Foraging on Public Land:

Environmental Health and Human Wellbeing in Western Washington

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Introduction

Until very recently in the evolution of our species, we have relied on foraging, the practice of gathering edible wild foods from the environment, as a primary means of obtaining sustenance. Even with the rise of farming and agriculture 12,000 years ago, people still relied on foraging for some of their needs. To this day at least 1.6 billon people still rely on foraging to as a primary means to acquire food and resources, and foraging is a resource that helps people in poverty avoid starvation (Svizzero, 2016). This is the case even in more affluent counties like the United States, where many people still rely on foraged and hunted foods to meet their basic needs (Svizzero, 2016). Today 55% of the global population live in urban settings (United Nations), and in urban settings, people forage on public lands (KUOW; Brandner & Schunko 2022; Mclain et al. 2014). Many people in urban settings additionally forage to meet economic needs as well as cultural and provisioning ones (Svizzero, 2016). However, in many regions, the ability of people to forage is limited by laws, rules, and restrictions which compromise this key human behavior. This is the case in Western Washington, where it is illegal to remove plants, and thus, forage, in many of the regions public land spaces (City of Seattle; Washington State Parks; National Park Service). These regulations have complex and important implications on both environmental health and wellbeing and human health and wellbeing.

Foraging is an important part of human culture and should be allowed on public lands. Below is a discussion of the potential benefits and environmental consequences of foraging on public lands, and an argument for promoting more intention restrictions on these activities in Western Washington that balance the human need for foraging and the need for protection of the local environment.

Historic Basis for the Restriction of Foraging:

On public lands, foraging is often not allowed (Svizzero, 2016). In Western Washington, the concerns of policymakers on the impact of foraging seems to be primarily driven by concern that foraging practices may be detrimental to natural spaces and ecosystems (KUOW). Overharvesting of natural resources by individual members of the public has indeed been cited as an issue in urban areas across the globe. History demonstrates that humans have the potential to destroy natural populations of plants, and land managers cite this as a reason to restrict access to foraging (Svizzero, 2016). Various pressures can influence foraging and its ability to be sustainable. For example, when a foraged good can be sold for a high value, people have a tendency to overharvest it for profit. This is especially true when those harvesting the resource are experiencing poverty and using foraging as a means of supplementing diet and income (Azizi et al. 2022, Svizzero 2016). Other factors which influence the sustainability of foraging practices include the density and needs of the population. In times of war, or political insecurity, populations of commonly foraged plants decreased due to an increased reliance on those resources as a source of sustenance. This decline occurs due to both an increase in food shortages and, in some cases, an influx of refugees who need resources such as local food (Aziz et al., 2022). In densely populated areas, species that are sought after as forage can become more and more scarce

The practices of those engaging in foraging also impacts the ability of plants to be sustained. Foragers often do not have a strict rule for what would constitute overharvesting, though generally have a concept that over harvesting was 'greedy'(Giraud et al. 2021). In 2013, KUOW, a Seattle public news station interviewed several people whose occupations require oversite of public lands where residents are known to forage. Dewey Potter the spokesperson for the city's Parks Department at the time mentioned that Seattle was trying to restore forested spaces and that at times restoration areas were destroyed by foragers removing plants. He had concerns about the sustainability of foraging in the city. Of note, despite these concerns the city has refrained from cracking down on foraging, and has instead endeavored to educate the population about sustainable foraging techniques (KUOW).

Evidently, when foraging is done improperly (especially in times of economic insecurity or without proper training) the practice can result in potential ecological issues. However, this does not mean that the practice should face outright bans on public lands. Although there can be the potential for urban foraging to have negative impacts on the environment, it can also be argued that the practice is an important part of human connection to nature and has the potential to foster a greater level of stewardship. This next section describes known benefits of foraging for both human health and the environment that support the position that current public foraging regulations need to be revised.

Basis for Allowing Urban Foraging in Western Washington:

(Giraud et al. 2021).

