

Bay Tree Beach 2-Sep-03

12:04 PM arrive

12:56 PM depart

Abiotic

light penetration 54 cm

salinity 17/1000

water temp 30 C

sand temp 32 C

air temp 36 C

Tides 9 Sep 11:46 AM High tide 6:00 PM low tide

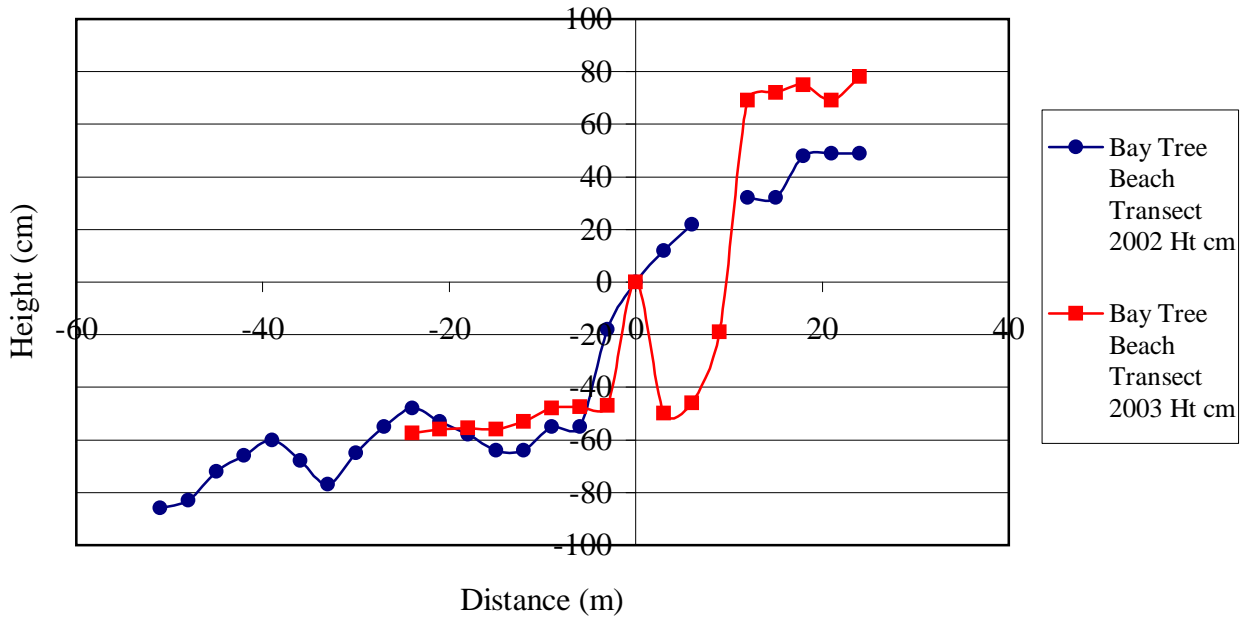
Weather: sunny with some clouds, no/light breeze

Transect

Bay Tree Beach Transect

| distance M | 2002 Ht cm | 2003 Ht cm |
|------------|------------|------------|
| -51 | -86 | |
| -48 | -83 | |
| -45 | -72 | |
| -42 | -66 | |
| -39 | -60 | |
| -36 | -68 | |
| -33 | -77 | |
| -30 | -65 | |
| -27 | -55 | |
| -24 | -48 | -57.5 |
| -21 | -53 | -56 |
| -18 | -58 | -55.5 |
| -15 | -64 | -56 |
| -12 | -64 | -53 |
| -9 | -55 | -48 |
| -6 | -55 | -47.5 |
| -3 | -18 | -47 |
| 0 | 0 | 0 |
| 3 | 12 | -50 |
| 6 | 22 | -46 |
| 9 | | -19 |
| 12 | 32 | 69 |
| 15 | 32 | 72 |
| 18 | 48 | 75 |
| 21 | 49 | 69 |
| 24 | 49 | 78 |

