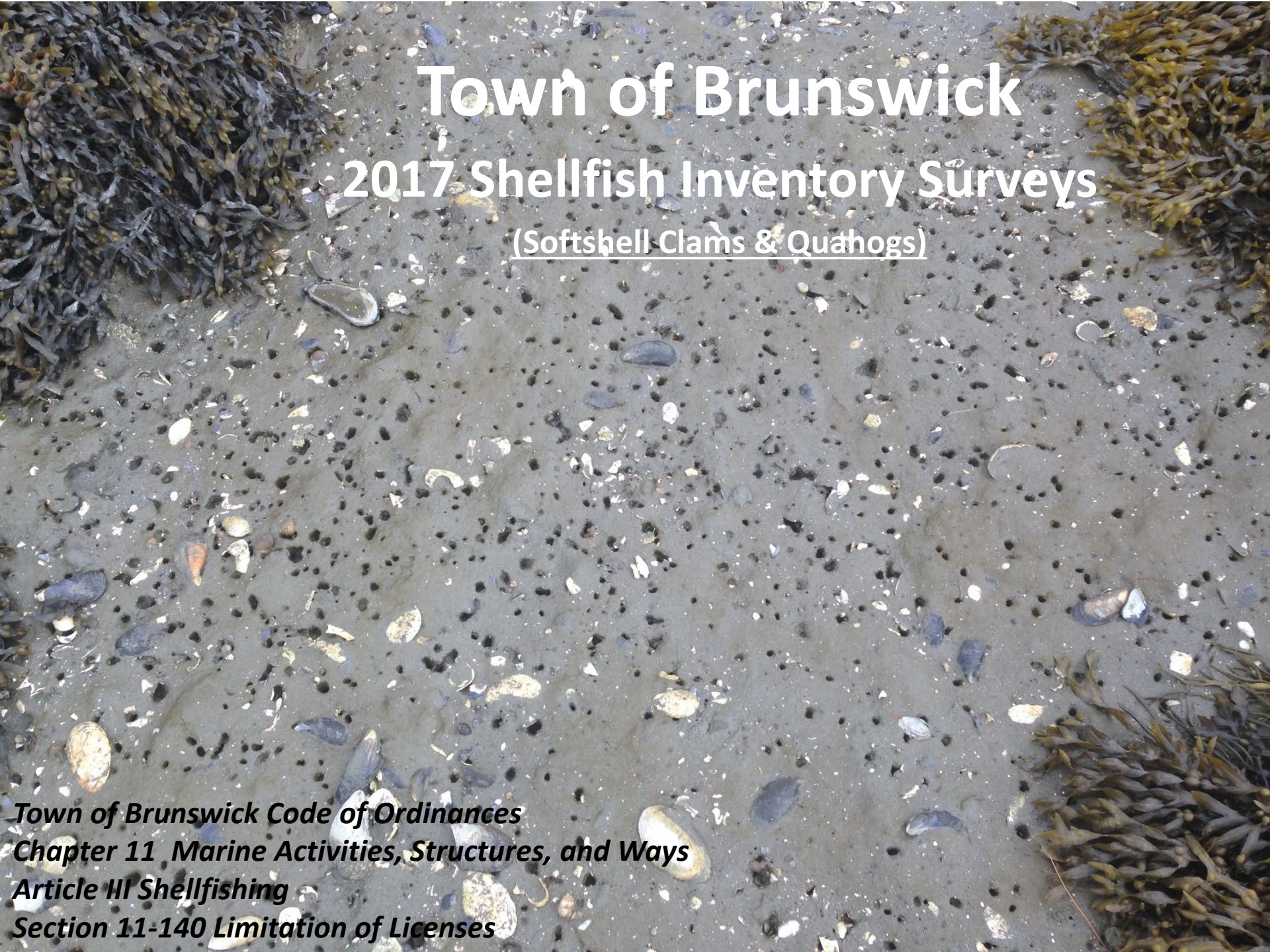


The background of the slide is a photograph of a muddy beach. In the upper corners, there are clumps of dark, leafy seaweed. The central and lower portions of the image show a wide expanse of wet, greyish-brown sand. Scattered across this sand are numerous small, dark, oval-shaped objects, which are likely softshell clams or quahogs, as mentioned in the text. Some of these objects are partially buried in the sand, while others are more prominent. There are also some lighter-colored, irregularly shaped fragments, possibly broken shells or debris, scattered throughout the scene.

