

Anna Linder
Internship Summary

My experience at Tagawa Greenhouses is not one that can be replaced. The internship program is based on educating the student in every aspect of the company. I had an idea of what I was looking for when I started looking for my internship, I spent a few weeks doing some research and looking into my options but I didn't find any thing that peaked my interest. Finally, Terry began talking about Tagawa's and telling me about their program. As soon as I agreed to apply for the internship, things began to fall into place.

When I heard that I was accepted I was so excited. This was my chance to get out of the Midwest and experience something completely new. Once I got my tentative calendar from Bill Kluth (the intern advisor) I was even more excited. The program was so detailed and I was going to have the opportunity to experience so many different areas of the industry, I knew the choice I had made was the right one.

I arrived on January 2nd to my new home in Lochbuie, CO. It was definitely a different living condition then I was used to, but I was right on the Tagawa Property! The first few days were spent getting situated, meeting Jessie (the other intern) and meeting everyone in the office. After all of the introductions and orientations it was time to get to work. Jessie and I were sent of to the soil room where we were immersed into the dirty work. We spent three days there filling big wooden crates with soil as it came out of the hopper. It was not more than 50 degrees in that room for those three days and we were filthy when we clocked out at 3:30 in the afternoon but we were excited to be doing the job anyways. The next couple weeks were spent doing jobs such as; operating the Elle pot machine, filling plug trays with soil, and feeding plug trays to the seeding machine. At the same time, I was spending a lot of time with some of the key managers to develop my special project.

Week 4 was the week I was really looking forward to, that was when I began my 6 weeks of plug production at the facility in Golden, CO. Growing plugs was something that was completely new to me. The majority of my experience at Linder's was retail

based so the idea of growing my own crop for 6 weeks was really exciting. My first week in Golden, I spent a lot of time with the production manager. He taught me how things work there as far as planning the crops and making the most of the space they had available. The first day there we walked through all the greenhouses to look at how all of the crops were doing. By the end of that day I was able to describe the differences between different plug trays and which ones needed more attention.

My second week at the Golden facility, my crop of Vinca arrived. I was learning how to grow the crop with one of the other growers named Ian in range 4. As soon as all of my plug trays were put in place we started fertilizing them. I had to learn how to operate the booms, mix the fertilizer, and hook up the fertilizer injectors to the booms. There were quite a few times when I had to walk around in wet clothes and have wet hair for a few hours during the day because I had detached the hose from the boom before the water pressure was released! It was definitely the hard way to learn the lesson!

After a few weeks at the Golden facility I was becoming very familiar with my daily tasks. I was in charge of watering my crop, taking soil samples, doing bug counts, changing yellow sticky cards, spraying pesticides and growth regulators, and helping Ian water the rest of the range. I was starting to feel more confident in growing these tiny little plants and my efforts were not unnoticed. It had been about 3 ½ weeks since I had started growing my crop when the growers and the site and production managers decided that my crop was doing well enough for me to take over another crop of Vinca in range 2. The irrigator in that range was over watering the crop and they assigned me to take it over. I was so thrilled that they trusted their new intern to take over the crop. I spent my last few weeks in range 2 working with Vern, who was a very experienced grower. Things continued to go very smoothly until Vern asked me to spray the crop with A-Rest. I had done this many times before but I wasn't familiar with where everything was located in range 2. I gathered everything I needed, and mixed the chemical in my backpack sprayer. I was feeling pretty good when I finished up with my spraying and was getting ready to clean out my sprayer when Vern approached me and

started asking questions about how I had measured my A-Rest. I showed him the steps I had gone through and when I showed him the measuring cup I used, his reaction was not a good one. Apparently, I had used an incorrect measuring cup that actually doubles the amount of what it said on the side of the cup. To make a long story short I had applied twice the rate of A-Rest to my crop of Vinca than I needed to. Once I realized my error, I was so nervous that I had ruined the crop. After about a week went by I was informed by one of the owners of Tagawa's that my mistake turned out to be a very beneficial experiment and that they would be changing the amount of A-Rest sprayed on the crops to twice the rate they were using before. I got very lucky and was told that the Vinca crop was one of the best they had ever seen. I was able to breath after I heard that, but I definitely learned the importance of the little details from that mistake.

