Maryland Shellfish Aquaculture Activities







10/17/2016



Karl Roscher, Director
Aquaculture & Industry Enhancement Division
DNR-Fishing and Boating Services

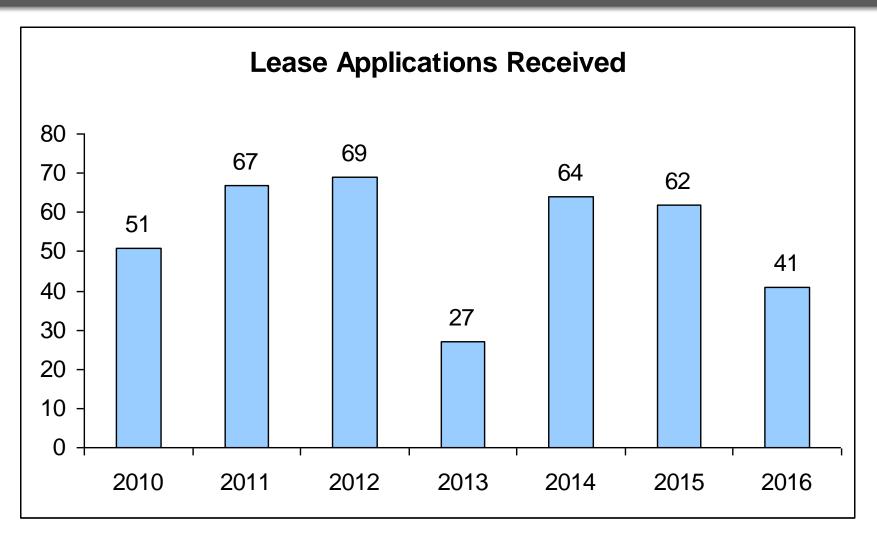
Shellfish Lease Application Activity Since September 2010



	Lease Site Totals through L 3/39/2016			Totals through /14/2016
	Sites	Acres	Sites	Acres
Submitted since 9/7/10 (SLL+WC)	355	7777.80	384	8290.03
Executed since 9/7/10 (SLL only)	107	3738.93	126	4169.93
Executed since 9/7/10 (WC only)	67	306.92	72	340.83
All executed by State since 9/7/10	174	4045.85	198	4510.76
Applications Terminated/Withdrawn	76	1726.71	88	2080.61
In process total (SLL+WC)	105	2005.24	98	1698.66
In-process applications that are incomplete	7	31.30	1	0.60
All applications submitted since 8/1/11	277	5178.20	306	5690.43
Water Column submitted since 8/1/11	122	944.29	134	1211.94
Water Column executed since 8/1/11	61	268.94	67	307.15
Sanctuary submitted since 8/1/11	88	669.21	99	2681.41
Sanctuary executed since 8/1/11	43	682.21	55	1970.31
TFL holders named on apps submitted since 9/7/10	228		272	
TFL holders named on leases executed since 9/7/10	115		143	
TFL holders named on apps still in process	72		70	
Permitted by ACOE since 9/7/10	161	2862.15	186	3858.91

Commercial Shellfish Aquaculture





Commercial Shellfish Aquaculture



Count By County

Lease Type	AA	CA	СН	DO	KE	QA	SM	SO	TA	WI	WO	Total
SLL	25	12	2	75	1	3	71	23	56	44	10	322
WC	3	1	0	17	2	1	23	6	2	0	9	64
Total	28	13	2	92	3	4	94	29	58	44	19	386

Acreage By County

Lease Type	AA	CA	СН	DO	KE	QA	SM	SO	TA	WI	WO	Total
SLL	350.85	121.7	38.8	2341.1	44.8	25.2	686.43	444	596.29	980.7	142.7	5772.57
WC	9	15	0	75.61	8.8	5	103.88	24.7	9.6	0	38.08	289.67
Total	359.85	136.7	38.8	2416.71	53.6	30.2	790.31	468.7	605.89	980.7	180.78	6062.24

