





**Transect 1: Mill Pond**

Observers and dates

1998 Liz, Teachers  
 1999 Liz/Cindy  
 2000  
 2001 11/8/2001, LD, NS

2002 Duff and Kagle

2003 Duff  
 2004 Duff/Munson  
 2005 Duff/Janson  
 2006 Duff

2007 Duff and Wilbur

2008 Duff

Boards on gate

2009 Duff & Hi Tide gates opened 2004 and beyond

**Soft Peat Soil**

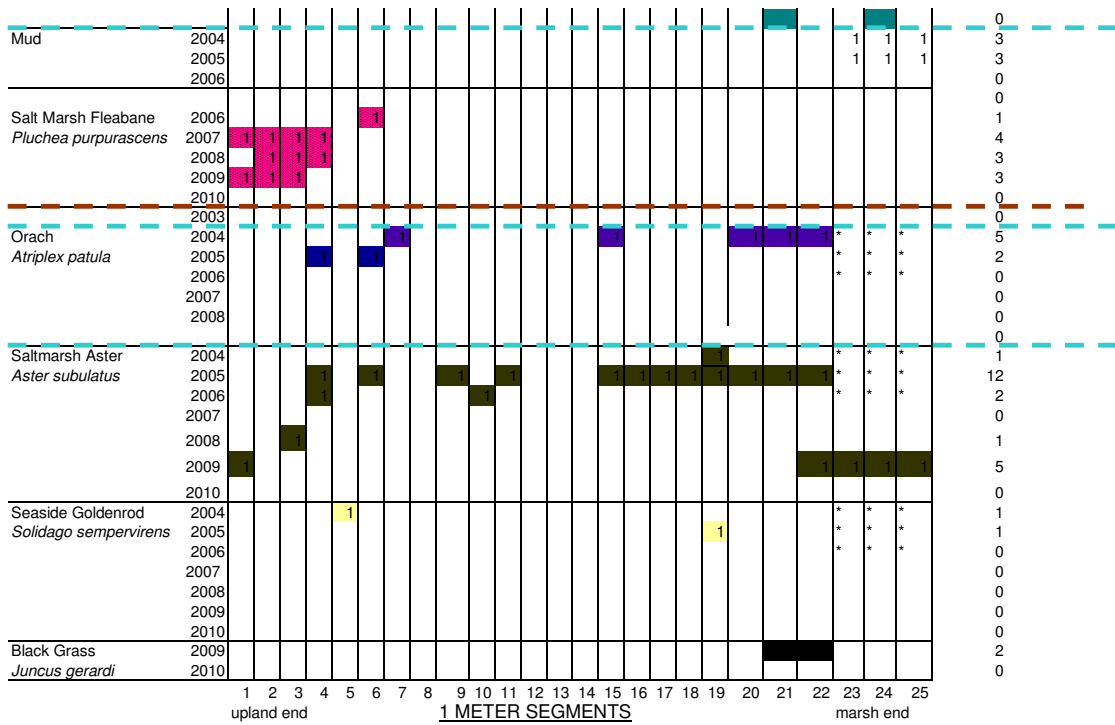
Boards were placed above the tide gate in 2003, raising the pond level. This killed vegetation on the marsh. tide gates open in 2004 and beyond.  
 \* In 2004 this transect ends at the edge of the pond at meter 22. Meters 23-25 are mud, no vegetation.

