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SeagrassNet Monitoring in Great Bay, New Hampshire, 2015

Frederick T. Short
Jackson Estuarine Laboratory, fred.short@unh.edu

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Frederick T Short, Ph.D.
University of New Hampshire

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Monitoring Overview

SeagrassNet is a global monitoring program begun in 2001 and designed to scientifically detect and document seagrass habitat change (Short et al. 2006a, 2014). Monitoring of eelgrass (*Zostera marina* L.) in the Great Bay Estuary using SeagrassNet was conducted in Portsmouth Harbor between 2001 and 2009 (Short et al 2006b, Rivers and Short 2007), and in Great Bay starting in 2007 (Short 2009). Results from SeagrassNet 2015, supported by PREP and conducted in Great Bay, are described in this report.

Following the standard SeagrassNet protocol, a site was established in Great Bay (Figure 1) in 2007. For SeagrassNet, a "site" consists of three permanent, parallel, 50 m transects (referred to as A, B and C). For the Great Bay site, transect A is closest to shore and shallowest, and C is furthest from shore and deepest (Figure 2).

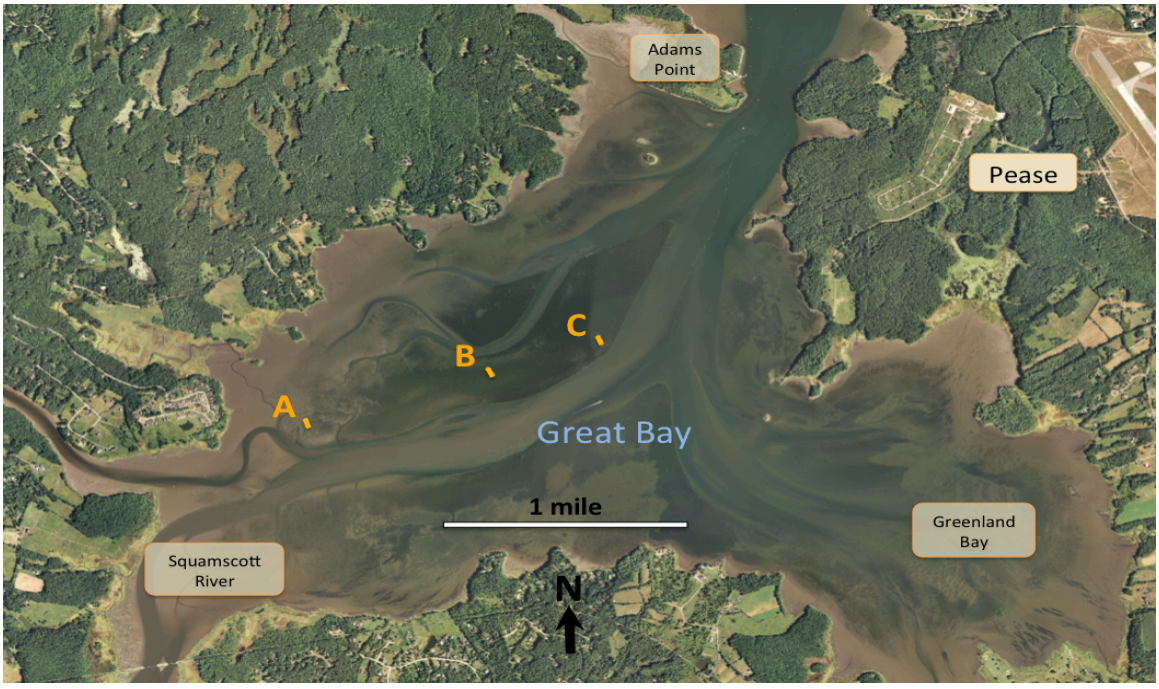


Figure 1. SeagrassNet monitoring site Transects A, B and C in Great Bay, New Hampshire.

In 2015, as called for by the SeagrassNet protocol, quarterly sampling (April, July, October) was done at 12 0.25m^2 quadrats placed along each of the three transects (A, B, and C). SeagrassNet sampling parameters include: photographic record; percent cover; canopy height; biomass; shoot density; and sexual reproduction (flowering shoots). The position of the quadrats along each transect was assigned during the development of the SeagrassNet protocol using a random number generator (www.SeagrassNet.org).

The sampling in Great Bay was conducted on April 20-21, July 30-31, and October 15, 21 and 30 of 2015. In April 2015, the transects were videoed rather than photographing individual quadrats along them, because water clarity was so poor that it was impossible to accurately place the sampling quadrats. Only a few shoots of eelgrass were present at any of the three transects in April 2015. Other than that, all sampling was done according to the SeagrassNet protocol (Short et al. 2006a, 2014). In Figures 5 and 6 and Appendix 1, below, as a frame of reference and to extend the data to the next spring, the April 2016 SeagrassNet data is included.

