



INTERNSHIP EXPERIENCE AT *Winding Hills Stables*

By Elizabeth Elmore



I am a horticulture major at Clemson University entering my junior year. Internships are mandatory in order for horticulture majors to graduate and I found the

perfect place at Winding Hills Stables in Northport (Long Island town) New York. My partner Vincent Galatolo and I designed our project to focus on hydroponics and vermicomposting at a horse farm. We chose Winding Hills based on the sheer volume of manure at our disposal. The farm itself also has a great natural habitat for landscaping and gardening.

The projects we chose were projects that required skill sets neither my partner or I truly had such as carpentry. We chose the projects so we would have brand new experiences and would hopefully learn new skill sets. We spent additional time building our large vermicomposting system since we never built anything like

it. It can hold up to five hundred pounds of manure that will be broken down by worms and then will be sold as worm castings for the garden. I am very satisfied that our time was predominantly spent focusing on the horticultural projects. The extra time was helpful

My time at Winding Hills allowed me to make connections between classes and the internship work. I constantly racked my brain for classroom information to use for my project. For example, I had to use Dr. Vincent's Horticulture 101 proper planting information so I would know which kinds of landscape plants would thrive in the barn's environment. I choose plants that were drought tolerant and were perennials so they would be easy to care for and they would return year after year. I used the same concept of proper planting for choosing crops for the summer garden at the barn. Dr. Faust's Horticulture 2100 Planting in the Spring class had me prepared for plant diagnoses in the garden. Dr. Faust showed us slideshows of different plant nutrient deficiencies and diseases and tested us visually in the laboratory

with diseased plants. This prepared me well for up keeping the summer garden and landscape plants I installed. I was able to look at my crops' foliage and see which nutrients they were lacking so I could properly fertilize them as well as tell which of my landscape plants were becoming heat stressed. I used this visual guide my entire internship at Winding Hills to keep my plants healthy the whole summer. Up keeping the vermicomposting bin required me to use my knowledge from Dr. Vincent's Horticulture 101 class about how to properly vermicompost. I used my knowledge about keeping the appropriate amount of "greens" and "browns" and made sure the manure pile was turned regularly to keep it from overheating and killing the worms. I learned from Dr. Vincent that we must have the proper amount of nitrogen rich compost (greens such as weeds) and carbon rich compost (browns such as cardboard) in order to keep the populating worms alive. Without constant use of this knowledge, my worms would not have repopulated enough to put in the large vermicomposting bin.





A horticulture intern at Winding Hills needs to be flexible and cautious. First off, the humidity in Long Island is very high and makes it much more sweltering than it actually is. Long pants were a necessity to avoid poison ivy and insect bites and landscaping requires one to be directly in the sun. Therefore, anyone who cannot tolerate heat well may have difficulty being out in the sun six or more hours at a time for five days a week. Also Long Island is constantly threatened by rain. We had to stop work numerous times and wait for the rain to die down or have to even come back later because it wouldn't stop. Work was not only stopped by weather, but also by horses. They are by nature very skittish and will go wild when scared. I frequently had to stop working on projects or quit working in a certain area all together because of the horses. One of them nearly bucked a farm hand because I opened a garbage bag and was later told horses hate the sound. Imagine constantly having to be careful with ev-



ery single movement around these huge animals while there are children and parents all around. One misjudgment or wrong move that scares the horse, and someone near him or her could potentially be harmed.

Naturally my best strength for this project was my diligence and plant care knowledge. My knowledge of plants made it easier to care for them and pick low maintenance plants that are aesthetically pleasing. This independent project required a lot of research and trial and error. Since I wanted the projects to be successfully completed, I took weeks before my internship to learn about the processes required since I had no prior knowledge. This diligence made everything smoother and compensated for my lack of skills in other areas. My partner and I both were new to building and using power tools. Thankfully we had the designs for our hydroponic vegetable tower completely ready. I couldn't imagine having a hard time with the tools as well as not being sure as



to how I put things together. The tower required a pump and hose that was capable of sending water eight feet up towards the lid of the tower, in order to efficiently water the plants' roots that are hanging down in the tower. We spent more time than expected building both the tower and vermicomposting bin due to being careful and having issues actually putting things together. I need to get more comfortable with building design as in translating the drawing on paper into the final product. It was very difficult for me at times to see how something should be put together sturdily such as a wall for the bin.

I would like to do another internship if I can do something involving hydroponics. I would really like to work at a hydroponic facility that grows food. There is one in Japan that is in a Sony semiconductor facility that would be incredible to intern at. I am definitely open to going to another internship in order to build my resume and to gain new experience.

