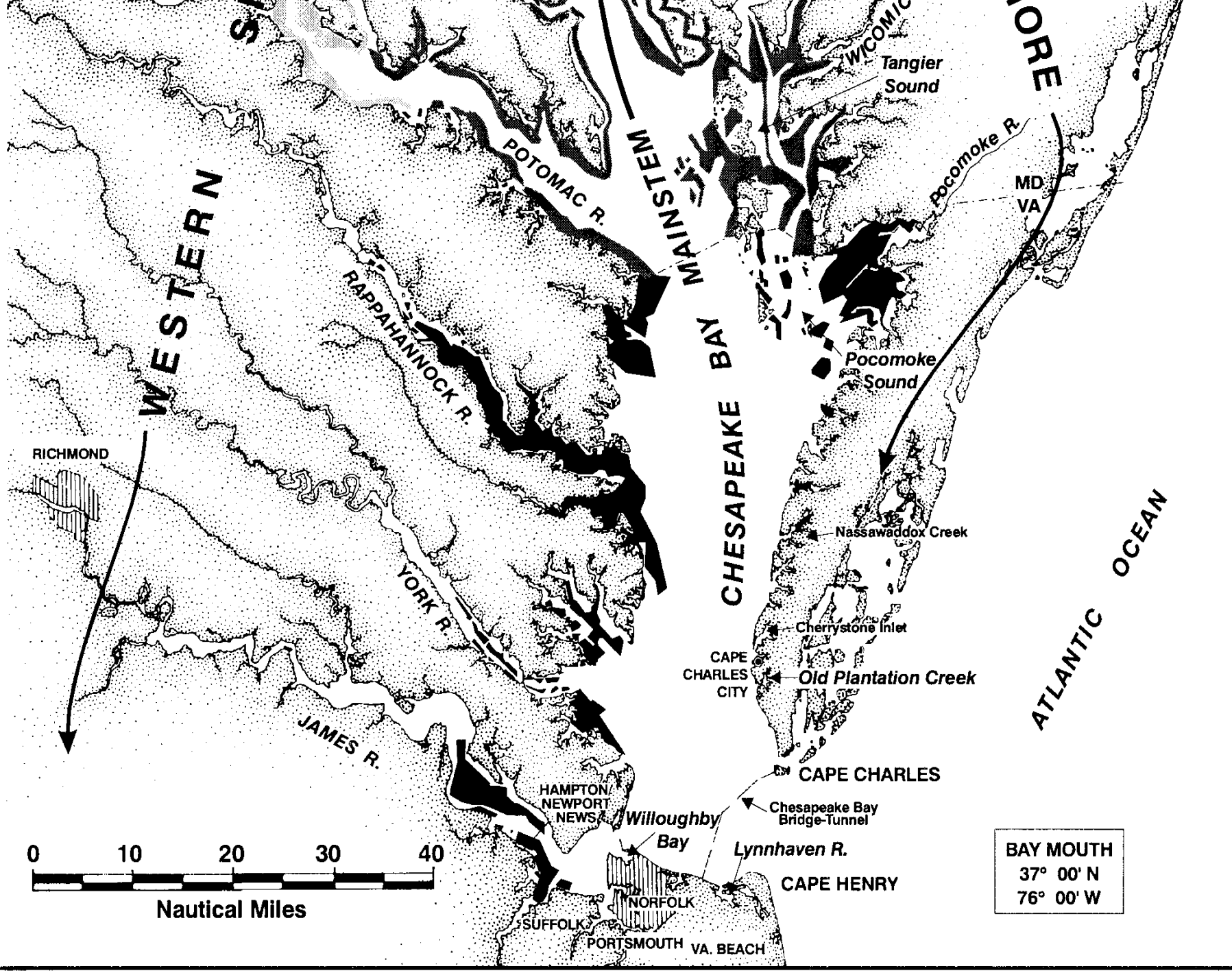
Eastern Oyster (*Crassostrea virginica*) Restoration on the Seaside of Virginia's Eastern Shore

