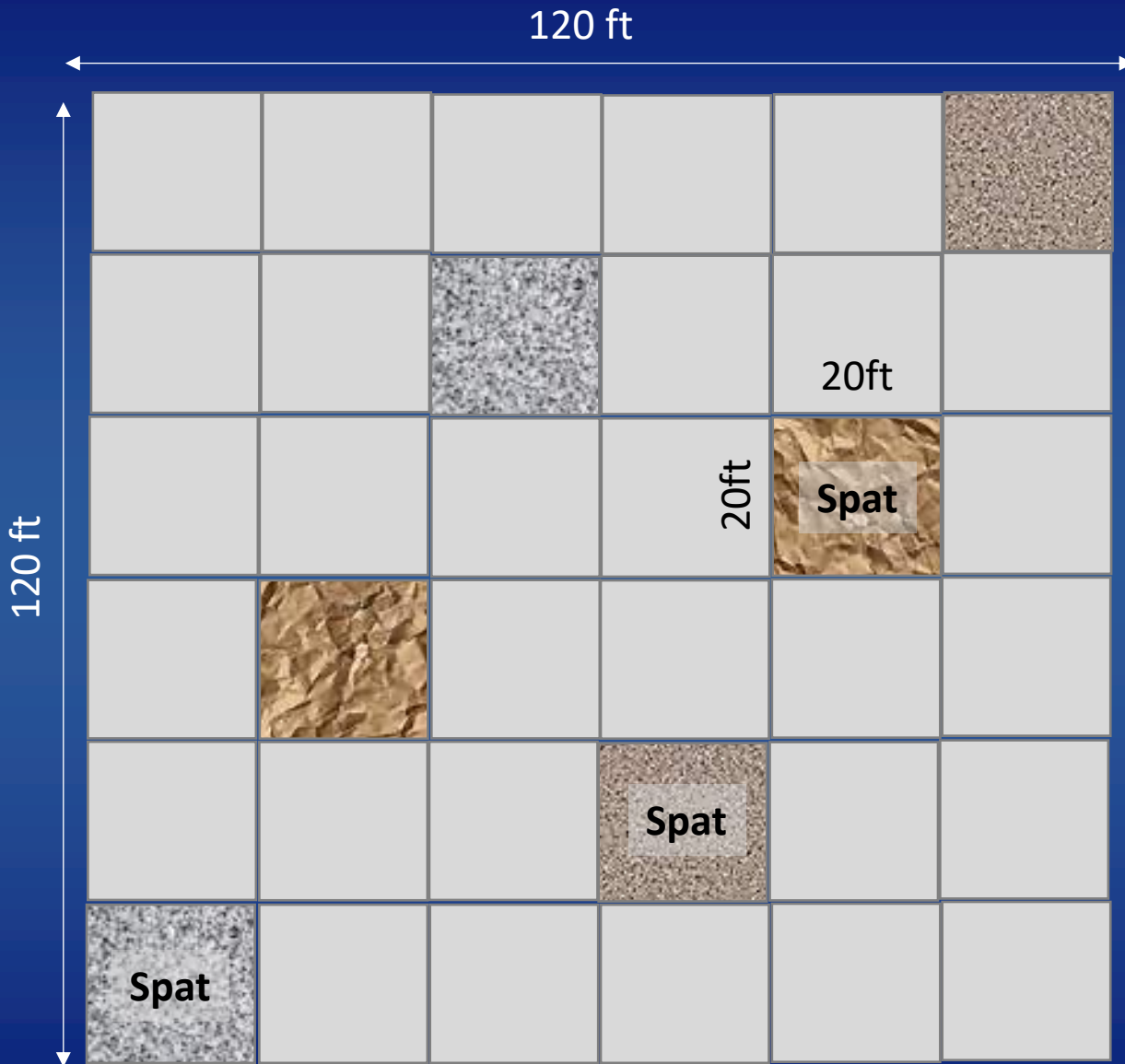
Experimental design

5 Sites: 1) Peanut Ridge, 2) Monkeys Elbow, 3) Hotel Bar, 4) Dry Bar, 5) The Miles
3 replicates per site

6 treatments per replicate (each material with and without hatchery spat)

Total number of reefs: $5 \times 3 \times 6 = 90$





Single replicate

- 120 ft x 120 ft footprint
- Plots laid out to minimize flow interference

Reef size

- 20 x 20 x 1.5 ft (~24 yd³)

Materials

- Shell
- Small (4") limerock
- Medium (6-8") limerock

Treatments

- 2 reefs per material
- 1 reef with spat on shell

5 sites x 3 replicates x 6 reefs
 = 90 reefs x 22 yd³
 = ~2,000 yd³ material

Logistics

Target time for deployment – before first peak spat set (May 8 or 15)

Oystermen will be employed to deploy materials from their vessels

Materials need to be 'staged' in different locations for reloading

Materials need to be placed within specified areas

GPS coordinates and material data need to be collected

Experiments need to be marked so they can be easily located for monitoring

Questions

How many oystermen?

How long will it take?

Media – yes? No? who and when?



Questions and Discussion

