

## Eastern Oyster (*Crassostrea virginica*) Restoration on the Seaside of Virginia's Eastern Shore

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Virginia's Eastern oyster resource has been exploited since European settlement and before. In colonial times, sailors referred to oyster reefs as navigational hazards. Commercial harvesting of oysters began in Virginia in the early 1800s with peak harvest occurring in the late 1800s (Kennedy 1989). In the 1960's the disease known as MSX (*Haplosporidium nelsoni*) appeared in Virginia's oysters and when combined with other factors, has devastated populations and the oyster industry ever since. Virginia's oyster population is only 1% of what it was 35 years ago (Wesson et al. 1999) and current harvest is in the range of tens of thousands of bushels per year.

Restoration of the Virginia oyster resource has been assisted by a series of initiatives since 1990. Progress toward these efforts has been made through the development of several programs including direct application of substrate (cultch) to extant oyster reefs to facilitate settlement and recruitment, enhancement of reefs on the Seaside of the Eastern Shore by placement of shell, and construction of elevated reef structures in the Virginia portion of the Chesapeake Bay (Wesson et al. 1999).

Restoration of selected oyster reefs in the seaside lagoons of Virginia's eastern shore has been ongoing since 1995. Relative success of these intertidal reefs has been mixed. Natural reproduction and growth has occurred on all reefs and reefs have generally held up well in the face of natural predation and native and non-native disease. However, some reefs have declined in areal extent due to sedimentation and illegal harvest. Future reef restoration will focus on placement in locations where the likelihood of sedimentation and illegal harvest are minimized.

### References:

- Kennedy, V.S. 1989. The Chesapeake Bay oyster industry: traditional management practices. *cited in:* Kennedy, V.S. and L. P. Sanford. 1999. Characteristics of relatively unexploited beds of the eastern oyster, *crassostrea virginica*, and early restoration programs. *in:* M. Luckenbach, R. Mann, and J. Wesson. (eds.), Oyster Reef Habitat Restoration: A Synopsis and Synthesis of Approaches. Virginia Institute of Marine Science, Gloucester Pt., Va. 366 pp.

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