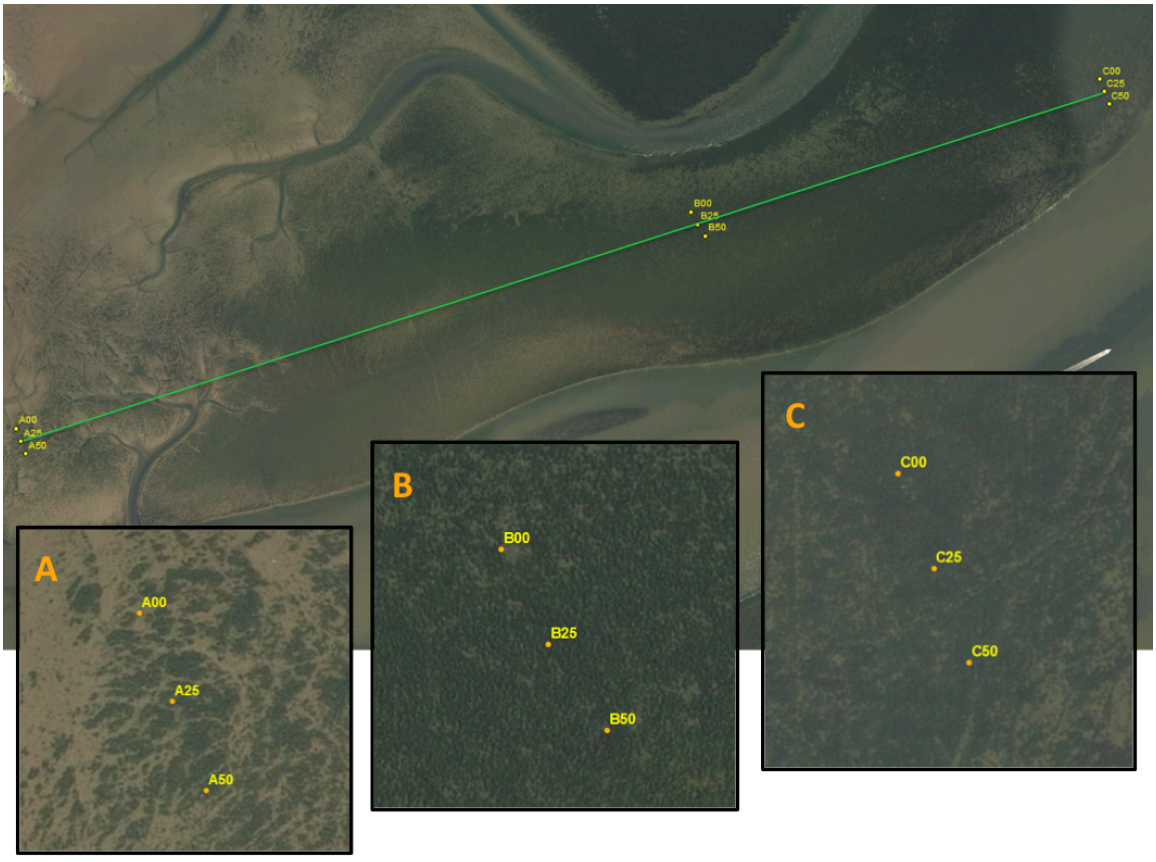


Figure 2. SeagrassNet monitoring locations, using GPS data, for each end and the midpoint of Transects A, B and C in Great Bay, New Hampshire.

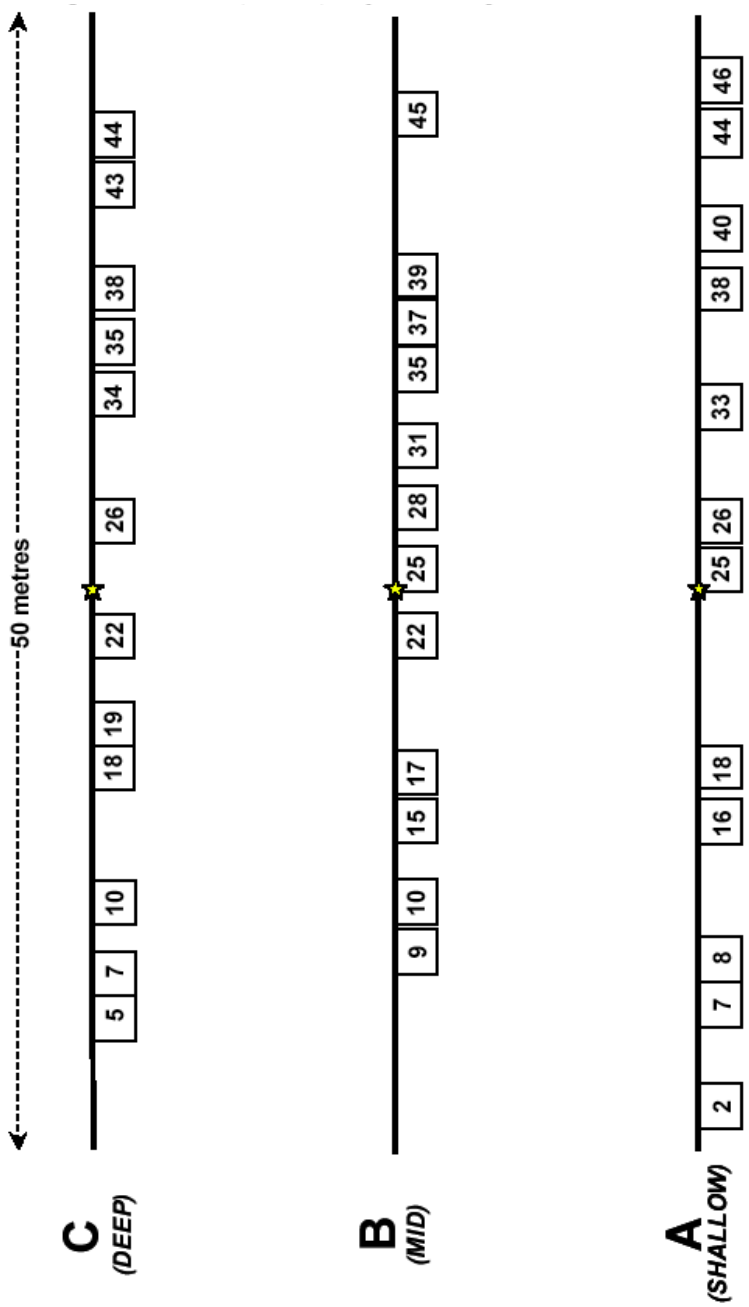


Figure 3. Location of the 12 SeagrassNet quadrats along the 50 m transects. Each square represents a quadrat. Numbers indicate the meter distance along each transect where the quadrats are positioned for sampling. The stars represent the midpoint of each transect.

Quadrat Photos

A photograph is taken during SeagrassNet sampling of each of the 12 random quadrats along each transect (Figure 3), providing useful documentation of field percent cover measurements of eelgrass, and a record of conditions seen in the field (for example, see Figure 4, photos from Transects A and C in Great Bay). During the

course of 2015, changes in eelgrass percent cover were evident at all three transects throughout the year. On Transect A, April 2015, most of the quadrats had no live eelgrass; in July, many of the Transect A quadrats had substantial eelgrass cover; while in October most of the quadrats along Transect A were filled with seaweed and very little eelgrass was present in the quadrats (Figure 4). For comparison, there was no live eelgrass at Transect C in April 2015, low eelgrass cover was present in July, and in October the eelgrass cover was the greatest of the year (Figure 4).

Figure 4. Some eelgrass quadrat photographs at SeagrassNet site NH9.2, Transects A and C, in Great Bay for April 2015, July 2015 and October 2015. "NH9.2" is the designation for the SeagrassNet site in the Great Bay. The "A11" label indicates that the photographed quadrat is the 11th of the 12 quadrats along Transect A. "C02" indicates the 2nd of 12 quadrats along Transect C.

Percent Cover

The differences in eelgrass percent cover seen in the example photos above (Figure 4) were also apparent from the data based on field measurements using a percent cover guide. Percent cover is a measure of how much of the quadrat is covered by seagrass on a scale of 0 – 100%. Transect A reached its maximum eelgrass percent cover in July 2015 while Transects B & C each reached their maximum percent cover in October 2015 (Figure 5 and Appendix 1).

Shoot Density

Transect C had much higher shoot density (shoots m^{-2}) than Transect A or Transect B (Figure 5). Shoot density was the same for Transects A and B in July.

Canopy Height

Eelgrass canopy heights were the same at all three transects in July, but by October eelgrass canopy height was greatest at the deepest transect, Transect C (Figure 5).

Flowering

Flowers were most abundant at Transect A in July, with 45 flowering shoots m^{-2} (Figure 5). For the year overall, flowering at Transect A exceeded that of B, while A and B both greatly exceeded flowering at Transect C. Typically, eelgrass flowers more when the plants are stressed (Dennison et al. 1987, Moore and Short 2006).