SPECIES

upland end **1 METER SEGMENTS** marsh end

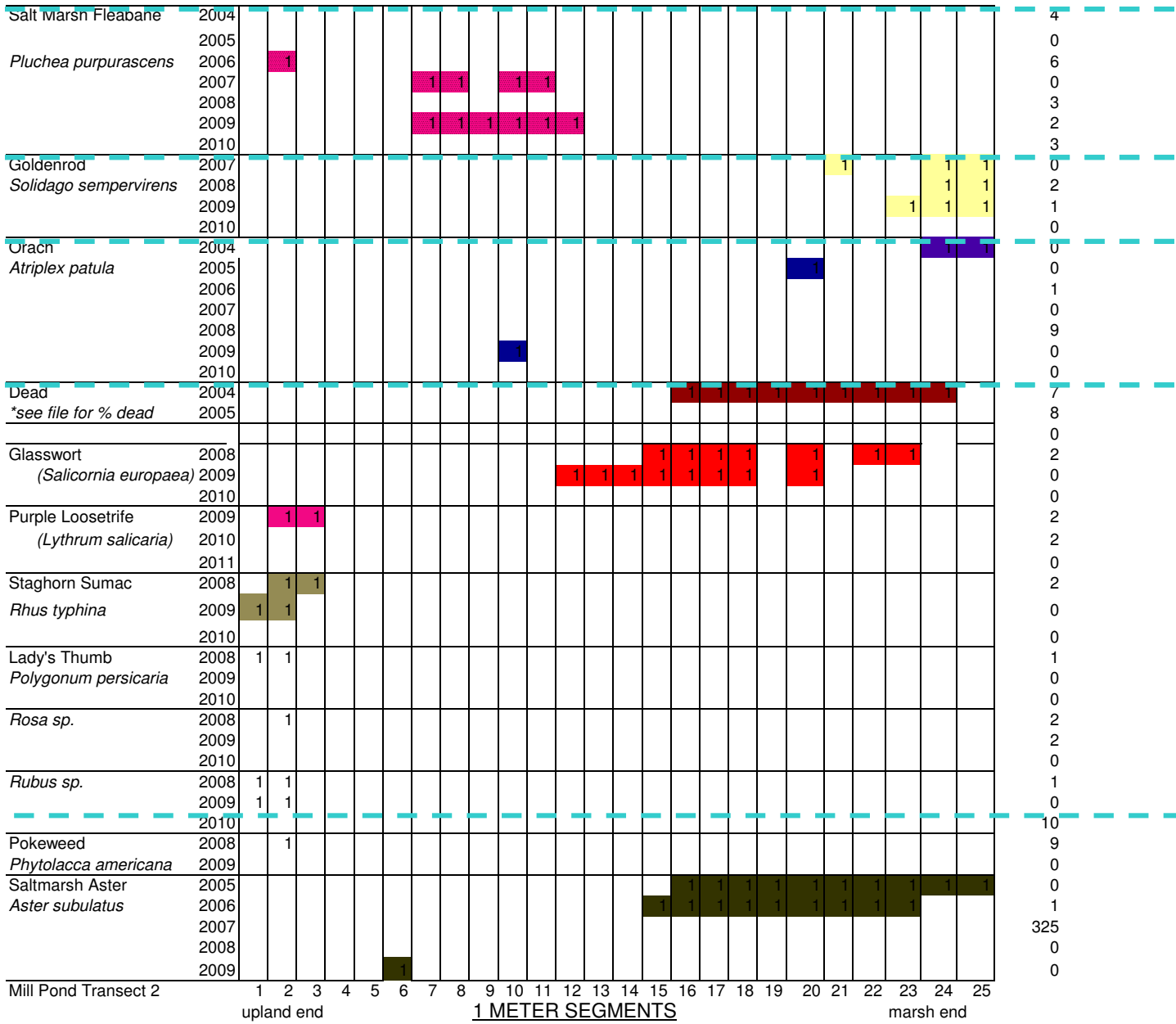
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	# of intervals
Pragmites	1998	1	1	1																						3	
<i>Phragmites australis</i>	1999	1	1	1	1																					4	
	2000	1	1	1	1	1																				5	
	2001	1	1	1	1	1	1																			6	
	2002	1	1	1																						3	
	2003	1	1	1																						2	
Tide Gates opened----	2004	1	1	1																		*	*	*		2	
	2005	1	1	1				1	1												1	1	1	1		9	
0 is immature	2006																									5	
	2007																									6	
	2008	1																								4	
	2009	1																								5	
	2010																									0	
Salt marsh Hay	1998	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	
<i>Spartina patens</i>	1999	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	
	2000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	
	2001																									22	
	2002	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	
ALL DEAD	2003	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24	
Tide Gates opened----	2004																						*	*	*	21	
	2005																									19	
	2006																									22	
	2007																									24	
	2008																									22	
	2009																									24	
	2010																									0	
Glasswort	2008		1	1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	
<i>(Salicornia europaea)</i>	2009								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	
	2010																									0	
Spike Grass	2003				1	1	1																*	*	*	3	
<i>Distichlis spicata</i>	2004																									2	
	2005																									0	
Algal Mat	2003																									4	
	2004																									0	
Dead	2004																							*	*	19	
*see file for % dead	2005																									0	
	2006																									0	
Saltmarsh Cordgrass	1998								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	
<i>Spartina alterniflora</i>	1999		1	1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	
	2000			1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	
	2001										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	
	2002										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	
	2003																									4	
Tide Gates opened----	2004																						*	*	*	1	
	2005																									3	
	2006																									8	
	2007																									9	
	2008																									10	
	2009									1	1															13	
	2010																									0	
Quack Grass?	1998																									1	
<i>Agropyron pungens</i>	1999																									0	
	2000																									0	
	2001																									0	
	2002																									2	

Endstakes missing. Location guessed in 2008.



Transect 1 Mill Pond





Mill Pond Transect 2

upland end

1 METER SEGMENTS

marsh end

325  
0  
0



# Average *Phragmites* Heights, Transect 1, Mill Pond, Gloucester, MA 2000-2009

