

Chesapeake Beach

Oyster Cultivation Society

CBOCS Missions

PRIMARY

- Host Oyster Spat on Shell for 1 year

PARALLEL

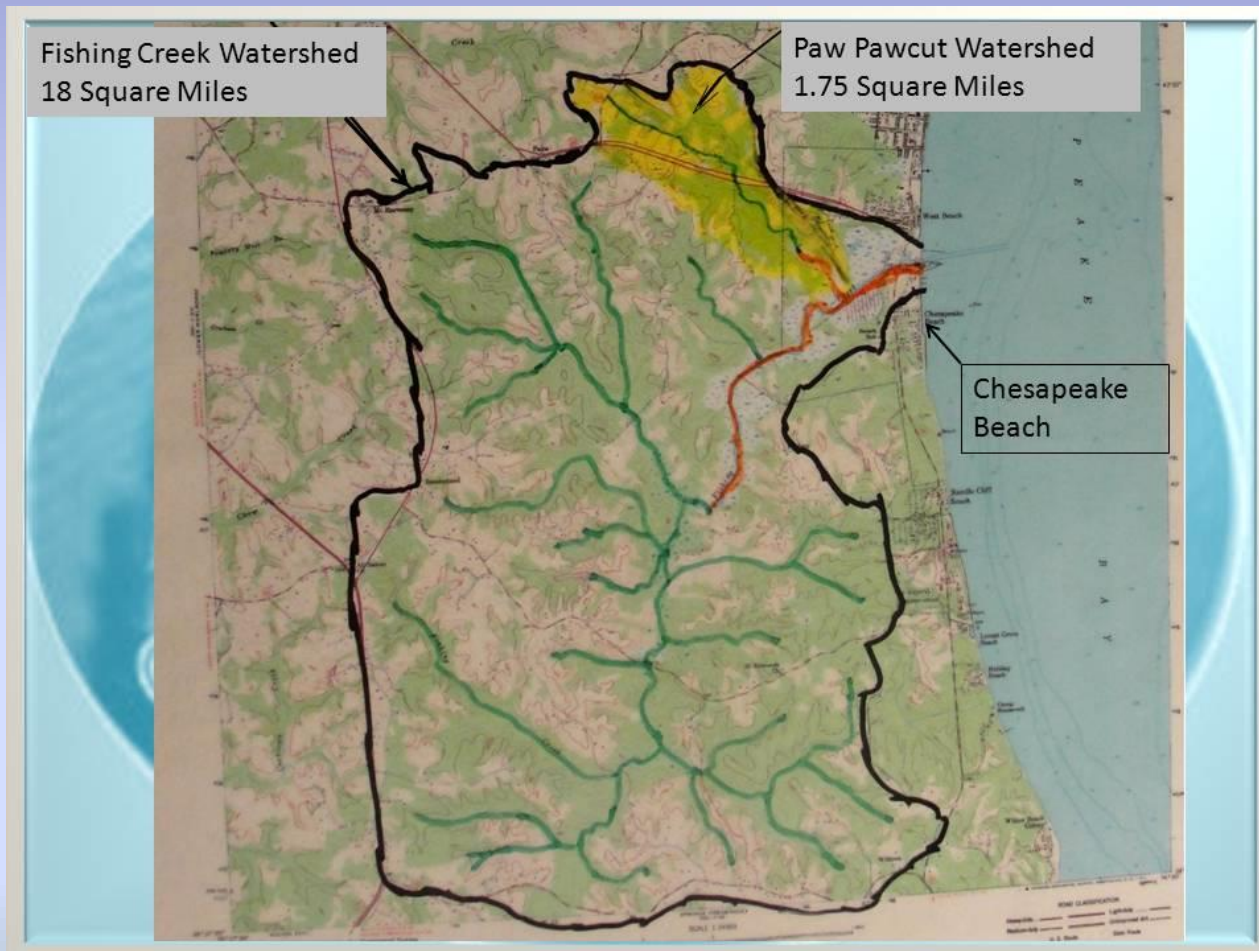
- Educate youth
- Monitor water quality
- Outreach to community
- Enhance Fishing Creek Trail