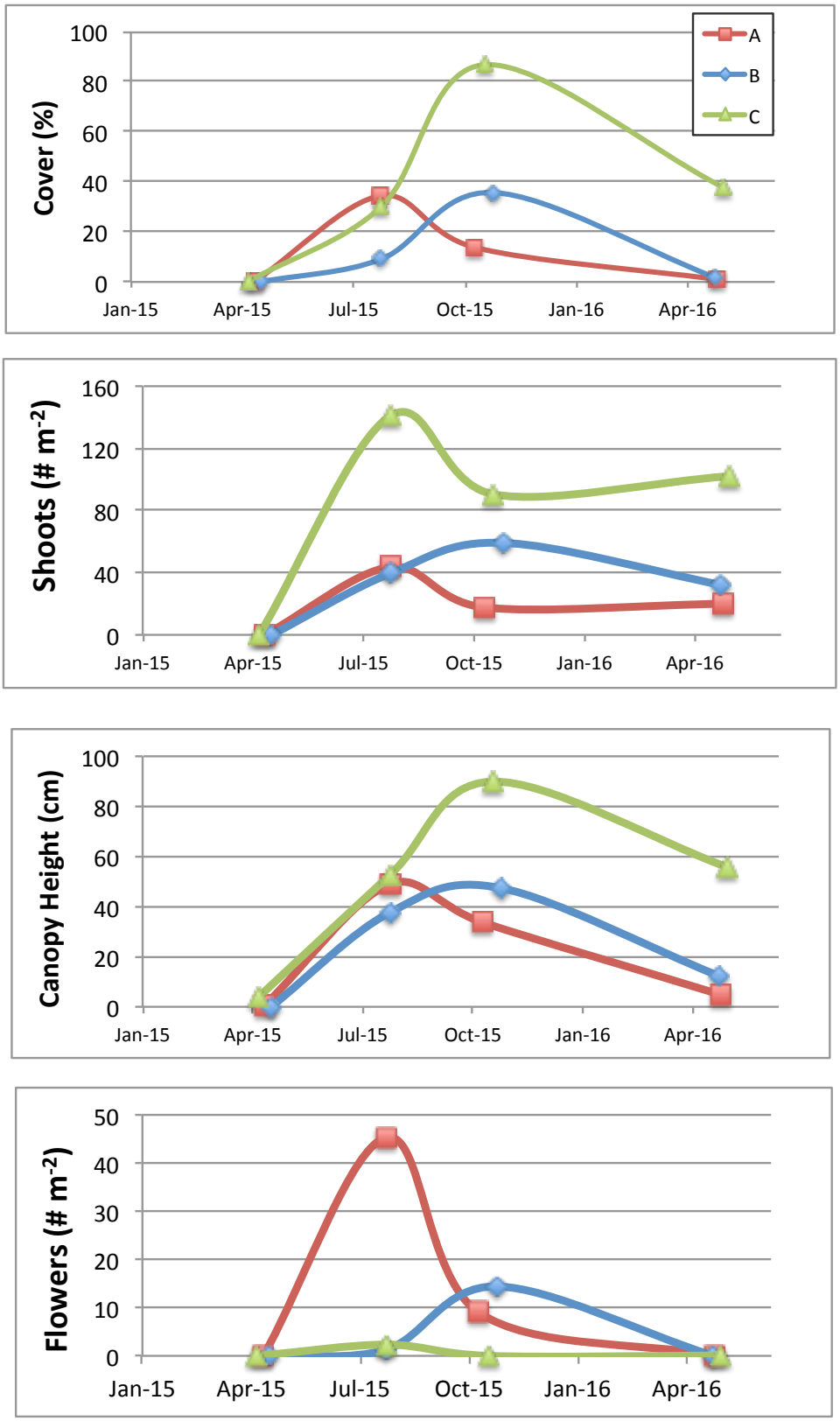


Figure 5. Eelgrass percent cover, shoot density, canopy height and flower density at SeagrassNet site NH9.2, Transects A, B, and C in Great Bay for April 2015 – April 2016.

SeagrassNet Site Assessment for Great Bay

Eelgrass monitoring of the Great Bay in 2015 using the SeagrassNet protocol revealed low values for the New England region of eelgrass percent cover, shoot density, canopy height and flower density (Short et al. 1989), and all of the eelgrass parameters (Figure 6, Appendix 1) were lower in 2015 than seen in most previous studies of the Great Bay Estuary (Short et al. 1991, Short 1992, Short et al. 1993, Short 2009) going back to 1990.

An evaluation of SeagrassNet transects A, B, and C combined for 2015 shows percent cover and canopy height (Figure 6) had similar overall patterns and reached their maximum values in October. In contrast, shoot density had its highest values in July, reaching 60 shoots m^{-2}. Flowering also reached its highest values in July.

Typical eelgrass in a healthy, clear water environment in New Hampshire and southern Maine attains maximum canopy height in late summer and autumn (Gaeckle and Short 2003) while the greatest shoot density occurs in July (Ochieng et al. 2010), consistent with what was observed in 2015. In the past (going back to 2007) at the Great Bay SeagrassNet site, percent cover at all transects reached 100% by July and continued at near 100% through September (in preparation). In 2015, however, mean percent cover for all transects was less than 50% in July. By September, transect C had approximately 85% cover while A and B were less than 50%.

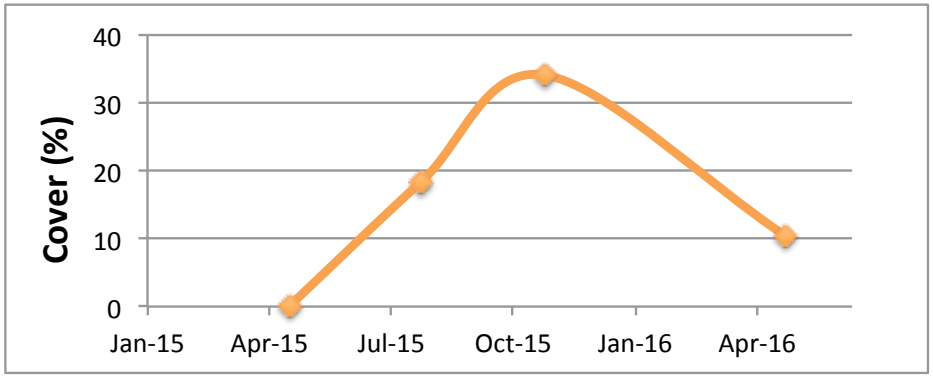
An important observation in explaining the 2015 results is that in April of 2015, in contrast with a typical April (SeagrassNet data in preparation) including April of 2016 (Figure 6), values for all eelgrass parameters were near zero. This reduces the ability of the eelgrass to reach more typical levels for all the parameters as the growing season progresses, since it is essentially starting from seedlings rather than established plants. A potential explanation for the lack of eelgrass in April of 2015 is the unusually poor water quality observed over the winter. While ice scouring is a potential factor in eelgrass depletion at Transect A (but not Transects B and C), ice scouring was not observed during the 2014-2015 winter season.

