During the summer of 2014 I had the opportunity to work as a forestry intern in the Thain Family Forest at the New York Botanical Garden in Bronx, New York, for ten weeks. The New York Botanical Garden was founded in 1891 and currently covers 250 acres in the heart of the Bronx. The Thain Family Forest is an old-growth remnant forest that takes up 50 of the 250 acres. This patch of mixed hardwood forest is the largest piece of remaining forest that once covered most of New York City. Throughout this 250-acre landscape there are many living plant collections and gardens such as the Rock Garden, the Native Plant Garden, the Family Garden, the Rose Garden, the Conifer Collection, and the Thain Family Forest. As an advocate for the plant kingdom, the New York Botanical Garden serves as a living museum of plant collections while conducting wide ranging research and continuing education of horticulture and plant sciences.

Working as a forestry intern, I was involved in the ongoing restoration and active management that will aid in the survival of the Forest’s health and native plant biodiversity despite many limitations and human-caused disturbances. I worked alongside three other forestry interns, volunteers, and two other forest staff members under the supervision of the manager of the Thain Family Forest, Jessica Arcate Schuler. My main responsibilities included invasive plant removal, trail maintenance, planting native species, and seed collection and propagation. The invasive species that we focused on removing were Japanese angelica-tree (*Aralia elata*), honeysuckles (*Lonicera* spp.) oriental bittersweet (*Celastrus orbiculatus*), Amur corktree (*Phellodendron amurense*), Japanese knotweed (*Polygonum cuspidatum*), tree-of-heaven (*Ailanthus altissima*), and Norway maple (*Acer platanoides*). A variety of tools were used for removing these species. Smaller invasive species were removed by hand, larger
saplings and small trees were removed using weed wrenches, and honeysuckle shrubs were removed using a “honeysuckle popper”. Trail maintenance consisted of replacing broken rails, weeding, and fixing areas displaced by heavy rain.

Active invasive species removal is especially important in the Thain Family Forest because it is a highly disturbed patch of forest very close to one of the biggest ports in the country where many invasive species are introduced from Europe. I was also involved in helping on several research projects in the Forest. One research project was a canopy gap study focusing on plant establishment after Hurricane Sandy. Another research project I was able to help with was a study on the best way to reduce Japanese knotweed growth. Other activities I was able to do during my internship included attending weekly plant walks with students from the Garden’s School of Professional Horticulture, attending tours of buildings on the Garden grounds such as the Pfizer Plant Research Lab and the William and Lynda Steere Herbarium, taking classes that the Garden offers under an Adult Education Program, and going on field trips. One field trip I was able to attend was at Martha Stewart’s estate, as well as two other private estates in Westchester County with large expanses of gardens and tree collections.

During this internship I was able to expand on some of my skills I gained from school as well as establish new skills from working in the field of horticulture. After taking Dendrology last year, I was able to expand my tree and plant identification skills by working in the forest every day and observing these plants in a different habitat. My understory plant and flower identification skills were also developed due to the weekly plant walks that I attended and asking the forest staff about plants that I could not recognize. I was able to learn how to set up camera traps in the forest and expanded on a Microsoft Excel file that contained information on animals
seen in the forest such as great horned owls (*Bubo virginianus*), foxes (*Vulpes vulpes*), coyotes (*Canis latrans*), opossums (*Didelphis virginiana*), and white footed mice (*Peromyscus leucopus*). I developed my time management skills this summer because I commuted from New Jersey into New York by train and was able to make it to work on time every day. Another skill I developed was communication. In the forest we frequently had individual volunteers and volunteer groups that needed instruction on what to do so I was able to communicate with and teach them how to identify specific invasive species we were targeting that day and how to correctly remove them.

Some high points of my internship this summer were the opportunity to work in the forest every day, attending plant walks and a few adult education classes, and the ability to walk around the Garden and check out the many plant collections and themed gardens that covered the 250 acre park. My favorite plant walk was at the Rose Garden because it was in full bloom and I learned a lot about the myriad of rose cultivars. The two classes I was able to take were Backyard Chickens and Spring Foraging for Wild Edibles. A few low points of the internship were definitely the abundance of poison ivy in the Forest and the few days of the summer where it poured during the entire work day. I have never experienced poison ivy before this internship but I am glad to say I can now identify it from a mile away. I also learned my lesson to wear waterproof pants on work days where there was predicted rain or I would be stuck with puddles in my boots for the entire day.

After completing the internship I learned that I still want to continue my career in the field of forestry. I was exposed to the field of horticulture a lot this summer and it definitely widened my appreciation for the entire plant kingdom, not just trees. I was also able to get an
inside look at the subject of landscape design which I have always been interested but never really knew anything about. I can definitely say that my future career will be more on the side of field work than office work because I enjoy being out in the field much more.