The first two tabs (green) in the spreadsheet represent the community data (fishes) summarized by site (first tab) and by sub-reaches within sites (second tab).

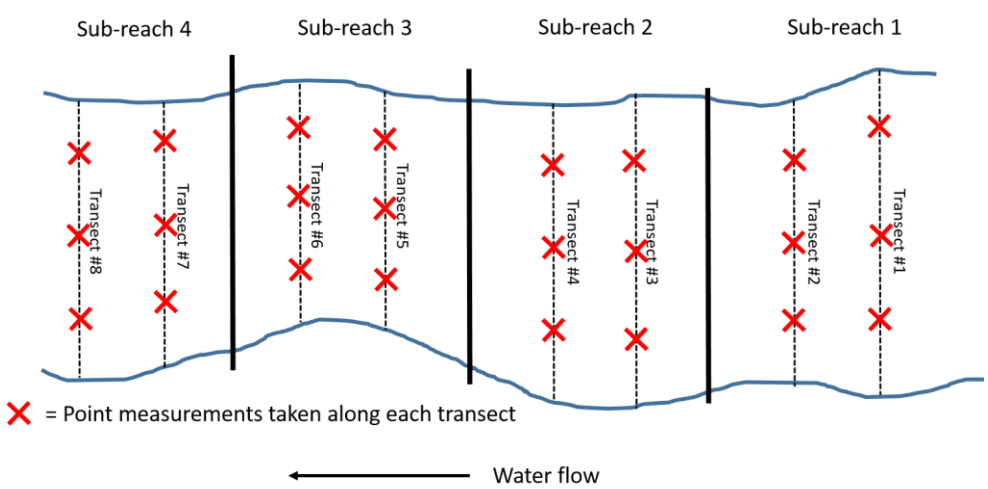
- Fishes were collected with a 4.6 × 1.2 m seine. Two hauls of the seine were performed in each sub-reach (see below for explanation of sub-reaches).

The third tab (yellow) is a table of ecological traits for all the species we sampled. I excluded many traits in this database, but the codes and abbreviations for the column headings can be found in Appendix 1 in posted document (Frimpong and Angermeier, 2009).

The fourth tab (red) is the raw community data.

The fifth and sixth tabs (green) represent the habitat data summarized as the community data by site (fifth tab) and by sub-reaches within sites (sixth tab). For those of you that did not measure any habitat variables here's a brief synopsis and diagram to aid in writing your papers.

- At each site we took four random stream width measurements to estimate an average stream width
- This average stream width was multiplied by 25 to obtain a total length of stream sampled (minimum of 100 m; maximum of 200 m)
- The total stream length sampled was divided into four equivalent sections (sub-reaches)
- We established two transects across the stream width within each sub-reach (total of eight transects per site).
- At each transect we recorded the stream width
- Along each transect, we took measurements at three points across the stream width (25, 50 and 75% of the stream width) for a total of 24 point measurements per site. At each of these points we measured:
    - Stream depth
    - Stream flow
    - Dominant substrate type
    - Presence of detritus, woody debris and aquatic vegetation
- At each site we measured a suite of physicochemical data. Temperature (ºC), pH, specific conductivity (microsiemens per centimeter; µS/cm), total dissolved solids (TDS; milligrams per liter; mg/L) and dissolved oxygen (mg/L) were all measured with a YSI Professional Plus. Turbidity (NTU) was measured with a LaMotte Turbidity Meter.



Below is a brief description of what each column represents in the habitat data tabs (the only difference between the two habitat tabs is whether the averages or proportions are calculated for the entire site or the four sub-reaches within each site:

- First three columns should be fairly intuitive
- ‘length_sampled’ is the total length of stream sampled at each site in meters
- ‘mean_width’ is the average stream width in meters (m)
- ‘mean_depth’ is the average stream depth in centimeters (cm)
- ‘mean_flow’ is the average stream flow (velocity) in meters per second (m/s)
- ‘mean_substrate’ is the average substrate type (size) based on a scale from 1-5. Lower values indicate soft substrates (e.g. mud, sand) while larger values indicate larger substrates (e.g. gravel, cobble). In general, the higher the value, the larger the dominant substrate type or size
- ‘percent_detritus’ is the proportion of the 24 point measurements in which detritus was present (e.g. leaf litter)
- ‘percent_wood’ is the proportion of the 24 point measurements in which woody debris was present (e.g. submerged sticks, logs)
- ‘percent_vegetation is the proportion of the 24 point measurements in which aquatic macrophytes were present
- The last six columns represent the physicochemical data collected at each site. The seventh tab (red) is the raw habitat data.

The last tab (yellow) is the basic site and locality information for the sites we sampled.