

Setting up your Excel Spreadsheet

Some info on excel spreadsheets:

- A. A single box on a spreadsheet is called a cell.
- B. In discussing spreadsheets, we talk about columns and rows. Columns are the cells that run up and down or vertically. Rows are the cells that run side to side or horizontally.
- C. Columns are labeled at the top with capitalized letters. Rows are labeled along the side with numbers.
- D. To name a cell, we start with the column label and then the row label. For example, the cell in upper most left hand corner of a spreadsheet is A1; it's in column A and row 1. The cell to the right of A1 would be B1. It's in a different column, but it is in the same row.
- E. Now that we have some background review on spreadsheets, we will now talk about how to set up our spreadsheet for figuring out the biotic index of a body of water.

Biotic Index Spreadsheet:

1. Although the columns and rows in a spreadsheet are already labeled on the computer by letters and umbers, respectively, we want to give them more descriptive titles for our use. Just like a graph, we want the titles for the columns and rows to tell us something about the information in the cells.
2. The rows in our spreadsheet will be labeled with our species names. We will label this column with "Organisms" (upper left-hand cell on the spreadsheet) and then beneath it we will type in our species' names. To make it easier for you to manipulate the number of species in each class of organisms, be sure to label Class I, Class II, etc. The organisms you are looking for are listed below.

Class I

Mayflies
Stoneflies
Caddisflies

Class II

Dragonflies
Damselflies
Water Beetles
Black Flies

Class III

Midges
Earthworms
Leeches
Snails
Sowbugs
Scuds

3. At this point, you should have a list of the organisms in the first column of your spreadsheet. Now we will enter in our column titles for the number values we are looking for. For our graph today, we are going to label the columns with the names of the values we will be investigating and entering into our spreadsheet. These titles are as follows:

Tolerance Values
Number Found
Total Tolerance Value

Skip a column after the “Organisms” column and type in our first value title from above. Skip another column and type in the next title. Do the same for the last title.

4. Since our values for the Tolerance values are constant and will not change throughout our activity, we can go ahead and type those values in now. You will find those values on the worksheet labeled “Organism Tolerance Levels” in your packet.
5. Once you have your spreadsheet set up, you are ready to start entering your data.
 - A. To enter numbers: Simply highlight the cell where you want to put the data in either by clicking on it with the mouse, or by using the arrow keys. Then enter your number and hit enter.
 - B. To calculate numbers: There is a simple way of calculating numbers in Excel so that we do not to. Follow these steps to calculate the Total Tolerance Value on your excel spreadsheet.
 1. Highlight the cell for the organism you want to calculate
 2. Type in an equals sign.
 3. With the mouse, click on the cell that contains the number of organisms found.
 4. Type an asterisk sign for multiplication
 5. With the mouse again, click on the cell that contains the tolerance value for this organism.
 6. Hit Enter.

In the cell, the total tolerance value for the organism should appear. The computer has done the math for you!!!