Shellfish Survey Programme

Project Outline:

Bottom grown mussels

- Facilitate industry in searching for seed mussel beds.
- Better management of the seed mussel resource (known quantities, locations, quality of the seed mussel and possible remaining biomass).
- Current meters and environmental monitoring devices deployed as needed.
- Current and environmental data analysed, and reports produced.
- Continue the investigation into possible genetic influences on post-relay survival.

European flat oyster

- Continue to work in Clew Bay and Galway Bay where native oyster populations exist, and pacific oyster farming is well established.
- Collaborate with the Marine Institute, Clew Bay Oyster Co-op, Cuan Beo, Clarinbridge Oyster Co-op and existing aquaculture producers in the area to monitor the performance of native oyster spat produced in spatting ponds in 2021 under different nursery scenarios.
- Survey selected areas in Clew Bay and the St. Georges Bed using the T. Burke II to estimate the quantity and quality of settlement substrate.
- Further investigations will be carried out on optimising the use of spatting ponds in spat settlement.

Project Objectives:

Bottom grown mussels

- To map and quantify subtidal seed mussel beds around the coast of Ireland, to inform the sustainable management of the fishery using expert knowledge in a cost-effective way using the BIM inshore survey vessel. Deliverables will include detailed and timely reports on the location, the biomass and the condition of the seed mussel beds as well as post fishery seed mussel situation. Also, a large amount of environmental data will be collected and made available to other stakeholders.
- To provide an informed decision in determining the most feasible option for sourcing seed mussel outside of naturally occurring beds, genetic testing of mussels will be done in conjunction with GMIT.

European flat oyster

- To accurately map the native oyster stocks in Clew Bay and in the St. Georges Bank Oyster Order.
- To further investigate survival and performance of hatchery sourced native oyster seed in different systems.
- To monitor reef formation of relayed stock.
- These outputs seek to demonstrate the importance and investigate the effectiveness of aquaculture practices in the protection of ecosystem health and the promotion of biodiversity.

Expected Benefits:

Bottom grown mussels

- Identify and quantify sustainable seed mussel beds around the coast of Ireland, in order for the bottom mussel industry to fish sustainably for relaying on farming grounds. Survey will exclusively concentrate on historical areas given operational constraints associated with Covid-19.
- Provide sound scientific information and data to DAFM to help them manage the resource in order for the bottom mussel industry to fish sustainably for relaying on farming grounds.
- Results from the genetic study could potentially inform seed sourcing strategies for the BG mussel sector in the Irish Sea.
- Data collected to support the aquaculture licensing process.

European flat oyster

- Contribution to the ecosystem health and biodiversity in aquaculture bays.
- Improved relations between inshore fishers, aquaculturists and the local community.
- Improve public perception of both sectors.

Projected Cost: €203,000