Town of Brunswick

2017 Shellfish Inventory Surveys

(Softshell Clams & Quahogs)

***Town of Brunswick Code of Ordinances
Chapter 11 Marine Activities, Structures, and Ways
Article III Shellfishing
Section 11-140 Limitation of Licenses***

Town of Brunswick Marine & Coastal Resources



2017 Annual Shellfish Surveys

Coastal Characteristics

- Recreational Uses

- Shellfishing
- Sport Fishing
- Hunting
- Boating (Kayak & Power)
- Water Sports
- Birding
- Swimming

- Commercial Uses

- Commercial Fishing
- Shellfishing
- Aquaculture
- Commercial Guiding
- Boat Repairs/Mooring's
- Island Transports
- Marinas



Coastal Attributes

Harbor Area		Total (acre)	Intertidal (% acre)	Shallow (% acre)	Deep (% acre)
1	Maquoit Bay	1,570	32% (510)	39% (610)	29% (450)
2	Merepoint Bay	420	38% (160)	22% (90)	40% (170)
3	Middle Bay	640	56% (360)	41% (260)	3% (20)
4	Harpwell Sound	410	69% (280)	24% (100)	7% (30)
5	New Meadows River	830	33% (270)	45% (370)	22% (180)
Total Coastal		3,900	41% (1,600)	37% (1,450)	22% (850)
6	Androscoggin River	1,050	---	---	---
	Tidal	810	300 (37%)	460 (57%)	50 (6%)
	Non-Tidal	240	---	---	---