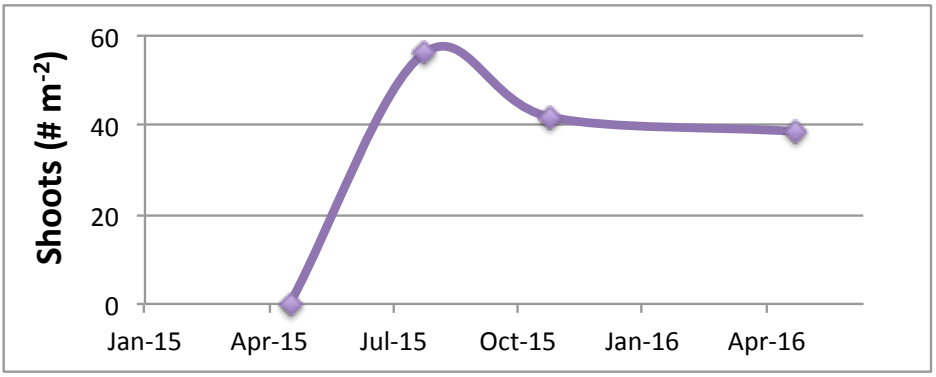
Comparing the results from the three transects exemplifies the complexity of these habitats. Transect C, the deepest transect, had the highest measurements for all parameters except for number of flowers. Flowering is typically reduced in lower light conditions and Transect C, especially at low tide, certainly has the lowest water clarity (see Appendix 2). At high tide, however, deeper water from the channel influences Transect C more than the other transects, potentially bringing in clearer water and nutrients.

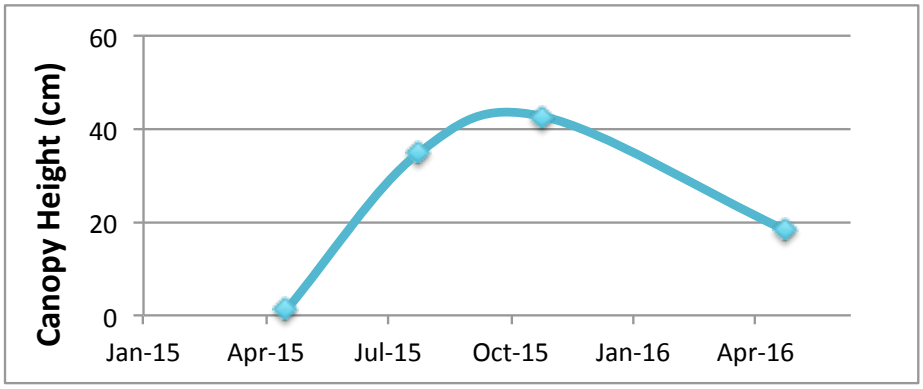
The balance between light and nutrients is important because of potential impacts on seaweeds, which can outcompete eelgrass under certain conditions. For example,

transect A is the shallowest and receives the most light. In high light situations, if a particular threshold of nitrogen concentration in the water is reached, seaweeds will thrive and outcompete eelgrass. Photographs in Appendix 2 show that seaweed abundance was highest at Transect A and lowest at Transect C. Transect A eelgrass percent cover almost reached 40% by July, but had declined to under 20% cover by October (Figure 5), and competition from seaweed (see Figure 7) was most likely the cause. Seaweed competition could also contribute to reduced eelgrass canopy height and flowering at Transect A (Figure 5).

In contrast, at Transects B and C, seaweeds were much less abundant than at Transect A. Transects B and C also failed to reach typically high eelgrass percent cover measures and their percent cover maxima were delayed from July until October 2015, most likely due to poor water clarity conditions as documented in the photo mosaic (Appendix 2).







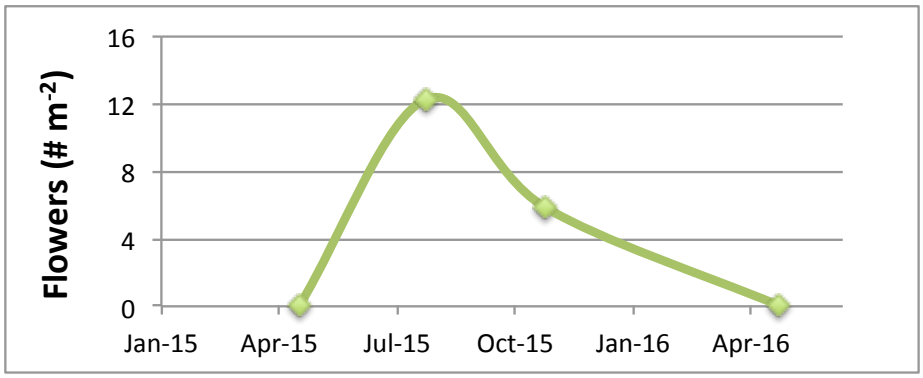


Figure 6. Eelgrass percent cover, shoot density, canopy height and flower density for Great Bay at SeagrassNet site NH9.2, for April 2015 – April 2016 (means of data for Transects A, B, and C).

Photo Mosaics

The 2015 photos of Transects A, B, and C were compiled in photo mosaics, allowing a visual assessment of the SeagrassNet site in Great Bay (Appendix 2). In many cases, seaweeds were removed from the quadrats in order to see and photograph the eelgrass beneath. Since change in seaweed distribution and biomass is an important issue in its own right, the protocol for future years will be adjusted so that each quadrat will have a "before" photo (i.e., before seaweed removal) and an "after" photo once the quadrat is cleared of seaweeds (Figure 7).

SeagrassNet quadrat photos show clear distinctions in eelgrass cover (Appendix 2) throughout the year. Transect A shows virtually no eelgrass in April 2015, but by July many of the quadrats had high eelgrass cover, having revegetated from seedlings (pers. obs.). By October 2015, Transect A was extensively blanketed by seaweed (*Gracilaria vermicuphyllum* & *Ulva lactuca*). Note that *G. vermicuphyllum* is the invasive species (compared with native *Gracilaria tikvahiae*). When the seaweed was removed, only a few eelgrass shoots were found to be present (Figure 7).

