1. Begin by creating a spreadsheet. It will be easiest if you complete all the calculations, such as means or standard deviations first. In this example, we will be graphing means and using standard deviation for error bars.

Highlight the means for the first set of data, hold down the Control key and highlight the means for the second set of data. You can see both sets highlighted in the screenshot to the left.

2. Click on the graph icon and choose XY Scatter with the line option. It is important to use the XY Scatter graph to get the correct spacing of data on the X-axis.

Click Next.
3. After clicking Next, your graph will appear, but it will not be correct. Now click on the Series tab.

4. Under the box labeled Series, you should see Series 1. Move over to the Name field and enter a very short description (Two pellets, in this example). Do NOT use “control” or “variable”.

Click on the red arrow by the X Values field. This will allow you to highlight the values for the X-Axis---just the numbers, not the label. (Remember that your independent variable goes on the X-axis.) Then click on the red arrow again to get back to the screen below.

Finally, click on the red arrow by the Y Values field. Highlight the mean values.

5. Click on the Add button below the Series box. See the arrow in the screenshot to the right. This will add a second series of numbers to the graph which will be your other data set, in this example, the zero pellets group.

Repeat the same steps as in #4 for this series and click Next.
6. You graph should now have two appropriately placed lines. Continue on with the title and axis labels as before.

7. To add error bars, right click on one of the data lines and choose Format Data Series. Select the Y error bars tab and click Custom. Using the red arrows at the end of the + field, highlight the standard deviation for all the days in your data series. This will give you error bars above the data points. Repeat using the SAME DATA for the – field. This will give you error bars below the data points. Click OK.
8. Note that each data point has an error bar that has the same amount above and below the point. Repeat the procedure for the next data line, remembering to use the correct standard deviation.