

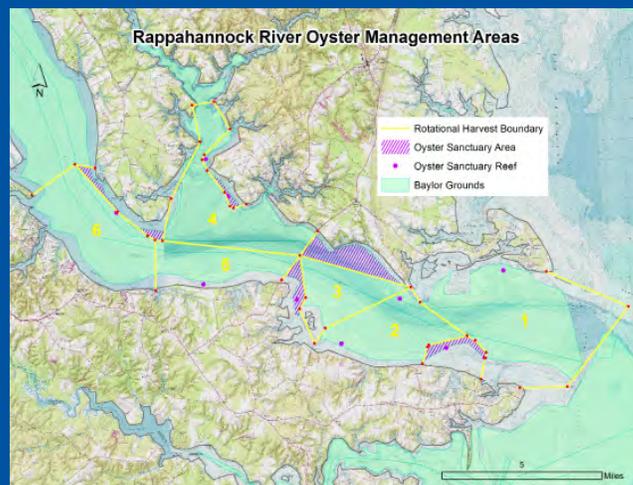
Virginia Oyster Heritage Program: As Oyster Reefs Grew, So Did Opportunities to Learn

Photo courtesy of VMRC.

In 1999, the Virginia Coastal Zone Management (CZM) Program initiated the *Virginia Oyster Heritage Program*, bringing together state, federal, non-governmental, and private oyster industry partners to increase Virginia's wild oyster population through restoration of natural 3-dimensional reef habitat. Up to that point, many nutrient reduction efforts had focused on land-based solutions. It seemed timely for a concerted focus on a water-based solution – specifically nature's water filter, Virginia's native oyster, *Crassostrea virginica*. Virginia's oyster populations had been in decline for well over a century, and the harvest that year was the lowest ever recorded. Between 1999 and 2001 the Virginia CZM Program funded construction of 14 one-acre of sanctuary reefs and 500-acres of harvest area in the Rappahannock River and several acres of sanctuary on the Seaside of Virginia's Eastern Shore.

In 2006, the Virginia CZM Program reconvened the Oyster Heritage Program partners to evaluate the environmental and economic results of their efforts and respond to mounting pressure to open sanctuary areas to harvest on the Rappahannock River. Together the partners developed an innovative strategy that combines harvest rotation with preservation of brood-stock sanctuaries. The strategy applies a three year rotational harvest protocol using 6 geographic areas in the lower section of the river.

Today, oyster reef restoration efforts jump-started under the VOHP, combined with a new rotational harvest approach, shows there is great promise in achieving a restored population and a sustainable fishery. Oysters are beginning to take hold once again as demonstrated by a ten-fold increase in harvest in the fall of 2011.



Under the rotational harvest strategy on the Rappahannock River, two of the six areas are open each year to harvest with an area lying fallow for two years following harvest. The strategy also set a maximum oyster harvest size limit and provided for large oysters to be put back on sanctuaries. This rotational harvest protocol also was applied in Pocomoke Sound near Tangier Island.



Virginia Coastal Zone
 MANAGEMENT PROGRAM



This accomplishments fact sheet was originally produced by the Virginia CZM Program for a June 2012 event to celebrate the 40th anniversary of the CZMA and to highlight the accomplishments made possible through this federal funding.

Virginia Oyster Heritage Program Results

- Restoration of more than 80 brood stock sanctuary reefs and 1000 acres of harvest area in Virginia.
- CZMA funding (\$1.5 million) was focused on restoration efforts in the Rappahannock, where 14 one-acre 3-dimensional oyster sanctuary reefs and 500 acres of adjacent 2-dimensional harvest areas were restored.
- As a result of its coordination and funding of the VOHP, the Virginia CZM Program leveraged its CZMA funding to raise millions more in private and public dollars, resulting in \$2.5 million in federal funds to the Corps of Engineers to implement oyster restoration projects in Virginia following the VOHP model.
- Although improvements in reporting are needed, estimates show up to a 14-fold increase in harvest on the Rappahannock since the rotational harvest system began in 2007, from just over 1,600 bushels that year to over 23,800 bushels in 2010.
- In 1999, Virginia's total oyster harvest was the lowest ever recorded--23,000 bushels, valued at \$575,000. The total 2011 Virginia harvest (wild and aquaculture) was 236,000 bushels--a 10 fold increase with a corresponding dockside value of \$8.6 million.
- Recent testimonies from the field convey the success of the rotational harvest approach, and the positive impact of Virginia CZM's problem-solving role – in this case how to restore a dwindling coastal resource while simultaneously maintaining a sustainable coastal industry dependent on that resource:

"Last year was about the best I've seen it, the rotational system has helped for sure. There's more oysters out there, and bigger ones too." William Parks, waterman for 36 years.

"We're protecting the resource, giving people work and keeping this industry viable, this is how things should be done." Tommy Kellum, owner Kellum Seafood.

"The rotational system is about the best thing we have right now to create a sustainable fishery." Tommy Leggett, scientist and oyster farmer with the Chesapeake Bay Foundation.

(As printed in the Virginian-Pilot in October 2011)

For more details about the accomplishments of the Virginia Oyster Heritage Program:

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<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/Oysters.aspx>



Photo by Virginia CZM Program.



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