CBOCS Accomplishments

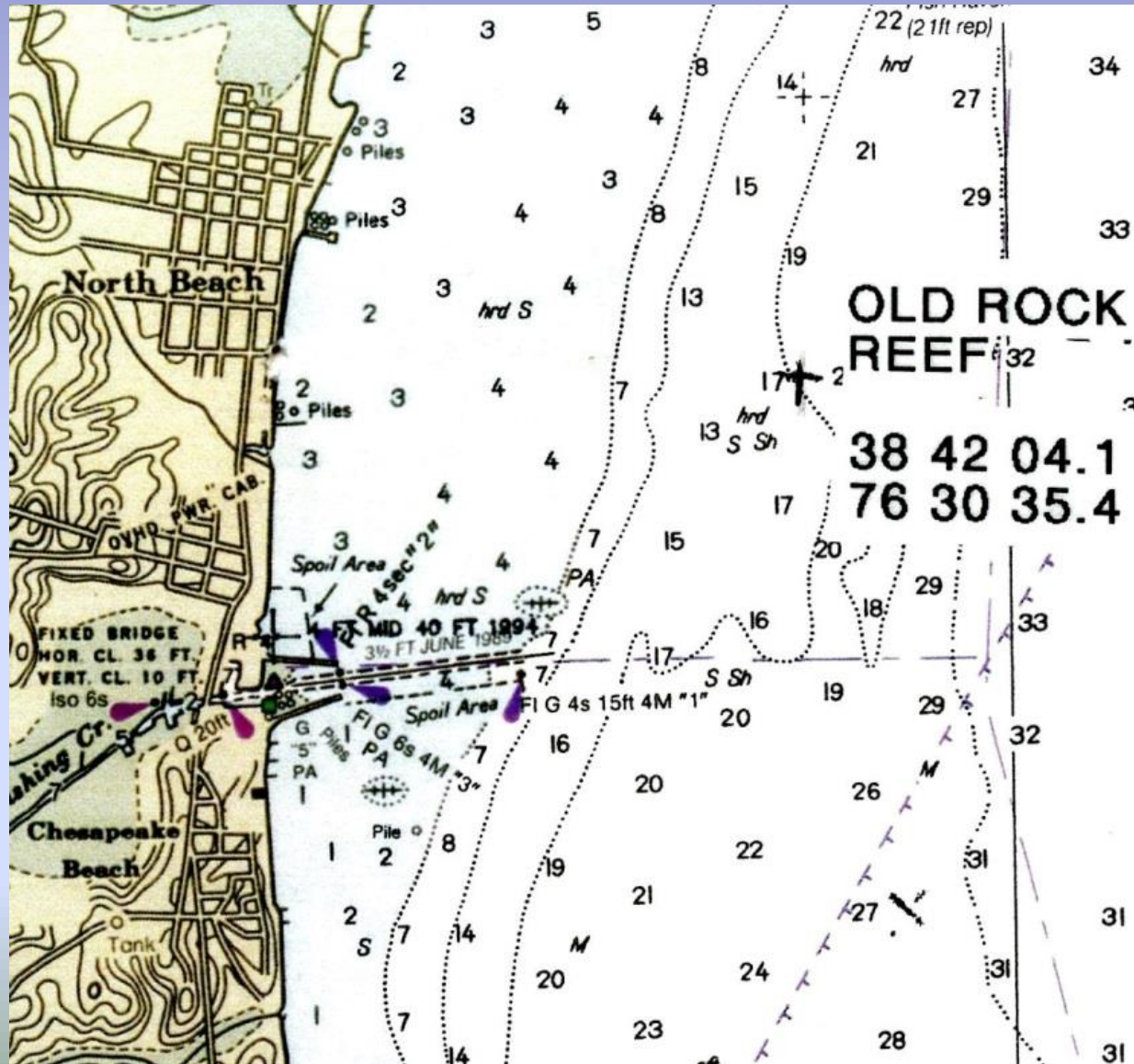
- Formed 2011, **5th year in operation**, 120 volunteers
- Installed 30 BOCS Oyster Cages in Fishing Creek to raise oysters from spat to 1 year olds (plus another 30 MGO cages)
- Placed 400,000 juvenile oysters on Old Rock Reef
- Hosted 3200 Calvert County Students on Field Trips
- Partnered with Maryland Growing Oysters program