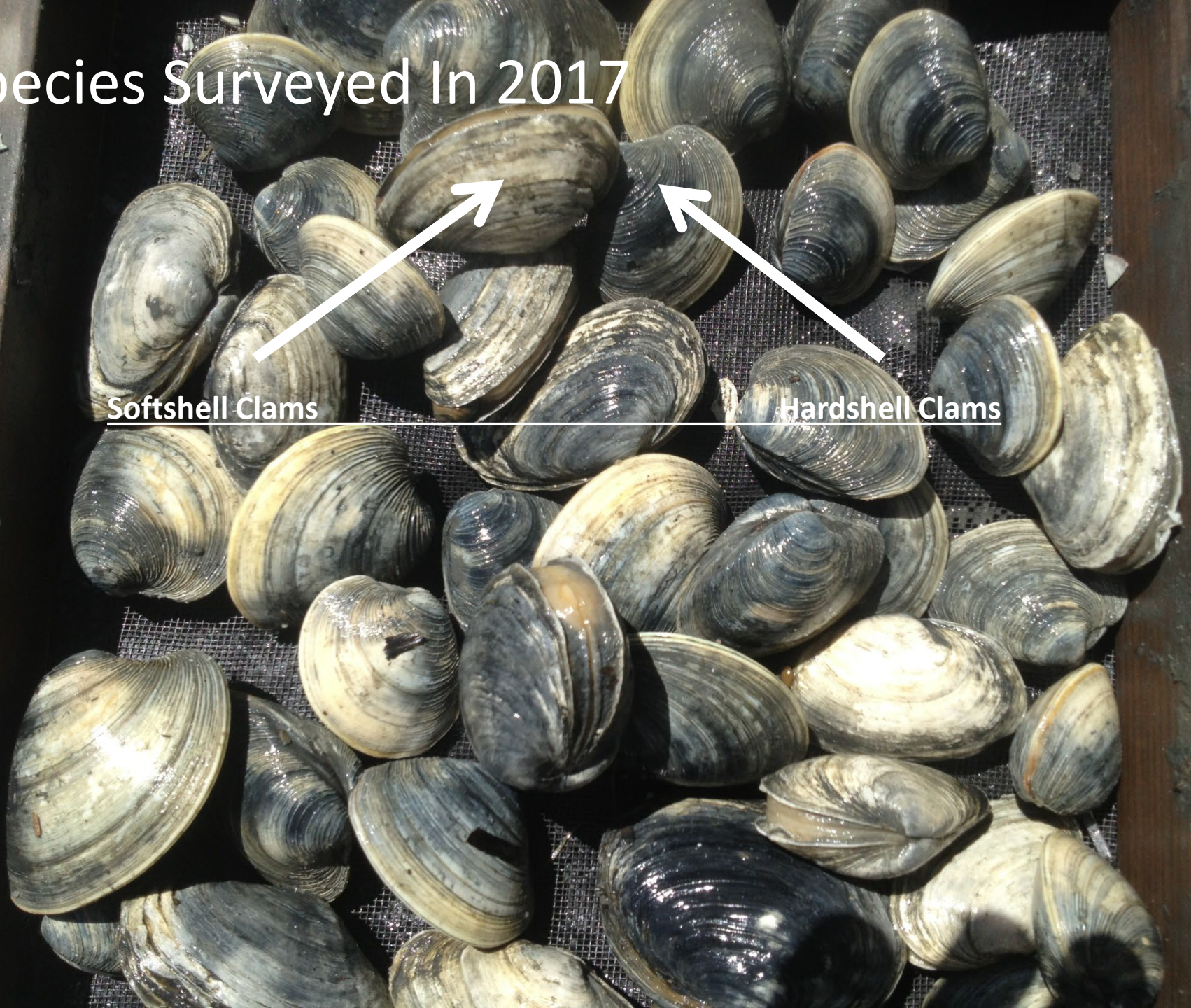
Table 2 – Shoreline Frontage

Harbor Area		Total (mi)	Private (mi, %)	Open Space (mi, %)
1	Maquoit Bay	13.7	6.4 (47%)	7.3 (53%)
2	Merepoint Bay	3.6	2.5 (68%)	1.2 (32%)
3	Middle Bay	10.4	5.0 (48%)	5.4 (52%)
4	Harpwell Sound	14.0	10.3 (73%)	3.7 (27%)
5	New Meadows River	19.1	12.9 (67%)	6.3 (33%)
Total Coastal		60.9	37.0 (61%)	23.8 (39%)
6	Androscoggin River	20.6	8.0 (39%)	12.7 (61%)
Total Shoreline		81.5	45.0 (55%)	36.5 (45%)

Species Surveyed In 2017

Softshell Clams

Hardshell Clams



Historical Commercial License Sales

(Includes Resident and Non Resident)

• 1998-1999 =	54	• 2009-2010 =	57
• 1999-2000 =	60	• 2010-2011 =	58
• 2000-2001 =	69	• 2011-2012 =	53**
• 2001-2002 =	69	• 2012-2013 =	57**
• 2002-2003 =	75	• 2013-2014 =	60***
• 2003-2004 =	75	• 2014-2015 =	50***
• 2004-2005 =	74	• 2015-2016 =	50***
• 2005-2006 =	74	• 2016-2017 =	51***
• 2006-2007 =	74	• 2017-2018 =	??
• 2007-2008 =	56*	• 2018-2019 =	TBE
• 2008-2009 =	64	• 2019-2020 =	TBE

