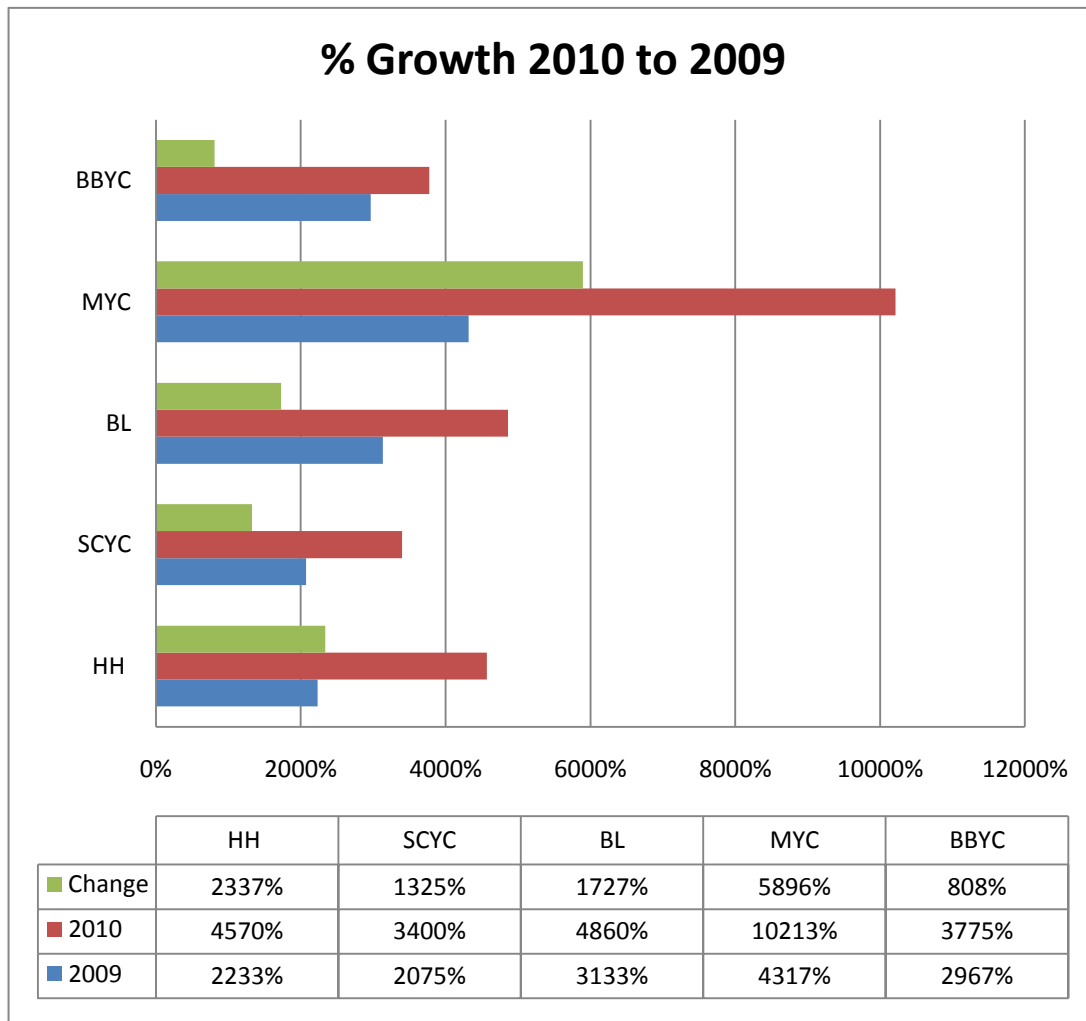




# Upweller Report 2010

**Growing Shellfish** –In general 2010 was a much better growing year than 2009. This can be seen in the chart below. The growth data were gathered each week for seed from each different hatchery. This chart is based on seed from one



hatchery at each location (some upwellers had seed more than one hatchery). The data reflects the growth pattern for five of the upwellers. Weather conditions in the spring and summer of 2009 were not favorable for seed growth. This can be clearly seen in the data table contained in the chart. The first example is HH. In 2009 the seed growth for the year was 2233% (shown in blue). In 2010 the rate was almost twice that at 4570% (shown in red). The net change was 2337% (green). The variation in growth rate for the year from one location to another (Example: MYC 10,213 to SCYC 3,400) is the subject for study by our Certified Shellfish Gardeners.