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The practice of blanket bans for foraging on public lands is problematic in many ways. Often, these rules are based on the western idea that humans are separate from nature and that receiving sustenance from natural environments is universally detrimental, that the best way to protect nature is to simply leave it alone. In the book Braiding Sweetgrass Robin Wall Kimmerer, an accomplished ethnobotanist and member of the Potawatomi nation, argues that thus western ideal fails to account for the myriad benefits that foraging practices can provide to the ecosystem. She explains that tending of the environment (as indigenous people have done throughout time) through harvest can actually be a key reason that plants are able to survive and thrive. In one study described by Wall Kimmerer, randomly assigned plots of Sweetgrass (Hierochloe odorata) were harvested using a variety of methods and compared to plots that were left to grow without intervention. The results of the determined that the plant grew more vigorously with higher rates of survival following harvest compared to control plots where the species was left untended. Such examples of species reliant on human foraging practices may be found in Western Washington as well. For example, Common Camas (Camassia quamash) is generally reliant on human management to maintain robust populations. This plant is a traditional food source for indigenous nations of the pacific northwest, and has been tended and harvested since time immemorial. A study utilizing traditional methods of harvest to foraged and managed Camas populations (including the use of fire, digging sticks, and the sod turn over method) determined that these practices produced a significant increase in Camas bulb size and relative health of Camas patches (Stucki et al., 2021). This same study determined that Camas plants generally rebound to preharvest numbers within a year for most traditional harvest methods.

Not all forage species receive a direct benefit from foraging on the basis of their physiology, however, even for species where the practice of harvest can result in temporary reductions of the forage, there are benefits to allowing the practice to continue as long as it is done in a sustainable manner. When considering the impacts of urban foraging, many sources have found that the provision of a framework of connection to the environment increases the potential for people to engage in beneficial stewardship of that environment. Land Managers generally had an anti-foraging stance, but when researchers observed foraging practices and interviewed foragers, they found that people were engaging with the land in ways that matched the goals of the land managers. Foragers have been found to practice a variety of methods that are considered to be a form of environmental stewardship (Mclain et al. 2017). In an effort to ensure that the habitat is not damaged by foraging activity and to reciprocate for the plants being removed, a high proportion of foragers studied take care of public spaces where they forage by doing one or more of the following: cleaning up litter, removing invasive plants, propagating bulbs or spreading native seeds (Landor-Yamagata, J. L 2018). These foragers also share personal knowledge with other visitors to the area, and stress the importance of teaching stewardship and responsible harvest to others (Mclain et al. 2017). This trend holds true for the Puget Sound region as well; urban foragers in that region generally actively tend the places they forage, making sure that the habitat retained its population of plants (Mclain et al. 2017; KUOW). Additionally, foragers generally attempt to take only a small fraction of species when foraging, and remove plants only where they grow in abundance (Mclain et al. 2017). Despite concerns of land managers, it is abundantly clear that humans can have a beneficial stewardship relationship with the land they forage on.

A final note, when done properly, foraging on public lands can be beneficial not only to the environment, but also to those doing the foraging. People forage for a variety of reasons including for with connection to nature, provision of food, for mental health benefits, and for cultural connections and enjoyment (Landor-Yamagata, J. L 2018). Foraging has been shown to alleviate poverty, and can even do so without commensurate environmental degradation (Svizzero, 2016). Each of these benefits gained from the practice are meaningful contributions to the health of those doing the foraging, and to society as a whole.

Conclusion:

Many municipalities and public land governing authorities in Western Washington have enacted bans on foraging practices. Although there are real potential concerns with allowing these practices in public spaces (such as overharvesting and ecological damage) these detrimental impacts seem to primarily occur in areas of political or financial distress (Azizi Et al. 2022). There is currently a lack of scientific evidence showing that foraging in the public lands of Western Washington is a significant factor in denuding local ecosystems. On the other hand, studies and interviews with foragers in the region conclude that people engaging in this practice generally steward the lands which they use in a manner consistent with the goals of official land managers. In fact, some species of plants have developed complex interdependent relationships with humans and thrive best when harvested. Furthermore, in a time where most humans are living in urban settings, it is important for them to have ways to connect with nature, and since foraging provides a way for humans to obtain this connection (along with many other benefits to health and wellbeing), it seems critical that we reevaluate the current regulations regarding this practice. With proper public education around sustainable foraging and *reasonable* restrictions on protected species and areas, the relationship between human foragers and plant ecosystems can be mutually beneficial. Instead of making foraging illegal, foraging should be an opportunity for environmental education and stewardship.

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