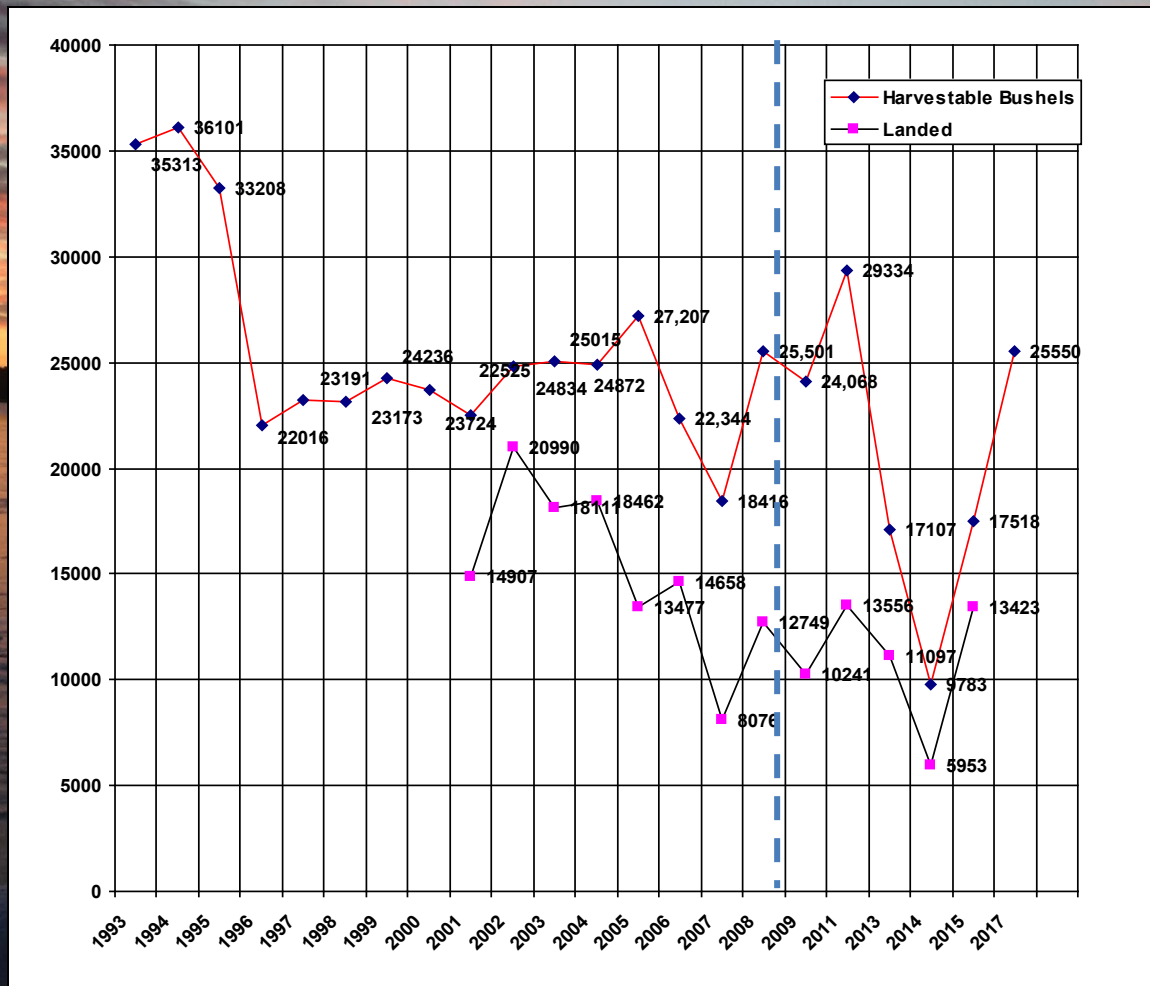
58 Average # of Licenses over 20 Years

*= Re-evaluation of average harvest

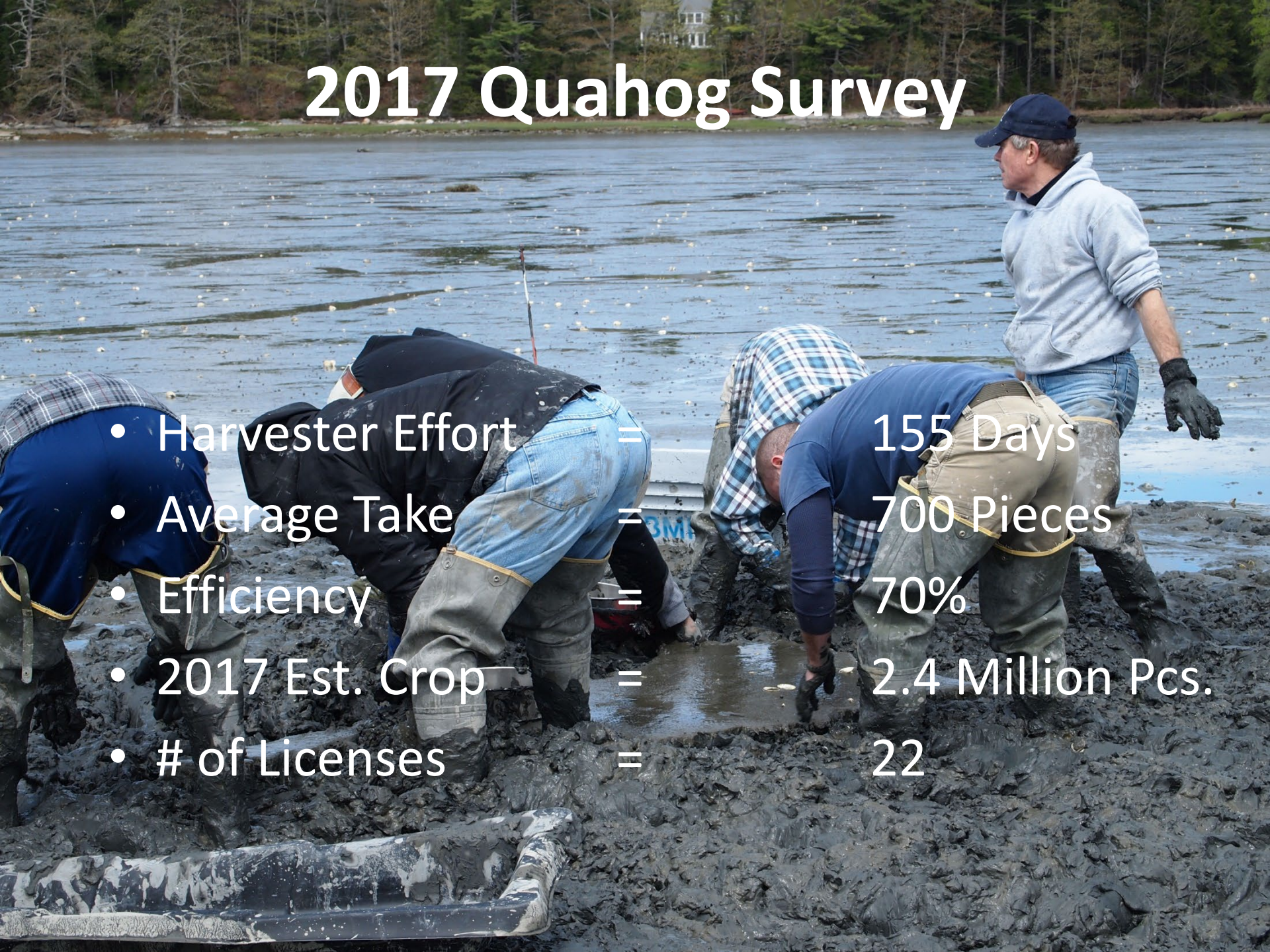
**=Green Crab Inundation

***=Implementation of Student Licensese

24 Year Softshell Clam Inventory Trends



2017 Quahog Survey

- 
- Harvester Effort = 155 Days
- Average Take = 700 Pieces
- Efficiency = 70%
- 2017 Est. Crop = 2.4 Million Pcs.
- # of Licenses = 22

