Seattle Audubon Society

Mission
To cultivate and lead a community that values and protects birds and the natural environment.

Conservation
Seattle Audubon strives to connect people and birds. By building this connection we hope to promote an environmental ethic that we are part of nature, not separate from it.

The more we understand our interconnections with the animals and the land around us, the more willing we will be to make the tough decisions to restore damages of the past and create new interactions with the environment around us that are healthy and sustainable.

Canopy Connections
Urban habitat provides the foundation for sustaining wildlife populations and creating healthy landscapes for people. Canopy Connections seeks to improve urban habitat and form critical connections between people, birds, and habitat. As we all know, the urban forest is a essential element of urban habitat, as well as being important to the health and well-being of our city.

The Seattle Tree Map is one part of Canopy Connections, and seeks to
- Foster a culture of urban tree stewardship in Seattle by engaging residents with their trees in a different way
- Inform others about the importance of our urban forest
- Contribute to the environmental health of the city and promote the city's goal of reaching 30% canopy coverage
- Support local community efforts to better manage and care for Seattle's trees
- Connect users to other existing efforts by the city and other organizations to care for and increase Seattle's urban forest

The Seattle Tree Map

Tour

The Seattle Tree Map is currently in a late-stage draft; we anticipate full functionality by March at the latest. The test site is currently located at http://canopy.greymaple.org/.

Home Page

- We initially didn't have a home page, the Tree Map page itself served that function, but we decided that we wanted a home page that would orient and introduce new users to the Seattle Tree Map's functions and reasons for existing
- Serves as a jump point to explore or add to the Tree Map
- Advertises upcoming events (tree plantings, neighborhood tree surveys) and website updates
- Piques interest through graphics, recent photos, and numbers (the Seattle trees yearly benefits, Seattle's most common trees, etc.)
- Location for login or sign up, place to donate to the costs of maintaining website
- Internal site navigation and links to external sites for more information
- Lists organizations that provided support to the development of the website
- Fun fact: that bird in the banner is a male Golden-crowned Kinglet, sitting on a Douglas Fir branch

The Map

- The map page is organized with a search bar at the top, Google map below, and Yearly Eco Impact data from i-Tree to the left
- The basic search bar allows users to search by tree genus
- If you want to search by species, the advanced filters easily allow that, and provide many other options for searching as well
- Currently our data consists of about 128,000 street trees from SDOT's data collection to be a starting point
- Below the map are various export options; these are not currently functional but it is on the to-do list before launch
- A tooltip on the Yearly Eco Impact box will bring users to a section on the About page which briefly explains how the data is calculated and where it comes from; we may expand this section a bit to provide more details on this process for greater transparency
  - The current figures come from the default values provided by i-Tree. We have been asking around different city departments and other organizations who work with these issues to try to get more localized values but it seems to be a bit more complicated than at first glance, so we have left it at the default values for now.
- After searching, users can pan, zoom, all the expected map features, as well as click on individual tree dots for a Quick view, which provides some basic information
- Users can then view more details, edit the tree, or favorite the tree

Tree Profiles

- Each tree has a profile page that lists its
    - General information such as name, DBH, and plant date
    - Yearly ecosystem services (from i-Tree)
    - Environment and plot information
    - Status – what condition it is in, what actions have been taken recently, and also provides the ability to add an alert
    - Affiliations – who stewards the tree, who sponsored its planting or care, etc.
- Users can also upload pictures of the tree and favorite it
- The tree is shown both on an aerial map and in a street view format, both of which are actively navigable
- Gives you the closest nearby address to reference the location
- Allows users to post comments

User Profile

- Displays the user name (not the users REAL name, email, or any other personal data), picture (uploaded by user), date joined, favorite trees, recently added and edited with an accompanying map, and recent tree photos added
- Also displays reputation, which is determined by user activity; users gain reputation by adding and editing trees

About – basic About page, we plan on expanding with some more information and graphics

Resources (external link) & Canopy Connections (external link)

Ideas for Future Use

- http://cluster.greymaple.org/map Clustering experiment
- Employ the Seattle Tree Map as a way to track tree mapping between teams competing to survey as many trees as they can within a certain amount of time
- Add Seattle reLeaf's Tree Walks to the map to highlight and support the Tree Ambassador program
- Develop an app to make the online tree map more accessible to mobile users
- Target neighborhoods undergoing increasing development and tree loss to inventory trees and build support for urban habitat conservation during the development process
- Develop a tree mapping curriculum with urban forest advocacy components for middle or high school students to exercise tree mapping as citizen science service projects

Additional Notes

- The free, open source code for the site was provided by OpenTreeMap (https://www.opentreemap.org/), software created by Azavea (http://www.azavea.com/)
- If you would like to see more examples of city and regional tree maps (including a few which also used OpenTreeMap), Steve Zemke has put together a very thorough list of these tree map URLs, located at: http://friends.urbanforests.org/urban-forest-maps/
- I would like to highlight the amazing group of volunteers who helped make this website possible, and especially our volunteer Web Developer, Alan Humphrey, who has devoted an incredible and admirable amount of time to creating this website. Thank you, and cheers!