## Summarization I - Nunavut Exercise

- 1. Load the PG008\_original.xlsx file into a data.frame object and answer the following questions.
  - a. How many fish were collected from each year?
  - b. What percent of all fish collected were from each year? [Show results as a table rounded to one decimal place and as a figure.]
  - c. Construct a table that shows the percentage (to one decimal) of females (and males) collected by year.
  - d. Construct a table that shows the number in each maturity stage collected by year and sex.
- 2. Isolate the Arctic Char captured in 2013. Use these data to answer the questions below.
  - a. Construct a length frequency graphic. [Experiment with different bin widths]
  - b. Summarize (numerically) the length measurements.
  - c. Construct a table from which you can easily find the percentage of fish longer than 450 mm.
  - d. Construct a table from which you can easily find the percentage of fish shorter than 700 mm.
  - e. Summarize the weight measurements.
  - f. Examine the weight-length relationship.
  - g. Examine (graphically and numerically) the log-log transformed weight-length relationship.
- 3. [Time Permitting] Isolate Arctic Char captured from a single year where age was estimated for a large number of fish. [Hint: Make a frequency table of age by year.] Use these data to answer the questions below.
  - a. Summarize the age distribution.
  - b. Construct a table from which you can easily find the percentage of fish older than age-8.
  - c. Construct a table from which you can easily find the percentage of fish younger than age-15.
  - d. Examine the length-age relationship.

1