CBOCS is endorsed and supported by Chesapeake Beach Mayor Wahl, Calvert County Commissioners, Calvert County School System, Delegate Fisher and Senator Miller and Chesapeake Beach Residents

CBOCS Fishing Creek



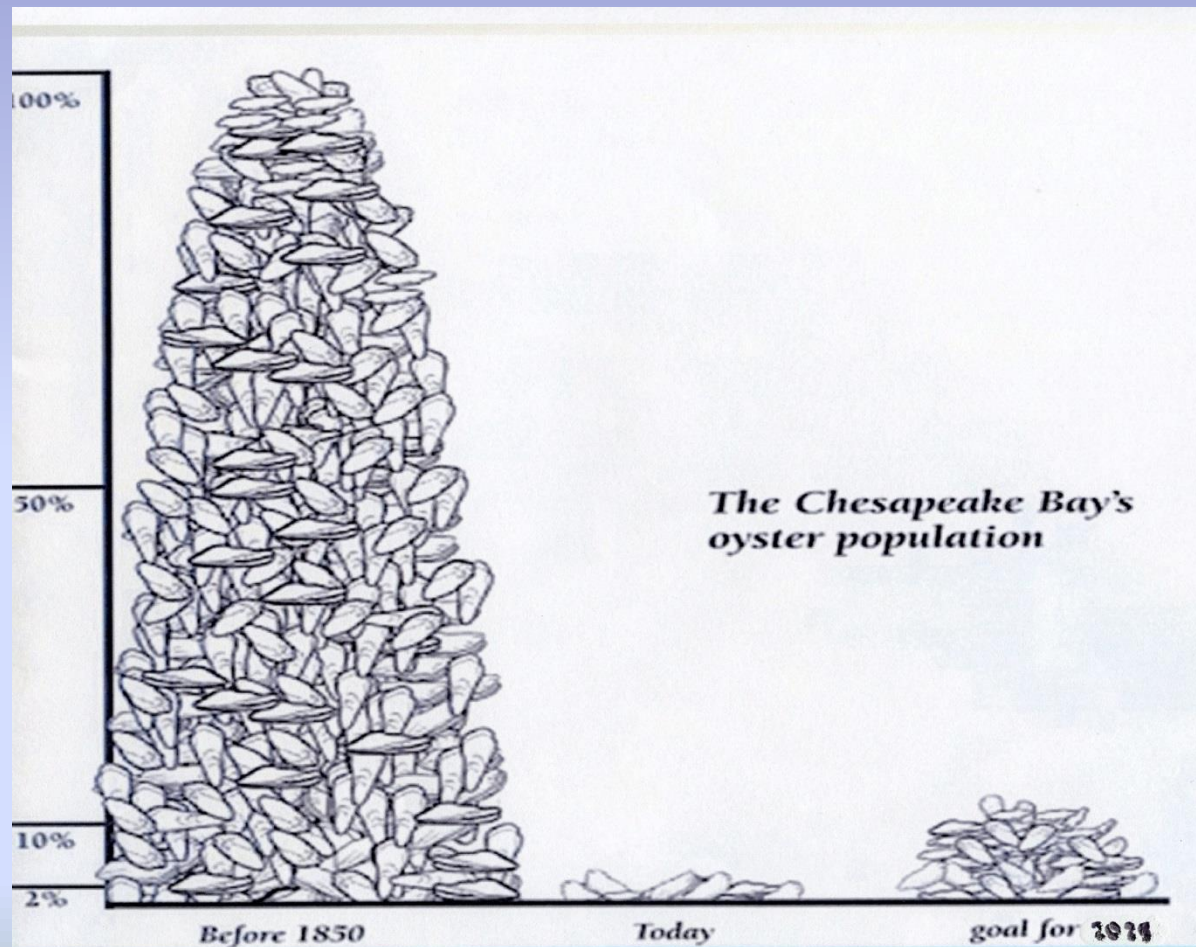
CBOCS Oyster Reef

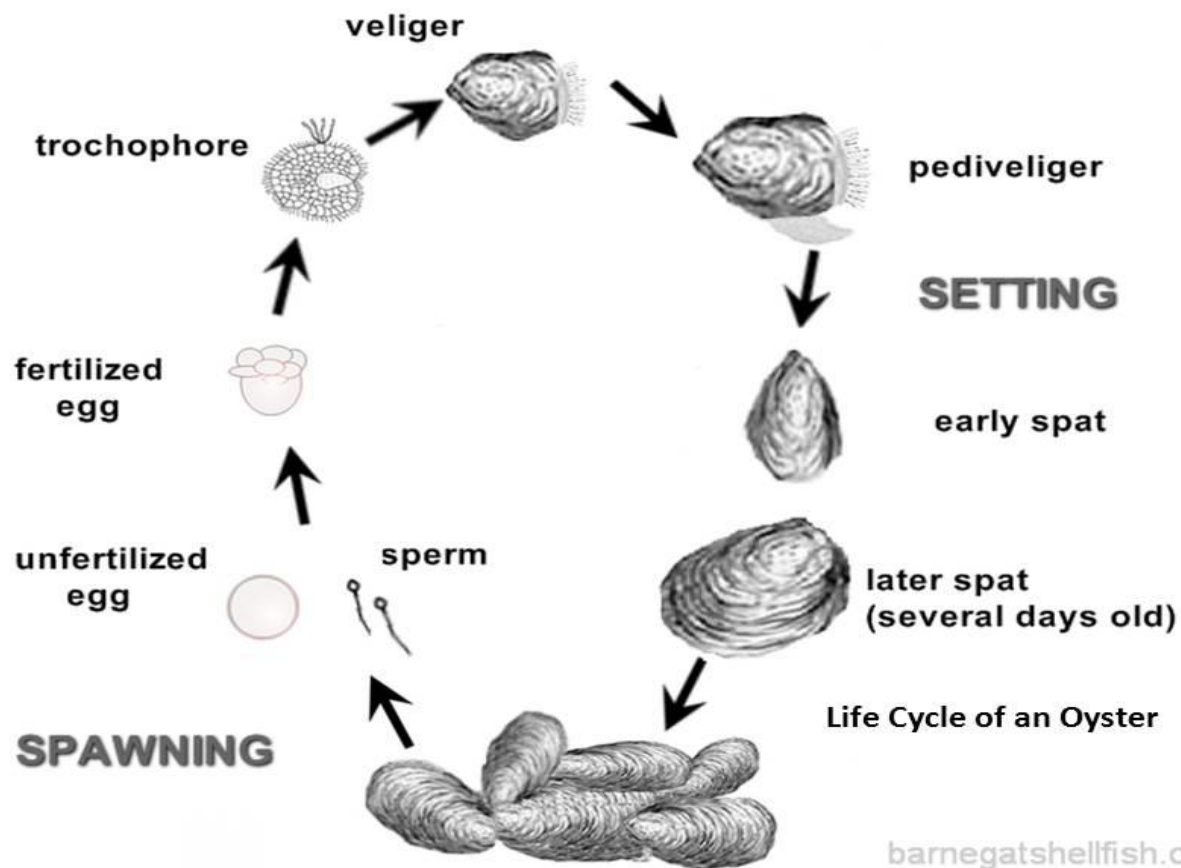


OYSTERS

Crassostrea virginica --
eastern oyster; Atlantic oyster;
Virginia oyster