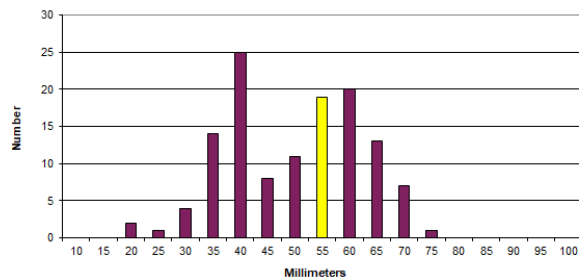
Simpsons Point & Barnes landing

23 Acres Softshell Clams & Quahogs

Legend

-  Crow Island
-  Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
854 Bushel



1000 ft

Bunganuc

127 Acres Softshell Clams, Quahogs, & Razor Clams

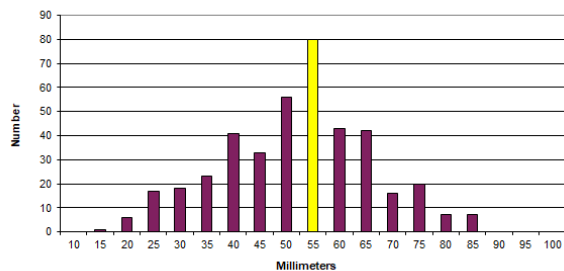
Legend

2017

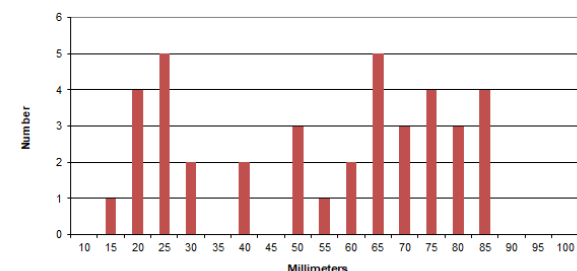
High Seed Densities (Clams & Quahogs)

