



P.O. Box P St. Michaels, MD 21663

Visit the EC website at [www.wetland.org](http://www.wetland.org)

# OYSTER GROWERS GUIDE

Fall 2009

## MESSAGE FROM THE GOVERNOR

**D**ear Marylander: Thank you for agreeing to be part of our

Marylanders Grow Oysters project, an exciting way to create and develop a living, diverse, oyster reef community.

Through your action and commitment, you are providing an important head start during the first year of life for these vulnerable oysters until they are large enough to be planted on a local sanctuary.

Not only will more oysters be placed in the Chesapeake

Bay as a result of your efforts, but rejuvenated oyster reefs will naturally become vital underwater ecosystems for a rich diversity of aquatic life.

Working together, we can make real our vision for bringing about a cleaner, greener, more sustainable future all of us prefer—both for ourselves, and for future generations.

Good luck and thank you again for working to improve the health of the Chesapeake Bay and its tributaries, and to set a vital example of stewardship for our fellow Marylanders.

Sincerely,  
Martin O'Malley, Governor



*The future generation of Oyster Growers!*



*Spat will grow on these recycled shells in cages before being placed into sanctuaries.*

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### Oyster Facts

- Oysters grow an average 1 inch per year.
- Oysters can change sex.
- Oyster larvae can only attach to a hard clean surface; after attaching they can never move again.
- Before oysters are a year old, they are called "spat."
- An oyster can filter up to 50 gallons of water per day in warm water.

## ABOUT EC AND THE MGO PROGRAM

Environmental Concern Inc. (EC) is a nonprofit organization that promotes public understanding and stewardship of wetlands with the goal of improving water quality and enhancing nature's habitat. This is accomplished through wetland outreach and education, native species horticulture, and the restoration, construction and enhancement of wetlands.

The Marylanders Grow Oysters (MGO) program, instituted by Governor Martin O'Malley in 2008 and directed by the Maryland Department of Natural Resources reinforces EC's mission to improve water quality and enhance nature's habitat. EC is pleased to be a partner in the 2009 Marylanders Grow Oysters program, distributing spat and facilitating their growth with the property owners residing along San Domingo and La Trappe Creeks.



A special thank you to our 2009 Restoration Summer Intern, Brittany Baker (Allegheny College), for helping us with the first issue of the "Oyster Growers Guide".

## TELL YOUR NEIGHBORS

**A**sk around! See if your shoreline neighbors are involved with the Marylanders Grow Oysters program (MGO).

If they are, you can compare cages to maximize

the health of your spat; if not, you can talk to them about the ecological (and personal) rewards of growing oysters and possibly persuade them to become an oyster grower too.

The MGO program can also become a community building exercise, as well as a restorative Bay initiative. Offer to shake your neighbors' cages one week or lend them the hose from your pier.

Questions, concerns, or comments? Please contact Jessica Lister at (410) 745-9620 or [oysters@wetland.org](mailto:oysters@wetland.org).

Phone: (410) 745-9620 Fax: (410) 745-3517  
[www.wetland.org](http://www.wetland.org)



All About Wetlands Since 1972

## LEARNING THE ROPES

**H**ow you tie your cages may affect the success of your oysters' growth over the course of the year. Tie the cages too high and exposure to freezing winter winds could kill your spat; tie the cages too low and sediment buildup may restrict water flow and stunt the oysters' growth. Cages should be tied so that they are about one foot below the surface of the water during low tide. This will keep

the oysters in the water and alive. If the tide is lower than usual and the cages are exposed to air for a couple hours, don't worry; this short-term exposure is fine and will actually help to control fouling as long as the air isn't freezing. In winter or at times of freezing temperatures, however, the cages must

*This year's cages are slightly smaller than those distributed last year along the Tred Avon River. The cages still hold the same number of spat, but with a lighter design, caring for the spat is less exertive. Those spat can grow heavy!*

## OYSTER CAGE MAINTENANCE

**D**uring the cold winter months, your oysters will become dormant. No cleaning or rinsing will be necessary. Before the temperatures reach freezing, though, you should continue with the maintenance of the cages. Even during the warmer months, your work is minimal. Dunk your cages in and out of the water (like steeping a tea bag) once every two weeks. Jostling the cages will

shake off excess silt and keep the oysters from growing into the mesh wire of the cages, which may easily break their delicate shells and kill them. If you observe heavy fouling on the cages, spray the cages with a garden hose, or use a brush to scrub off buildup. You can also help control fouling by leaving the cage of oysters out of the water for up to two hours once a week during the spring/summer months. The fouling organisms will dry out and die when exposed to air. This method is

*Temperature is an important factor in determining what care your oysters need. Please make careful note of the differences between warm and cold weather practices.*



*Fouled cage (left) versus clean cage (right). Heavy fouling on cages may restrict water flow to your spat.*

particularly helpful in controlling predatory creatures, like the flatworm pictured on the next page. Predatory creatures like the flatworm pose a severe threat to young spat.

## SPAT-IALLY AWARE



*Chris Judy, director of the DNR MGO program, determines the location of existing sanctuaries on the Tred Avon River. The oysters grown in cages on the Tred Avon River last year were relocated to sanctuaries in the river in late August.*

**I**n about 9 to 12 months, once your spat have matured, they will be transported to an oyster sanctuary within San Domingo or La Trappe Creek. The Marylanders Grow Oysters program transports oysters to a sanctuary within the waters that they were raised to ensure a natural transition from cage to reef. The DNR looks at historical oyster bar maps to find the general location

for potential sites. From there they go on boat, surveying the water bottom to determine its composition, noting areas with ideal habitat conditions. Areas with existing oysters, of course, are ideal—it means there may be an existing reef there, and may be a good relocation site for the oysters. Environmental Concern Inc. will work with MD DNR to identify the sanctuaries within San Domingo and La Trappe Creeks.

## IDENTIFY YOUR MICRO-REEF INHABITANTS

*When you open your oyster cages, you may be surprised to see more than just spat living on the oyster shells... See if you can find these organisms in your own cages, or send pictures of organisms you find to EC at [oysters@wetland.org](mailto:oysters@wetland.org).*



*Mud crabs*



*Predatory Flat worm*



*Grass shrimp*



*Polychaete*



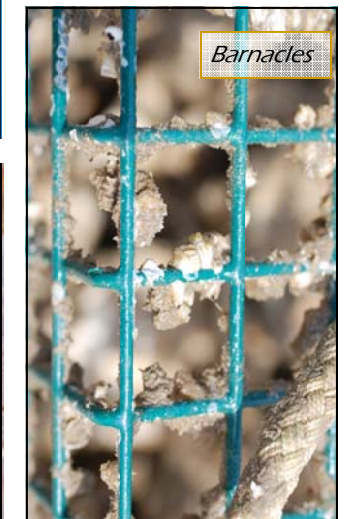
*Goby fish*



*Skillet fish*



*Tunicates or "Sea squirts"*



*Barnacles*

## LOOK INSIDE THE CAGE

**I**f you look carefully, you will see that your oysters now have many neighbors. The micro-reefs in your cages are a home to fish (goby's, skillet fish, blennies), mud crabs, worms,

grass shrimp, shrimp-like amphipods, and other organisms. To see them, place your cage on your pier and let it sit there for a few minutes. Then pick it up and look underneath the cage. You

will see many creatures on your pier. The cage wire itself has barnacles and mudworms that are part of the ecosystem of your cage and the Bay. Enjoy your micro-reefs!