

Cushman Pond Dive Report for Saturday August 22nd 2015

Conditions:

Surface water temp 75⁰; Estimated water temp at 8' = 58⁰;

Thermocline at 10' depth;

Air temp 75⁰ and sunny;

Water visibility 10', At depth approximately 6-8'.

Participants:

1 diver - (Scott Gregory)

2 third lung- (hookah) divers (Greg Buck, Bryant Buck)

3 snorkelers – (Donald Marshall, Marissa Arsenault, Jim Buck)

7 Boat & Barge Support- (Dianne Buck, Keith Rowe, Marti Kinsell, Jim Rowe, Joe Davis, Jane Davis, Kelso)

6 Ground Support - (Gene Spender (LIPPC), Doug Faille, Cliff Rowe, Bob Bertwell, Elaine Bertwell, Barbara Buck, Lois Brown)

19 Total Participants

Dive Summary:

The August 22nd survey found a total of **3 plants** for a volume of approximately **one quart** (.25 gallons) bringing the year-to-date for 6 surveys to 26 plants and approximately 1.75 gallon volume. (7 quarts) No plants were found in the recurring shallow water sites. All plants were found in at least 5' of water.

Comparing our results through the end of August 2014 we had found 55 plants for an estimated volume of 8.5 gallons. (34 quarts) Our trend continues as we are finding half as many plants as 2014 and we're harvesting them much earlier which results in decreased volume.

The survey covered the pond from the southeast corner beyond Faille's dock to the town landing and continuing to the Buck's docks. The east and north shores were not surveyed.

The 3 snorkelers left from the dam area and surveyed the cove before breaking into 2 groups; 2 surveyed the West Shore to the Buck's docks and one surveyed the South Shore to the Southwest corner. No milfoil was found by the snorkelers. Two hookah divers left the Southeast Corner and proceeded east to the edge of the cove and then north along the West Shore to Buck's Dock. One hookah diver surveyed in the deeper water of approximately 10' depth. The scuba diver focused on the town landing and cove area and then proceeded into the deeper waters of the pond.

During the survey, the ground support crew cut down the large old mats and reconfigured them into smaller 6'x 12' mats which are easier to place and move. At this time we also initiated numbering and tracking the benthic mats that are placed on the plant sites. This will enable us to confirm how long a mat has been in place and also the total number of mats being used on the pond.

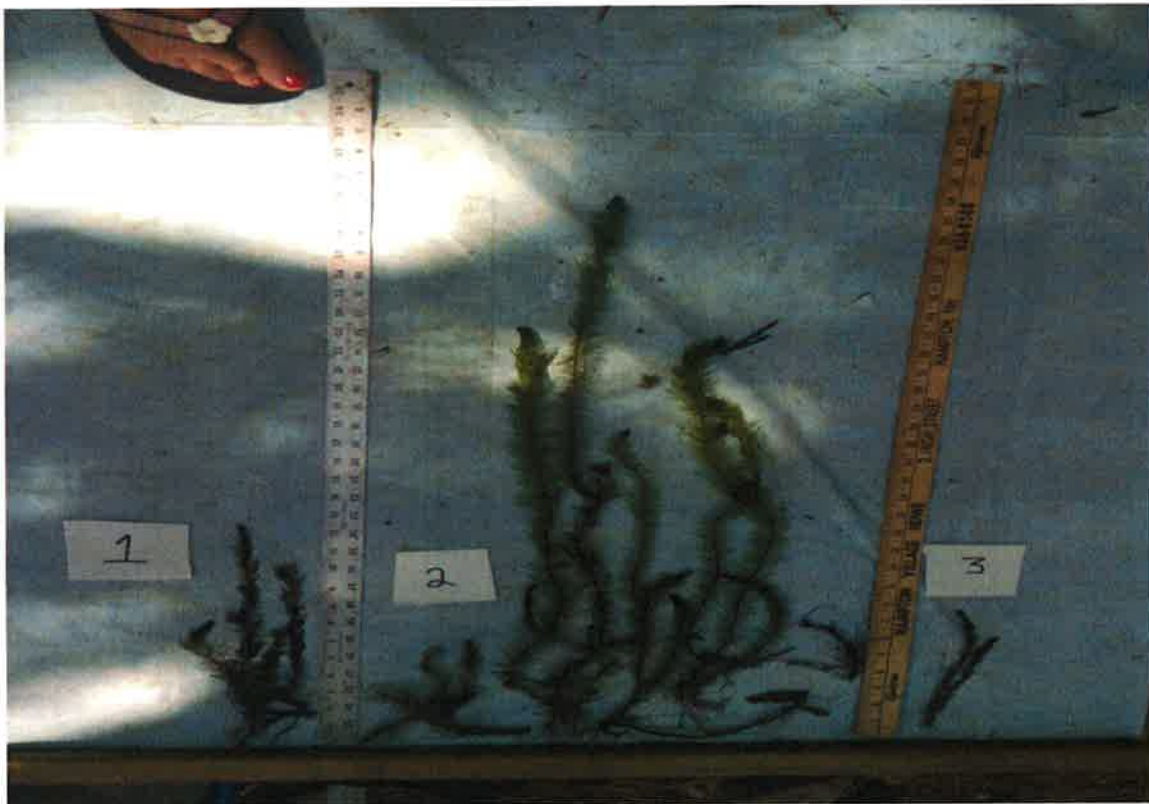
Plant # 1 was found in 5 to 6' of water off the southeast weedbed. It consisted of 4 stems with longest being 13" long. This plant was not matted.

