



Benefits of Geoduck Nursery Systems & Predator Exclusion

Pacific Shellfish Institute Quarterly Progress Report

April 1, 2026 – June 30, 2026

Background

The Pacific Shellfish Institute is conducting applied research to support Alaska's mariculture industry, focusing on developing methods and assessing the viability of cultivating geoduck (*Panopea generosa*) under the Southeast Conference Other Mariculture Species grant program.

Project Update

- Pacific Shellfish Institute (PSI) Senior Biologist, Andy Suhrbier surveyed the 2025 geoduck outplant at the "Sykes" beach leased by Tom Carruth on 6/17/26 and found sign of geoduck survival and predators (Figures 1-3). They also installed a clam predator net higher up the beach to encourage growth and survival of hard clams such as cockles (*Clinocardium nuttalli*) and native littlenecks (*Leukoma staminea*).
- Alutiiq Pride Marine Institute (APMI) had a successful geoduck spawn in 2026 and seed is available. A nursery system is needed in Ketchikan to transition and boost the seed prior to planting. Due to the imminent move of the Ocean's Alaska barge to Sitka a boat-based nursery system in Ketchikan was envisioned.
- PSI Director Bobbi Hudson met with Alaska Department of Fish & Game (ADF&G) staff to confirm mutual understanding of regulatory changes needed to allow geoduck seed importation into Alaska, and disparities between Alaska and Washington state regulations for native shellfish species. ADF&G staff provided guidance on the process for changing import regulations and exploring options for geoduck seed supply in Alaska.
- A list of reliable out-of-state hatcheries was developed, and Bobbi began one-on-one interviews to solicit interest and capacity to navigate importation requirements, and input towards feasible revisions.

Key Milestones

Clam Net Installed	Deployed a clam predator net higher up the beach at the Sykes site for cockles and littleneck clams.
Nursery Adjustment	Project partners devised a plan for a boat-based nursery in Ketchikan to replace the Ocean's Alaska barge nursery system.
2025 Outplant Survey	Surveyed the 2025 outplant and found signs of healthy geoduck juveniles.

Challenges

A second round of seed has allowed for another nursery trial in Ketchikan and eventual outplant at the Sykes location. Ocean's Alaska's hatchery/nursery barge has been sold to the University of Alaska and has been prepped for a move to Sitka. This created a gap for the nursery/acclimation phase for the geoduck seed, which is necessary for increasing outplant survival. Partners discussed options and the current effort is to fit out Tom Carruth's boat as a nursery system. This effort has been led by Tom.

Predators, including moon snail (*Neverita lewisii*), red rock crab (*Cancer productus*), and sunflower sea stars (*Pycnopodia helianthoides*) were observed at the Sykes site in June 2026 (figure 1 and 3). Also, many of the 2025 mesh tubes were lost over the winter, due to high wave energy at the site. It was recommended by a geoduck farming expert to cover the new 2026 outplant tubes with mesh to reduce this loss. This will be done in July 2026.



Figure 1. Drilled juvenile geoduck shell and sampled live geoduck (Suhrbier 6-17-26).



Figure 2. Geoduck juvenile sampled at the Sykes site. Notice growth from outplant and desirable shell color (Suhrbier 6-17-26).



Figure 3. Sunflower sea star (*Pycnopodia helianthoides*) juvenile next to mesh geoduck tubes (Suhrbier 6-17-26).

Next Steps & Recommendations

1. Continue updating and distributing all summary documents and guidelines for geoduck farmers and nursery operators.
2. Finish a boat-based geoduck nursery system with seed from Alutiiq Pride Marine Institute.
3. Install 5,000 mesh tubes under blanket netting at the Sykes outplant site.
4. Continue to solicit and summarize lessons learned from shellfish hatcheries who recently attempted importation of shellfish seed for emerging mariculture species (i.e., Kumamoto and Olympia oysters) to Alaska and gauge interest in geoduck importation.
5. Prepare a written summary of regulatory changes to allow geoduck seed importation into Alaska, and recommendations to resolve disparities between Alaska and Washington state regulations for native shellfish species.