

## GEODUCK FARMING FACT SHEET

Geoduck have been farmed in South Puget Sound for over 15 years, and grown commercially for ten years. As of the end of 2006, approximately 150 acres have been planted in geoduck in Puget Sound – 1/1000th of the total tidelands in Washington.

The potential to expand geoduck farming is limited. Geoduck are not easy to grow. The baby geoduck, or seed, are difficult to produce, mortality is high, and hatchery capacity is very limited at this point. Moreover, only tidelands with deep clean sand, high salinity, and the cleanest, certified waters can be used for geoduck farming.

Because of these challenges and the importance of maintaining water quality, geoduck farmers continually use emerging technologies and science to adapt and improve their farming methods.

### PLANTING

Geoduck seed are just ¼” to ½” long when they are removed from nurseries for planting.

Because they’re so vulnerable to predators and drying out at low tide, the seed must be protected for the first year or two. Farmers do this by planting them in short lengths of PVC pipe – 9”-12” long, inserted into the ground at the intertidal zone – the area that is intermittently covered and exposed by the tide. These nursery tubes are spaced about 12-18” apart, with about 3-4” left above the substrate. Generally 2-4 geoduck seed are planted in each tube.



These nursery tubes protect the baby geoducks until they can grow and dig to a depth where they won't dry out at low tide or be eaten by predators. To help the young clams evade predators, nets are placed over the tops of the tubes.

Farmers use different types of nets and methods to secure them, depending on the conditions in their area.

On some beaches, each nursery tube is topped with a single net and secured with a rubber band to keep it in place. Many beaches, however, now have a single, large net covering the pipes. This reduces the visual impact and the potential for tubes being dislodged by storms.



Nursery tube planted with geoduck.



Nursery tubes covered with a single, large net.



## FARM MANAGEMENT

Farms are periodically checked to ensure adequate growth of the geoducks.

To help maintain the beach environment, growers monitor their equipment and pick up any litter. In addition, the Pacific Coast Shellfish Growers Association (PCSGA) organizes beach cleanups at least twice a year, where growers collect beach litter – the vast majority of which is not related to shellfish farming. PCSGA has established a toll free hotline, 800-964-6532, to report shellfish aquaculture debris for clean-up.

Depending on growing conditions, the nursery tubes are removed after 12 to 24 months, and for the next four or five years until harvest, a geoduck crop is virtually invisible. During the first two years the nursery tubes are visible approximately 5-6% of the time. The rest of the time they are under water and/or not visible due to nighttime low tides. Considering that it takes an average of 6 years to grow a crop of geoduck from seed to harvest size there will be tubes visible approximately 2% of the time.



Above, below and left:  
Planted geoduck beaches after PVC pipes  
are removed.



## HARVEST

The length of time to harvest may range between 4 and 7 years depending on planting density, substrate quality, tidal elevation, and market conditions.

Generally, geoduck clams weigh approximately 1.5 to 2 pounds at harvest time, but that can vary depending on market demand.

Geoducks can be harvested above the water line at low tide or by divers below the water line.

Both methods utilize high volumes of sea water at low pressure to soften the sediment where the geoducks are buried until they are released from their burrow. The pumps used to power the water hoses are mounted on small boats or barges anchored off-shore. To reduce noise, harvesters use water-cooled diesel pumps covered by a housing.

Harvest times and duration are dependent on the farm size, crew size, and market demand.



Harvesting Geoduck



Geoducks harvested and ready for market.