

**COASTAL RESOURCES DIVISION** 

# Georgia Shellfish Program Update

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#### Topics to Address

- Program partners and regulatory roles
- Status of traditional shellfish fishery and current mariculture
- Challenges related to oyster mariculture implementation
- Moving Forward
- Program goals

#### Shellfish Program Partners

- Georgia DNR Coastal Resources Division (CRD) is responsible for classification, sampling and laboratory analysis of shellfish growing areas.
  - lease management/permitting, harvester education/permitting, and recreational area management
- Georgia DNR Law Enforcement Division insures compliance with Georgia shellfish laws O.C.G.A. 27-4-190 thru 201.
- Georgia Department of Agriculture, Consumer Protection Division, regulates handling and storage requirements, shucking, packing, shipping and/or sale of shellfish products within O.C.G.A. 40-7-12.
- US Food and Drug Administration (FDA), National Shellfish Sanitation Program (NSSP), program certification

## Water Quality Monitoring

- Shellfish waters are analyzed monthly and classified as either Approved or Prohibited.
- CRD's Shellfish Lab and staff are certified by the FDA and inspected every three years using NSSP standards.
- Precautionary fishery closures due to major weather events result in additional sampling. (Hurricane Matthew 2016 and Hurricane Irma 2017.)



# Traditional (Wild) Shellfish Harvest

- Oysters naturally grow in clusters in intertidal zones.
- Harvest at low tide when oyster and clam beds are exposed.
- **Clams** are generally found in small remote creeks and harvested by hand.
- Obtaining skilled and trained labor for commercial operations can be a limiting factor.
- Wild shellfish leases generally require lower start up costs and overhead.
- Oyster beds are managed annually to meet cultch replenishment requirements.
- Continued interest to promote leases that support wild shellfish harvest to fill large demand for clustered oysters.



#### Clam Mariculture

- Clam farming is a proven industry in Georgia that requires minimal gear, maintenance and husbandry.
- DNR inspects hatcheries and monitors the purchase of clam seed from out-of-state hatcheries.
- Georgia farmed clams reach market size in 16 20 months.
- More resilient to storms, crop grows submerged in sediments with minimal profile.
- Minimal permitting requirements.



Farmed hard clams (Mercenaria mercenaria) are the same as the wild native species thus reproductively active and contributing to wild recruitment.

# 2017 Shellfish Program Stats

Shellfish Growing Acres	Commercial	Recreational
Chatham	4,868	1,267
Bryan/Liberty	1,706	936
McIntosh	17,756	1,974
Glynn		1,888
Camden	4,856	2,467
Total	29,186	8,532

- 17 commercial lease areas permitted
  - 8 private and 9 state leases
- 17 master collector permits
  - 107 individual harvester permits
- 7 recreational harvest areas



### Shellfish Landings



#### Why is this one of the most regulated fisheries in the U.S.?

- Oysters and clams traditionally consumed raw or undercooked.
- Consumption of raw or undercooked shellfish is linked to severe illnesses and deaths.
- Oyster mariculture is predominantly designed to produce a single oyster intended for the raw half shell market.
- Georgia is a member of the Interstate Shellfish Sanitation Conference (ISSC).



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### Oyster Mariculture

- Oyster farming has been growing throughout many regions of the U.S. including the Southeast and Gulf coasts.
- The growth of this fishery has presented many challenges to both the entrepreneurs and regulators.





#### **Current Challenges**

- Shared allocation of the public domain.
- Georgia will need to develop an oyster mariculture siting tool.
  - Consideration given to natural and cultural heritage areas, proximity to other structures and live bottom, commercial and recreational uses, navigational channels.
- Threatened and Endangered Species.
- State and federal permitting.



#### **Current Challenges**

- Protocols for seed importation within the bioregion to ensure the safety of native populations.
- Storm mitigation plans.
- Summer harvest.
- Regulatory burdens in the NSSP.
  - Operational plans
  - Annual inspections and permitting of new facilities



#### **Moving Forward**

- Develop an efficient permitting process.
- Additional compliance and enforcement.
- Proper gear selection to reduce conflicts with endangered and threatened species and with other wildlife and birds
  - Additional water sampling stations may be required in proximity to mariculture gear.
- Code and Policy reform (Agency)



#### **Moving Forward**

#### Policy reform

- Establish permitting requirements distinguishing wild harvest from aquaculture.
- Allow Board to regulate harvest seasons, seed importation and size requirements, gear types, methods of harvest and aquaculture siting criteria.
- Shellfish Management Plan to be developed and incorporated by reference in Board rule.



## Program Goals

- Recruit new members to the shellfish industry by promoting new and traditional shellfish opportunities.
- Engage with future growers that have interest and knowledge to establish hatchery/nursery capacity within the state.
- Higher density/smaller acreage leases.
- Diversification to other native shellfish species (e.g. Sunray Venus clams, blood ark clams and native ribbed mussels).
- Special use areas for oyster mariculture and gear.
- Increased laboratory capacity for vibrio testing, biotoxin testing, and rapid testing for other pathogens (i.e. norovirus).
- Update and refine educational curriculum to educate industry on BMP's for mariculture to increase compliance with current and future requirements.
- Increased enhancement of recreational shellfish harvest areas.



### Thank you

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