

The Ecological Restoration of Centennial Grove, Union Bay Natural Area: invasive species removal and reinforcement of natural biodiversity of the Pacific Northwest

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Introduction

The reserve that is now the Union Bay Natural Area (UBNA) began its life as part of Lake Washington, to later be drained and used as an unregulated industrial landfill for 40 years. 15 years after being capped in 1971, the site was turned over to the UW School of Environmental and Forest Sciences (SEFS) where it became UBNA. Since then, the area has been used by SEFS faculty and the staff of the UW Botanic Gardens for ecological restoration, teaching, and research purposes. Restoration of Centennial Grove first began in 2007 with the planting of 400 native conifer saplings, only to have 38 survive.

Site Description



Centennial Grove is a 0.67-acre plot located within the western side of UBNA. With a very limited native vegetation canopy, the dryness of the site has prohibited the growth of most vegetation species. The lack of ground moisture has allowed for excessive amounts of invasive species, such as Himalayan blackberry and Bull thistle, to take over the site.

Project Objectives

- Mitigate the presence of Himalayan blackberry and other non-native species.
- Promote the establishment and dominance of native vegetation typical of lowland forest.
- Improve health of existing native conifer and deciduous trees on site.

Restoration Approach

- Himalayan blackberry removal on entire site by mechanical removal techniques such as, stem cuttings and root crown removal.
- Suppress invasive species encroachment by applying at least eight inches of coarse wood chip mulch on the entire site.
- Increase native plant structural integrity and biodiversity by installing native trees and plants in the form of containers, bareroot stock, and lifestakes.

Project Accomplishments

November 2020



May 2021



May 2022



Looking Forward

To successfully fulfill the project objectives and to ultimately provide the site with enough support to become self-sustainable, a long-term stewardship plan of 10 years was put into place following the initial restoration. The need to intervene with the site will become less with each year as the native species become more established and shift the suitability of Centennial Grove away from that of invasive species and towards native vegetation.



Acknowledgements

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