

Urban Farm Crop Plan Proposal
Gordon Neighbourhood House

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Introduction

Our group is partnering with the Gordon Neighbourhood House (GNH) in Vancouver's West End to provide a crop plan for their urban farming program. The West End community, located between Burrard street, West Georgia and Stanley park, has been ranked the fourth most densely populated neighbourhood of Vancouver in 2011 (City of Vancouver, 2012). It is primarily comprised of residential areas with tall apartments making up the majority of its dwellings (City of Vancouver, 2012). This poses a big challenge to urban farming as these tall buildings block sunlight. Therefore, in addition to the typical considerations required for agriculture, such as water/nutrient input and pests, urban agriculture is met with challenges due to insufficient sunshine and the small scale of the practice. Furthermore, increasing concerns about climate change and natural resources have brought environmentally sustainable agricultural practices to the forefront of agricultural planning.

The percentage of low income families in the West End is higher than the city average and affordable housing has been a concern (City of Vancouver, 2012). Increased odds of food insecurity has been found to be associated with families spending over 30% of their income on housing (City of Vancouver, 2012; Kirkpatrick and Tarasuk, 2011). Additionally, homeless people are migrating towards the West End at an increasing rate due to safety concerns of living in Vancouver's Downtown Eastside. All of these situations highlight the importance of the food initiatives provided by GNH, which aims to reduce community food insecurity of the West End neighborhood and put an emphasis on food being central to community building. Not only does the urban farming program provide food for its community kitchen and farmers markets, but the gardens also provide a space for community members to meet, volunteer and work on the plots to learn about growing healthy food in an urban setting (GNH, n.d.).

The goal for our project is to create a feasible and flexible crop plan for the upcoming spring and summer growing seasons for all three of GNH's community gardens. These crop plans will ultimately address these limitations and challenges, and allow for the highest yield and quality of produce grown with the smallest environmental impact. We hope to collaborate with GNH Vegan Meal Planning team for LFS 350, as well as GNH kitchen and farmers' market to ensure that the our plan maximizes the benefit to the entire community. Food has the potential to create strong communities, and we hope that creating an effective crop plan will help GNH fulfill its intentions in doing so.

Significance

The successful execution of this project is significant because it will increase the availability of nutritious and locally grown produce for the community. It will be distributed

through various outlets such as community lunches, cooking workshops, and farmers' markets. Therefore, urban farming is a practice that can increase community food security by increasing people's access to locally-grown fresh produce and community's self-reliance while creating opportunities for the community to learn and explore sustainable and healthy food systems that are respectful of the local culture (Hu, Acosta, McDaniel, & Gittelsohn, 2013). Through a feasible crop plan, GNH can provide these benefits and be more cost effective by reducing the amount of money spent on purchasing bulk products to sustain their activities and ensure the plots are utilized to their full potential, maximizing yield without compromising the integrity of the land and produces. Overall, GNH is increasing the West End's community food security by providing accessible, healthy, and local food through urban farming in which a feasible crop plan is the fundamental starting point.

Objectives

The objectives to achieving the above mentioned goals are:

- To assess each urban farm site according to the specific characteristics of each location. For example, because the layout of garden boxes cannot be changed, exposure to sunlight due to location, possible pests, as well as any property regulations such as watering and composting rules, should be considered.
- To develop a crop plan focusing on a Top 10 list of plants and herbs that will maximize quality and yield, as well as fulfill the community's purposes. These will be selected based on feasibility determined by site assessments, previous crop plans, relationships between crops, as well as complementation with community meal planning activities.

Method

The crop plans will depend largely on site assessments of each farm, what has been grown in previous years, and consultations with Joey, the head farmer at GNH. We will obtain information regarding the past crop plans, urban farming methods and agroecological methods from Joey. We will conduct additional research on efficient urban farming methods, such as companion planting, weed management, and crop rotation via the internet, gardening manuals and books. The site assessment will help us determine the types of crops that can grow in each individual site depending on the availability of sunlight. In addition, it will be useful to know how often Joey visits each site to determine where to plant the crops that require more frequent care and maintenance. As such, the Crystal Court Plan, one of the farm site, receives the most sunlight and is also the biggest site of the three. Therefore, we would ideally plant more sun-loving crops at this site. In contrast, the Jervis site is blocked by tall apartment buildings, therefore, more shade-loving crops would be more suitable, such as herbs and salad greens as mentioned by Joey. In the end, we will determine the top 10 list of

crops and herbs that are suitable to each plot's growing conditions in order to generate a crop plan for each site. As we design the crop plan, we will ensure that crop rotation is followed in order to mitigate nutrient loss and to prevent diseases or pests.

Outcomes

Upon completion of the project, we will produce three feasible but flexible crop plans for each of the sites that will grow the top 10 crops utilized by the community. These, along with an infographic displaying the information and an oral presentation about the project will be completed by March 26, 2018, and a final report summarizing and outlining the project will be completed by April 8, 2018.

References

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