

# **Edible Landscape Map Pilot Project**

Research and Implementation Approaches for Mapping Bellingham's  
Urban Fruit Trees



Allison Johnson, Reid Haefer, and Nick Spring

Western Washington University

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##### **1. INTRODUCTION**

Every year hundreds of pounds of fruit falls into yards and streets around Bellingham, while utilization of our local food banks has sky rocketed. In response to this fallen fruit, an underutilized food source within our community, the need for a facilitated gleaning and maintenance effort is apparent. Fruit is a resource for our entire community. Fruit is allowed to rot because many tree-owners can't use all of the fruit produced by their trees. This is why we set out on a mission to begin the task of surveying Bellingham's fruit trees and working with community groups to develop a long-term approach to utilizing this valuable resource.

Our goal was to survey tree-owners within 2 or 3 neighborhoods as a pilot project, which could later be expanded to include all of Bellingham. Working with groups that are already involved in fruit gleaning and others hoping to build community resilience through organized gleaning efforts, we wanted to find out what was necessary to include on a fruit map, as well as create an online data-base for the continuation of future mapping.

There has been a desire for such a resource in the past, but past attempts have failed to bring anything to a sustained fruition. Knowing that this is the case, we began our monumental task of creating a structure that could continue to be utilized for years to

come, while addressing the needs of the various stakeholders. While mapping this resource is only one means to an end, it is a necessary step in the organization and development of neighborhood tree gleaning and maintenance efforts.

The city of Bellingham has made a commitment to sustainability. In current times, when issues of peak oil, economic uncertainty and global climate change are at the forefront of our collective battles, the nexus of solutions that local food addresses is a beneficial and necessary task. Urban food, and specifically urban fruit, can provide hundreds—even thousands—of pounds of local food to citizens, while providing environmental benefits through water filtration, CO2 reduction, and urban greenery—and thus, beauty. Not only is possible employment available to certain individuals through the process of organizing community gleaning, but the maintenance, utilization and improvement of the conditions of our local fruit trees can provide many intangible benefits.

## **2. METHODOLOGY**

To design and implement an edible landscape map of Bellingham neighborhoods, our team met with contacts in the community, conducted internet research, and held walking and biking door-to-door trips. Throughout our research we documented all of our sources and contacts, so that this project may be continued by future Western students or community members.

## **2.1 Internet Research**

Mapping of local fruit resources is new to Bellingham, but similar projects have been undertaken in other locations in the state of Washington and in other states. By sampling the techniques used by these programs and analyzing their successes and failures, we gained useful ideas for how we want to establish our program. We also researched different aspects of gleaning, such as reasons for creating a program, tree health maintenance, and the obstacles we may encounter.

## **2.2 Contacts and Meetings**

While developing this program we met with community members, Western students and faculty, and spoke to representatives from similar programs in other cities. We worked with the Sehome Neighborhood Association, Small Potatoes Gleaning Project, Transition Whatcom, the Center for Local Self-Reliance, and the Bellingham Food Bank. We also contacted City Fruit in Seattle, an edible landscape mapping program in Seattle which has many of the features we hope to include in our project.

We also met regularly as a group to develop the program and brainstorm ideas. We included other Western students and community members in our mapping efforts by holding mapping walks in the pilot neighborhoods.

## **2.3 Program Development**

### **2.3a Pilot Location**

To develop the program as effectively as possible we decided to begin by mapping a six block area in the York neighborhood. We chose this area because our group had a connection to it, so we would be able to easily access the neighbors. We mapped this neighborhood on foot as our website was still a work in progress, and we felt that we could learn more about the obstacles we might face in larger-scale mapping efforts. We knocked on doors and asked homeowners questions from a survey we had developed. We asked about number of trees, health, specific type, whether there was fruit, whether or not the homeowner was interested in participating, and other relevant information. We used this information to create a mock map of the neighborhood.

### **2.3b Target Users and Stakeholders**

Our target users are residents of the City of Bellingham. Under-utilized fruit and nut trees can provide a sustainable, local food source for individual community members, families, and organizations devoted to providing food for our neighbors facing economic or other hardships. We also hope to serve homeowners with excess fruit by offering removal of the fruit and help with pruning and other tree health issues. The stakeholders in this project are the Bellingham residents and local food-related organizations such as those mentioned under contacts.

### **2.3c Accountability/Liability**

Because we will be publishing the information we obtain on a public map and on the internet, it will be important to include a disclaimer warning people of the risks of gleaning and the proper ways to seek permission to enter private property. We will include a paragraph on each site the map or other information is posted on, as well as educating those we speak with about the project.