Plant #2 was found in the silt in the bottom of the cove in about 10' of water approximately 30' east of the milfoil buoy. It was a small plant with 2 stems, the larger of which was 6' long. This plant was matted with mat #3.

Plant #3 was found in about 11' of water approximately 250' beyond the buoy into the deeper silt "mud flat" area of the pond. This was initially noted with surprise but an old marker was later found near the site and it was recalled that several years ago plants had been located in that area.

It was a large plant that appeared to root off a broken stem. The plant contained at least 7 stems with the longest close to 30" in length. The plant was matted with mat #4. A floating marker was left at this site as a reference for future dives.

Plants #1, 2, & 3 (August 22nd)



Diver hours for this survey were 3 hours for Scott Gregory. Year To Date Diver Hours are: 39.5 Hours with 16.5 for Doug Faille, 16.5 for Scott Gregory and 6.5 for Jackey Bailey.

Hookah Hours for this survey were a total of 6. Year To Date Hookah hours are: 24 with 12 each for Bryant and Greg Buck.

Volunteer hours totaled 34 including the preparation of this report. Year to Date Volunteer hours are: 240 hours.

Mats: 4 mats were deployed; No mats were removed. Mats 1 & 2 were deployed to cover harvested plant sites from earlier dives. Details are included in the newly added charts at the end of this report.

Approximate plant locations of this week's dives and Year To Date Dives are displayed in the attached maps. Mat locations have also been added in a separate chart.

Other News:

Late last week our man from LIPPC, Gene Spender, was contacted by the DEP notifying him that the DEP would be conducting its own survey on Monday, August 24th. This turned out to be excellent timing as both Doug & Scott are available to support them and the DEP can focus on the Plant #3 location and the other deeper waters of the pond. We'll follow up with a report on the DEP results.

Next Survey is: Saturday, September 5^h 9:30AM at the Town Landing.

This will be our final planned survey of the year and we hope to put as many divers in the water as possible to finish the year with a clean pond. We'll perform a survey of the entire pond, checking the recurring sites and also sweeping the deeper waters. Over the next couple weeks we'll also be investigating the use of Fish Finder /Sonar as a means of finding and marking plants in the deep water mud flats. We hope to leave the LWRMA crew nothing to find when they make their survey later in September.

Our September 5th survey will be followed by the Annual Picnic that evening. Toby & Rebecca Botorff, our newest members of Cushman have agreed to host the event. We'll follow up with more information as plans are finalized.

