

POST OCCUPANCY EVALUATION

BASELINE INFORMATION

PROJECT NAME: Owl Boxes

LOCATION: Trees located near Denny Field, William H. Gates Law Library, and Union Bay Natural Area

AWARD MADE: 2010-2011 School Year, Start date: March 28, 2011

PROJECT COMPLETED: October 25, 2012

DURATION (MONTHS): Approximately 1.5 years

AWARD TOTAL: \$1,000

AWARD SPENT TOTAL: \$1,000

% SPENT: 100%

PROJECT MANAGER(S): UW Students Jessica Kang and Alexandra Ulmke. Also on the “Barn Owl Team” were students Grace Kuraitis, Emily Wegeleben, and Kimberly Grant

CONSULTANTS: Burke Museum Student Committee, Charles Easterberg (Public Health Advisor – Environmental Health and Safety), Kristine Kenney (University Landscape Architect – Office of Planning & Budgeting), Heather Swift (Principal and Founder – Co Habitats), Matthew Mega (Director of Urban Habitat – Seattle Audubon Society), John Withey (Postdoctoral Research Associate – School of Forest Resources)

SIZE (SQ FOOTAGE, ACREAGE): Although the exact sizes of these owl boxes are not listed, there is an ideal size that Barn Owl boxes must be to be efficient. Designs should be at least twenty four inches deep, eighteen inches high and eighteen inches wide. They should also always have an entrance hole that is at least six inches off the base of the box and at least five to five and a half inches wide in circumference.

PROJECT PROFILE

SITE & CONTEXT: The potential sites for the Barn Owl boxes were evaluated according to two sets of criteria. The first was to meet the campus’ needs and the second was to meet the Barn Owl habitat requirements. The ideal sites for owl boxes for the campus would least disrupt the campus community and functionality. Owls are very messy creatures, so most of the proposed locations are in wooded areas. In order for a site to be considered ideal owl habitat it must have a suitable space for an owl box at least 12 feet off of the ground, the tree must be a conifer, and it must have other trees in near proximity to help provide cover. The boxes must be painted in order for them to blend in with their natural surroundings and also to help conceal the owls. Several of the sites that met both sets of criteria were ruled out due to the noise caused by students living in buildings nearby. Eventually the project team decided to put several owl nesting boxes on conifer trees located near Denny Field, William H. Gates Law Library, and the Union Bay Natural Area. Through a physical survey of campus, the project team found specific trees in these areas that met the established criteria.

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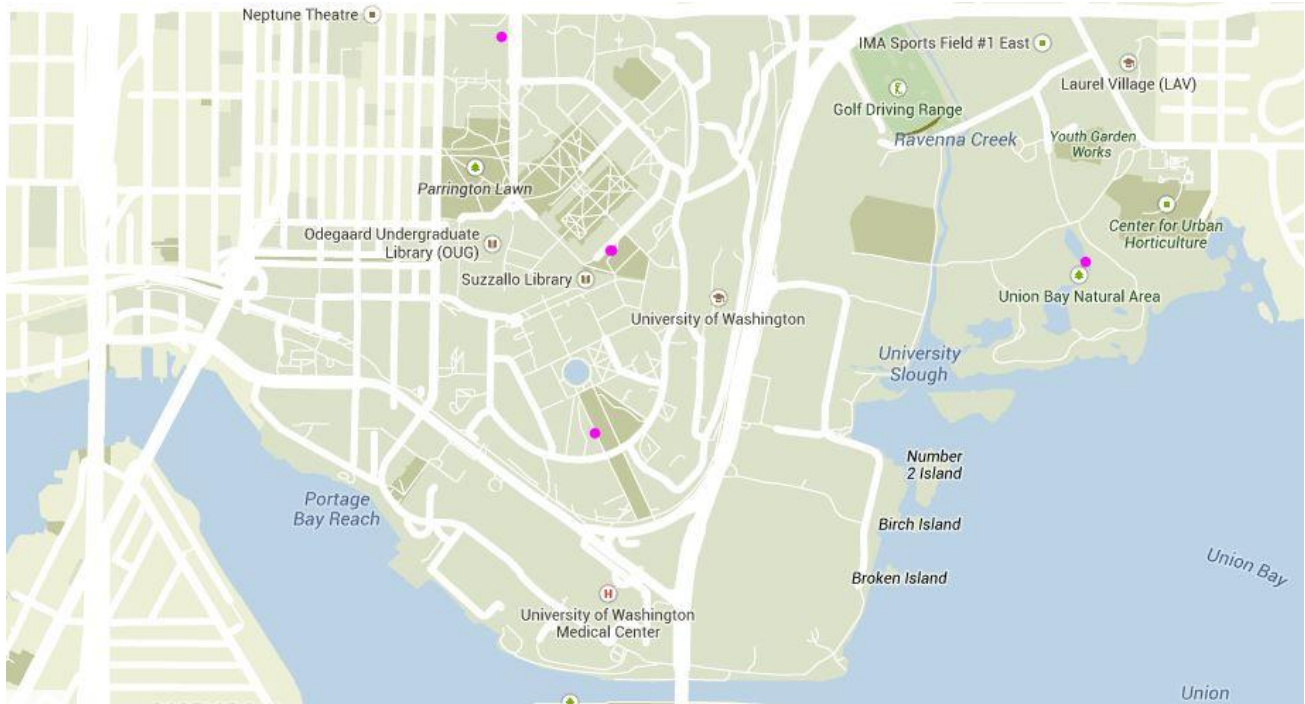
PROGRAM ELEMENTS: The boxes are anchored to the trees using rings that wrap around the circumference of the trunk, and can be loosened periodically to accommodate the growth of the tree

MAINTENANCE / MANAGEMENT REGIEME: The University of Washington Grounds team was utilized in providing support in the installation of the owl boxes but they no longer have any involvement in the monitoring or maintenance of these owl boxes.