Softshell Clams
SIZE DISTRIBUTION

Quahogs
SIZE DISTRIBUTION



2018 Est. Crop
3582 Bushel SS
912 Bushel HS



Buttermilk Cove & Gurnet

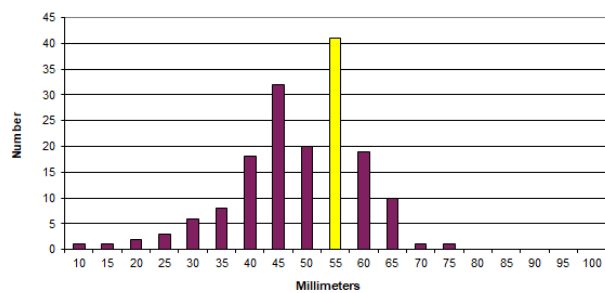
16 Acres Softshell Clam

Woodward Cove

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
1340 Bushel SS

2000 ft



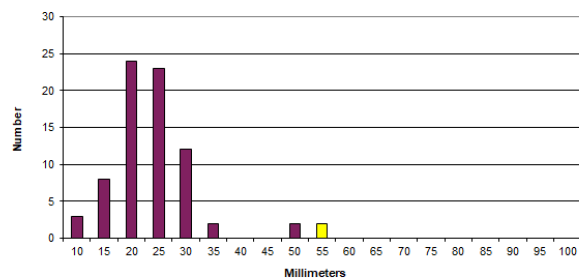
Catlin Shore

147 Acres Growing Area

Legend

 Survey Area

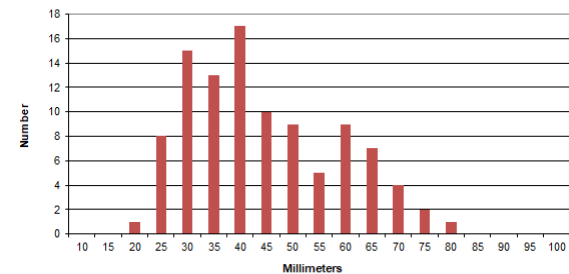
Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
310 Bushel SS
902 Bushel HS