Our schedule for 2015 is nearly complete:

1. ~~Sunday, May 24th — 9:30AM Divers Only Cove Focus~~ **Complete**
2. ~~Sunday, June 14th — 9:30AM First Full Survey~~ **Complete**
3. ~~Saturday, July 4th — 9:30AM~~ **Complete**
4. ~~Saturday July 18th — 9:30AM~~ **Complete**
5. ~~Saturday, August 8th — 9:30AM~~ **Complete**
6. ~~Saturday, August 22nd — 9:30AM~~ **Complete**
7. **Saturday, September 5th - 9:30AM** – followed that evening by the Annual Picnic, LWRMA Close Out Survey – To be scheduled

Thanks for you continued support.

Jim Buck

Cushman Pond Milfoil Surveys

2014 Month End August Results

<u>Date:</u>	<u>31-May</u>	<u>28-Jun</u>	<u>26-Jul</u>	<u>9-Aug</u>	<u>30-Aug</u>	<u>2014 Results</u>	<u>%</u>
Location:							
Cove/Town Landing	5	6	9	9	6	35	64%
Deep Water						0	0%
SE Weedbed	1	10	4	0	0	15	27%
NorthWest Shore	0	0	0	1	2	3	5%
South Shore	0	0	1	1	0	2	4%
Total	6	16	14	11	8	55	100%
%	11%	29%	25%	20%	15%	100%	
Est Volume (Gallons)	0.50	2.50	2.00	2.00	1.50	8.50	Gallons
# Participants:	5	19	13	27	21	85	