The table below shows the start up volume of seeds for a specific batch that was loaded and grown at each of various upwellers. The actual count of individual clams is estimated by the hatchery and later verified to be (+ or - 10%.) Once validated, the estimated count is used to simplify all the “number crunching.” The chart also tells the % of the batch that was planted at the specific location. For example BL 1 (Barneget Light 1) was loaded on July 17 with 9,000 ml of batch BA 09 and 100% of the seed was planted at location BLO.

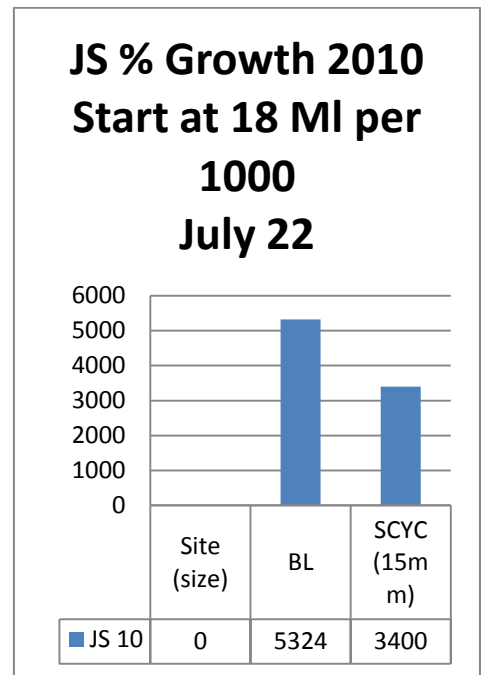
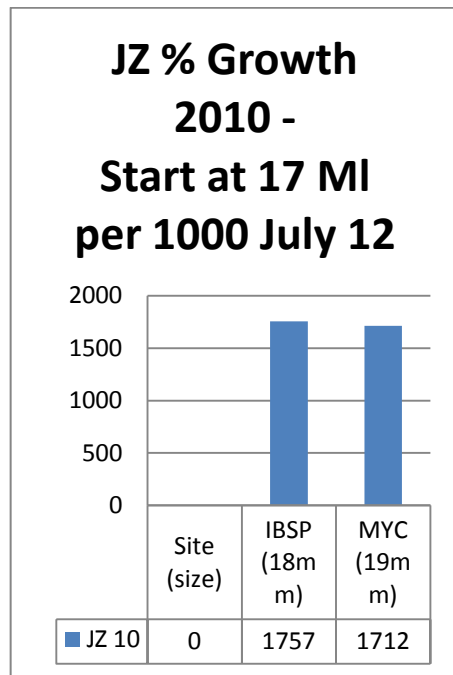
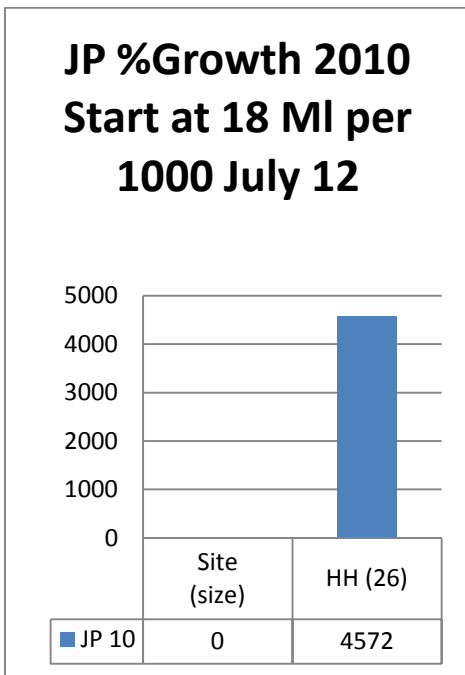
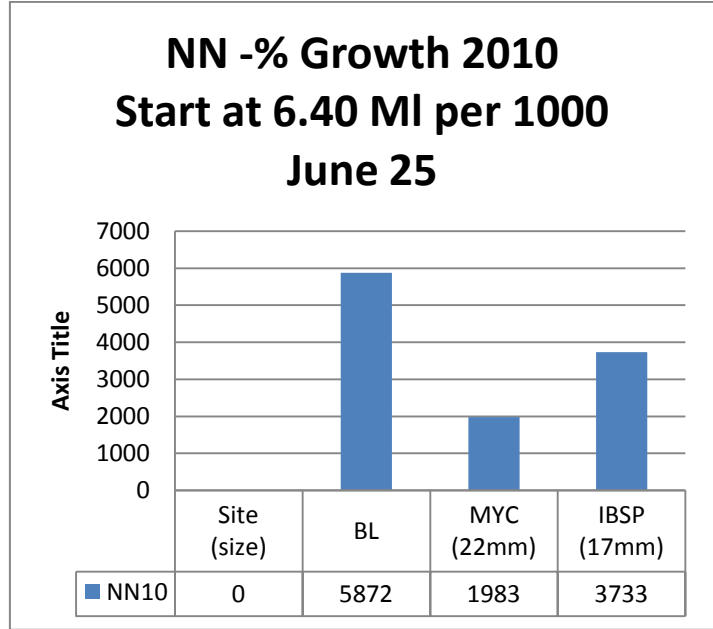
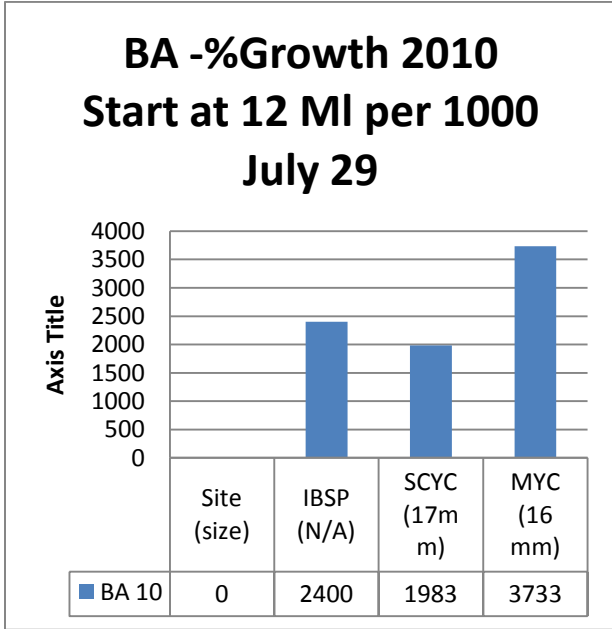
REPORT 12/15/010				% Planted - Location					
Start date	Batch Date	Volume	Batch	Sedg	WrTn	BLW1	BBW1	TC	PM