by: William Hester
U.S. Fish and Wildlife Service
Gloucester, Virginia

Martinsburg
Frederick
Towson
BALTIMORE
Ellicott City
Chestertown
Winchester
Charles Town
JEFFERSON
FREDERICK
Berryville
CLARKE
Leesburg
MONTGOMERY
Rockville
HOWARD
ANNE ARUNDEL
Centreville
ANNAPOLIS
QUEEN ANNES
KENT
LOUDOUN
ARLINGTON
D.C.
PRINCE GEORGES
WARREN
Front Royal
Woodstock
SHENANDOAH
FAUQUIER
PRINCE WILLIAM
Fairfax
FAIRFAX
WASHINGTON
Alexandria
Upper Marlboro
Denton
Easton
TALBOT
CAROLINE
Washington
Luray
RAPPAHANNOCK
Manassas
Warrenton
PAGE
La Plata
CALVERT
Prince Frederick
Cambridge
DORCHESTER
CULPEPER
Culpeper
Stafford
CHARLES
Harrisonburg
MADISON
Madison
STAFFORD
KING GEORGE
King George
ST MARYS
Leonardtown
CHESAPEAKE BAY
WICOMICO
Princess Anne
SOMERSET
Stanardsville
GREENE
Orange
Fredericksburg
Spotsylvania
ORANGE
SPOTSYLVANIA
Bowling Green
WESTMORELAND
Montross
Charlottesville
Louisa
CAROLINE
ALBEMARLE
LOUISA
Warsaw
RICHMOND
NORTHUMBERLAND
Heathsville
Tappahannock
Palmyra
FLUVANNA
GOOCHLAND
Hanover
KING AND QUEEN
King William
King and Queen CH
Lancaster
LANCASTER
Lovingston
Goochland
HANOVER
KING WILLIAM
MIDDLESEX
Saluda
BUCKINGHAM
POWHATAN
Powhatan
HENRICO
New Kent
NEW KENT
GLOUCESTER
MATHEWS
Mathews
Eastville
Buckingham
CUMBERLAND
Cumberland
RICHMOND
Chesterfield
Charles City
CHARLES CITY
JAMES CITY
Gloucester
Williamsburg
Yorktown
APPOMATTOX
Appomattox
Amelia CH
CHESTERFIELD
AMELIA
Colonial Heights
Petersburg
Hopewell
Prince George
PRINCE GEORGE
Surry
SURRY
Hampton
Cape Charles
Farmville
PRINCE EDWARD
NOTTOWAY
Nottoway
DINWIDDIE
Dinwiddie
Charlotte CH
CHARLOTTE
Lunenburg
LUNENBURG
Sussex
SUSSEX
Isle of Wight
Newport News
Norfolk
Portsmouth
ISLE OF WIGHT
SOUTHAMPTON
VIRGINIA BEACH (CITY)
Halifax
MECKLENBURG
Boydton
Lawrenceville
BRUNSWICK
Emporia
Courtland
Franklin
SUFFOLK (CITY)
CHESAPEAKE (CITY)
GREENSVILLE
JOHN H KERR RES
LAKE GASTON
ROANOKE RAPIDS LAKE
GATES
Gatesville
Currituck
Warrenton
NORTHAMPTON
ACCOMACK
NORTHHAMPTON
Accom


W/COMICO
Tangier Sound
POTOMAC R.
MAINSTEM
Pocomoke R.
MD
VA
WESTERN
RAPPAHANNOCK R.
CHESAPEAKE BAY
Pocomoke Sound
RICHMOND
Nassawaddox Creek
YORK R.
Cherrystone Inlet
CAPE CHARLES CITY
Old Plantation Creek
ATLANTIC OCEAN
JAMES R.
CAPE CHARLES
HAMPTON/ NEWPORT NEWS
Willoughby Bay
Chesapeake Bay Bridge-Tunnel
Lynnhaven R.
CAPE HENRY
NORFOLK
SUFFOLK
PORTSMOUTH
VA. BEACH
0 10 20 30 40
Nautical Miles
BAY MOUTH
37° 00' N
76° 00' W

