

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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Restoring the health of our natural environment benefits not only the vegetative and animal species living within that habitat, but also surrounding communities. With an increasing world population and the annual global temperatures on the rise, maintaining those environments is becoming a difficult task. The Union Bay Natural Area (UBNA) is located within the University District of Seattle, WA., a popular area for nature lovers and student research. UBNA has a unique life history because of the land-use changes surrounding it. Up until the late 1800's, UBNA was part of Lake Washington and later drained for US Naval purposes. Around 1930, the area was transformed into an unregulated industrial landfill that was later capped in 1971. The UW School of Environmental and Forest Sciences (SEFS) received the 73-acre plot where it came to be the UBNA many people know today. Centennial Grove is a small section within UBNA that was initially restored with the planting of hundreds of tree saplings in 2007 to mark SEFS 100 year anniversary. The lack of continued stewardship, nutrient poor soils, and minimal moisture lead to few trees surviving and the site to be overrun by invasive species. In order to restore Centennial Grove, my colleagues and I took a full evaluation of the site to determine the best plan of action in creating a successful self maintaining and sustainable site. After studying the tree, shrub, and herbaceous species that would best withstand the conditions of our site, we carried out a work plan involving the removal of invasive species, mulch application, and the planting of native PNW vegetation. A year after the initial restoration was completed, observations showed site conditions and vegetation survival with a robust resistance to the warming climate, a common trend occurring in most growing cities like Seattle.