

2024/2025 Joint Innovation Project

Developing Hybrid Oyster Seeds for Alaska Shellfish Growers



Problem Statement: Regionally optimized shellfish seeds are needed to sustain the growth of the seafood industry.

Proposed Solutions: Genetic breeding and on-farm evaluation of different oyster strains

Scientific Approaches:

1. Genetic pedigree analyses
2. Crossbreeding distinct genetic lines
3. On-farm trials



Hatchery production of hybrid crosses

Research Highlights:

1. High survival rate of 95% for over two years
2. Contrasting growth rates – up to a 3-fold difference between distinct families
3. Significant hybrid effect – top hybrid line having 40% higher yield than average
4. Next steps involving further assessments to test commercial viability of the enhanced seeds



Field Evaluation at Hump Island, AK



Field Evaluation at Baranof Island, AK