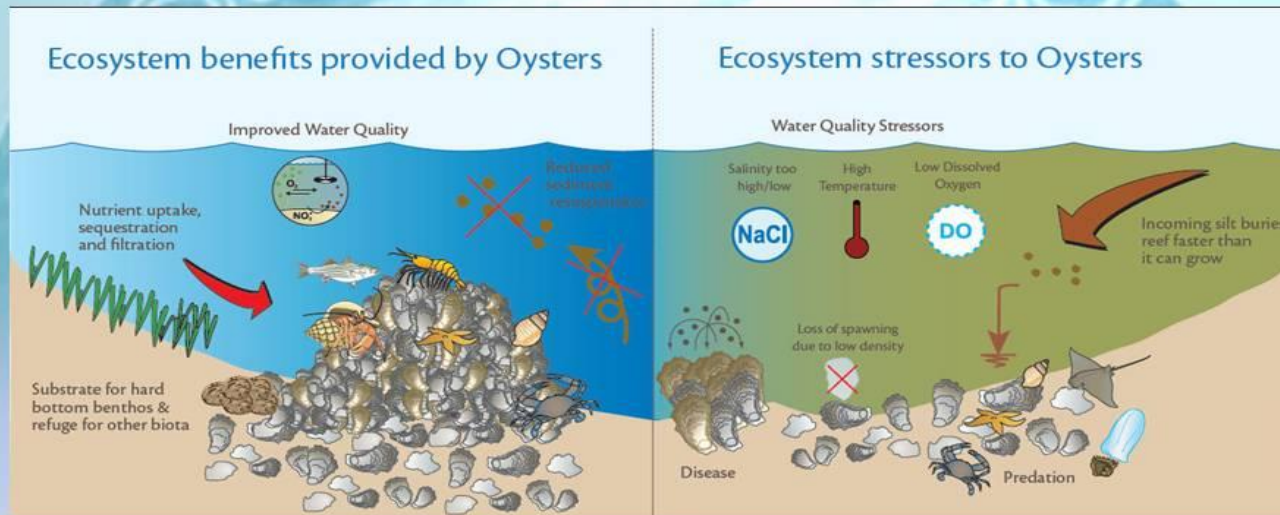




Oysters

Benefits of Oysters

- Oysters are good for the ecosystem.



- Oysters are good for the economy.
 - Oyster fishing and aquaculture
 - Help sustain vibrant recreational fisheries