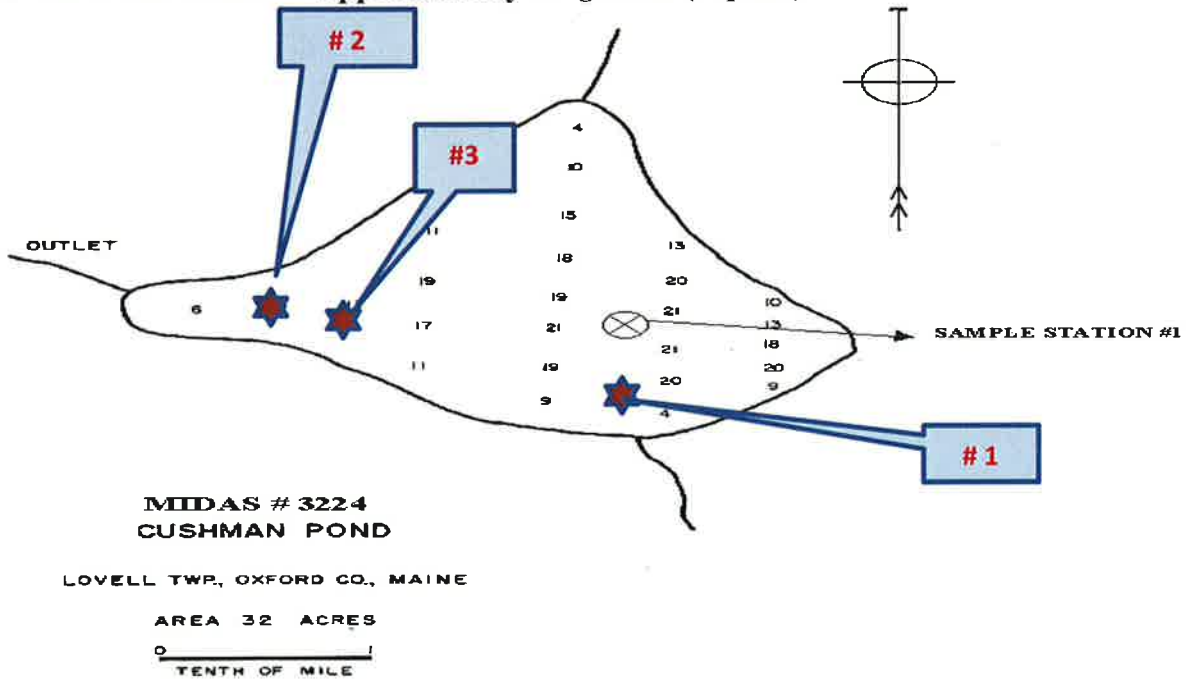
2015 Year To Date (YTD) Results

<u>Date:</u>	<u>24-May</u>	<u>13-Jun</u>	<u>4-Jul</u>	<u>18-Jul</u>	<u>8-Aug</u>	<u>22-Aug</u>	<u>YTD Total</u>	<u>%</u>
Location:								
Cove/Town Landing	4	4	1	4	2	1	16	61%
Deep Water						1	1	4%
SE Weedbed	0	1	3	0	1	1	6	23%
NorthWest Shore	0	0	0	1	1		2	8%
South Shore	0	0	0	1			1	4%
Total	4	5	4	6	4	3	26	100%
%	15%	19%	15%	24%	15%	12%	100%	
Est Volume (Gallons)	0.25	0.50	0.25	0.25	0.25	0.25	1.75	Gallons
# Participants:	17	14	40	15	32	20	138	

	YTD August 2014	YTD August 2015	% Change
# Plants	55	26	-53% Reduction
Volume (Quarts)	34.00	7.00	-79% Reduction
# Survey Participants	85	138	62% Increase

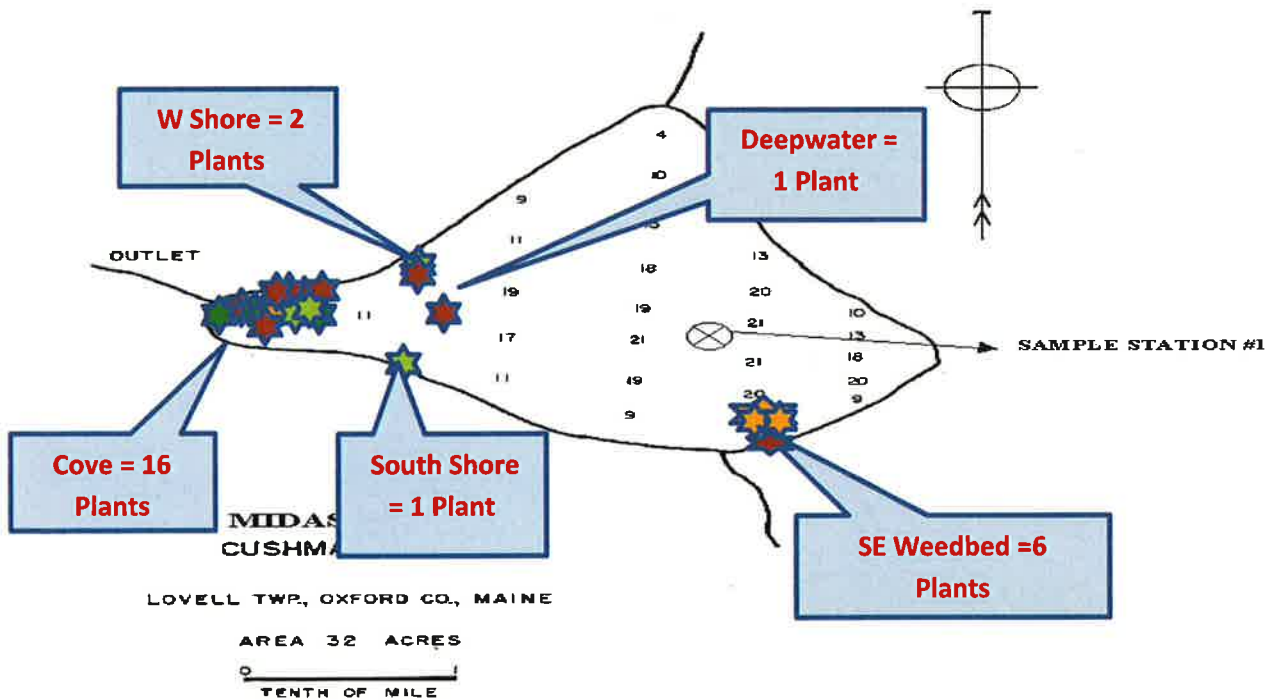
Cushman Pond Milfoil Sightings for August 22, 2015

