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PSE 442

Soil Judging Reaction Paper

The five days spent in Pennsylvania for the Regional Soil Judging Competition has been one of the most positive learning experiences I have had in my college career. Most of our time there was spent learning soils, driving around or sleeping. Even when we had free time at the hotel, we were quizzing each other on different aspects of soils we might encounter. Three major things that I took away from this experience are the power of teamwork, learning is done best in the field and that hard work pays off.

The Power of Teamwork

I really only knew one team member before we left for Pennsylvania, Allison. We met through working in the soils department at school a few years ago and have been good friends ever since. I knew the other three but did not know much about them. After the first day of looking at pits, we all became very close very fast. We drove down to Pennsylvania in two separate cars with the boys in one car and the girls in the other. Once we got down there, since there were five of us and five seats in a car, we all squeezed in one car with all of our gear. We spent a lot of time in that car

over the week driving to test pits and getting lost at each turn we made. Instead of getting upset at each other or anxious because we had no idea where we were in Bucks County, we all just laughed about it and made the best of each situation. Although we all may not have agreed on the best way to get from point A to point B, we always made it there and were excited to see what what kind of soil we would find in the next pit.

We did more than just travel together. We also had to practice together and learn the new soils together. Some group members knew more than others and they were very helpful when there was an area of confusion. It was very interesting to see how each person attacked the profile. Since I had less experience in soil pits than others, I tended to hang back a bit and watch how others examined the profile. Once I got a better feel for how to go about judging the soil, I was able to go into the pits with a bit more confidence and fill out each sheet to the best of my ability. Without such a strong team, it would have taken me much longer to understand what was going on.

Another large part of our team was our coach, Ken. We certainly would not have done as well in the competition if it were not for him. He came down a few hours after we started practicing on the first day and we were completely lost until he found us. It was very hard to make sense of completely new soils that we had never seen before. He was able to steer us in the right direction and give us the confidence we needed in order to do well in the competition. Ken kept stressing to us that what we

put down on our sheets had to make sense with what we saw around us. At every pit I went to in the competition I kept these words in my head and made sure what was on my score sheet made sense with what I saw around me.

The group competition on the last day was when we saw how our group gelled together. We had toiled together all week and saw how each other worked, so when the group competition came along, we were able to assign people to different tasks based on who was better in certain areas. This happened fast and without really knowing because we had not judged and had to agree on an entire pit before that point. I took the task of recording the group's decisions on the score sheet. This worked out well because I knew many of the other group members would rather concentrate on what to call each soil property. We ended up doing our best working as a group. For the most part, we agreed on everything and when we did not agree we would skip it and come back to it. The group work also gave us confidence in our answers and there was less second-guessing. We were able to bounce ideas off of people to either confirm or deny our thoughts. In the individual competitions this was not possible and it was easy to confuse yourself.

For a team who had not worked with each other much before the time spent in Pennsylvania, we came together quickly and worked very well together. No one disliked each other or was upset with one another by the end of the week. We were all

so excited about soils and the competition all week so we did our best to learn as much as possible for the competition.

Learning is Best in the Field

Another important item that I took away from the soil judging experience was how much easier it is to learn while in the field instead of a classroom. For us, soil judging was not a course, but I feel like I learned more and will retain more from this experience than from any other classes I am taking. Everything was hands-on and had to be carefully thought through. We had one professor, Ken, with us for five students which made it very easy to ask questions if there was any ambiguity on an issue. There was so much to learn about Pennsylvania soils that we had to spend every minute in the pit working to figure it out. Each pit contained a surprise for us. Each time we had to figure it out from not knowing much about it at all.

It is hard to learn about judging soils when just in a classroom. Before we left for Pennsylvania, we spent quite a bit of time meeting and going over what we might see down there. Ken gave us sheets with possible soil series that we might find and we went through them in detail to help picture the types of landscapes and soils down there. This did help, but it did not compare to what we learned when we were finally in the Pennsylvania pits. I went through each soil series and drew a profile with colors, consistency, redox and other such items. I tried to picture the colors of the soils with

the Munsell color book, but it was so hard because I had never seen an Alfisol or an Ultisol up close and in person.

We at least knew what to look for when we got into the new pits. We mostly have gravelly soils up here in Maine, but in Pennsylvania there are more channery soils due to the different residuum parent material. We knew that there would be more clays in the Pennsylvania soils, but we did not know what they would feel like. Once we got down there, we could finally feel the textures and get acquainted with them before the competition. Another difficult concept for us to grasp were the fragipans. We had not seen many of those up in Maine, but we knew to expect them there and we found quite a few. They were hard for us to distinguish at first since we had never seen them before and they did not seem as brittle as I had envisioned. Most of this could never be actually learned in the classroom. It is important to learn the concepts behind each soil property, but without seeing and feeling the soil, the concepts are hard to grasp. When you actually see and feel the soil, the images and textures stick in your head much better than if someone tells you that a certain series has a Bt horizon at a certain depth and a silty loam texture.

Hard Work Pays Off

Come to find out, all of our hard work both paid off and was gratifying. Although we had a lot of fun on the trip, we also worked quite hard during daylight hours. From

sun-up to sundown we were either in the pits or driving to the next pit. At night we were discussing the pits we had seen that day or making sure we knew what everything meant on the score sheet. We even worked hard before we left for the trip. We started recruiting and fundraising for the team to compete during the previous spring semester. We wanted to make sure that we had a big enough team to compete and were hoping to have enough for two teams. We held a fundraiser selling raffle tickets to anyone we could find. We sat out in between the library and the union on Maine Day selling tickets in the cold while wearing our awesome vests and hats. This money paid for most of our tolls and snacks, so it definitely paid off. On top of fundraising, we had to do a lot of studying on our own to get prepared. At times, it seemed like I was taking an extra class because I was mostly studying for soil judging.

All of this hard work paid off! Our team did awesome and it felt really good! Allison came in 8th overall for the individual competition. Our team came in 4th for the group competition and after combining the group and individual scores, we placed 5th overall. We were all very impressed with ourselves. I thought we would not hear much about it after we returned, but we seem to be quite popular around Deering Hall. Many professors have taken me aside and congratulated our team on how well we did. Mark Anderson has even set up a small web page with two pictures of the teams and posted it to the big Ecology & Environmental Science folder on First class. It feels great to be part of such a success.

Closing Remarks

I am so glad that I participated in the soil judging competition this year. We had an amazing team and an even better coach. We would not have done nearly as well without him. It is sad to think that I will not be able to compete in another one of these events. I learned a great deal about soils and wish I could go through this experiences again. We are planning on recruiting more younger soil enthusiasts to go compete in Ohio next fall. Our team had such a great time and we have some great pictures to help show how exciting soils can really be!