Oyster Larvae

100's of oyster larvae

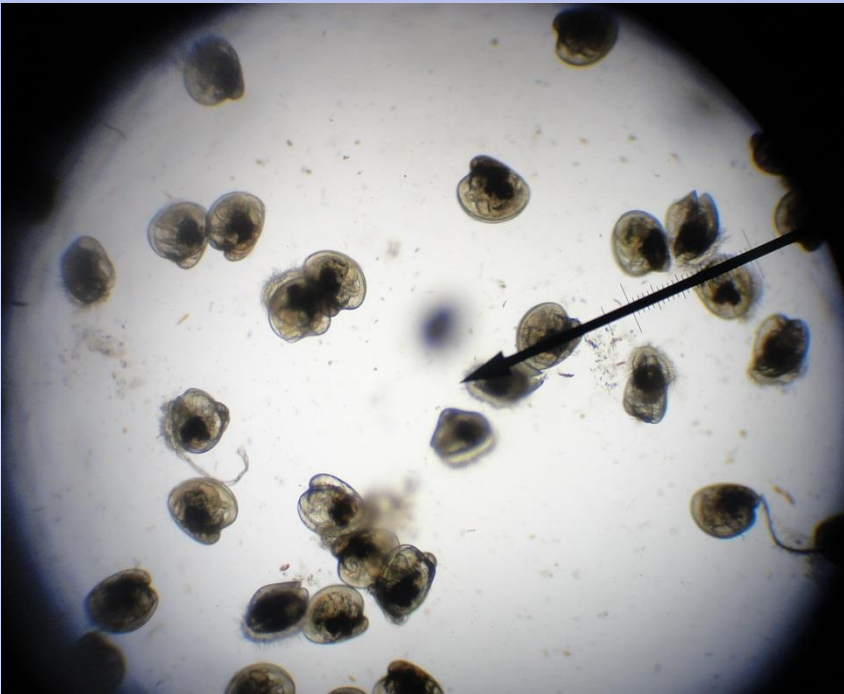


1 oyster larvae (Poppy seed size)



Oyster Larvae

Many Larvae magnified 40 times



Larvae swimming around in tank



Oyster Spat

Oyster Spat 8 weeks old



Oyster spat 10 months old



Oyster Clumps from Chesapeake Bay

Oyster clumps 3 year old



Oyster clumps 3 year old



Oysters 3 years old

Oyster clumps 3 years old



Oysters filtering creek water



Raising Oysters – Step 1

Oyster bag delivery



Oysters loading in BOCS



Raising Oysters - Step 2

Oyster bags being loaded



Oyster bags to be loaded



Raising Oysters – Step 3

Float the Cages



Position for Growth Cycle



Raising Oysters – Step 4

Placing BOCS cages under Trail

BOCS ad MGO Cages



Growing Oysters

Buoyant Oyster Cultivation System (BOCS)

- Pier or Boardwalk
- Fishing Creek Only
- Weatherize 2x/year

Oyster Cage

- Piers only
- Bay or Fishing Creek
- Agitate every week



Raising Oysters - Step 5

Raising Oyster Cages



Lifting Oyster Cage



Raising Oysters – Step 6

Cages into unloading frame



Juveniles Unloaded



Raising Oysters - Step 7

Cleaning Cages - YUK



Cleaned Cages - YEA



Raising Oysters – Step 8

Transport to Reef



Deployed on Reef



Raising Oysters – Step 9

Counting 1 year old Spat



Counting 1 year old Spat



Raising Oysters – Step 10

Counting and Sizing Spat



Count Totals

Spat count per shell

9-15

	Bag 1	Bag 2	Bag 3	Bag 4
1	3	2	3	0
2	15	2	1	0
3	3	3	0	0
4	8	8	2	0
5	6	15	2	0
6	6	4	0	0
7	3	5	1	0
8	3	1	0	1
9	2	12	0	1
10	1	4	1	2
11	14	6	0	1
12	12	3	0	0
13	4	5	1	0
14	5	8	0	1
15	3	11	0	3
Sub Total	98	99	11	4
Total	177	17	28	34

62

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Raising Oysters – Step 11

DNR buoy on Old Rock Reef



**Monitor Reef Progress
Calvert County Dive Team**



Oyster Reef Balls

Reef balls ready to be deployed



Reef ball after 3 years in bay



CBOCS Volunteers

All Ages



All breeds



Parallel Mission – Student Involvement

- Support CHESPAX “Oyster of the Chesapeake Bay” field trips for 6 Northern Calvert schools 5th grade students.
- Conduct joint environmental programs with Northern High school LORAX and Northern Middle school Honors program.
- Conduct educational seminars and field trips for youth, church and civic groups.

Parallel Mission – Student Involvement

Water Quality Monitoring



Measuring Oysters



Parallel Mission – Student Involvement

Stream Flow Monitoring



Water Quality Monitoring



Parallel Mission - Student Involvement

Field Trip Orientation



Identifying Oyster Friends



Parallel Mission – Student Involvement

Viewing Oyster Friends



Observing Wonders of Trail



Parallel Mission – student Involvement

Checking Oyster Spat



Oyster Introduction