Bay Tree Beach Transects for September 2002 and 2003



Biomass

| | stem count | ave ht cm | ss g (~5 stems) | Stem Lengths cm | | | | | | |
|----------------------|------------|-------------|-----------------|-----------------|-----|-----|-----|----|-----|----|
| littoral/sublittoral | 105 | 90.25 | 16.5 | 81 | 76 | 104 | 100 | | | |
| tidal pool | 63 | 59.5 | 12 | 76 | 52 | 76 | 52 | 76 | 25 | |
| supra lit phrag | 27 | 80.71428571 | 21.2 | 97 | 106 | 61 | 28 | 96 | 102 | 75 |

$g \text{ Carbon}/m^2 = 0.5 m^2 \text{ stem count} * \text{mass g}/5 \text{ stems} * 2 * 0.06 g \text{ C}/g \text{ C} / m^2$

littoral/sublittoral $0.5 m^2 * 105 * 16.5 g/5 \text{ stems} * 2 * 0.06 g \text{ C}/g \text{ wet m} = 20.79$

tidal pool $0.5 m^2 * 63 * 12 g/5 \text{ stems} * 2 * 0.06 g \text{ C}/g \text{ wet mass} = 9.07$

supra lit phrag $0.5 m^2 * 27 * 21.2 g/5 \text{ stems} * 2 * 0.06 g \text{ C}/g \text{ wet ma} = 6.87$

Floristics

Bay Tree Beach 2003

| | | |
|-----------------|-------------------------------------|---------------------|
| Maritime Forest | <i>Opuntia compressa</i> | Prickly Pear Cactus |
| | <i>Pinus taeda L</i> | Loblolly Pine |
| | <i>Smilax rotundifolia</i> | Greenbriar |
| | <i>Ilex opaca Aiton</i> | American Holly |
| | <i>Betula nigra L</i> | River Birch |
| | <i>Fraxinus pennsylvanica marsh</i> | Green Ash |

| | | |
|---------------|--------------------------------|------------------|
| Supralittoral | <i>Phragmites australis</i> | Fragmites |
| | <i>Ammophila breviligulata</i> | Beach Grass |
| | <i>Cyperus esculentus</i> | Nut Grass |
| | <i>Clethra alinifolia</i> | Sweetpepper Bush |
| | <i>Arenaria lanuginosa</i> | Beach Sandwort |
| | <i>Baccharis halimifolia</i> | Groudsel Tree |
| | <i>Cakile edentula</i> | Sea Rocket |

| | | |
|----------|-------------------------------|--------------|
| Littoral | <i>Limonium nashii small</i> | Sea Lavender |
| | <i>Salicornia virginica L</i> | Glasswort |
| | <i>Spartina alterniflora</i> | Cord grass |

Kristel Trolenberg http://www.st.nmfs.gov/st1/recreational/survey/local_names.html

Savasia Stephens

Fauna

Seine

| # Caught | Scientific Name | | | | |
|--------------------|--|--------------------|----------------|--|-----------|
| 15 | <i>Fundulus similis</i> | Longnose Killifish | | | |
| >25 | <i>Labidesthes sidd</i> | Silverside | | | |
| 1 | <i>Leiostomus xanti</i> | Spotfish | | | |
| 1 | <i>Menticirrhus spp</i> | Northern Kingfish | | | |
| ? | <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td><i>Callinectes</i></td></tr><tr><td><i>sapidus</i></td></tr><tr><td> </td></tr></table> | <i>Callinectes</i> | <i>sapidus</i> | | blue crab |
| <i>Callinectes</i> | | | | | |
| <i>sapidus</i> | | | | | |
| | | | | | |