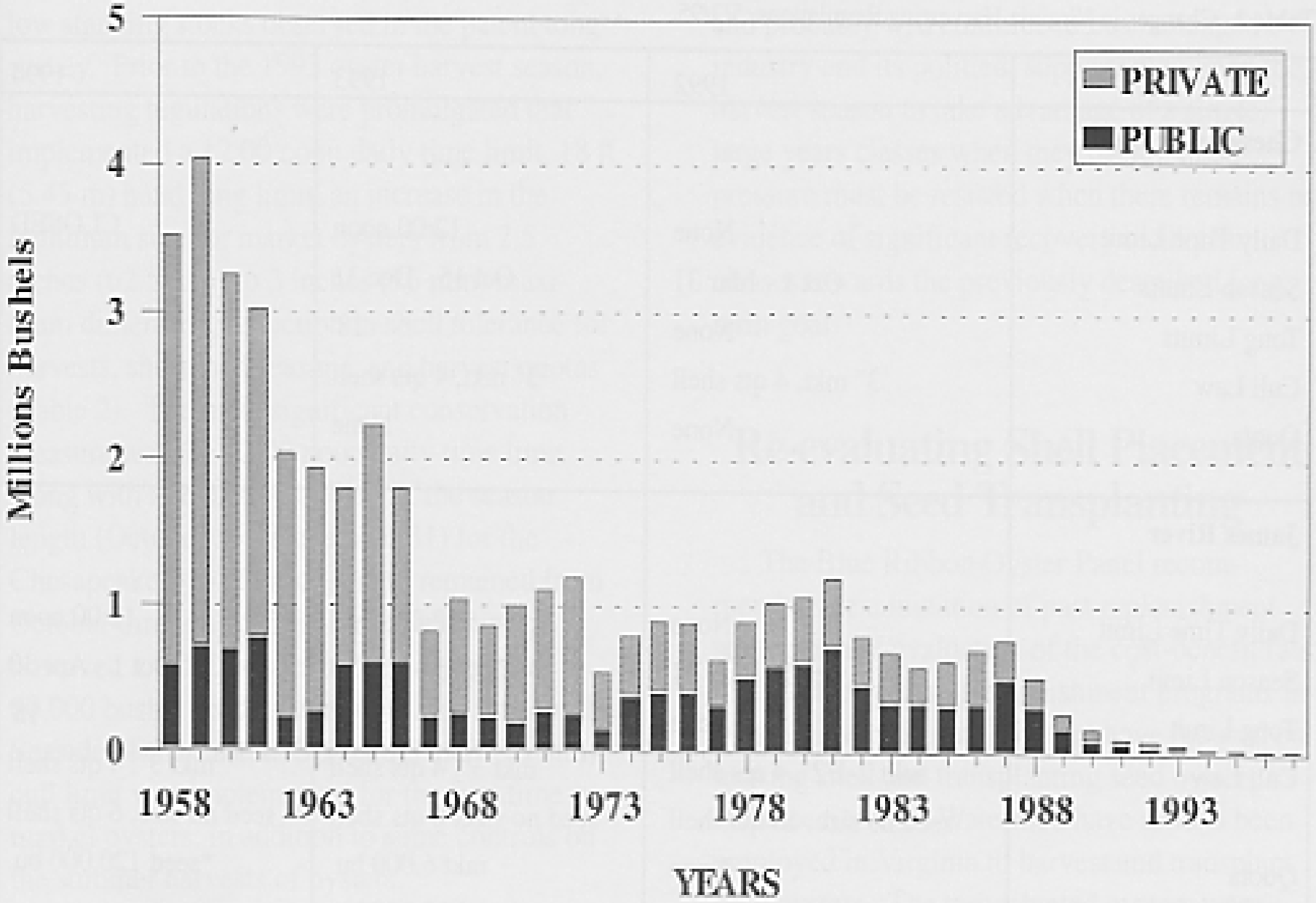


Figure 1. Oyster ground production, public and private.

