



Ryan Antolick
Wheelock College
Sustainability Mini Grant Winner

Tell us a little bit about yourself.

To begin with, I am 24 years old and from Martha's Vineyard where I grew up after moving from New Hampshire when I was very young. My college career has been a very interesting one to say the least. I graduated from the Martha's Vineyard Public Charter School in 2009 with nine other graduating students. Right out of high school I attended St. Anselm College in New Hampshire where I only stayed for one semester. After leaving St. Anselm, I attended Hesser College for one semester, and then New Hampshire Technical Institute for one full year. At this point in my college career I had been in school for two years, and attended three schools and was beginning to believe that College was not for me. Instead of completely dropping out, I decided to take a year off and work with *AmeriCorps National Civilian Corps* (NCCC). While in the program, I gained many life experiences and learned more about what I did not want to do with my life and, overall, realized the importance of a college degree. I spent a lot of time working on environmental projects and this is what sparked my interest in my current Environmental Studies major and Sustainability minor. After finishing my time in AmeriCorps NCCC I began the search for a new school where I would fit in better, and be able to work towards an environmental degree. Wheelock College was not my first choice for schools, but after visiting and discovering that they were developing a new environmental studies degree—with a minor in sustainability—through the Colleges of the Fenway I decided this was the place for me. I applied, got in, and have been here ever since.

Describe your interest in sustainability, the environment, green initiatives.

Where did your interest begin? How have you been supported at Wheelock?

As I discussed above, my interest in the environment and sustainability began with my time in AmeriCorps NCCC. Within the program my team spent an above-average amount of time working on

environmental projects due to our enthusiasm and interest in the field. The project that really spurred my interest in these fields was while I was on Catalina Island working with the Catalina Island Conservancy. Catalina Island is a very unique place because the majority of the island is privately owned, but has been leased to the conservancy in an effort to restore it to its natural beauty. Over 80% of the island is uninhabited and left as a wildlife reservation. While on the island our team worked on many projects from invasive species removal, to trail restoration. Our goal was to assist in any way we could to help preserve and restore the island to its original state. This idea and field is what I eventually would like to be a part of in the future after I graduate. I want to continue to help restore the natural environments on our planet so that future generations can be a part of it.

Explain the AquaFarm in more detail.

This AquaFarm project began with an independent study project that I worked on last year with a fellow student having to do with organic waste disposal alternatives, which we did as part of the Muddy River Symposium. We were designing a system where we would feed catfish organic waste from the Wheelock cafeteria and see if it could be an alternative to traditional waste disposal. The experiment had several issues and needed re-working so, in order to continue it, my professor, Lisa Lobel, gave me the idea to apply for a grant through the COF Center for Sustainability and try to design a similar experiment. This semester I am taking a class called Environmental Impacts taught by Lisa Lobel and, as part of the class, we wanted to design an experiment having to do with aquaponics. Aquaponics is a process of growing plants—in this particular situation, vegetables or herbs for consumption—using a closed ecosystem fueled by fish. The plants would be planted above a fish tank in which specific species of fish would be living, and the roots would eventually grow into the tank feeding off of the fish waste. This is a well-proven method of growing plants. We would not be testing the possibility of being able to actually grow the plants, but rather, each student in the class would be developing their own experiment. Currently, we are all working to design an experiment and not at a place to comment fully on what those will be.

Many other classes besides the one described above will (hopefully) utilize the AquaFarms to further student education. The tanks have the ability to demonstrate many natural cycles such as the nutrients cycle, which takes place on our planet in an observable, and manageable state. Classes such as Plants and Animals—another example of the life science classes offered at Wheelock College—would be able to use these tanks to observe the impact that animals have on plant life, and vice versa. The tanks are an amazing teaching instrument because of their simplicity and ease of care, making them a great in class tool. The overall goal of the grant given by the COF Center for Sustainability is to bring a more hands-on learning opportunity to students at Wheelock College on

the processes of biogeochemical cycles within an ecosystem. These tanks offer the ability to create a closed micro-ecosystem which can be studied to gain an understanding of how chemicals and nutrients cycle through the environment. It also demonstrates the affect on organisms, plants, and animals living within them. Growing herbs in a classroom offers many advantages, especially at a school like Wheelock College, because many of the students here are interested in becoming teachers or working in a similar field. Educating teachers on the importance of sustainability and the nutrient cycles will allow them to bring this information into a classroom, help to create a perpetual cycle of improved education and, hopefully, lead to a more sustainable world in the future.

How has your educational experience contributed to your passion?

At Wheelock College I have had the opportunity to work and learn from some of the brightest, most caring, and special individuals I could have asked for. The science department at Wheelock is not a large one and because of that I have been able to learn, and become close to most, if not all, of the professors who are a part of it. The environmental studies program is what drew me to the school. Driven by that interest, I joined Wheelock Students for Environmental Action (Whee-SEA), thanks to a push from Ellen Faszewski, head of the math science department. Being at Wheelock and having the opportunity to learn from wonderful people, in small intimate classes, has been a wonderful gift and I would not trade it for anything.

What would you say to convince other students that sustainable practices are imperative and what are some simple things students can do to contribute?

The first thing I say to people who don't already know the importance of sustainability is: Are you comfortable in the way that you are currently living? Do you want your children to be as comfortable and secure as you? If so, and if you want to keep living in the manner in which you have become accustomed, and allow future generations to live in similar way, then changes need to be made to ensure that this future is available. It's not as difficult as people have been made to believe. Simply by recycling, composting, disposing of your waste properly, turning off the lights when you leave a room, converting to energy-efficient electronics, using a reusable water bottle or coffee mug, locally sourcing food, biking or walking to school, or even using public transportation are all methods that a person can make in their every day lives to be a more sustainable person. Taking just one of these steps helps to make a better and safer future. Imagine if everyone on the planet decided to unplug his or her electronics for just one hour every day. An incomprehensible amount of energy would be saved, and less fossil fuel would need to be burned to supply that energy. Taking little steps in your

every day lives might not seem like you're making an impact, but it does. More importantly, teaching this to others is what makes the biggest impact. Americans use more energy, resources, and generate more waste than any other country in the world. Being more sustainable helps to promote equality within our world for food and water distribution, along with energy and other resources. We are not a very good nation when it comes to spreading the wealth and resources, but we could be with a push in the right direction.

Anything else you'd like to share on this topic?

The only thing I would like to add is that students are the first step in creating a better world. We will be the future teachers, CEO's, lawmakers, and presidents of our country and it is up to us to ensure that our planet will be livable for the future of humanity. The planet has been, and will continue to be here long after we are gone, and it is up to us as to how long we stay.

"Anything else you're interested in is not going to happen if you can't breathe the air and drink the water. Don't sit this one out. Do something. You are by accident of fate alive at an absolutely critical moment in the history of our planet." -Carl Sagan