Average sizes: SLL- 18 acres WC – 4.5 acres

Shellfish Aquaculture Lease Stats



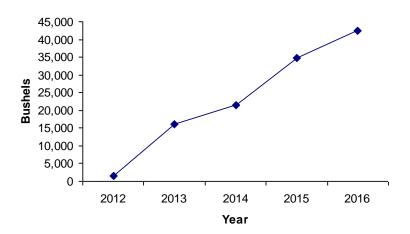
- Currently 386 total leases owned by 170 distinct individuals/companies on 6062 acres.
- About 38% of leases issued since 2011 are for water column leases.
- About 46% of primary leaseholders have TFLs (78 out of 170).
- Approximately 47% of pending applications are for water column leases.
- To date in 2016, DNR has permitted 446 distinct individuals to work on these leases.

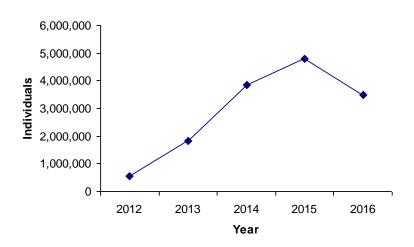
Oyster Aquaculture Production



Annual Total Harvest as Reported

Year	Species	Units	Bushels
2012	Oysters	Bushels	1,443
2012	Oysters	Individuals	567,403
2013	Oysters	Bushels	16,104
2013	Oysters	Individuals	1,827,991
2014	Oysters	Bushels	21,362
2014	Oysters	Individuals	3,838,037
2015	Oysters	Bushels	34,676
2015	Oysters	Individuals	4,788,226
2016	Oysters	Bushels	42,457
2016	Oysters	Individuals	3,490,764





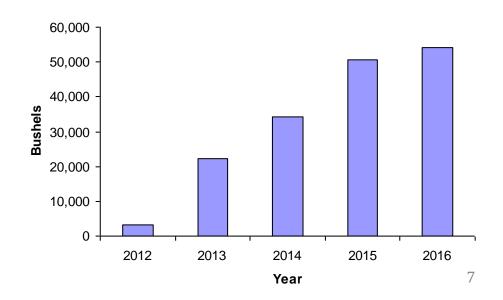
Farm-Raised Oyster Production





Annual Total Harvest Converted to Bushels

Year	Species	Bushels
2012	Oysters	3,335
2013	Oysters	22,196
2014	Oysters	34,155
2015	Oysters	50,637
2016	Oysters	54094



2016 Harvest



- 163 leases have reported harvest so far in 2016 (141 submerged land leases and 22 water column leases), which is 42% of all active leases.
- 287 individuals are associated with harvest
- 27,340 bushels have been harvested so far in 2016 by a leaseholder with a TFL
- Using to date 2016 harvest #s, and estimates based on the last 3 months of production in 2015, total harvest in calendar year 2016 expected to be around 65,000 bushels.

Year	Species	1	2	3	4	5	6	7	8	9	10	11	12
2012	Oysters						413	523	578	533	398	411	484
2013	Oysters	369	407	504	5,526	4,080	1,762	2,401	2,163	2,370	915	852	1,079
2014	Oysters	765	1,320	1,277	5,897	4,408	3,591	3,601	3,693	3,820	1,953	1,781	2,066
2015	Oysters	1,305	1,143	1,925	6,135	7,553	5,740	5,848	6,138	6,041	2,556	2,156	4,096
2016	Oysters	1,476	2,491	3,638	11,690	8,690	7,610	5,701	6,044	6,755		•	

Industry Trends



- Leaseholders are applying for more acreage. Over half of applications in process have been submitted by existing leaseholders.
- Leaseholders are exploring staged grow-out in different locations to make improvements to management efficiencies and crop production.
- Increased % of water column leaseholders applying for permits to operate shellfish nurseries.
- Interest among growers of becoming Certified Shellfish Dealers so they can expand their markets.

Aquaculture Program Staff



Deputy Director

Katie Busch

Program Support

Kari Bradberry

Leasing and Permitting

- Becky Thur
- Maude Morris
- Alyssa Cranska

Field Operations

- Manager (vacant)
- Steve Schneider



Questions?



