



ENHANCE ★ PROTECT ★ CONSERVE

MDMR Shellfish Bureau Overview 2021

Shellfish Bureau

- **Reef Cultivation**

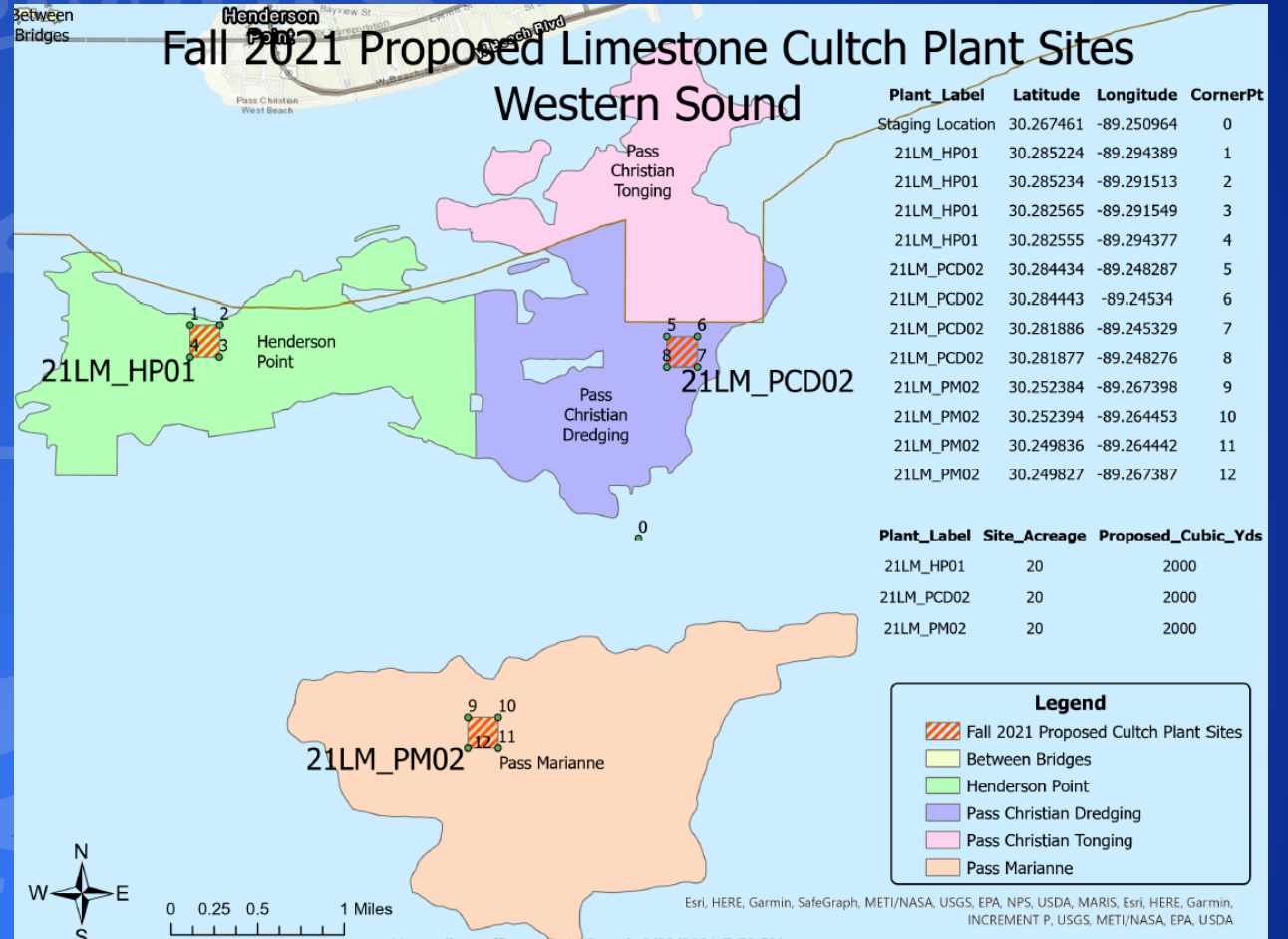
- Cultivated approximately 160 acres of the western Mississippi sound

- **Reef Assessments**

- Completed 124 one-minute dredge tows
- 175 square meter dive samples

- **Clutch Planting**

- Spring cultch plant – 100 acres of oyster reef
- Fall cultch plant – 100 acres of oyster reef