		ML		SIO	WTS	BLO	BBO	BHO	HO
BL1	17-Jun	9,000	BA09			100			
<u>BL2</u>	25-Jun	320	NN10		100				
BL3	12-Jul	980	JS10		100				
BL4	29-Jul	300	BA10		100				
SCYC 1	17-Jun	2,700	BA09						6000
SCYC 2	12-Jul	900	JS10	100					
SCYC 3	29-Jul	300	BA 10	100					
SF1	17-Jun	4,050	BA09						9000
SF2	25-Jun	320	NN10		100				
SF3	12-Jul	850	JZ10		100				
SF4	29-Jul	900	BA10		100				
BBYC1	17-Jun	2250	BA09				100		
BBYC2	12-Jul	1800	JS10	100					
BBYC3	29-Jul	300	BA10	100					
BH1-	17-Jun	4,500	BA09						10,000
BH2	25-Jun	320	NN10		100				
BH3	12-Jul	1,800	JP10		100				
HH	12-Jul	1,800	JP10	50	50				
IBSP1	17-Jun	4,500	BA09	100					
IBSP2	25-Jun	160	NN10	100					
IBSP3	12-Jul	1,275	JZ10	100					
IBSP4	29-Jul	300	BA10	100					
MYC1	17-Jun	4,500	BA09	100					
MYC2	25-Jun	160	NN10	100					
MYC3	12-Jul	1,275	JZ10	100					
MYC4	29-Jul	300	BA10	100					

