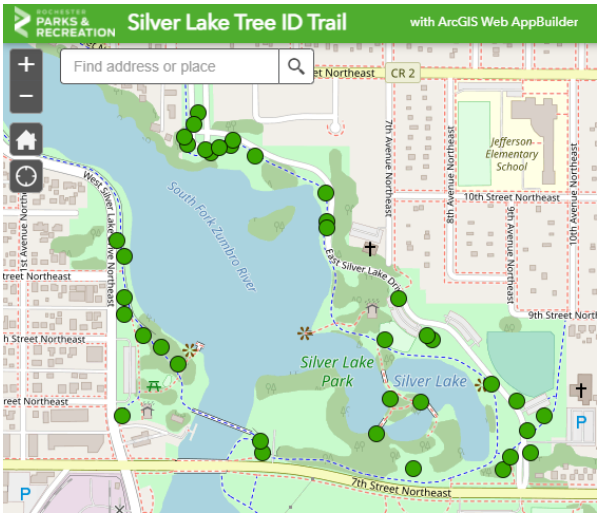
Creating the Silver Lake Tree Identification Web Application



Hello!

My name is Jared, I am a Minnesota GreenCorps member serving the City of Rochester Parks and Recreation Forestry department for 2020-2021. As part of my service I was tasked with providing outreach and education to the public. This document describes how I worked with my colleagues in the City to develop the **Silver Lake Tree ID Web Application.**

During spring of 2021, the Rochester Parks and Recreation Forestry department applied for a grant to help fund the replacement of removed Emerald Ash Borer infested Ash trees in the City. As part of the grant application, Parks and Rec indicated that they would provide public education by developing an interactive map that would help to inform the public about EAB and how they manage it.

The grant application was accepted, which was great news as the City is losing hundreds of ash trees every year. And as promised, we began brainstorming on how to create an interactive and educational experience for the public.

The original idea was to create an educational and interactive map that would educate the public about EAB. But soon into planning, we decided that the experience would be much more worthwhile if it provided information about other tree species as well. With this new idea in mind, we started to think about parks in Rochester that would be suitable for the project. The choice was obvious, Silver Lake Park. Silver Lake is ideal because it is popular, has well over a mile of paved trails, and has a very diverse array of tree species that are fairly accessible.

With the general idea formed and the park location determined, I began to work on the application. I started by assessing the tree species that are in Silver Lake Park. I was able to find nearly 40 different species of trees that were all within 50 feet of the trails using the City's online tree inventory and ArcGIS, the City's preferred GIS (Geographical Information System). This work was all completed on my desktop in the office, so next, I had to reference the trees I selected by visiting Silver Lake. It was during this visit to the park where my colleague and I made our selections for trees and took photographs of each tree that would be featured in the Web App.

Now we had our trees selected and photographs taken, and it was time to create the Web Application. How exciting! The most crucial part of developing the app itself, was getting help from the City's GIS specialists. They were instrumental in teaching me how to create a web application using ArcGIS Online. With a ton of help from the GIS specialists, a lot of trial and error, and a lot of refining, the application was ready to be used by the public.

Our final step was to install sign posts at the base of our featured trees. These signs contain the species name for the trees and a QR code that links to the web application. While the signs were being created, we had a testing period in which city workers were able to use the application and provide feedback to us on how to improve it.

We are so excited about this project at Rochester Parks and Recreation. We hope citizens will use it often to learn about trees and to have fun exploring Silver Lake in a new way!