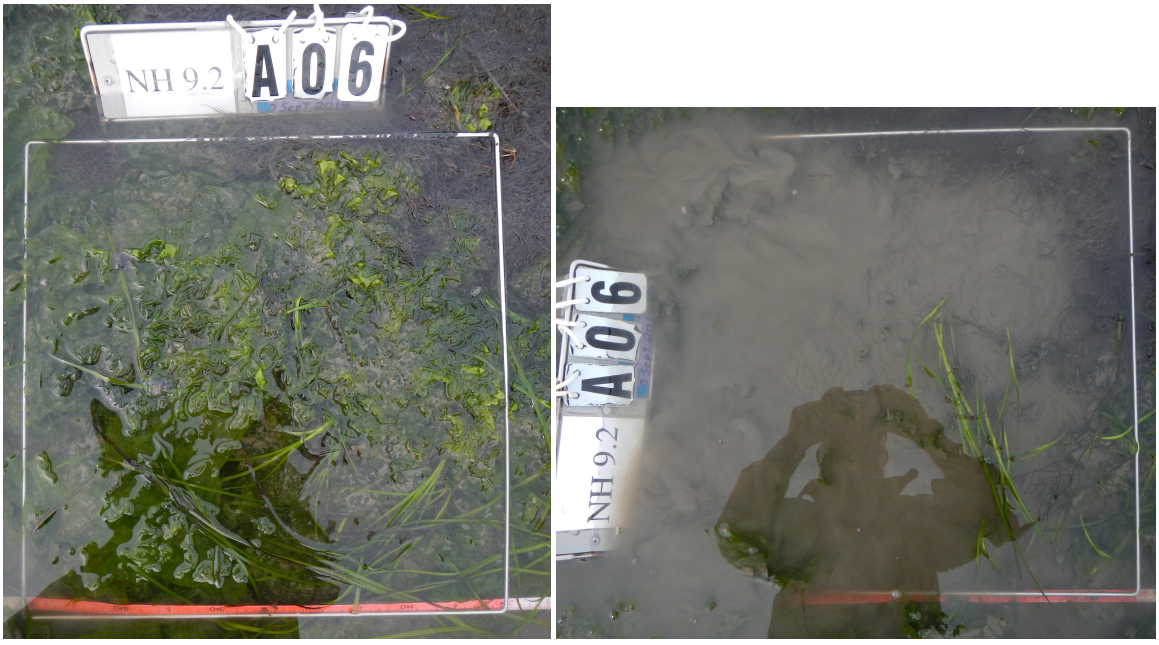


Figure 7. October 2014 example of a quadrat photo on Transect A before seaweed was removed (left) and after seaweed was removed (right).

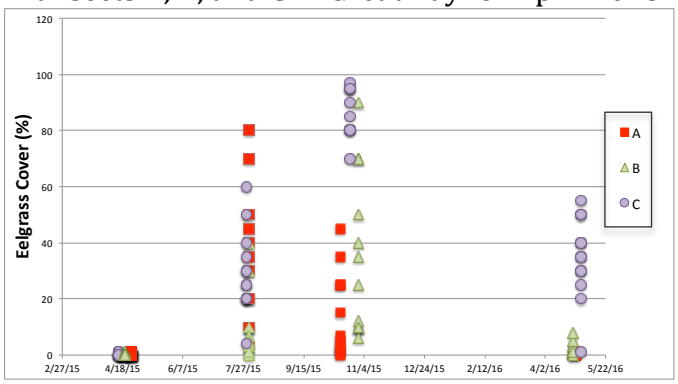
Quadrat photographs of Transect B show a similar situation, but the water clarity at this transect was so poor that it was impossible to take photos without being very close to the estuarine sediment (Appendix 2). The water clarity in April 2015 was so poor that a video was used to scan the entire transect because the metal quadrats could not be placed accurately along the 50m tape measure. There was almost no

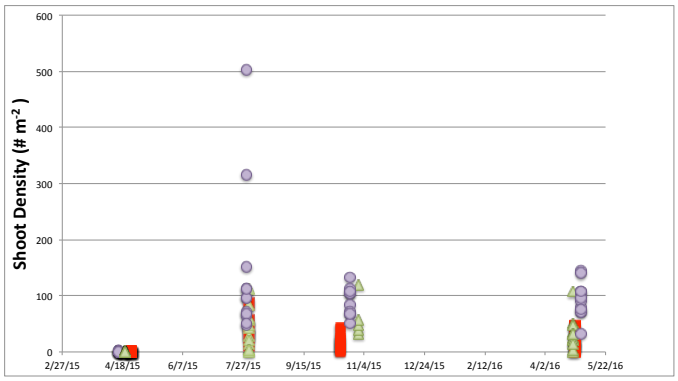
eelgrass across the length of the transect. In July 2015 at Transect B, eelgrass could be seen in all quadrats although poor water clarity precluded entire quadrats being photographed. By October, with somewhat better water clarity, some complete quadrats could be photographed, and quadrats along Transect B had percent cover values from 6 – 90% (Appendix 3).

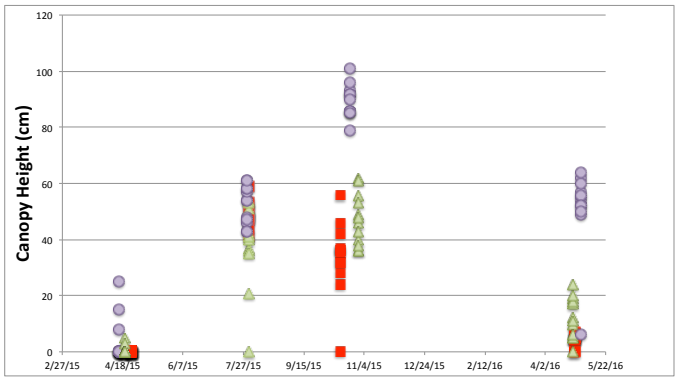
In April 2015 at Transect C, poor water clarity conditions were evident along the entire transect, and there was no eelgrass (Appendix 2). In July, there was eelgrass in all quadrats ranging from 4 – 60% cover, but water clarity was still not good enough to photograph full quadrats (Appendix 3). During the October sampling, the eelgrass had very high percent cover and in some cases water clarity allowed photographing the entire quadrat.

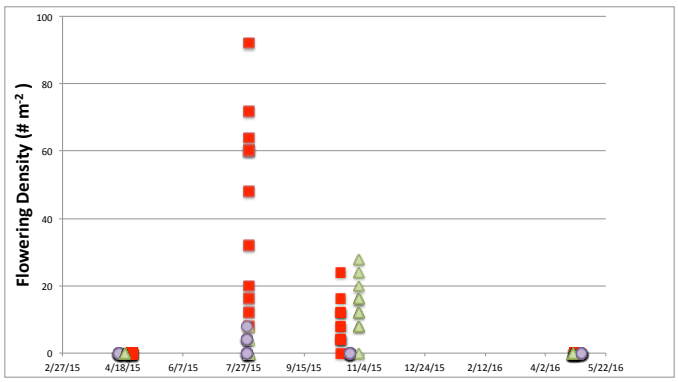
Appendix 1

Eelgrass percent cover, shoot density, and canopy height at SeagrassNet site NH9.2, Transects A, B, and C in Great Bay for April 2015 – April 2016.







