Mapping out the Data

Using the data provided, locate and color in the counties in which Green, Leatherback and Loggerhead turtles have been observed nesting.

Graphing out the Data

Using the same data, make a graph using Microsoft Excel which depicts the change in *yearly statewide total* nesting observations for the three turtles from 1990 to the present date.

Directions for making a graph in Excel 2007:

1. Open up a new spreadsheet.
2. In cell A1 type the title of the graph.
3. In cell A2 type Year.
5. In cell C3 type Leatherback.
6. In cell D4 type Loggerhead.
7. In column A fill in years starting with 1990 to end date.
8. In column B fill in the nesting data for Green sea turtles starting with 1948 to present.
9. In column C fill in the nesting data for Leatherback sea turtles.
10. In column D fill in the nesting data for Loggerhead sea turtles.
11. Select a cell from within the data set (highlight any date or nesting number).
12. Click on the Insert tab in the tool bar at the top of the screen. Chose the Scatter plot graph in the Charts group (see below).

13. Choose a scatter plot graph with straight lines and no markers.
14. You can change the color of the line and background of the chart using the Design tab in the Chart Tools group (see below).

15. Click on Layout in the Chart Tools group. Use the Chart Titles, Axis Titles and Legend to label your data.
16. Click on Format to further change colors, borders and fonts within your chart.
17. Right click on your chart. Select Move Chart and choose to place your chart in a New Sheet.
18. Enlarge your chart so that it fills the page. Print your Chart on a separate piece of paper.
19. Go back to Sheet 1 and print out your data set.
Questions

1. **List** the counties in which all three sea turtles have nesting sites.

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_________________________________________________________________________________________________

2. **Describe** the *trends, or patterns*, in the nesting data for each sea turtle (use the graph you created to answer this question.)

   **Green:**
   
   ________________________________________________________________
   ________________________________________________________________

   **Leatherback:**
   
   ________________________________________________________________
   ________________________________________________________________

   **Loggerhead:**
   
   ________________________________________________________________
   ________________________________________________________________

3. **Describe** the *differences* in the nesting data of the sea turtles.

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4. **Explain** how this data might be useful to conservation biologists.

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