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Vic and Margaret Ball Internship Student Report
Green Circle Growers, Oberlin, Ohio
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My internship experience started off with a long drive accompanied by my mother, from Newton, IA to Oberlin, OH. I arrived on a Saturday night and had one full day to settle in before my first workday. My nerves weren't too bad, until I dropped my mom off at the airport. I instantly became nervous, sad, and terrified to be far away from everyone and everything that was normal to me. Little did I know, I was about to have a wonderful, fun, and exciting internship that I wouldn't pass up for anything.

Before coming to Green Circle I had little to no work experience in a greenhouse. I had just spent the summer working in a small greenhouse doing basic tasks but nothing extensive.

So I was nervous to begin working at such a large-scale place but also eager to gain knowledge and confidence in becoming a greenhouse grower.

I was welcomed to Green Circle Growers with open arms. Matt Heard, an Iowa State Alumni and also the main person I had been in contact with from the start was there to start off my first day. I spent the morning with him getting paper work done and taking a short tour, then it was off to the greenhouse!

My first week was spent shadowing the head grower in the section I'd be working in. There are four different areas to Green Circle growers, the Orchid range, Plant 1, Plant 2 and Plant 6, which is where I worked. Within Plant 6 it is broken down into A-strip, B-strip, and C-strip. Then to break it down even more, each strip is separated by an "upper and lower level". Each level is around 2.5 acres in size

meaning that Plant 6 is around 15 acres of glass greenhouse total. I worked in the area called Upper B.

It didn't take too long to get into the rhythm of things. There were certain tasks that got done weekly and then everything else was basically a judgment call. The first plants I got to work with were finished potted mums. Two days of the week we spent measuring the height and width of mums and charting them on a graph. The mums that we measured were marked with numbered blue flags. With this information we could make calls on when to water and if we needed to use more fertilizer. Graphical tracking was also done on the poinsettias.



Another important task done every week was putting out bug cards and taking bug counts. Shore fly, Fungus Gnat, Aphids, Thrip, Whitefly, and Leaf Hopper were counted and recorded in an excel spreadsheet on the computer. This information was used to make calls on when to spray insecticides or do nematode applications. There were a few instances where we didn't catch stuff in time and had a rather large infestation. The pictures below show an aphid infestation on violas. When stuff like this happens we just had to spray it with stronger chemicals and try to seclude it as much as possible from the rest of the crop.



I really liked that Green Circle uses biological insects and not only insecticides. Weekly bio cards were put out in the poinsettia crop and weekly nematode applications were done in the plugs. The nematode applications helped with managing shore fly and fungus gnat. The weekly bio cards helped keep up a steady population of bios to manage whitefly and other insect pests. Even with bio cards and preventative sprays for disease there are always obstacles with poinsettias. Throughout my time at Green Circle we faced many challenges with our poinsettia crop.



First it was pythium, which we did a preventative application of Terrazole for.



Then it was spider mites, and we had to throw away about 25 plants.

Lastly, we started getting burn on the bracts that is believed to be from high humidity while overhead watering. With these issues going on it was good to be able to work through them and learn the signs of disease and insect damage



One of my biggest concerns going into this internship was spraying chemicals. I was worried about being safe, making the right calculations, and applying it correctly. An accomplishment for me was being able to say I learned how to do all those things. There were many early mornings coming in to spray the poinsettia crop. It was usually with a large 200-gallon electric sprayer at 5:30 am. I would wear a spray suit, gloves, rubber boots, full face mask and of course a head light since it was still dark out. I am happy that I am comfortable with applying chemicals through an injector, backpack sprayer and large electric sprayers. I can't say that I didn't make any mistakes though but nothing that couldn't be fixed.



Picture of a time that I forgot to unplug the sprayer when moving to the next house and I stretched the cord so far it ripped open and sparked. But they fixed it!

Green Circle Growers was a wonderful company as a host. They host many interns, mostly international students but are trying to get more U.S. students. Housing is provided for male students but hasn't been for female students yet. Even though they could not provide housing for me they were very helpful trying to find it. Location is really great for a young college student. There is the perfect combination of both small town feel and a big city feel just half an hour away in Cleveland. The staff at Green Circle is very welcoming and accepting of everyone.

The technology at Green Circle is advanced and available to all of the interns. Whatever you are interested in, they could find a place for you because of all the resources in such a large-scale place. I think that this experience will put me ahead when it comes to applying for jobs. It has also given me confidence and experience that I couldn't get in a classroom. If I could convince every greenhouse student I meet to take an internship like this I would. I can say for me being away from

friends, family, school and taking a semester off was all worth it for this learning experience.

I have many plans for my future. First I need to get back to Iowa State and finish my degree. From there I hope to work as a grower somewhere close to home and eventually start my own greenhouse. I like the growing aspect but also enjoy the management/sales part of the greenhouse industry so I would love to get the chance to do both.

Lastly, I would like to thank you for this opportunity. It is an experience I will never forget and that has benefited me in many ways. I am beyond grateful and appreciative. I would also like to thank my professor Dr. Currey. Without the influence and reassurance Dr. Currey gave me I don't think I would have applied for this scholarship. Again, thank you so much and I will be sure to encourage others to take the time to apply for this amazing opportunity.

