

Shinglemill Creek Old Growth Stump Research

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Vashon High School Tree Surveyors Poster Group: Ben Jackowski, Cody Clevenger, Jameson Sudduth, Liam Bleck, and Lili Helsby

Land Uses

When the land was clear cut on Vashon Island in the late 1800s and early 1900s almost every tree was taken down. The trees that were cut down were used for logging, agriculture, fishing, and also used for residential development.

Conclusion

In conclusion, we found that the old growth forest was much more spread out and had much larger trees than the current forest. We also found that the old stumps were providing a home for new Western Hemlock. Further more we found Holly plants which are known to be invasive.

Further Research

In further research we would like to get new and current GPS. The GPS units we used were not very accurate and it would be helpful. Also we would like to tag more stumps that we found but did not have the equipment to do so. Also we found the invasive species of Holly and we would like to check back later to see if it becomes more invasive in the forest.

Main Question

The overall main question of the entire long-term project is: What did the original Shinglemill Creek riparian forest look like and how does it differ from what we see today?

We the students of Vashon Island Highschool are interested in answering this question because forest structure and composition impacts lots of different ecological processes in the watershed including salmon runs, invertebrate populations, nesting and foraging habitat for rodents and birds and water quality. If we know what changes have occurred we will have a better idea of how to restore this watershed to increase habitat value and water quality.

Our research questions:

1. How do the size of old stumps compare to the new trees growing in Shinglemill today?
2. What role do the old stumps take in re-generating the forest?

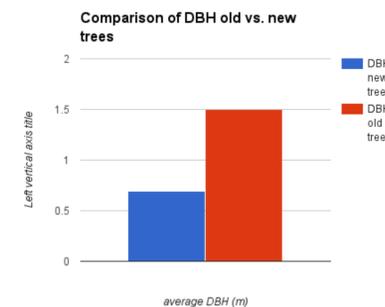
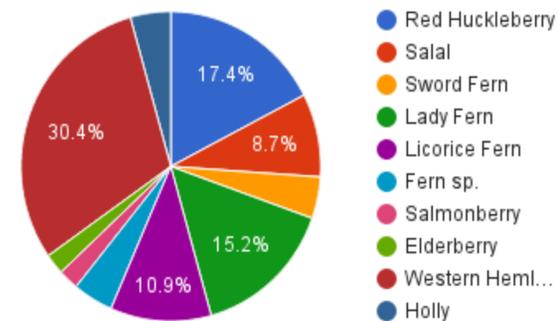
Methods

- Take photo of stump
- Tag the stumps with orange flags
- Take GPS coordinates
- Take the DBH
- Take the the height
- Record results on spreadsheet
- Record plant life that the stump is harboring

Role of Trees

The old trees play the role of nursing stumps. They host a abundant amount of plants like the red huckleberry, salal, sword fern, lady fern, licorice fern, fern sp., salmonberry, elderberry western hemlock holly, They help the other plants grow by providing a stable home for the plants to develop. The plants dig their roots into the stump and absorbs the remaining nutrients the old stumps leave for them to grow.

Nursing Plant Community



DBH

DBH means diameter at breast height which is where we measure the tree. The average DBH was 1.456 meters.



Locations of the stumps that we surveyed