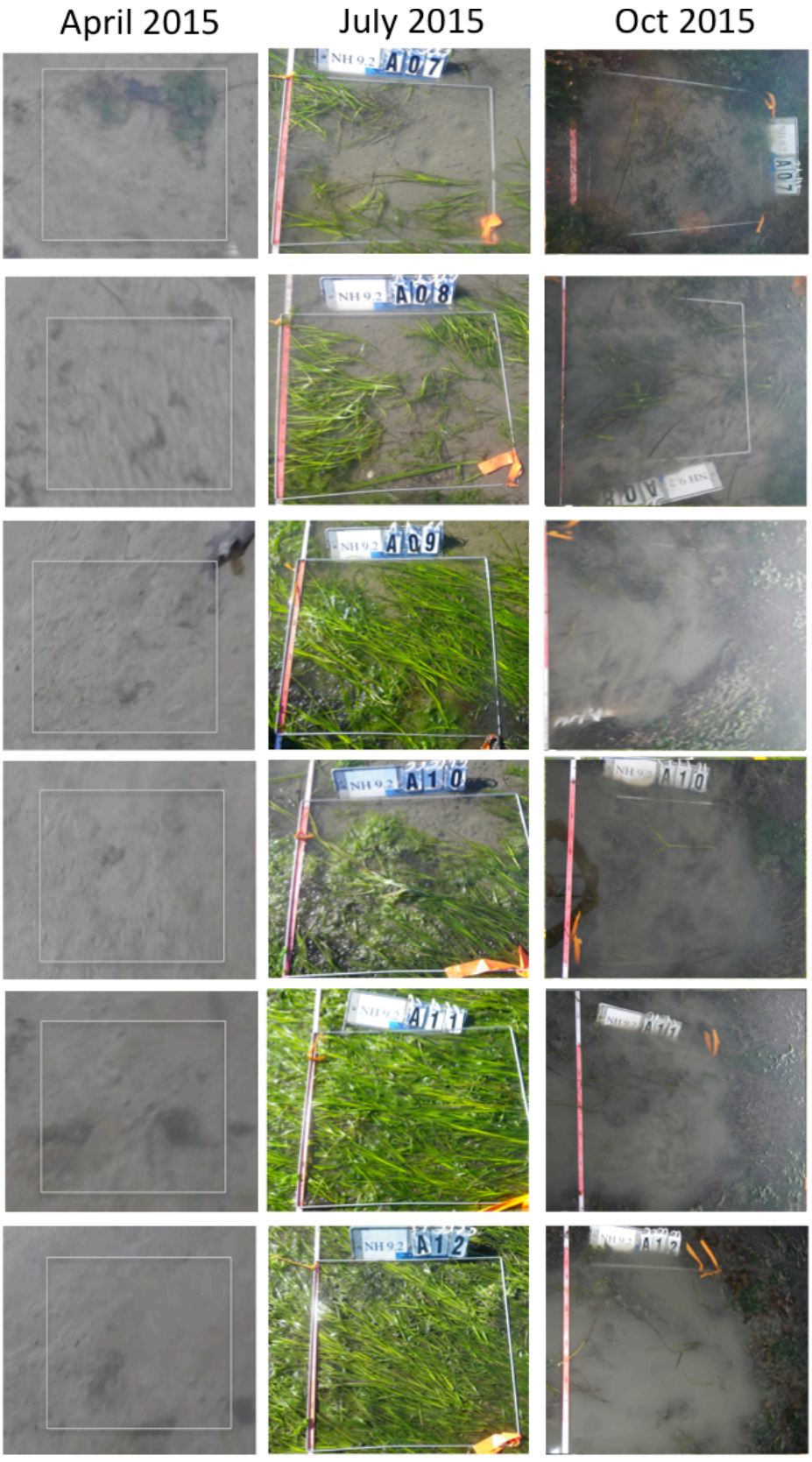


Appendix 2

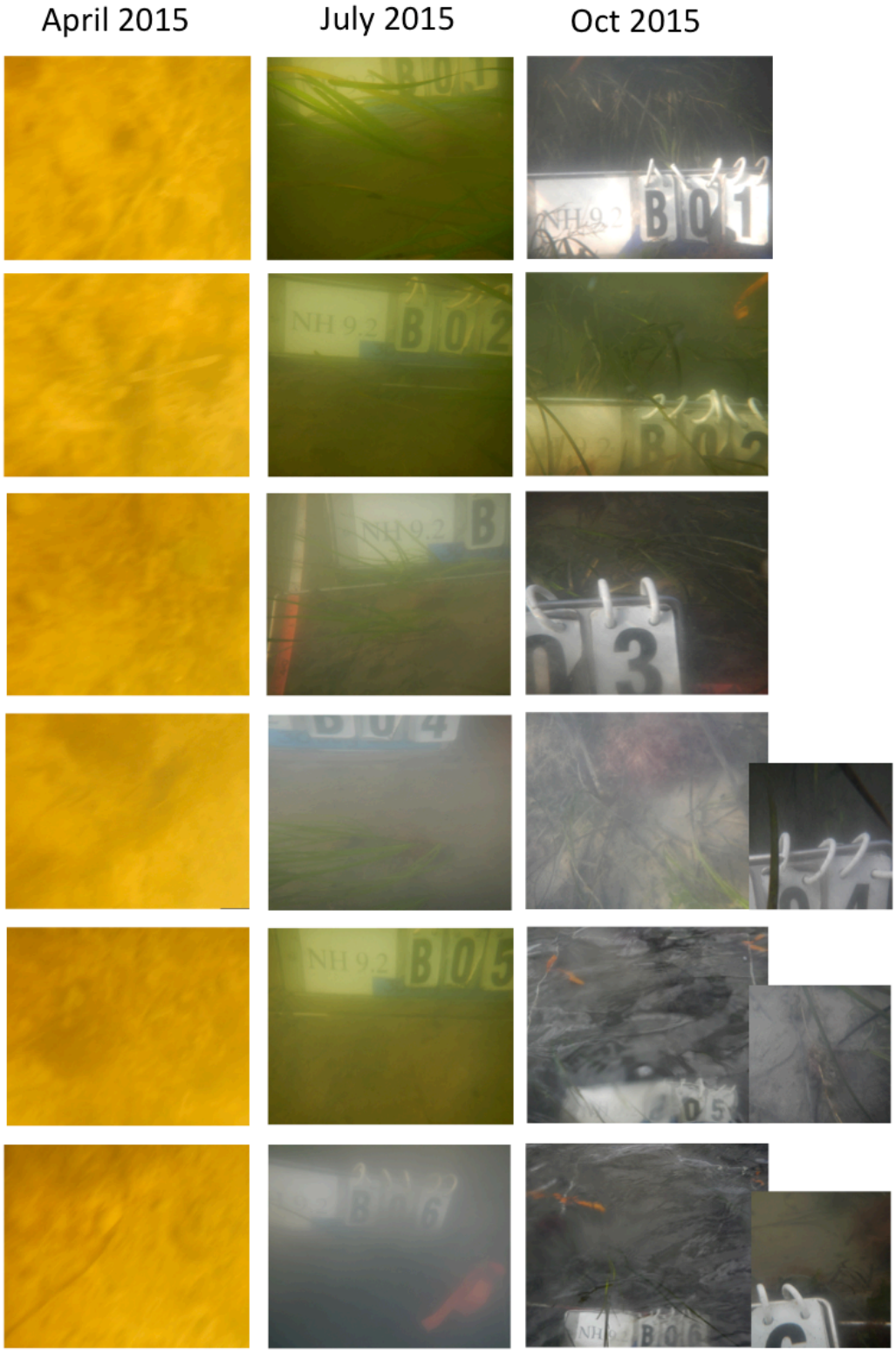
Photo mosaic of quadrat photos from the 3 SeagrassNet transects (A, B, and C) taken during April, July and October 2015 in Great Bay, New Hampshire. The photos are organized so that columns represent the month the photographs were taken while the rows show the 12 replicates along each of the three transects (A, B, and C) over two pages.

