Stream Lab Part 2

In addition to typing up your answers to the first (stream table related) part of the lab. I also want you to examine natural streams during our break from lab. We’ve talked about a lot of types of stream features that are common almost everywhere. For this part of the lab you will find a local stream (there are plenty in the area: behind the physical plant, along the Greenway on Concord Rd, south on Main, etc), take pictures of features that we’ve talked about, and then create a finished lab product that includes your answers for the first part of the lab and the new (2nd) half with annotated pictures. Below are the features that you’ll want to find and discuss. Remember, you should have an annotated picture for each part. I assume that most of you have a digital camera or a cell phone camera. If not, you can check one out from IT in the basement of Chambers.

You may share initial pictures IF you were out in the field (well, stream) together. However, you pictures must be annotated separately. It is likely that you will find it useful to get into the creek, sandals and shorts are ideal for this in the Davidson area. Please let me know if you have any questions.

1. Find a section of a stream with a cut bank. Take pictures of the cut bank and annotate the pictures to make it easier to discuss. Then describe the processes that occurred to form the cut bank. Where was the majority of water flowing? Where was flow the fastest?

2. Find a section of the stream with a point bar. This point bar may be associated with the about cut bank (or not). Describe the processes that occurred to form the cut bank? What is the energy of water along the point bar compared with the energy along the outside of the turn? How about the grain size?

3. Find a wide, straight section of the stream and examine how sediment differs across the cross section. Is sediment more fine or coarse where water is flowing the fastest? Is water deep or shallow where it is flowing the fastest?

4. Find a series of ripples and describe how they migrate. Do your best to take pictures of the ripples. Spend a few minutes looking at them. How does grain size change along the ripples? Where on the ripple is the coarsest sediment?