Quahogs SIZE DISTRIBUTION



Clay Cove & Crow Island

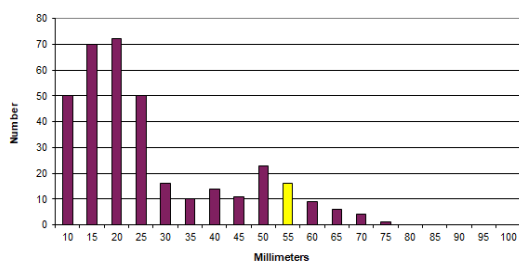
41 Acres Softshell Clams & Quahogs

Legend

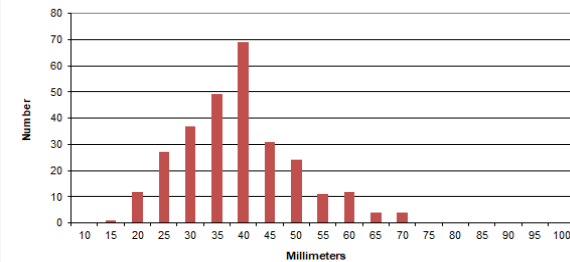
-  Crow Island
-  Feature 1

Softshell Clams
SIZE DISTRIBUTION

Quahogs
SIZE DISTRIBUTION



2018 Est. Crop
1140 Bushel SS
506 Bushel HS



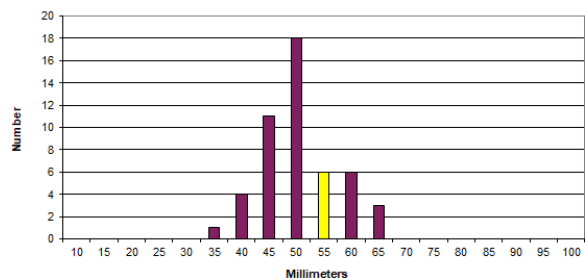
Coombs Island

60 Acres Growing Area

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
160 Bushel

1000 ft



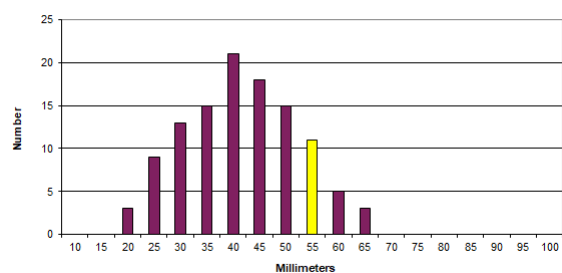
Harpswell Cove

128 Acres Softshell Clams

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
320 Bushel

2000 ft



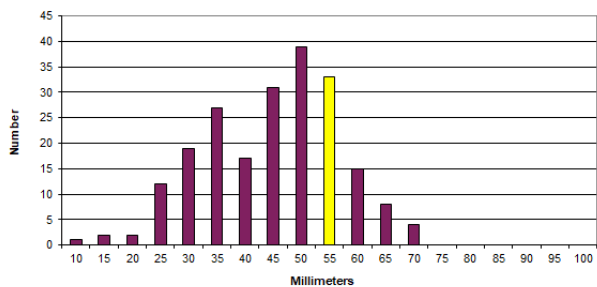
Little Bull Pen

10 Acres Growing Area

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
1158 Bushel SS

1000 ft

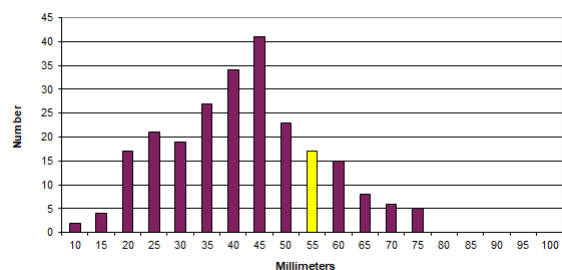
Long Reach

50 Acres Growing Area

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
1915 Bushel

2000 ft



Maquoit Bay

371 Acres Softshell Clams & Quahogs

Legend

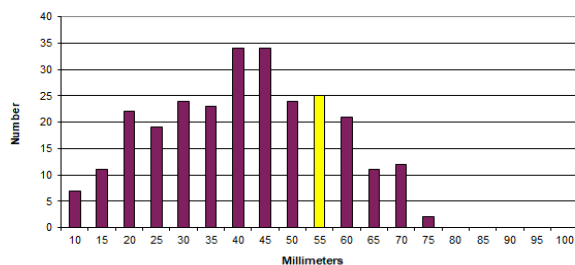
2017

High Seed Densities (Clams & Quahogs)