Daniel and Lee

>25 all dead *Geukensia dem* ribbed mussel

Allie, Concetta, Kyra

Capture Recapture Study

| <i>Littorina irrorata</i> | Capture Phase | | |
|---------------------------|----------------|---------------|--|
| # of snail | Ht of Water cm | Ht on Stem cm | |
| 1 | 8 | 21 | |
| 2 | 8 | 22 | |
| 3 | 8 | 42 | |
| 4 | 10 | 33 | |
| 5 | 10 | 35 | |
| 6 | 24 | 43 | |
| 7 | 24 | 45 | |
| 8 | 24 | 46 | |
| 9 | 24 | 52 | |
| 10 | 25 | 42 | |
| 11 | 25 | 43 | |
| 12 | 25 | 46 | |
| 13 | 25 | 49 | |
| 14 | 25 | 46 | |
| 15 | 25 | 47 | |
| 16 | 25 | 54 | |
| 17 | 26 | 46 | |
| 18 | 27 | 49 | |
| 19 | 27 | 43 | |
| 20 | 27 | 45 | |
| 21 | 27 | 47 | |
| 22 | 27 | 55 | |
| 23 | 28 | 42 | |
| 24 | 28 | 50 | |
| 25 | 28 | 45 | |
| 26 | 28 | 28 | |
| 27 | 28 | 37 | |
| 28 | 28 | 40 | |
| 29 | 28 | 42 | |
| 30 | 29 | 42 | |
| 31 | 29 | 43 | |
| 32 | 29 | 55 | |
| 33 | 29 | 49 | |
| 34 | 29 | 54 | |
| 35 | 30 | 35 | |
| 36 | 30 | 49 | |
| 37 | 30 | 37 | |
| 38 | 30 | 50 | |

| | | |
|----|------|----|
| 39 | 30 | 34 |
| 40 | 30 | 44 |
| 41 | 30 | 54 |
| 42 | 30 | 57 |
| 43 | 30 | 34 |
| 44 | 30 | 36 |
| 45 | 30 | 37 |
| 46 | 30 | 40 |
| 47 | 30 | 60 |
| 48 | 31 | 40 |
| 49 | 31 | 44 |
| 50 | 31 | 43 |
| 51 | 31 | 44 |
| 52 | 31 | 50 |
| 53 | 31 | 52 |
| 54 | 32 | 39 |
| 55 | 32 | 44 |
| 56 | 32 | 45 |
| 57 | 32 | 55 |
| 58 | 32 | 57 |
| 59 | 32 | 35 |
| 60 | 32 | 36 |
| 61 | 32 | 37 |
| 62 | 32 | 44 |
| 63 | 32 | 42 |
| 64 | 32 | 42 |
| 65 | 32 | 59 |
| 66 | 32 | 60 |
| 67 | 32 | 61 |
| 68 | 32 | 62 |
| 69 | 32.5 | 53 |
| 70 | 33 | 67 |
| 71 | 33 | 35 |
| 72 | 33 | 58 |
| 73 | 33 | 53 |
| 74 | 33 | 41 |
| 75 | 33 | 44 |
| 76 | 33 | 45 |
| 77 | 33 | 47 |
| 78 | 33 | 53 |
| 79 | 33 | 56 |
| 80 | 33 | 36 |

| | | |
|-----|----|----|
| 81 | 33 | 46 |
| 82 | 33 | 57 |
| 83 | 34 | 60 |
| 84 | 34 | 36 |
| 85 | 34 | 37 |
| 86 | 34 | 38 |
| 87 | 34 | 34 |
| 88 | 34 | 40 |
| 89 | 34 | 33 |
| 90 | 34 | 42 |
| 91 | 34 | 43 |
| 92 | 34 | 46 |
| 93 | 34 | 37 |
| 94 | 34 | 38 |
| 95 | 34 | 41 |
| 96 | 34 | 43 |
| 97 | 34 | 46 |
| 98 | 34 | 47 |
| 99 | 34 | 48 |
| 100 | 34 | 37 |
| 101 | 34 | 40 |
| 102 | 34 | 37 |
| 103 | 34 | 38 |
| 104 | 36 | 48 |
| 105 | 36 | 58 |
| 106 | 36 | 64 |
| 107 | 36 | 47 |
| 108 | 37 | 48 |
| 109 | 37 | 42 |
| 110 | 37 | 43 |
| 111 | 37 | 43 |
| 112 | 37 | 43 |
| 113 | 37 | 42 |
| 114 | 37 | 43 |
| 115 | 38 | 40 |
| 116 | 39 | 46 |
| 117 | 39 | 40 |
| 118 | 39 | 50 |
| 119 | 47 | 51 |
| 120 | 55 | 87 |
| 121 | 56 | 65 |
| 122 | 56 | 67 |

| | | |
|-----|----|----|
| 123 | 56 | 68 |
| 124 | 56 | 69 |
| 125 | 58 | 79 |
| 126 | 58 | 76 |
| 127 | 62 | 69 |