



(<https://www.globalseafood.org>).



 Responsibility

Joint initiative to replenish oyster population in Baltimore Harbor

22 October 2021

By Responsible Seafood Advocate

Solar-powered technology could be key to hitting Maryland's EPA targets for 2050

The Chesapeake Bay Foundation (<https://www.cbf.org/index.html>) (CBF) and Solar Oysters, LLC (<https://www.solaroysters.com/>) have launched a new collaborative initiative to replenish the native oyster population in Baltimore Harbor. On October 21, 300,000 spat-on-shell oysters were loaded onto Solar Oysters' new automated aquaculture platform in the harbor. The platform uses solar power to rotate large oyster cages filled with young oysters to clean the bivalves and help them grow over time.

"We are excited to showcase our Solar Oyster Production System, a new, innovative, automated oyster production technology powered by solar energy," said Stephen Pattison, Solar Oysters' business manager. "This technology could help reduce Maryland's target nitrogen reduction shortfall (2009 to 2019), which the EPA [U.S. Environmental Protection Agency] has mandated that Maryland must advance by 2025 to remain on target."

The oysters grown on the Solar Oysters platform will significantly increase the number of oysters CBF adds to the Fort Carroll oyster sanctuary, which is located just outside Baltimore Harbor. Once cultivated, CBF will add the oysters to sanctuary reefs to improve the Bay's health and overall oyster population through work with the Chesapeake Oyster Alliance.



The oysters grown on the Solar Oysters solar-powered platform will significantly increase the number of oysters added to the Fort Carroll oyster sanctuary. Photo courtesy of Solar Oysters.

“The number of oysters we’ll be putting on the Solar Oyster platform is equal to the number of oysters we raise each year with volunteers in the harbor through our oyster gardening program,” said Doug Myers, CBF Maryland senior scientist. “This effectively doubles the number of oysters we can put on the sanctuary reef each year. Those oysters will enable the reef to filter more water and provide additional habitat to fish, crabs, and other marine life.”

Oysters are natural filter-feeders, and Pattison said this technology could help reduce nitrogen and other types of pollution that cause harmful algal blooms in the bay. The innovative approach was made possible through a \$150,000 grant from The Abell Foundation.



We built this city on oyster shells

When Seattle decided to rebuild the seawall separating its waterfront from Puget Sound, it turned to a bivalve byproduct for a unique, environmentally friendly material for an hospitable marine habitat. The city wanted its design and materials as pragmatic and beneficial for its underwater residents as for those using the parks, paths and services above ground.



Global Seafood Alliance

0

“This project is very attractive to us as it addresses a number of challenges the City faces,” said Robert C. Embry, Jr., president of the Abell Foundation. “These include developing and piloting an innovative technology, support for the growth of a Baltimore-based company, and improving water quality in the harbor by cultivating oysters as filters.”

While benefiting Baltimore reefs, Pattison said that test results will be used to inform future work, as Solar Oysters plans to “expand to new sites and apply the technology to the oyster aquaculture industry.”

Follow the *Advocate* on Twitter [@GSA_Advocate \(https://twitter.com/GSA_Advocate\)](https://twitter.com/GSA_Advocate).

Author



RESPONSIBLE SEAFOOD ADVOCATE

editor@globalseafood.org (<mailto:editor@globalseafood.org>)

Copyright © 2021 Global Seafood Alliance

All rights reserved.