= 3 Plants Harvested for approximately .25 gallons (1 quart)



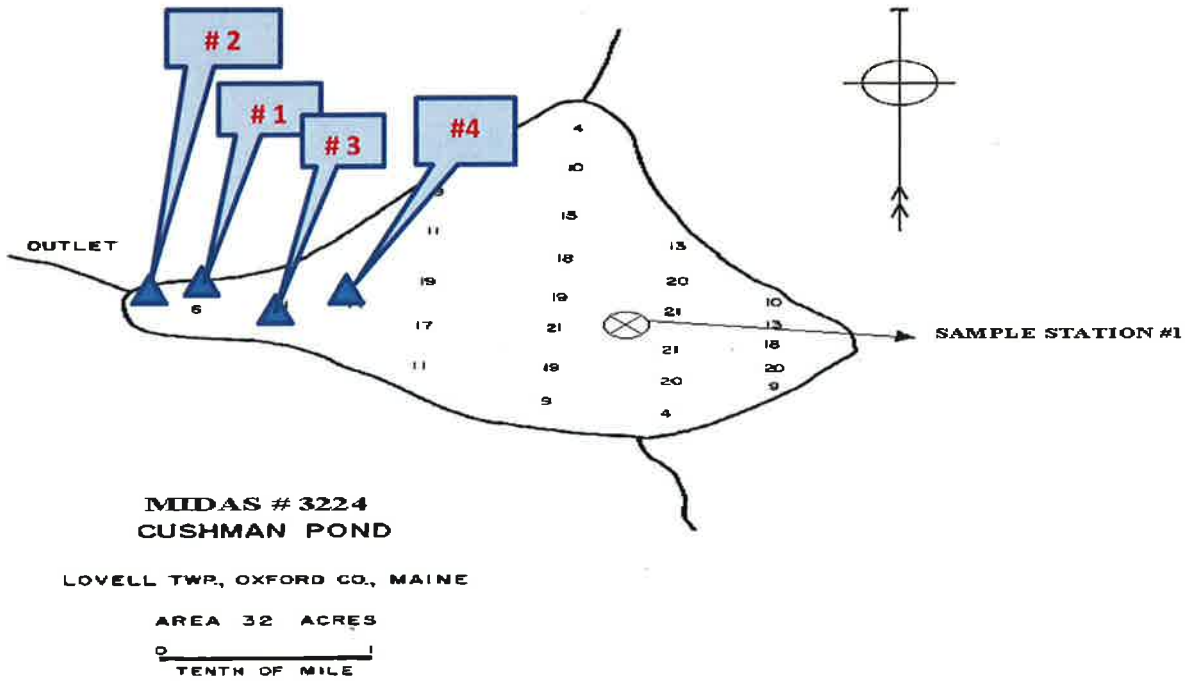
Cushman Pond Milfoil 2015 Sightings through August 22, 2015

= 26 Plants Harvested for approximately 1.75 gallons (7 quarts)



Cushman Pond Mat Locations as of August 22, 2015

= 4 Mats Deployed, 0 Mats Removed



Mat #	Deployed	Area	Location	Plant #	Plant Size	Removed
1	8/22/2015	Cove	Cope- Leaning MapleTree, Prior plant find	8/8/15 #2,3	14",16"	
2	8/22/2015	Cove	rock outcrop- 75' from dam, Prior plant find	6/14/2015 #2	14"	
3	8/22/2015	Cove	30' East of Buoy	8/22/15 #3	6"	
4	8/22/2015	Deepwater	250' from Buoy	8/22/15 #4	30"	
5						
6						
7						