After my time at Golden I returned to the Brighton facility and started a 3-week period in the propagation area. The majority of my time was spent working with the Cellfor Program. The Cellfor area was used to grow tiny pine trees that would eventually be planted in a forest and then cut down for lumber once it was big enough. The trees had to be in a greenhouse with a mist system so the environment was very humid. The trees were hybrids that were grown in 1'x1' Styrofoam trays and each tray would cover 1 acre of land. When I began working in this area the number of viable trees were about equal to the number that did not survive. This was very discouraging news to Carlos, the grower I was working with, and he needed my help to understand why this was happening. My task was to take squeeze tests of the different varieties of the trees to test the pH and the EC of the soil. The results of the squeeze tests were so far off from where they were supposed to be that Carlos asked me to start over. When I returned with similar results he was shocked and immediately sent his irrigators to fix the problem. I was in charge of testing the trees every day for about 2 weeks until the EC and pH were back in the correct zones.

After my 3 weeks in propagation, I another 6-week period of growing retail ready product. This was product that was grown for the Home Depot's and Costco's that Tagawa's was supplying to. I spent the majority of my time working in Range 7, which I

really enjoyed. I was given 4 houses full of hanging baskets, geraniums, African daisies, and many other popular varieties of annuals. I had a lot more freedom in this area as far as feeding and watering the plants. After I spent a few weeks in Range 7 I was moved into Range 3 to take the place of an irrigator that was very sick. This range was filled with similar annuals for about 2 weeks and then began to empty out. The greenhouse was soon filled with trays of oasis in preparation for the poinsettias that were coming in. I was so shocked that they were already sticking poinsettias in May!

After the six weeks I spent growing retail ready product, I was informed that Jessie and I would be traveling to the Tarawa's facility they had recently re-opened in New Mexico. I was so excited to have this opportunity because I had heard so much about the facility and how amazing it was. Jessie and I were sent on a 7-hour road trip to a small town called Estancia. The Tagawa's got us our own hotel rooms and we spent a week at the new facility. Only half of the facility had been redone and there was just a plastic wall that separated the two areas. It was amazing to see how much they had done in just 5 months. There were 20 acres total and they had redone 10 acres which included a fan and pad cooling system, over 3 miles of paved walk ways, and irrigation that included a mist system. The facility had to hire all new staff and was fully functioning with product covering all 10 acres. The New Mexico used about 35 people total to take care of all 10 acres. It was fascinating to see the management differences between the 3 facilities.

The last few weeks at the internship were spent with the upper management and in the office. We spoke to many of the different areas about how they help the company run more smoothly. We also got to spend some time with the Tagawa's and learned the history about the family as well as how they've come so far in 25 years. It was a great learning experience for me and it was also a great time to ask a lot of questions after spending time in every area of the company.

Through out the duration of the internship, I was given a few hours each week to work on my internship project. My special project was decided before I even arrived in Colorado. I had expressed a lot of interest in sustainability when I was doing the phone

interview for the internship. Little did I know Tagawa Greenhouses was currently trying to figure out a way to communicate their sustainability goals to the employees, customers, and to the community. This became my project. When I was introduced to my project I was told that I was being given the job that 14 key managers couldn't figure out. Needless to say, I was intimidated! I wasn't sure where to begin or even what kinds of things they were expecting from me.

I decided to start out by defining sustainability. I did a lot of research and talked to a lot of different people about what it meant to them. After a few weeks I came up with a few different definitions but my favorite one was, "Meeting the needs of current demands without preventing future generations from meeting their own demands." I felt this was a broad definition that could be related to any situation. Once I was comfortable with my definition, I began to relate it to the values the Tagawa's had set for themselves and for their employees. I did a lot of research on how to communicate ideas with employees and developed a collection of posters and handouts that were educational and simple.

The reaction I received after I gave my presentation was a very positive one. Although sustainability is still somewhat of a controversial subject, the Tagawa's have decided that they are committed to it and in order for this to be successful, the employees need to be on board and they need to understand what they need to do to make this a success.

The things I learned during my internship at Tagawa's will stay with me throughout the rest of my college career and long after I graduate. My experience gave me an understanding about our industry that I know I could not have learned in the classroom. It also raised my awareness of the detail there is to the success of a company. I am able to bring the knowledge that I gathered during my internship back to the classroom and also back to Linder's. After learning so much about the Tagawa's and how the company works, I am very eager to learn the same kind of things about my families company and how we make our operation successful. Since I have been back in Minnesota and started working back at Linder's, I keep remembering little things that I learned at Tagawa's.

Some of the things I learned I have shared with some of my managers and co-workers and others I have kept to myself. I know that a lot of the things that I learned at Tagawa's won't work the same way here but the general concepts are very helpful. It is difficult to explain the value of the internship, and I do not think I have entirely reaped the benefits from it yet. Over time I think I will continue to appreciate the things that I learned during my time spent there. I would recommend the internship at Tagawa's to any student that is willing to work really hard and learn more than imaginable.