Excel assignment for WFB 117

Using the Excel file on the course web site:

**Background:**

This data set is from Vermont Department of Fish and Wildlife gillnetting during the period of experimental sea lamprey control, to assess survival and growth of lake trout. The nets caught more than just lake trout. The state uses numeric codes for each fish species, which you will find in the second worksheet in the homework file.

Lake trout were given a fin clip before they were stocked; each year a different fin was clipped, in a five-year rotation (given below). Lake trout were also assessed for lamprey wounds. Experimental lampricide treatments occurred in 1990 and 1994; if the treatments were effective at killing larval sea lamprey, there should be a reduction in number of fresh wounds the following year (1991 and 1995).

1) Note that the data file is unformatted – in other words, all columns are the default width, so some are wider than needed for the data, and some are too narrow to show the information in the cells. Format the table to make it easier to read, e.g., change column widths, put a border under the header and color this row beige. Use ‘wrap text’ to fit column headings into cells. Freeze the header row to make scrolling easier.

2) Make a pivot table that summarizes **how many of each species** were collected each year. The pivot table should be on a new sheet named “PIVOT\_Q2”. Put months into columns, and years into rows. “Proof” these data – are there any detectable issues with the dataset? If there is an issue, **describe the issue** and what you did to resolve it **in 1-3 sentences below.** Refresh your pivot table to reflect any changes made.

3) Make a pivot table that lists the number of each species captured, and the number of total lamprey wounds (fresh plus healing) per species. The pivot table should be on a new sheet named “PIVOT\_Q3”. What do you conclude about lamprey wounding from these data?

4) Make a new pivot table that lists the number of lake trout caught per year, and the number of fresh wounds detected each year (slice the data to include only lake trout). The pivot table should be on a new sheet named “PIVOT\_Q4”. Lampricide treatments occurred in 1990 and 1994; if the treatments were effective at killing larval sea lamprey, there should be a reduction in number of fresh wounds per capita the following year. Is there an effect of lampricide treatments visible in the data? Reply in one or two sentences.

## Email your spreadsheet, with pivot tables, to your instructor and Dr. Jon Doubek (Jonathan.Doubek@uvm.edu) before 6:00 pm on Tuesday, March 5. Name your file “ExcelAssign117\_YourLastName.xlsx”

* Write your answers in RED below Questions 2, 3, and 4 in this document, and email this word document with your answers to your instructor and Dr. Jon Doubek (Jonathan.Doubek@uvm.edu) before 6:00 pm on Tuesday, March 5. Name the completed word document “ExcelQuestions117\_YourLastName.doc”.

Fin clip rotation. L and R are left and right; P = pectoral fin, V = ventral (pelvic) fin; A = adipose fin.

1996 - LV

1997 - RV

1998 - LP

1999 - RP

2000 - Ad & LP\*

2001 - LV

2002 - RV

2003 - LP

2004 - RP

2005 – Ad

2006 – LV

2007 – RV

2008 – LP

2009 – RP

2010 – Ad

2011 – LV

2012 – RV

2013 – LP

2014 – RP

2015 – Ad

2016 – LV

2017 – RV

2018 – LP