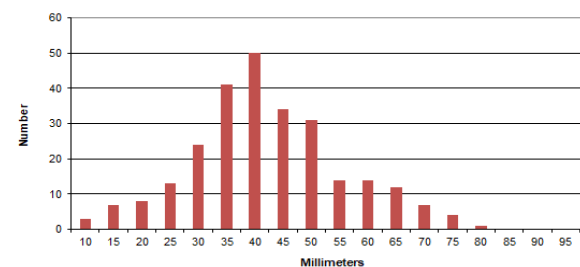
Softshell Clams
SIZE DISTRIBUTION

CGRE316
CGRE116 CGRE216

Quahogs
SIZE DISTRIBUTION



2018 Est. Crop
6101 Bushel SS
750 Bushel HS



Miller Creek

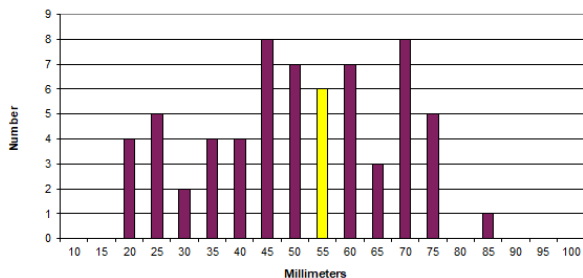
20 Acres Growing Area

Legend

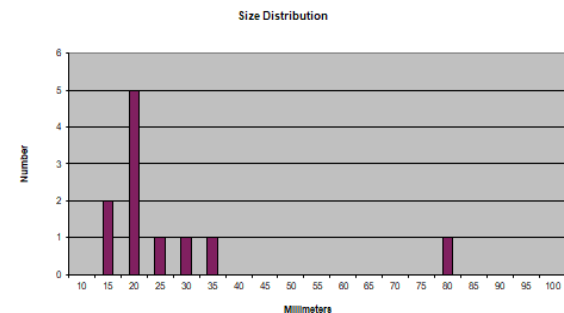
 Survey Area

Softshell Clams SIZE DISTRIBUTION

Quahogs SIZE DISTRIBUTION



2018 Est. Crop
1010 Bushel SS
70 Bushel HS



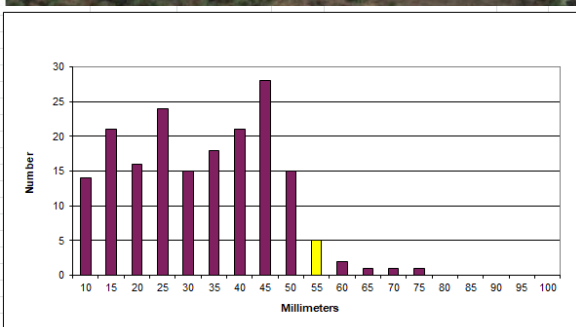
New Meadows

8 Acres Softshell Clam & Quahogs

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
540 Bushel

1000 ft



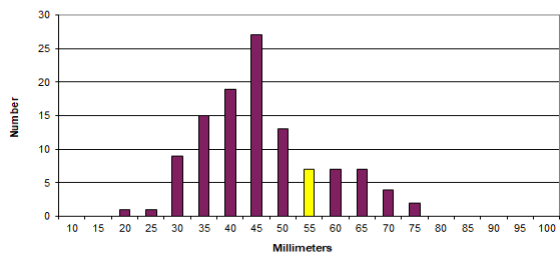
Smith Cove, Mere Point

Softshell Clam 10 Ac.

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
710 Bushel SS

1000 ft



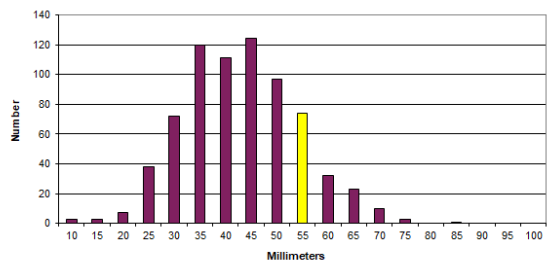
Thomas Point Beach

131 Acres Softshell Clam

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
5120 Bushel

2000 ft



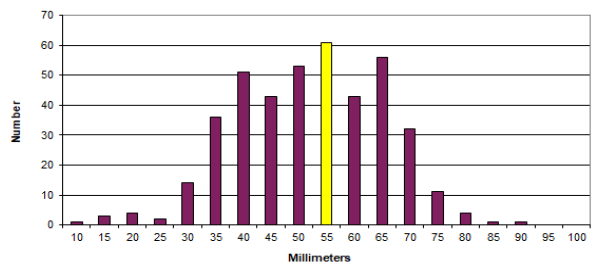
Woodward Cove (Big Bull Pen)

36 Acres Softshell Clam

Legend

 Survey Area

Softshell Clams SIZE DISTRIBUTION



2018 Est. Crop
1290 Bushel

1000 ft



2017 License Allocations

Resident Commercial 46
Non-Resident Commercial 5
Student Bushel Licenses 11
Bushel: License (0 Qualifications)
Recreational Licenses 115



License Calculations

Shellfishing Effort

*Softshell Clams = 255 Days of Harvest @ an estimated 100 lbs. per day
&*

Hardshell Clams = 155 Days of Harvest @ an estimated 700 pieces per day

2018 Est. Standing Softshell Clam Crop = 25,550 Bushels or 1.27 Million lbs.

2018 Est. Standing Hardshell Clam Crop = 3,140 Bushels or 2.4 Million Pcs.

Calculated Total Number of Commercial Licenses = 72 (50 SS & 22 HS)

15 % +/- Marine Resource Committee Discretion = 61 to 83

Marine Resource Staff Recommendation 61

Committee Considerations: 2017/18 Winter Mortality; Predation; other shellfish licenses (Bushel, Recreational, Student); Ocean Acidification. Aquaculture; Species Diversification (Razor Clams & Oysters)