



Maryland Shellfish Aquaculture Industry Update







Karl Roscher, Director Aquaculture Division DNR-Fisheries Service





Shellfish Aquaculture Leasing

Support from Governors and Maryland Lawmakers in Expanding the Shellfish Aquaculture Industry

"Oyster Restoration and Aquaculture Development Plan"

- Expand aquaculture leasing opportunities
- •Encourage the development of aquaculture businesses
- Bring back our native oyster
- Create new jobs and economic activity

General Assembly Legislation:

- •Restructured lease laws by a unanimous vote, lifting leasing moratoriums and opening new areas for leasing.
- •Streamlined permitting and consolidated State Agency authority for aquaculture permitting at DNR to improve efficiency in application processing and lease issuance





Partnerships-Financial Assistance

Goal: make affordable loan financing available to new and existing businesses to help offset capital investment required

MARBIDCO

- Shellfish Aquaculture Financing Fund Program
- Low interest, subsidized loans to businesses
 - Funding comes from a combination of federal and state sources (NOAA and State Capital Funds)
 - \$3.4 million in funding has been approved for 62 projects located in 10 Maryland counties
 - 51 loans approved for TFL holders







Partnerships-Training

Goal: Provide hands on training in aquaculture production and lease management for commercial fisherman and other entrepreneurs

- UM Extension-HPL-ORP
 - Oyster Aquaculture Training and Education Program
 - DNR funded 3 year project (\$300,000)
 - Regional Workshops for aquaculture training
 - leasing process, finance programs, information on remote setting
 - 2 annual conferences held
 - attended by over 120
 - Publications developed
 - Production systems, remote setting, cost and returns for bottom culture
 - HACCP training for growers
 - Certification as a shellfish shipper





Partnerships-Training

Goal: Provide hands on training in remote setting for leaseholders that will produce low cost spat on shell for planting on private leases.

Oyster Recovery Partnership, HPL, UME

Remote Setting Training Program

- Purchase equipment and larvae used in remote setting systems
- State supplies setting tanks, tech support
- Growers required to have shell and supply labor
- Participants have produced and planted over 700 million spat on shell on their leases through this program.
- This program has jump started production and will generate thousands of bushels of harvestable oysters for leaseholders.
- ORP has secured private funding through 2015





MARYLAND DEPARTMENT OF NATURAL RESOURCES Commercial Shellfish Aquaculture

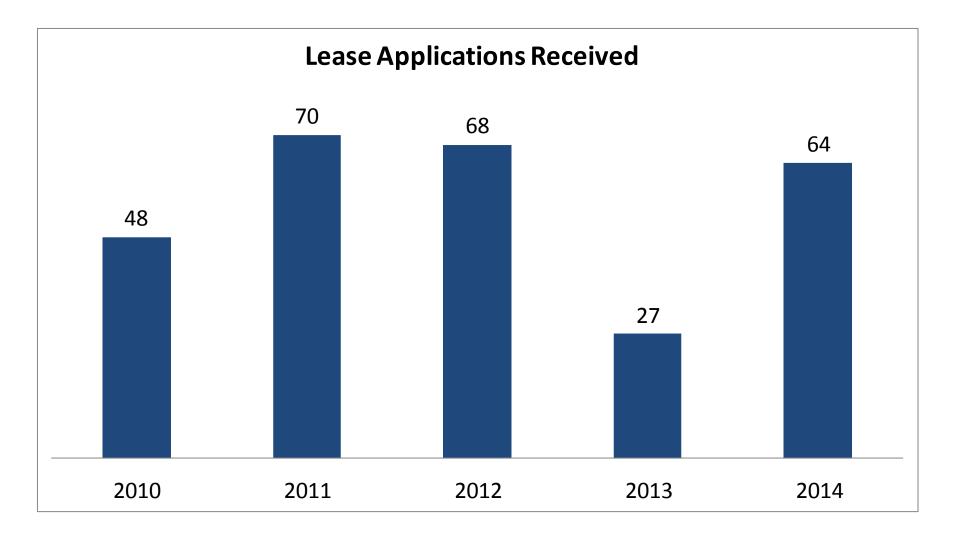
Shellfish Lease Application Activity Since September 2010

Lease Site Totals		Acres
299	Submitted (SLL+WC)	7632.60
73	Submerged Land Leases Executed	2226.85
58	Water Column Leases Executed	228.35
131	All Executed by State	2455.20
6	Pending Execution (SLL+WC)	74.8
56	Applications Terminated/Withdrawn	1456
108	In process total (SLL+WC)	3721.37
4	In-process applications that are incomplete	7.5
228	All applications submitted since 8/1/11	5062.55
102	Water Column submitted since 8/1/11	1093.39
52	Water Column executed since 8/1/11	190.37
74	Sanctuary submitted since 8/1/11	636.61
22	Sanctuary executed since 8/1/11	352.91
191	TFL holders named on apps submitted	
86	TFL holders named on leases executed	
76	TFL holders named on apps still in process	





MARYLAND DEPARTMENT OF NATURAL RESOURCES Commercial Shellfish Aquaculture







Commercial Shellfish Aquaculture



MD Shellfish Aquaculture Industry Today



Submerged Land Leases:

- 277 active leases
- 3960 acres
- shell on bottom



Water Column leases:

