Data Analysis Guide for Adult Female/Sponge Crab Survey

By analyzing data collected from the thirteen field stations throughout the year, you should be able to:

• state where in the Chesapeake Bay mature female crabs are most likely to be found during different seasons;

• construct a hypothesis which relates the location of mature female crabs to other factors, such as water chemistry, season, etc.;

• construct a hypothesis which relates egg production to salinity.

To help you develop your hypotheses, provide answers to the following items.

A. List the stations where the mean number of mature females (disregarding sponge) collected during each time period was:

<10 crabs 10 - 20 crabs >20 crabs

B. What other information from the data charts might help account for the differences in the abundance of mature females among the stations you listed above?

C. Group the stations according to sponge crab data:

No sponge crabs Orange sponge crabs Black sponge crabs

D. What other data from the charts might help you account for the differences in the location of female crabs in various stages of egg development?