Appendix 2, Transect A, Quadrats 1 - 6

Appendix 2, Transect A, Quadrats 7 – 12



Appendix 2, Transect B, Quadrats 1 - 6



Appendix 2, Transect B, Quadrats 7 - 12

Appendix 2, Transect C, Quadrats 1 – 6

Appendix 2, Transect C, Quadrats 7 – 12

Appendix 3

Data table for SeagrassNet samples in Great Bay, NH April, July and October 2015 and April 2016. "Zm" represents *Zostera marina*, eelgrass. Blanks indicate no data while zeros indicate values of zero.

Location	Site	Transect	Quadrat #	Species	Date	Percent Cover (%)	Shoot Density (# m^{-2})	Canopy Height (cm)	Flowers (# m^{-2})
New Hampshire / Great Bay	NH9.2	A	1	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	2	Zm	4/20/15	1	1	5	0
New Hampshire / Great Bay	NH9.2	A	3	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	4	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	5	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	6	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	7	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	8	Zm	4/20/15	1	1	3	0
New Hampshire / Great Bay	NH9.2	A	9	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	10	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	11	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	12	Zm	4/20/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	1	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	2	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	3	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	4	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	5	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	6	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	7	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	8	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	9	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	10	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	11	Zm	4/25/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	12	Zm	4/25/15	1	0	0	0
New Hampshire / Great Bay	NH9.2	C	1	Zm	4/15/15	1	1	25	0
New Hampshire / Great Bay	NH9.2	C	2	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	3	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	4	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	5	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	6	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	7	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	8	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	C	9	Zm	4/15/15	1	1	15	0
New Hampshire / Great Bay	NH9.2	C	10	Zm	4/15/15	1	1	8	0
New Hampshire / Great Bay	NH9.2	C	11	Zm	4/15/15	0	0	0	0

New Hampshire / Great Bay	NH9.2	C	12	Zm	4/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	1	Zm	7/31/15	3	12	41	16
New Hampshire / Great Bay	NH9.2	A	2	Zm	7/31/15	45	48	44	72
New Hampshire / Great Bay	NH9.2	A	3	Zm	7/31/15	20	32	52	60
New Hampshire / Great Bay	NH9.2	A	4	Zm	7/31/15	50	56	51	92
New Hampshire / Great Bay	NH9.2	A	5	Zm	7/31/15	10	24	53	12
New Hampshire / Great Bay	NH9.2	A	6	Zm	7/31/15	35	28	48	32
New Hampshire / Great Bay	NH9.2	A	7	Zm	7/31/15	10	32	47	48
New Hampshire / Great Bay	NH9.2	A	8	Zm	7/31/15	30	44	48	60
New Hampshire / Great Bay	NH9.2	A	9	Zm	7/31/15	40	48	47	20
New Hampshire / Great Bay	NH9.2	A	10	Zm	7/31/15	20	28	49	8
New Hampshire / Great Bay	NH9.2	A	11	Zm	7/31/15	80	84	59	64
New Hampshire / Great Bay	NH9.2	A	12	Zm	7/31/15	70	88	48	60
New Hampshire / Great Bay	NH9.2	B	1	Zm	7/31/15	40	84	54	4
New Hampshire / Great Bay	NH9.2	B	2	Zm	7/31/15	3	28	51	0
New Hampshire / Great Bay	NH9.2	B	3	Zm	7/31/15	1	4	41	0
New Hampshire / Great Bay	NH9.2	B	4	Zm	7/31/15	10	16	37	0
New Hampshire / Great Bay	NH9.2	B	5	Zm	7/31/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	6	Zm	7/31/15	3	20	36	0
New Hampshire / Great Bay	NH9.2	B	7	Zm	7/31/15	1	4	21	0
New Hampshire / Great Bay	NH9.2	B	8	Zm	7/31/15	5	56	40	8
New Hampshire / Great Bay	NH9.2	B	9	Zm	7/31/15	7	60	42	0
New Hampshire / Great Bay	NH9.2	B	10	Zm	7/31/15	5	44	41	0
New Hampshire / Great Bay	NH9.2	B	11	Zm	7/31/15	4	48	35	0
New Hampshire / Great Bay	NH9.2	B	12	Zm	7/31/15	30	112	53	4
New Hampshire / Great Bay	NH9.2	C	1	Zm	7/30/15	35	112	46	4
New Hampshire / Great Bay	NH9.2	C	2	Zm	7/30/15	20	64	54	0
New Hampshire / Great Bay	NH9.2	C	3	Zm	7/30/15	40	96	54	4
New Hampshire / Great Bay	NH9.2	C	4	Zm	7/30/15	4	72	43	4
New Hampshire / Great Bay	NH9.2	C	5	Zm	7/30/15	25	68	43	0
New Hampshire / Great Bay	NH9.2	C	6	Zm	7/30/15	30	96	48	0
New Hampshire / Great Bay	NH9.2	C	7	Zm	7/30/15	30	112	57	4
New Hampshire / Great Bay	NH9.2	C	8	Zm	7/30/15	25	152	58	0
New Hampshire / Great Bay	NH9.2	C	9	Zm	7/30/15	20	48	61	4
New Hampshire / Great Bay	NH9.2	C	10	Zm	7/30/15	20	52	47	0
New Hampshire / Great Bay	NH9.2	C	11	Zm	7/30/15	50	316	58	8
New Hampshire / Great Bay	NH9.2	C	12	Zm	7/30/15	60	504	61	0
New Hampshire / Great Bay	NH9.2	A	1	Zm	10/15/15	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	2	Zm	10/15/15	45	40	36	24
New Hampshire / Great Bay	NH9.2	A	3	Zm	10/15/15	35	44	32	12
New Hampshire / Great Bay	NH9.2	A	4	Zm	10/15/15	25	20	28	4
New Hampshire / Great Bay	NH9.2	A	5	Zm	10/15/15	5	20	42	12
New Hampshire / Great Bay	NH9.2	A	6	Zm	10/15/15	1	4	35	4

