

Sea Cucumber Genetics Project

The Southeast Region Dive Fisheries Research group of ADF&G has been collecting genetic samples from sea cucumbers during stock assessment surveys. Samples have been collected from a majority of commercial fishing areas and also sea cucumber control areas.



This study of genetic variation in Alaskan populations of sea cucumbers is important for two reasons. First, an understanding of population structure in sea cucumbers is critical to harvest this species without depleting abundances. Genetic markers, including mitochondrial and microsatellite DNA, will be used to identify demographically independent population units. These data will give insights into how connected the populations are with one another and whether populations have experienced any bottlenecks in population size. Second, if sea cucumber stocks are one day enhanced with juveniles produced in hatcheries, genetic data will be needed to identify the appropriate broodstock and to define where hatchery juveniles can be released.

