Goal 1.3 paper

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Acquire depth of knowledge in the organismal level of biology

Coming into Longwood, I, as well as many other students in the biology department, had never really had a biology course that even covered the organismal part of biology. Because of this, when Longwood restructured their biology curriculum, they made it so one of the sectioned topics was learning biology at an organismal level. Although not a lot of my founding courses touched on this topic, we did discuss this level a little in biology 251, which is introduction into ecology and evolution. However, as I continued in my degree, I had more and more classes which focused on biology at an organismal level. One of the courses that really sticks out for me is biology 309, plant biology. The knowledge I have acquired in these courses have been very useful to me and I have used a lot of this knowledge and skills in my internship this semester. Both these classes and my internship have really helped to build a foundation of organismal knowledge and has helped to build on this knowledge which will be useful in my future career.

In my biology 251, our lectures covered a broad variety of topics, the main ones being about ecology and evolution. However, to build a foundation in working with and understanding these topics we first had to discuss the underlying topics, which included talking about organismal level biology. I remember this was really one of the first times that we had gone through the naming and classification of species and looking at species individually. These lectures came in handy in my biology 309 course. In this course the main topic was focused on biology at an organismal level and see how form and function go hand in hand. In this class we covered the anatomy and physiology of plants and we also learned then necessary steps in identifying different plants, which were used in our lab classes. One of the assignments that really stood out in this class was our big class research project. We performed a couple of experiments in this lab, but the class project was our main experiment for the semester. One thing that really stood out was that our experiment was true research, because the professor had not performed experiments on this topic before. In this experiment we tested nutrient and phenolic acid stress effects on cucumber plants. Since this was true research we had to perform our own research and perform our own data analysis in which we made our own observations and conclusion. In the final paper for this project, you really see how the knowledge that I learned from this class was used to make conclusion and how I began to think about biology at a higher level, in which I observed and analyzed multiple factors working together within a single organism and not just what was happening at the cellular level.

With this knowledge I have gained from plant biology, I have been able to apply it in my internship. This semester, I am participating in an internship at Bear Creek Lake State Park, located in Cumberland County, VA, in which I am a park guide internship. At this internship I am learning how to work and interact with visitors and how to teach them and inform them, not just with a bunch of facts, but so that they are left with wonderment and experience along with knowledge. I have learned the art of interpreting and how to approach people of all ages. One of my tasks at my internship is to create a program that can be presented. For this program I was given a plot of land to manage and with this plot of land I create a program from it. With my managed area of land, I have designed a program titled “the little things that matter”. In this program, I have taken the skills I gained in wildlife identification and I have applied to it. What I have done is I have gone through my plot of land and I have identified the different types of trees, shrubs, wild flowers, and grasses and I have designed a program that will give an interpretive guide which will help to teach people the important steps to plant identification, but will also help them realize that sometimes it is the little things in life that matter the most. Leaving the audience with knowledge but also an overall lesson which will leave them pondering about the amazement and delicacy in life.

With all these experiences, I know that I can go on to use them in my career. Someday, I would love to be a park ranger through either the state or national park services. The knowledge and experiences I have gained in my classes and internship, will definitely help to build my skills that will be essential in working and interpreting at a park and will help set me aside from other candidates.