



A CAPE HATTERAS SECONDARY SCHOOL SCIENCE CLASS learns how to separate oyster eggs out during a strip spawn procedure led by the Coastal Studies Institute.

UNC-CSI, CHSS's hatchery project strip spawn oysters, monitor artificial oyster reef

The Cape Hatteras middle school science classes taught by teachers Tracy Shisler and Amber Bradshaw have been working under the guidance of the UNC Coastal Studies Institute to raise larval fish and oysters in an aquaculture hatchery.

Thursday, May 7 marked the third time that the school has participated in strip spawning oysters in their science laboratory. This process gives the students direct insight into the life-cycle of a local fishery. During strip spawning students determine the sex of the oysters, remove the gametes (egg and sperm) from the gonadal tissue and then combine them together.

After fertilization takes place the oyster larvae will be raised in the school hatchery until the oyster spat is ready to be permanently set on oyster shell. Following setting the juvenile oysters will be moved to the oyster sanctuary located behind the school. This sanctuary contains an artificial reef that was constructed from bagged oyster shell by the students, along with assistance from the UNC Coastal Studies Institute.

Now that water temperatures are warmer, the students will continue their study of the reef through a mask and snorkel. They will observe the ecosystem that has formed on the reef, monitor water quality and record the amount of oyster spat (larvae) that have settled on the reef. The data collected should help the students understand the impact this reef has on the entire ecosystem.

A future path of study for these students will be conducting research on which type of substrate is most successful in landing oyster spat; oyster shell, limestone marl or crushed concrete. These substrates are commonly used in oyster reef restoration projects, and conclusions from this study have the potential to be valuable for other similar projects.

Along with the oyster hatchery there are also aquaculture tanks that require daily attention. This year the school is raising juvenile red drum and hybrid striped bass. These fish may be tagged and released, or they may come to the same end as many fish

which are raised in hatcheries, they become a source of food.

This hatchery project could produce valuable data for other oyster restoration projects in our community, as well as 15 to 20 bushels of oysters. The students involved in the project are learn-

ing 21st century job skills while exploring biology, ecology, engineering, chemistry and physics.

For more information, please visit <http://csi.northcarolina.edu> or call 252-475-3663.