Shellfish Bureau

- **Oyster Aquaculture**

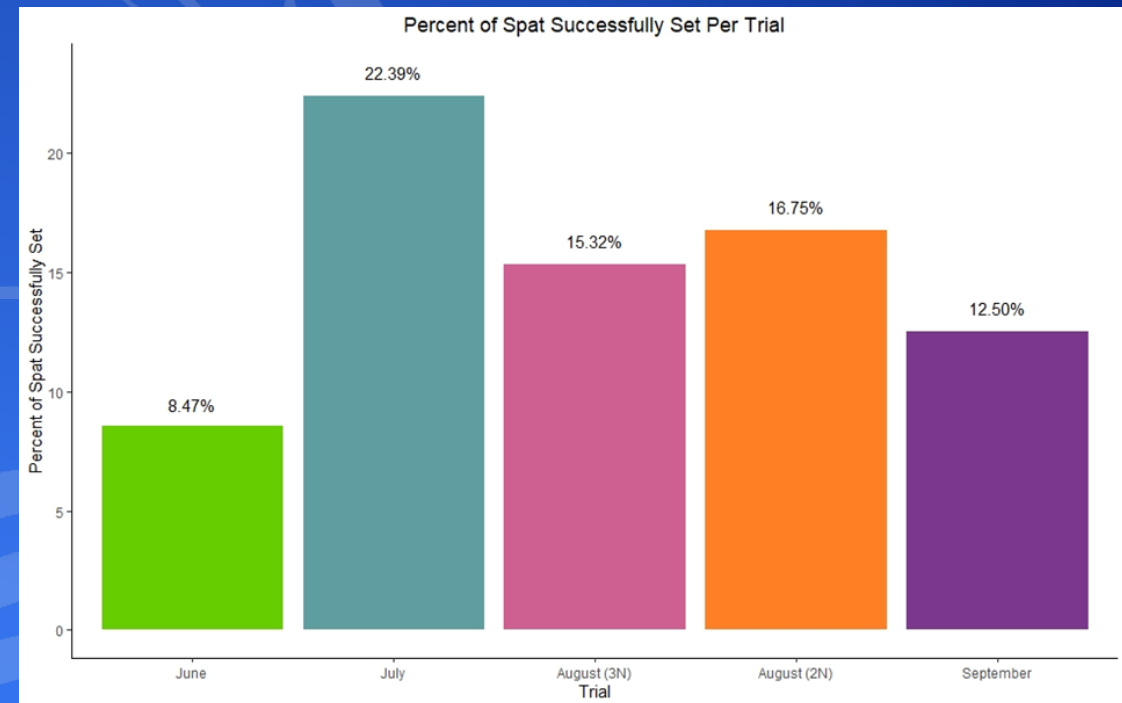
- 17 Active Off-Bottom harvesters for 2021
- 51 Acres leased in the MDMR Commercial Aquaculture Park
- 2.8 million oyster seed being cultured, commercial operations harvested approx. 423,895 oysters in 2020.
- Off-Bottom Oyster Aquaculture training classes will began in June



Shellfish Bureau

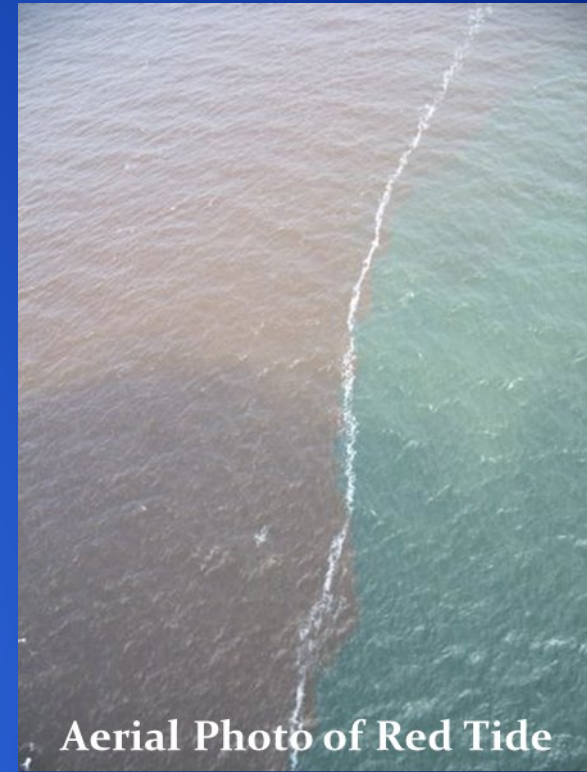
- Remote Oyster Setting Facility

- Currently, MDMR is in Phase I of the Remote Oyster Setting Facility Project.
- During Phase I, MDMR is assessing the feasibility of the facility and determine infrastructure layout ongoing operational and maintenance costs, setting efficiencies and production milestones.
- The future setting facility is expected to receive 2.5 billion eyed oyster larvae per year with a 15% setting efficiency.
- In 2021, MDMR acquired a total of 79.3 million oyster larvae from the University of Southern Mississippi Oyster Hatchery and Auburn Shellfish Lab to set on oyster cultch material for initial testing and technical trials in order to fine tune setting protocols.
 - The results of these experimental trials have produced 9.6 million oyster spat on 25 cubic yards of oyster shell distributed in the Biloxi Bay Reef complexes over a 5 month period.



Shellfish Bureau

- **Water Quality Analysis**
 - Monthly fecal coliform analysis for FDA Compliance
- **Harmful Algal Bloom Analysis**
 - Monthly sea water samples are collected at 15 locations for cell identification
- **Sanitary Surveys**
 - Annual evaluation of all environmental factors that affect the water quality of shellfish growing waters
- **Investigation of Source Points**
 - Assess and address high levels of fecal coliforms present in areas of the MS Sound
- **Scheduled to deploy 60 million spat-on-shell oysters to public reefs**
- **Oyster Management Plan**
 - Developed plan and held public meeting to address comments
 - Plan will be published within 30 days.



Office of Marine Fisheries Dry Lab

- Funded by GOMESA
- Types of Analysis
 - Fecal Coliform Analysis
 - ELISA (Enzyme Link Immunosorbent Assay) Analysis
 - HAB (Harmful Algal Bloom) Analysis
- Taxonomy Collection