### **2.3d Website Development**

We would like to work with Western's Student Technology Center to create an interactive web page where residents can voluntarily register their fruit and nut trees. This site will be modeled after the City Fruit site for Seattle. The website will include a Google map showing fruit tree locations and provided brief information on the type and health of the tree.

## **3. CASE STUDIES**

### **3.1 Urban Edibles (Portland, Oregon)**

Urban Edibles is a "community database of wild food sources in Portland." The website was created by Portland State Graduate Michael Bunsen. The core of the concept is an online interactive map, displaying edible trees and wild food sources in the Portland area. The website allows any person to post a "hot spot", relating to a fruit tree they discovered in their neighborhood. The project helped inspire The Portland Fruit Tree Project, which organizes volunteer "harvesting parties" to remove otherwise wasted fruit

from neighborhood trees. Fruit that would otherwise fall to the ground and rot is picked and utilized within the community.

### **3.2 City Fruit (Seattle, Washington)**

City Fruit is a “fruit resource for the entire community.” They work within many neighborhoods in the Seattle area, helping home owners grow and harvest healthy fruit. Furthermore, they thoroughly promote the sharing of this fruit within neighborhoods. “City Fruit collaborates with others involved in local food production, climate protection, horticulture, food security and community-building to protect and optimize urban fruit trees.” Their website outlines several conceptual goals of the organization. They include conservation, preservation of the urban tree canopy, stewardship, harvest, using and sharing fruit, and community building. City fruit spearheads several projects including Fruit Tree Care Workshops, Pinney Sustainable Fruit Harvest, and others. The project the most interests us is their Urban Fruit Tree Mapping project. On their website, they have an interactive map which displays the site of fruit trees around the Seattle area. The map allows anybody to register and post a fruit tree in several easy steps. This map increases community awareness of available fruit and reduces the amount of fruit that goes to waste.

### **3.3 Operation Fruit Rescue (Edmonton, Alberta)**

Operation Fruit Rescue Edmonton is a volunteer organization of fruit growers and pickers. They send volunteers to residences of fruit tree owners who either do not have

time to harvest their fruit or have excess fruit that they cannot use. One third of the harvested fruit goes to the homeowner, one third to Edmonton's food bank, and one third is given to the volunteer harvesters. This program relies on homeowners contacting the organization and asking for assistance with fruit harvest.

#### **4. THE FUTURE**

This project is a means to an end. Through the creation of this on-line community resource, we hope to collect data that will allow the coordination and cooperation of a multi-partied effort to utilize Bellingham's urban fruit. There are many visions of how this effort should develop, though it will undoubtedly be in cooperation with various local organizations and community members.

#### **Collaboration**

A lot of what originally fueled this project was Nick's experience gleaning urban fruit this past summer. The amount of food that is wasted due to neglect, over-abundance and any number of reasons is staggering. There are numerous preventable diseases that could be avoided. All of this food could be salvaged and used to feed those who are socially or economically disadvantaged or unable to buy their own local healthy food.

While we did not map all of Bellingham (by any means) in one quarter, we did begin the important process of community collaboration and program development. There have been past efforts within Bellingham to map this urban resource, but none have produced a sustained effort. And a sustained effort is what we need. The health of our urban food resources should be maintained just as our roads and our buildings are. This is why our orientation shifted mid-quarter from solely mapping to building the connections, background and a solid framework for a collaborative group that will be able to see this effort far into the future.

Because who really knows what the future will bring? Maybe in ten years all of this fruit that is currently forgotten and neglected will be a precious commodity. As for the Whatcom Community Food Project we have a simple but monumental task ahead of us. From here we hope to grow by building connections around our common vision and expanding our pilot project to encompass multiple neighborhoods. We have outlined a number of steps we would like to see taken in the future within our report. A larger implementation of the pilot project, connected with organized gleaning efforts is essential, so that we can develop the full cycle of this process.

We would like to close with a vision. It is important to start these conversations with where we would like to see ourselves going, rather than just reacting to what we don't like. Imagine a community where we have local food security, a community where no food is wasted and no one goes hungry. Imagine a landscape that provides our substance, where fruit and nuts are dripping from trees all around us, and vegetables tucked away between houses. Imagine a community working together to make this a

reality, actively maintaining and nurturing these urban treasures. To me this seems as inevitable as seed.