- 57 active leases
- 222 acres
- oyster cages & floats









Commercial Shellfish Aquaculture

Total Leases by County

Lease Type	AA	CA	СН	DO	KE	QA	SM	SO	TA	WI	WO	Total
SLL	24	11	1	54	1	5	60	24	50	37	10	277
WC	2	2	0	17	1	2	18	6	1	0	8	57
Total	26	13	1	71	2	7	78	30	51	37	18	334

Total Lease Acreage by County

Lease Type	AA	CA	СН	DO	KE	QA	SM	SO	TA	WI	WO	Total
SLL	327.45	83.9	25	1075.5	44.8	42.7	608.05	463.5	512.49	634.3	142.7	3960.39
wc	4.1	15.06	0	85.31	3.9	10	38.51	24.7	5.5	0	35.08	222.16
Total	331.55	98.96	25	1160.81	48.7	52.7	646.56	488.2	517.99	634.3	177.78	4182.55





Shellfish Aquaculture Lease Stats

- Currently 334 total leases owned by 155 distinct individuals/companies on 4182 acres.
- Average size of a submerged land lease is 14.3 acres.
 Water column leases average 3.9 acres.
- Largest leases: SLL=311 acres WC=15 acres
- 83% of active leases are submerged land leases.
- About 45% of leases issued since 2011 are for water column leases.
- In 2014, DNR permitted 498 distinct individuals to work on these leases.
- About 95% of production is sold wholesale.

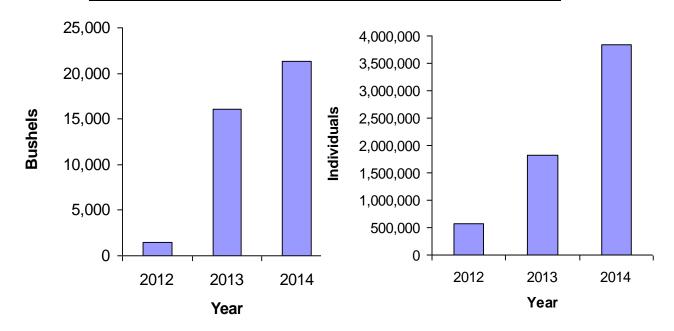




MARYLAND DEPARTMENT OF NATURAL RESOURCES Farm-Raised Oyster Production

Annual Total Harvest as Reported

Year	Species	Units	Bushels
2012	Oysters	Bushel	1,443
2012	Oysters	Individuals	567,403
2013	Oysters	Bushel	16,104
2013	Oysters	Individuals	1,827,991
2014	Oysters	Bushel	21,362
2014	Oysters	Individuals	3,838,037





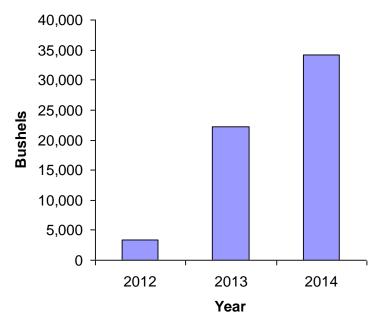


MARYLAND DEPARTMENT OF NATURAL RESOURCES Farm-Raised Oyster Production

Annual Total Harvest Converted to Bushels

Year	Species	Bushels
2012	Oysters	3,335
2013	Oysters	22,196
2014	Oysters	34,155









MARYLAND DEPARTMENT OF NATURAL RESOURCES Commercial Shellfish Aquaculture

• 2014 Average Sale Prices

(reported from 2014 Industry Survey)

Market Type	Units	Average	
		Price	
Wholesale	Bushels	\$56	
	Individuals	\$0.41	
Retail	Bushels	\$57	
	Individuals	\$0.60	









One of our leaseholders owns and manages over 450 acres of submerged land leases in the Nanticoke and Wicomico Rivers.

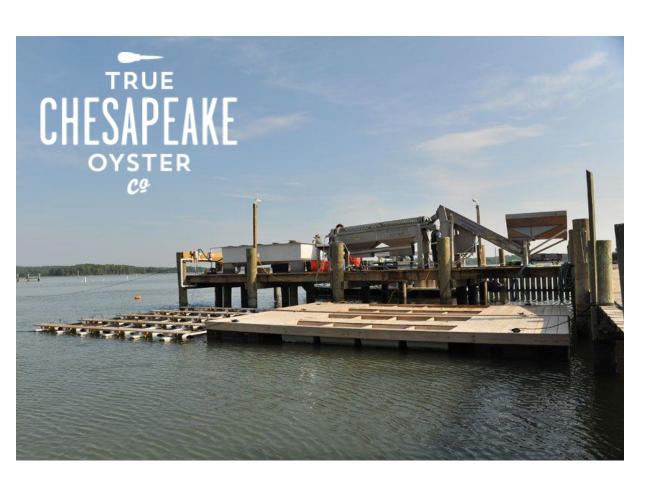
He utilizes remote setting to produce spat on shell that is planted on his leases.

Some of his leases are in areas that receive a good natural spat set which supplements what is planted.





Water Column Leases



True Chesapeake raises oysters on multiple water column leases in Southern Maryland.

They market their premium product as "Skinny Dipper" oysters and were the featured oyster at last year's Preakness Stakes.



MARYLAND DEPARTMENT OF NATURAL RESOURCES Questions?





MARYLAND DEPARTMENT OF NATURAL RESOURCES Aquaculture Division Staff

Administration

- Katie Busch
- vacant FTE

Leasing and Permitting

- Becky Thur
- Maude Morris
- Alyssa Cranska

Field Operations/MGO

- Manager (vacant)
- Steve Schneider

