

Announcements

- R function cheat-sheet (thanks Natalie!)
- Please use provided .Rmd file for take-home exam

Exercise 1: Entering contingency tables into R

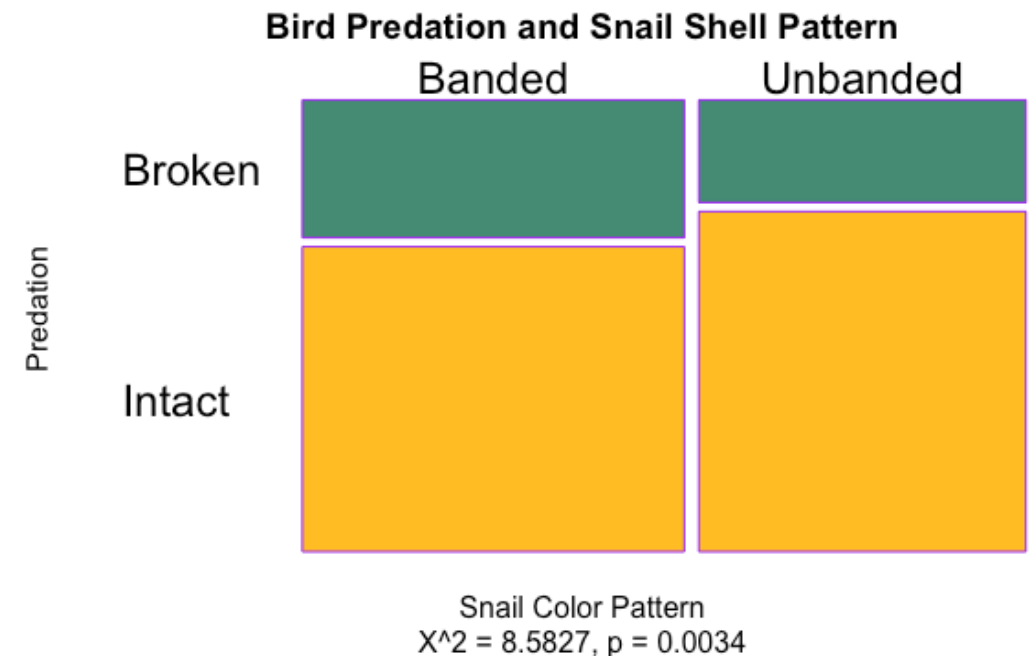
- Enter the data from this contingency table into R, and create a contingency table object.
- *Hint:* You can use Excel and save as a .csv file to read into R as usual OR use `tribble()` from the `tibble` package

Snail color pattern	Predation		Row totals
	Broken	Intact	
Banded	182	403	585
Unbanded	116	385	501
Column totals	298	788	1086

```
library(tibble)
df <- tribble(~factor1, ~factor2, ~freq,
              "A",      "YES",    35,
              "A",      "NO",     22,
              "B",      "YES",    55,
              "B",      "NO",    100)
df
```

Exercise 2: make a mosaic plot!

- Make a mosaic plot for the snail data you entered earlier.
- Make it your own by changing colors and axis labels.
- Dig around in the help file to see what other graphical parameters you can change!



Want to know more?

- R for Data Science (<http://r4ds.had.co.nz/>)
 - Focus on data manipulation ("wrangling") and visualization using the tidyverse (ggplot2, dplyr, tidyr, etc.)
- Cookbook for R (cookbook-r.com)
 - Similar to our syllabus, more in-depth, additional statistical tests
- Ecological models and Data in R (used in Bio133) (<https://ms.mcmaster.ca/~bolker/emdbook/>)
 - Focus on likelihood and modeling
- The R Book
 - Focus on statistics by type of data (count, proportion, time-series, etc.)
- <http://www.transmittingscience.org/courses/statistics-and-bioinformatics/r-without-fear-applied-r-biologists/>
- <https://www.edx.org/course/statistics-r-harvardx-ph525-1x-0>