PHOTO(S):



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PLAN(S):

ANALYSIS

USER/USE ANALYSIS: *"An increase in campus habitat will undoubtedly increase campus bio diversity, which will in turn create a richer aesthetic campus experience as well as provide more accessible educational opportunities for a variety of University programs. An administrative focus on habitat creation, along with financial support from the Campus Sustainability Fund, will allow students to become more involved in the creation of sustainable, ecologically significant campus. The student body is a rich resource for creativity and motivation that, when allowed to contribute to the shared goals and ideals of sustainability, will help keep the University of Washington on the leading edge of ecological design and environmental policy"* -Jessica Kang, project's final report.

PEER REVIEWS:

Email from Jamie Rowe (former CSF coordinator) to Sean Kennedy (CSF Budget Administrator) re: Owl Boxes spending (7/19/2012) *"Grounds picked up some additional unexpected installation costs."*

Facilities Services newsletter detailing potential unintended uses associated with the boxes (October 2012). *"The museum plans to install a camera if owls move into the box. According to Program on the Environment student Jessica Kang, owls will find the boxes eventually, but it could take up to a year. It's also possible other critters will make themselves at home. "I'm not going to lie," she says, "there might be squirrels in these."*

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Campus Arborist Sara Shores (11/25/2014): *"I have not heard of any owls utilizing our boxes yet. I spotted this guy 2 weeks ago lounging with his head out the opening. Mr. Raccoon."*

CRITICISM: The largest overall criticism of this project was the ambiguity over whether the boxes would actually attract owls and increase biodiversity or not. The goal was to attract at least one owl, but that could take up to a year. Even the project manager was skeptical admitting that the boxes might attract squirrels rather than owls.

PROJECT SIGNIFICANCE / UNIQUENESS: Barn Owls provide valuable ecosystem services as predators of pest species. Encouraging their presence could save the University of Washington thousands of dollars in pest control as well as help keeping the campus environmentally friendly by reducing pesticide use. Barn Owls also add an aesthetic value to the campus, and as charismatic mega fauna they will likely inspire students and staff to care about the biodiversity and ecosystem health on campus. Overall, the barn owl boxes increase the availability and quality of owl habitat, increase the aesthetic value of campus green space, and provide natural mitigation of pest species.

FUTURE PLANS: Even though they would not be funded by CSF, two more barn owl boxes are planned to be installed in and around the new Husky Stadium. Researchers have found that there is already an owl living near that area (inside Husky Stadium) and it may have been displaced due to construction near the stadium. This owl forages in the surrounding wetlands and open fields of the Union Bay Natural Area. This is also very close to the location where a lot of the University of Washington's organic residuals are held before they are transported to the Cedar Grove Composting facility (Everett, WA). Rats (owl prey) are likely in this area due to the readily available food source.

LESSONS LEARNED:

Email from Sean Kennedy (CSF Budget Administrator) to Jamie Rowe (former CSF coordinator) regarding using remaining Owl Box budget to fund monitoring cameras (7/19/2012) *"We really need more stringent language around what's allowed in an award, what the available time frame is, and what to do about any deviations (including unused portions of awards)."*

FOLLOW UP

CONTACT INFORMATION: Jessica Kang ms.jessica24@gmail.com

WEB SITE: <http://depts.washington.edu/poeweb/>

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PERFORMANCE

Please fill in all fields applicable to your project and for which you have data

NUMBER OF...

- ACRES
- **One or more barn owls**
- ATTENDANTS
- BIODIESEL PRODUCED (GAL.)
- COMPOST PRODUCED
- FOOD GROWN (LBS.)
- **Hotspots identified: trees located near Denny Field, William H Gates Law Library, and the Union Bay Natural Area**
- HOURS WORKED
- PAGES
- PEER OR PROFESSIONAL REVIEWERS
- PLANTS INSTALLED
- RIDES DIVERTED
- SQUARE FOOTAGE
- STORMWATER DIVERTED
- STUDENTS ENGAGED (VOLUNTEERED, EMPLOYED, ETC.)
- TOTAL kWh GENERATED
- **5 units installed**
- **Used by Barn Owls**
- VIDEOS PRODUCED
- WASTEWATER CAPTURED & TREATED
- WATER SAVED (GAL.)
- <http://green.uw.edu/promote/snapshots/barn-owl-boxes>

BEFORE & AFTERS...

- BUILDING TEMPERATURE
- kWh CONSUMED
- SOLID WASTE CONTAMINATION