Our goal is to learn about growing shellfish and the various things that impact their growth. In 2010 we obtained 200,000 seed clams from each hatchery: BA, JZ, JS, NN, JP for a total of about 1 million. We also obtained 70,000 large seed from BA for some planting experiments.

**Observations**

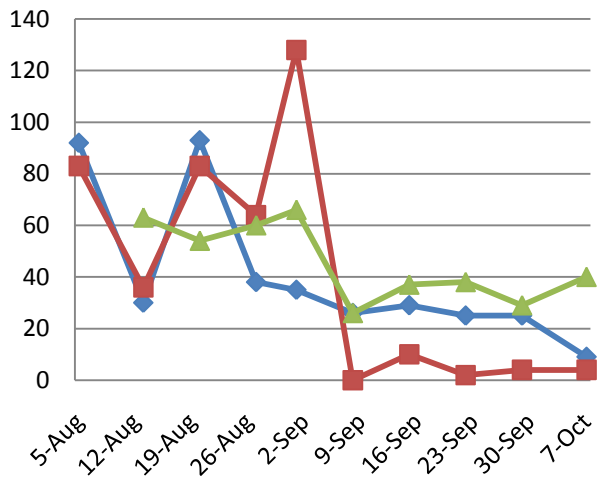
The following statistical reports are observations not scientific fact. Our volunteers gather data so we can discuss growing patterns in an effort to refine our techniques. Below are charts showing growth by batch (hatchery) with the start date, size, year-end size and upweller identified.

Batch by hatchery – BA, NN, JP, JZ,JS



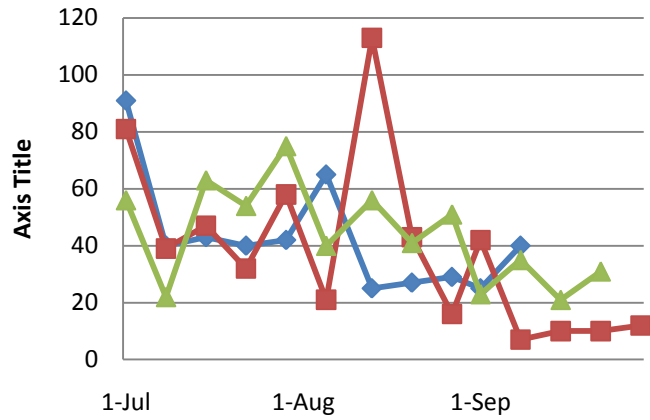
Another way to review the data is by weekly % of growth for a given hatchery batch at a specific upweller.

### Weekly Growth for BA



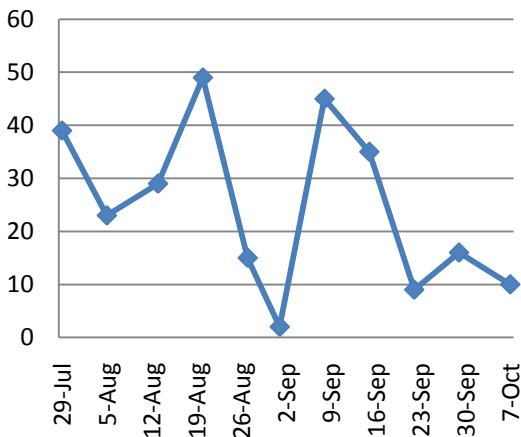
	5-Aug	13-Aug	20-Aug	27-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	7-Oct
IBSP	92	30	93	38	35	26	29	25	25	9
SCYC	83	36	83	64	128	0	10	2	4	4
MYC		63	54	60	66	26	37	38	29	40

### Weekly Growth for NN



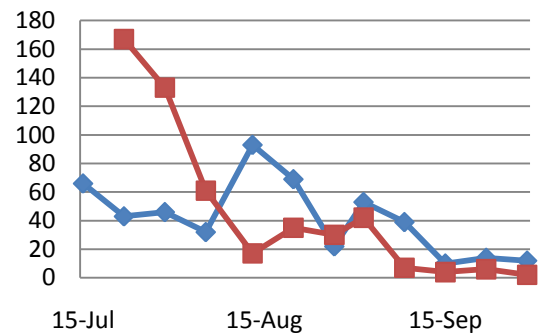
	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	13-Aug	20-Aug	27-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep
IBSP	91	40	43	40	42	65	25	27	29	25	40			
BL	81	39	47	32	58	21	113	43	16	42	7	10	10	12
MYC	56	22	63	54	75	40	56	41	51	23	35	21	31	

### HH JP10 Weekly Growth



	29-Jul	5-Aug	13-Aug	20-Aug	27-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	7-Oct
HH JP10	39	23	29	49	15	2	45	35	9	16	10

### Weekly Growth JS 10



	15-Jul	22-Jul	29-Jul	5-Aug	13-Aug	20-Aug	27-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep
BLJS10w	66	43	46	32	93	69	22	53	39	10	14	12
SCYC JS10w	167	133	61	17	35	30	42	7	4	6	2	

