Stonington Scallops—To Be or Not to Be?



In June of 2008 the Stonington Shellfish Commission, in partnership with The Nature Conservancy (TNC) and The Forrest and Frances Lattner Foundation, initiated a pilot project

in the waters of Little Narragansett Bay aimed at improving the native bay scallop population in the area. Stonington has historically been home to a thriving population of bay scallops, but since the late 1990s scallops have decreased in abundance to the point where even the most adept scalloper has a hard time bringing home an appetizer course, never mind dinner. No one has been able to pinpoint the direct cause of the rapid decline of bay scallops, but a number of factors, including habitat loss, nutrient enrichment, and predation, are suspected.

Modeled after TNC successes in the Rhode Island south shore salt ponds, the commission placed 2,500 adult bay scallops in cages on the bottom of the bay. The intent of the project was to have the adult scallops spawn, and to then track the young scallops—called spat—to determine how many are produced and how well they survived. This information can help the commission figure out how to proceed in improving the number of scallops in Little Narragansett Bay.

Jon Mitchell, oceanography teacher at Pine Point School, assisted the commission by acting in the role of Project Leader over the course of the summer. Students from Pine Point School and Stonington High School

assisted in building and deploying cages onto the study site (across the bay from the Barn Island boat ramp), monitoring the production of spat over the summer, helping to clean fouling growth off spat collection bags, and assisting in hauling gear out of the water this past fall. Local oyster grower Steve Plant of Connecticut Cultured Oysters donated time and expertise early on in the project, helping the commission purchase the proper equipment and supplies, and then providing instruction to volunteers on building cages to contain the adult scallops.

Due to some delays in the

permitting process, the adult scallops did not get into bay waters until nearly mid-July, much later than anticipated. Despite the delay, there was a fall spawning event and some scallop spat was found in the spat collectors in October. While the number of spat collected was not large, it was enough to let the commission know that their efforts were not in vain and that the process worked. Upon collection of the bottom cages in late October, they found that mortality among the adult scallops varied according to the number of scallops placed in the cages. At low stocking density (≈50 scallops per cage) mortality was about 15%; doubling the number of scallops in the cage increased mortality significantly. Unfortunately the commission did not get the opportunity to track the spat to determine how well it was able to survive in Little Narragansett Bay.

All in all, it was a monumental effort undertaken by a large number of volunteers, fostered by the ever abundant energy and enthusiasm of Jon Mitchell that helped take a successful pilot project from start to finish. The commission is invigorated by their success, albeit somewhat limited, and enthusiastic as they look forward into the 2009 season when they plan to deploy 7,500 adult scallops in the bay. Based on what they learned during the 2008 pilot project, the commission feels confident that they can get gear and animals into the water at a more optimal time, enabling them to capture a spring spawning event. This will also give them the opportunity to track the spat and monitor their survivability. Having this information will help make



better decisions regarding the commission's future efforts to enhance the bay scallop population.

The one thing we can be sure of for the 2009 field season is a much larger need for volunteers. If you are interested in spending some time on the water providing a helping hand in making the Little Narragansett Bay ecosystem a happier, healthier place, please contact Commission Chairman Donald Murphy at

stoningtonshellfish@yahoo.com.

Student volunteers assist in deploying cages of adult bay scallops in Little Narragansett Bay. Photo by Alan Desbonnet.