New Hampshire / Great Bay	NH9.2	A	7	Zm	10/15/15	3	8	56	8
New Hampshire / Great Bay	NH9.2	A	8	Zm	10/15/15	25	24	36	12
New Hampshire / Great Bay	NH9.2	A	9	Zm	10/15/15	15	16	37	8
New Hampshire / Great Bay	NH9.2	A	10	Zm	10/15/15	1	8	24	4
New Hampshire / Great Bay	NH9.2	A	11	Zm	10/15/15	7	24	32	16
New Hampshire / Great Bay	NH9.2	A	12	Zm	10/15/15	3	4	46	4
New Hampshire / Great Bay	NH9.2	B	1	Zm	10/30/15	70		62	24
New Hampshire / Great Bay	NH9.2	B	2	Zm	10/30/15	50		56	16
New Hampshire / Great Bay	NH9.2	B	3	Zm	10/30/15	25		36	20
New Hampshire / Great Bay	NH9.2	B	4	Zm	10/30/15	70		40	0
New Hampshire / Great Bay	NH9.2	B	5	Zm	10/30/15	10	32	49	12
New Hampshire / Great Bay	NH9.2	B	6	Zm	10/30/15	10	40	53	8
New Hampshire / Great Bay	NH9.2	B	7	Zm	10/30/15	6	48	46	8
New Hampshire / Great Bay	NH9.2	B	8	Zm	10/30/15	12	56	43	12
New Hampshire / Great Bay	NH9.2	B	9	Zm	10/30/15	35	120	36	28
New Hampshire / Great Bay	NH9.2	B	10	Zm	10/30/15	10		38	0
New Hampshire / Great Bay	NH9.2	B	11	Zm	10/30/15	40		48	
New Hampshire / Great Bay	NH9.2	B	12	Zm	10/30/15	90		61	16
New Hampshire / Great Bay	NH9.2	C	1	Zm	10/23/15	95	84	79	0
New Hampshire / Great Bay	NH9.2	C	2	Zm	10/23/15	95	112	92	0
New Hampshire / Great Bay	NH9.2	C	3	Zm	10/23/15	97	104	93	0
New Hampshire / Great Bay	NH9.2	C	4	Zm	10/23/15	80	68	86	0
New Hampshire / Great Bay	NH9.2	C	5	Zm	10/23/15	70	52	86	0
New Hampshire / Great Bay	NH9.2	C	6	Zm	10/23/15	90	104	92	0
New Hampshire / Great Bay	NH9.2	C	7	Zm	10/23/15	80	72	86	0
New Hampshire / Great Bay	NH9.2	C	8	Zm	10/23/15	95	132	92	0
New Hampshire / Great Bay	NH9.2	C	9	Zm	10/23/15	80	68	96	0
New Hampshire / Great Bay	NH9.2	C	10	Zm	10/23/15	85	108	85	0
New Hampshire / Great Bay	NH9.2	C	11	Zm	10/23/15			90	0
New Hampshire / Great Bay	NH9.2	C	12	Zm	10/23/15			101	0
New Hampshire / Great Bay	NH9.2	A	1	Zm	4/27/16	1	16	6	0
New Hampshire / Great Bay	NH9.2	A	2	Zm	4/27/16	1	8	4	0
New Hampshire / Great Bay	NH9.2	A	3	Zm	4/27/16	0	0	0	0
New Hampshire / Great Bay	NH9.2	A	4	Zm	4/27/16	1	12	5	0
New Hampshire / Great Bay	NH9.2	A	5	Zm	4/27/16	1	16	6	0
New Hampshire / Great Bay	NH9.2	A	6	Zm	4/27/16	1	8	7	0
New Hampshire / Great Bay	NH9.2	A	7	Zm	4/27/16	1	20	5	0
New Hampshire / Great Bay	NH9.2	A	8	Zm	4/27/16	1	40	5	0
New Hampshire / Great Bay	NH9.2	A	9	Zm	4/27/16	1	12	6	0
New Hampshire / Great Bay	NH9.2	A	10	Zm	4/27/16	1	40	5	0
New Hampshire / Great Bay	NH9.2	A	11	Zm	4/27/16	1	20	5	0
New Hampshire / Great Bay	NH9.2	A	12	Zm	4/27/16	1	48	5	0
New Hampshire / Great Bay	NH9.2	B	1	Zm	4/25/16	1	36	24	0

New Hampshire / Great Bay	NH9.2	B	2	Zm	4/25/16	1	20	19	0
New Hampshire / Great Bay	NH9.2	B	3	Zm	4/25/16	0	0	0	0
New Hampshire / Great Bay	NH9.2	B	4	Zm	4/25/16	2	24	17	0
New Hampshire / Great Bay	NH9.2	B	5	Zm	4/25/16	1	4	18	0
New Hampshire / Great Bay	NH9.2	B	6	Zm	4/25/16	1	20	12	0
New Hampshire / Great Bay	NH9.2	B	7	Zm	4/25/16	1	16	5	0
New Hampshire / Great Bay	NH9.2	B	8	Zm	4/25/16	2	32	10	0
New Hampshire / Great Bay	NH9.2	B	9	Zm	4/25/16	3	52	5	0
New Hampshire / Great Bay	NH9.2	B	10	Zm	4/25/16	5	108	11	0
New Hampshire / Great Bay	NH9.2	B	11	Zm	4/25/16	8	48	20	0
New Hampshire / Great Bay	NH9.2	B	12	Zm	4/25/16	1	32	6	0
New Hampshire / Great Bay	NH9.2	C	1	Zm	5/2/16	25	80	55	0
New Hampshire / Great Bay	NH9.2	C	2	Zm	5/2/16	50	144	53	0
New Hampshire / Great Bay	NH9.2	C	3	Zm	5/2/16	30	104	57	0
New Hampshire / Great Bay	NH9.2	C	4	Zm	5/2/16	30	72	62	0
New Hampshire / Great Bay	NH9.2	C	5	Zm	5/2/16	20	92	52	0
New Hampshire / Great Bay	NH9.2	C	6	Zm	5/2/16	35	72	49	0
New Hampshire / Great Bay	NH9.2	C	7	Zm	5/2/16	35	108	60	0
New Hampshire / Great Bay	NH9.2	C	8	Zm	5/2/16	50	96	56	0
New Hampshire / Great Bay	NH9.2	C	9	Zm	5/2/16	40	76	52	0
New Hampshire / Great Bay	NH9.2	C	10	Zm	5/2/16	55	140	50	0
New Hampshire / Great Bay	NH9.2	C	11	Zm	5/2/16	40	108	64	0
New Hampshire / Great Bay	NH9.2	C	12	Zm	5/2/16	45	136	61	0

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