

Inland Bays Journal Special Report**Enhancing, Restoring Inland Bays Shellfish****CIB's Oyster Gardening Program is a key to increase populations in Delaware's Inland Bays**

"Given the low level of natural oyster recruitment we have observed, the Inland Bays Oyster Gardening program is a key means for increasing oyster populations."

During the summer of 2003, the Center for the Inland Bays received a small grant from the National Fish and Wildlife Foundation to initiate a pilot-scale oyster gardening program. Now in its third season, the Oyster Gardening program is a cooperative effort of the CIB, Delaware Sea Grant Program and citizen volunteers. The purpose of the program is to raise juvenile oysters for stocking the demonstration oyster reef at the CIB's James Farm Ecological Preserve at Pasture Point on Indian River Bay, and for planned oyster restoration work in Little Assawoman Bay.

To accomplish this, volunteers who live on the Bays are enlisted and trained to care for nursery culture oyster spat in Taylor Floats at their own dock for annual stock.

Other shellfish restoration programs in the Chesapeake and elsewhere have demonstrated that raising oyster spat to a larger size in Taylor Floats, before putting it on the reef, can significantly reduce losses to crab predation. The oyster spat (on shell) used in the program is produced by the University of Maryland Hatchery at Horn Point in Cambridge, Maryland.

This year, oyster gardening activity has nearly doubled to 29 locations thanks to the volunteer efforts of 47 Inland Bays residents.

In addition to returning volunteers, new gardeners from Fenwick Island, South Bethany, the Bald Eagle Creek/Torquay Canal and Guinea Creek areas of Rehoboth Bay and the Indian River Marina have joined the oyster gardening program.

Volunteer gardeners have helped to produce more than 30 bushels of juvenile oysters on shell for reef development. The system-wide distribution of oyster gardening locations has also greatly facilitated the monitoring of In-

land Bays water quality and the occurrence of shellfish pathogens. Oyster spat with an initial average size of 10 millimeters have been deployed in Taylor floats during the last two summers (2003 and 2004) at various locations in all three of the Inland Bays. Average increases in oyster growth - ranging from 23 to 45 millimeters depending on location - have been good to excellent.

Good oyster growth has been observed at all Inland Bays locations especially in the Oak Orchard area of Indian River Bay and the southern portion of Little Assawoman Bay. Oyster mortality in the Taylor Floats has been negligible at all locations. Growth rates observed during the initial deployment of oysters in Little Assawoman Bay contradict anecdotal estimates that bay water quality conditions there are generally unsuitable for bivalves. These results also demonstrate the high potential for oyster aquaculture in the bay using off-bottom gear, and the opportunity to take advantage of the relatively closed conditions of Little Assawoman for promoting natural recruitment by developing oyster spawning sanctuaries in the bay. Besides providing an optimum environment for nursery growth, the baskets of oysters and shell in the Taylor Floats create excellent habitat for grass shrimp, juvenile fish and other small invertebrates.

With the assistance of these Inland Bays resident volunteers, we were able to deploy oyster spat at more than 15 locations around all three bays during 2003 and 2004.

Through community involvement and participation, the program also sought to educate the public about the important ecological services provided by oysters and other bivalve shellfish in improving water quality.

For additional information about the Inland Bays Oyster Gardening Program, please contact John Ewart at ewart@udel.edu or E.J. Chalabala at wildlife@inland-bays.org.



Volunteer oyster gardeners receive their spat from CIB intern Mike Yost, right. The spat are kept in a Taylor float at the gardeners' dock.

2005 Oyster Gardeners, Listed by Watershed

Our sincere thanks to all the volunteers working with us this season (47 individuals at 29 sites) They include the following:

Little Assawoman Bay

Ken Arni
Vicki & Wayne Carmean
Troy & Cynthia Hardin
Buzz & Betsy Henefin
Lloyd Hughes
Martha Keller
Natalie & Steve Madeburger
David & Suzanne Tucker
Anna & Charles Welsh

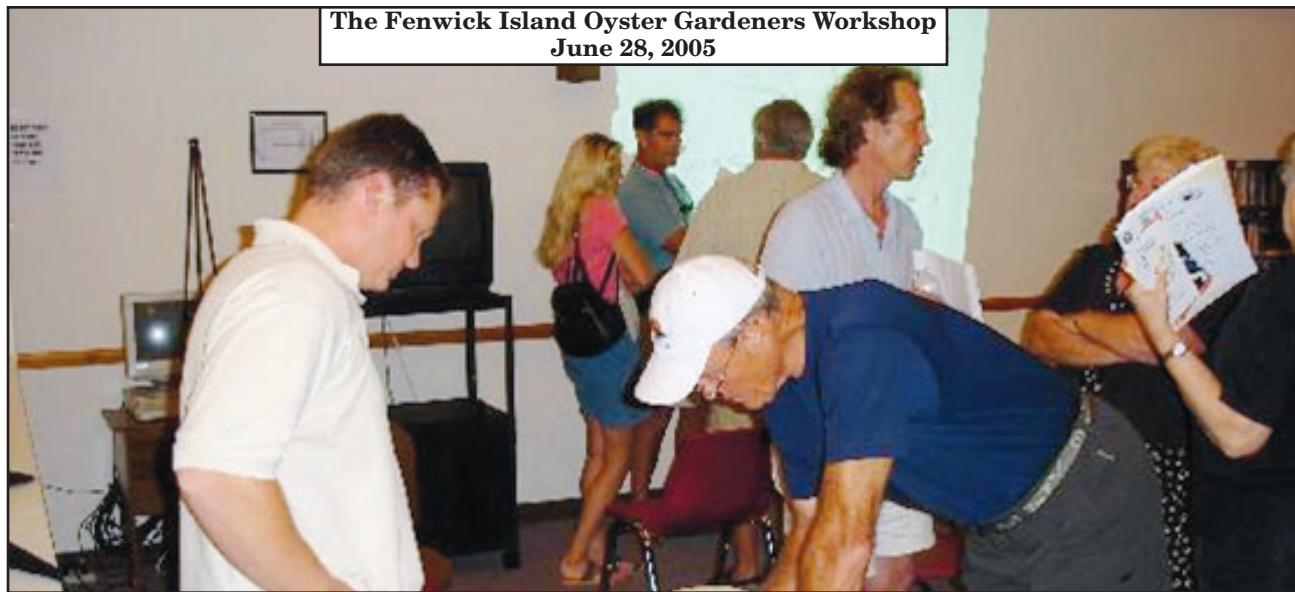
Indian River Bay

Peter DeMarie
Nancy & Graham Purchase
Bruce Maurer
Gary King
Dave Wolzansky

Rehoboth Bay

Louis Allman
Steven & Dodee Black
John Cristea
Jeff & Deborah Dershem
Gil Ekdahl
Al Goldfarb
Blair & Missy Jones
Michael Kenjorski & Jane Nigg
Dave & Sandy Munchel
Bob & Winnie Oggenfuss
Ted Parker
Glenn & Molly Ruoff
Dom & Sue Scaglione
Justin Sikora
William Timmons
Nancy & Jerry Weinberg

**The Fenwick Island Oyster Gardeners Workshop
June 28, 2005**



**The Lewes Oyster Gardeners Workshop
June 30, 2005**

