Shell Recycling Program: Atlantic City

By Scott Stueber, Assistant Fisheries Biologist

Atlantic City, a popular Jersey Shore destination for tourists and locals alike, is well known for its casinos, boardwalk and excellent restaurants. A newly developed program by New Jersey Division of Fish and Wildlife's Marine Fisheries Administration is taking place at the heart of it all, helping Atlantic City establishments save money, reduce waste and enhance local oyster reefs, one shell at a time.

Shell Out, Shell In

Shell recycling is a well-established practice in many states and has been gaining interest nationwide in recent years. Oysters, unlike many other species of shellfish, must attach to a hard substrate in order to grow. Traditionally, when oysters and clams are harvested and consumed at a local restaurant, the discarded shells are put in the trash and head directly for an area landfill. Shell recycling programs allow for a beneficial use of this resource by serving as the hard substrate necessary for oyster populations to grow.

Participating restaurants save oyster and clam shells commonly found in their seafood dishes. These shells are collected for use in restoration and enhancement efforts. Putting clean shell back in local waterways keeps excess waste from accumulating in landfills while simultaneously providing the preferred and much needed habitat for oyster populations to be successful.

Accumulated shell from the Shell Recycling Program.

Oyster Reefs Support Popular Fish Species

Oysters are a keystone species, meaning they are an integral part of a healthy ecosystem. Oyster reefs provide vital habitat for many of the commercial and recreational species that fishermen, boaters and naturalists enjoy in New Jersey's waters. Oyster reefs are home to a host of species including striped bass, blue crab and summer flounder, among many others. Additionally, a single adult oyster can filter and clear significant volumes of water each day, helping to improve water quality by cycling excess nutrients.

Recycling Partnerships

New Jersey Division of Fish and Wildlife's Marine Fisheries Administration — in partnership with **Rutgers Cooperative Extension, Stockton Univer**sity Marine Field Station and the Jetty Rock Foundation — has developed a shell recycling program in Atlantic City. The program was sparked by initial interest from the Hard Rock Hotel and Casino Atlantic City. The Hard Rock became aware of the very successful Oyster Recycling Program taking place in Long Beach Township and also wanted to do their part to enhance local oyster reefs. This interest led to the establishment of the Marine Fisheries Administration's Shell Recycling Program, which now collects from the Hard Rock, Dock's Oyster House and The Knife and Fork Inn.

Shell Recycling Program representatives are communicating with additional casinos and restaurants throughout Atlantic City, encouraging others to join the effort to enhance New Jersey's marine habitat. This program now gives restaurant patrons an opportunity to be involved in the restoration and preservation of marine resources while enjoying their favorite seafood dish.

Cure for the Common...Shell

Fish and Wildlife's Marine Fisheries Administration currently picks up shell from participating venues on a weekly basis. Shell is then transported back to the Nacote Creek Research Station where it will cure for a minimum of six months prior to being placed back in the water. Shells can carry diseases detrimental to native oyster populations. Oyster mortality outbreaks, such as that caused by Dermo Disease, can have a significant impact on the health of oyster populations. Thankfully, Dermo only impacts oysters, not human consumers.

This curing process helps to ensure that the waste shell is suitable for planting and would not cause harm to the native oyster population. The shells collected from these Atlantic City establishments will be used to enhance oyster populations in the Mullica River. This river, which spans Ocean, Atlantic and Burlington counties, is home to one of the last self-sustaining oyster reefs on the Atlantic coast of New Jersey. Our Marine Fisheries Administration looks to plant the recycled shell on these existing reefs which will help to enhance and increase this productive resource.

These reefs are hardy and have survived disease outbreak, freshwater intrusion and coastal development. The Mullica River is an excellent platform to enhance and expand due to this oyster population's resiliency.

Engagement, Education and Ecosystems

The Shell Recycling Program has already garnered much interest from Atlantic City tourists and residents alike. As our Marine Fisheries Administration staff picks up shell, we engage with the community, discussing the ecological benefits of recycling shell. Education is a key part of preserving our natural resources.

Recycling shell is a simple way to connect the consumer to these important ecosystems and to their role in environmental stewardship. The program provides an avenue for the public to make a direct difference in the local environment.

Planting Shell for Future Growth

New Jersey Division of Fish and Wildlife's Marine Fisheries Administration intends to plant clean shell on the Mullica River oyster reefs annually. Unfortunately, due to the impact of COVID-19, collection of shell was suspended in March of 2020. Thankfully, as some restaurants re-opened, collection resumed in June of 2020 and the Marine Fisheries Administration plans to begin shell planting in the summer of 2021. Because the developing Shell Recycling Program currently cannot collect enough shell to meet the Administration's enhancement goals, plans are underway to augment recycled shell with additional shell sources used in our other reef enhancement programs. Stay tuned for information relating to shell planting events and results as they become available. For more information on this program or any questions, contact the Shell Recycling Program Coordinator Scott Stueber at Scott.Stueber@dep.nj.gov.

