

***POPULATION OF SHORE CRABS***  
***LONG ISLAND SOUND, OUTER ISLAND CT***  
***Hemigrapsus sanguineus (per square meter)***

| <b>YEAR</b>             | <b>Average per sq. meter</b> |
|-------------------------|------------------------------|
| 1999                    | 28 +/- 5                     |
| 2000                    | 26 +/- 4                     |
| 2001                    | 32 +/- 6                     |
| 2002                    | 44 +/- 8                     |
| 2003                    | 38 +/- 7                     |
| 2004                    | 33 +/- 5                     |
| 2008                    | 47 +/- 8                     |
| 2009                    | 36 +/- 7                     |
| <b>Ten Year Average</b> | <b>36 +/- 4</b>              |

**NOTE:** All data was collected by students from the Walsh Intermediate School in Branford CT on the rocky beach of Outer Island, CT, a Unit of the USFWS Stewart B. McKinney National Wildlife Refuge. The investigation occurred during both Spring and Fall (May, June and Sept, Oct.) The students observed crabs by turning over rocks in random quadrats in three zones: low-tide, mid-tide and high tide areas). The data is an average of all crabs counted in the three tidal zones and of all sizes of crabs including juveniles and adults. This method of counting the crabs was a surface count which is different from the experimental method of digging down to a depth of 30 cm **This analysis is based on a total of 29,054 crabs counted over ten years. Data for 2007 is missing and no data was collected in 2005 and 2006. New population data will be added at the completion of the next investigation in June 2010.**

The student data differs from other research values. The student method of counting the crabs was a surface count made by overturning rocks in a meter square area which is different from the experimental method of digging down to a depth of 30 cm and removing all organisms from each quadrat. . The student data in the CrabsCount project was analyzed using standard RMS statistical methods which shows that the systematic errors are greater than the statistical errors.

