**Sample Bottle Labeling and Organizing**

***Overview and Explanation***

Sample labels are provided more or less in the order that bottles should be labeled, with one exception described below. Sample ID names are based on codes for the flume experiment, the sample type and location, the portal, and time within each 1-hour experiment that the sample will be collected. Explanations of these codes are as follows:

Flume/experiment:

1. C1 and C2: The two experiments (low velocity and high velocity) in the flume with *Colocasia* vegetation (i.e., the upstream flume).
2. N1 and N2: The two experiments in the flume with *Nelumbo* vegetation (i.e., the downstream flume)

Sample type:

* 1. Types starting with “F” (all labels with black text): Samples for fluorescence analysis. These labels go on the 20 mL scintillation vials.
     1. FI: Collected at injection station--samples of injectate in the bucket.
     2. FD: Collected at the main sampling station downstream.
     3. FE: Collected from the water coming out of the exit pipes.
  2. Types starting with “S” (all labels with navy blue text): Samples for particle size analysis. These labels go on the 125 mL Nalgene bottles.
     1. SU: Collected at upstream station
     2. SD: Collected at downstream sampling station
     3. SE: Collected from the water coming out of the exit pipes

Portal: When samples are collected from more than one depth or location at a single station, there are multiple “portals.” These are color-coded on the sample bottles. The colors will correspond to labeling tape that will be placed on the tubing for that portal in the field. There are a maximum of 6 portals, at the fluorescence station. Samples without a “portal” designation will be coded with a gold bar on the label.

R: red

Y: yellow

G: green

B: blue

W: white

P: pink

Time: Time within the experiment in which the sample will be collected. [The whole schedule](https://docs.google.com/document/d/1JR87byelt3M0dNWV-QOEkrE3GZSiCloUnT4Kk9nENWg/edit#bookmark=id.vtx5x7ueqlpf), per sample station, is in the field plan.

***Instructions***

* Ensure that you have received 4 cases (500/case, with 100 in single layers of the case) of scintillation vials and 4 cases (72/case) of 125 mL bottles. If not, contact Laurel before proceeding.
* Put the “F” labels (black text) on the scintillation vials and “S” labels (navy text) on the 125 mL Nalgenes, preserving the order of the labels on the printout\*. Keep the different experiments (N1, N2, F1, F2) in separate boxes. You will end up with 72 S bottles per experiment (1 case) and 320 F vials per experiment (4 trays). There will be some unlabeled vials in the last F trays. Do NOT put labels from another experiment on those bottles; just move on to a fresh tray/case when you finish the labels for one experiment.
* With a Sharpie, write on each tray/box what it contains, and indicate the corner of the first sample in the sequence, with an arrow showing in what direction the sequence moves from there.
* Loosely tape the boxes so that they don’t come open during the boat ride.

\* One exception to preserving order: At the end of the set of labels for each experiment, SU samples are interleaved with SD samples. Set the SU samples apart, and then put them in chronological order at the end of the box. In other words, what you’ll see right now at the end of each experiment’s set of labels is several rows with gold, red, and yellow constituting a row (G, R, Y). These rows advance chronologically, so that they look like this:

G R Y time 1

G R Y time 2

…. And so on

What I want in the box is

R Y (time 1) R Y (time 2) ……

G (time 1) G (time 2) ….