Barnacle Density Exercise – April 2012

Instructions:

1. Cut out a 2cm by 2 cm square in a piece of paper, so you can see through the paper and count barnacles. Pat can give you a piece of graph paper if you need it.
2. Find a shore locality that either had cobbles on the beach, rocks, or even a seawall.
3. The following will work except on a seawall: toss a coin near the rock or cobbles and find the spot with barnacles closest to the coin.
4. Count the number of barnacles in the open square.
5. Make counts for 20 squares.
6. Calculate the mean and standard deviation of the number of barnacles you count.
7. Convert the mean number to barnacles per square meter.
8. Make sure to take a digital photograph, preferably closeup, of the barnacles.

Where can you do this:

Your favorite beach on the north shore of Long Island will work, but other shore areas especially in Long Island Sound will work also. You can do this elsewhere in the NY-LI area, however. A spot that will work is West Meadow Beach, which is in Old Field right near campus. You may have to get a ride from a friend or take a nice but long walk from campus!

When to go?
You can find a tide table at the Marine Biology Web Page mentioned earlier in the semester. Google mbweb.html and you will see the link on this web page.

What to turn in:

A sheet with the counts for each square, plus the calculations mentioned above. Also turn in a photograph, which can be electronically pasted on the sheet. Mention the exact site you visited, giving the location. Describe what the habitat was like and what the barnacles looked like. You can email this to me with the title barnacle exercise so I will recognize it.

When is it due:

By Monday, April 30, in class.