For my honors service project, I volunteered with the Champaign County Forest Preserve District (CCFPD). They have many volunteer opportunities available, for a variety of interests and skill levels. My volunteering was in trail stewardship on CCFPD trails, and site stewardship on selected projects of importance. I have always enjoyed hiking and gardening (weeding is an important part), this was a fun way to combine these skills and help a local government organization. It was an easy way to enjoy the local wild areas and leave them in a better state than I found them.

It was very simple to get set up as a volunteer. I merely filled out the ‘get involved’ form on the CCFPD website and Kristin, their volunteer coordinator, was in contact with me shortly. I attended a short volunteer orientation at the Middle Fork Forest Preserve in Penfield, IL. At the orientation, we heard from Kristin, Park Rangers, and fellow volunteers.
We were able to choose from a list of trails for our trail steward assignments, and Rangers discussed upcoming needs for specific site cleanups. The CCFPD loaned us the necessary materials, such as work gloves, safety vests, marking tape and pruning tools. The employees stressed the importance of filling out volunteer logs to track our hours. The documented hours that volunteers work helps the forest preserves secure state and federal funding.

For the trail stewardship portion, volunteers may choose a particular CCFPD trail that the rangers decide needs to be monitored. I walked the Lake of the Woods Bike Trail Central in Mahomet, IL; the Sangamon River Forest Preserve in Fisher, IL; and the River Bend Forest Preserve in Mahomet, IL. Trail stewardship is easy and comfortable to do. All that is needed is to attend a volunteer orientation and walk your trail at least once a month, picking up trash, pruning as you are able, or simply notating damage and/or marking the overgrowth with a special marking tape. The most important aspect is to have your eyes on the trail
monthly, and report anything that needs attention to the proper park rangers.

Another aspect of my volunteering was attending site stewardship events such as invasive species removal days. Non-native invasive species are exotic plants or pests, which are not endemic to the local ecosystem. Therefore, they have no predators or controls when they grow in an area where they are not naturally and historically found. This leads to them spreading rapidly, which can be ecologically devastating to the local habitat. They can dominate the landscape and outcompete native plants for water, soil nutrients and sunlight. These pests may have been introduced to new areas by humans, sometimes intentionally, when they plant rare plant cultivars that spread through seeds or suckering rhizomal roots. Unintentional infestations may occur through contamination, as when firewood is moved. The infested firewood houses pests such as the Emerald Ash Borer beetle, which will spread to new trees surrounding the location of the firewood. These beetles bore
through the bark of Ash trees, disrupting the flow of nutrients to the tree, and eventually killing it.

I contacted the Museum of the Grand Prairie and their volunteer coordinator emailed me with a request from another local agency, for assistance with removing invasive plants from local preserves. I attended some of the “Great Garlic Mustard Hunt” events sponsored by the Headwaters Invasive Plant Partnership (HIPP). “HIPP is a partnership between local, state and federal agencies, non-profit organizations, private landowners and university groups in East Central Illinois to address the threat of terrestrial and aquatic invasive plants across jurisdictional boundaries.”

Garlic Mustard, *Alliaria petiolata*, was brought over from Europe as a culinary herb. It is an easily recognizable plant, with clusters of small white flowers on 6” to 40” stalks. The broad, basal rosette, or round fluted leaves, are attached to the stalk by a simple leaf stem. These rosettes smell like garlic when crushed, and it is typically the only tall four-petalled white flower blooming in early spring. CCFPD notified
their list of volunteers regarding the need for the invasive species removal. Volunteers are trained to identify, pull out and bag the Garlic Mustard for proper disposal by park rangers. They were fun events, the Garlic Mustard plants were easy to pull out, and I met several friendly and enthusiastic volunteers.

Garlic Mustard is a problem because it is allelopathic, meaning its roots release chemicals into the soil. These chemicals prevent forest tree seedlings and other plants from sprouting. They may also inhibit beneficial mycorrhiza. Mycorrhiza is a structure with a symbiotic association between a fungus and root systems of plants, which is very beneficial to soil health. Garlic Mustard is also highly fertile, and can be self-pollinating, with the average plant producing from 600 - 7000 seeds. In Central Illinois, Garlic Mustard typically flowers around mid-April, with seeds maturing by about mid-May. Pulling the plants out at this time is a critical control point, since they only reproduce from seeds. However, the plants must be bagged and removed, because the plants can still produce seeds if the plant had flowers when it was pulled.
Overall, I learned quite a bit about the importance of gardening responsibly, planting native species whenever possible, and controlling an invasive species spread before it gets out of hand. At one of the Garlic Mustard pulls I met JP, a local man who organizes a wild-food meeting. He was taking the Garlic Mustard he had collected to make a pesto for the upcoming meeting! Talking with the other volunteers was very enjoyable and I am excited to continue helping out with CCFPD events in the future.