Martinsburg
Frederick
Towson
BALTIMORE
Ellicott City
Chestertown
Winchester
Charles Town
JEFFERSON
FREDERICK
Berryville
CLARKE
Leesburg
MONTGOMERY
Rockville
HOWARD
ANNE ARUNDEL
Centreville
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SHENANDOAH
FAUQUIER
PRINCE WILLIAM
Fairfax
FAIRFAX
WASHINGTON
Alexandria
Upper Marlboro
Denton
Easton
TALBOT
CAROLINE
Washington
Luray
RAPPAHANNOCK
Manassas
Warrenton
PAGE
La Plata
CALVERT
Prince Frederick
Cambridge
DORCHESTER
CULPEPER
Culpeper
Stafford
CHARLES
Harrisonburg
MADISON
Madison
STAFFORD
KING GEORGE
King George
ST MARYS
Leonardtown
CHESAPEAKE BAY
WICOMICO
Princess Anne
SOMERSET
Stanardsville
GREENE
Orange
Fredericksburg
Spotsylvania
ORANGE
SPOTSYLVANIA
Bowling Green
WESTMORELAND
Montross
Charlottesville
Louisa
CAROLINE
ALBEMARLE
LOUISA
Warsaw
RICHMOND
NORTHUMBERLAND
Heathsville
Tappahannock
ESSEX
Palmyra
FLUVANNA
GOOCHLAND
Lovingston
HANOVER
King William
KING AND QUEEN
Lancaster
LANCASTER
King and Queen CH
MIDDLESEX
ACCOMACK
Accom
Goochland
BUCKINGHAM
POWHATAN
HENRICO
New Kent
Saluda
GLOUCESTER
MATHEWS
Mathews
Buckingham
Powhatan
RICHMOND
NEW KENT
Cumberland
Chesterfield
CHARLES CITY
Gloucester
Eastville
APPOMATTOX
Amelia CH
CHESTERFIELD
Charles City
JAMES CITY
Williamsburg
Appomattox
AMELIA
Colonial Heights
Hopewell
Yorktown
Farmville
PRINCE EDWARD
Petersburg
Prince George
Surry
NORTHAMPTON
NOTTOWAY
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Hampton
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BRUNSWICK
Halifax
MECKLENBURG
Boydton
Emporia
Courtland
Franklin
SUFFOLK (CITY)
CHESAPEAKE (CITY)
GREENSVILLE
JOHN H KERR RES
LAKE GASTON
ROANOKE RAPIDS LAKE
GATES
Gatesville
Currituck
Warrenton
NORTHAMPTON

Greenbush
New Church
Withams
Chincoteague
Saxis
Sanford
Wattsville
Rt 13
Temperanceville
Atlantic
Assateague
Pocomoke
Sound
Assawoman
Wallops Island
Tangier
Bloxom
Modest Town
Nelsonia
Lee Mont
Parksley
Greenbush
Accomac
Onancock
Onley
Rt 13
Harborton
Melfa
Locustville
Cedar Island
Pungoteague
Keller
Wachapreague
Craddockville
Painter
Belle Haven
Quinby
Davis Wharf
Willis Wharf
Parramore
Island
Jamesville
Exmore
Franktown
Nassawadox
Marionville
Weirwood
Birdsnest
Machipongo
Hog Island
Eastville
Cobb
Island
Cape Charles
Atlantic Ocean
Rt 13
Myrtle
Island
Capeville
Townsend
Kiptopeke
Smith Island
Fishermans
Island

3
5
4
2
1

MARYLAND

Research, Education, Outreach

Volume 19, Number 1

MARINE NOTES

SPOTLIGHT ON RESEARCH

Oyster Reefs: Key to Restoring Bay Grasses?

BY MERRILL LEFFLER

Illustrations by Karen Tennison; photo by Sandy Rodgers

In a 1988 scientific paper, Roger Newell, a researcher at the University of Maryland Center for Environmental Science (UMCES), dramatized the importance of oysters to Chesapeake Bay. He made the then-astonishing argument that a century before, oyster stocks could have filtered the entire Bay in less than six days. In 1988, the Bay's considerably depleted oyster population, said

The ecological role of oysters is now recognized as an important thrust of resource management

Bay oysters, after all, are still plagued by MSX and Dermo, parasitic diseases that have been devastating oysters and limiting many attempts at oyster restoration. While research efforts show much promise in developing disease-tolerant strains, getting these oysters into the Chesapeake in large enough numbers over the next decade will re-

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