Huckleberry Enhancement Project

A cooperative project between the Tulalip Tribes and the US Forest Service with monitoring assistance from Western Washington University staff and students.

**Objective:** Remove competing vegetation from around Big-leaf huckleberry so as to promote greater huckleberry production.

**2009 – planning**
A USFS Challenge Cost Share project was initiated with the Tulalip Tribes to thin 28 year-old conifer stands with big-leaf huckleberry understory. Thinning treatments were planned to reduce residual canopies to < 30% canopy cover, in small, trial blocks of approximately 5 acres. The project area is in the Stillaguamish River drainage, on the Darrington Ranger District, the Mt. Baker-Snoqualmie National Forest, Washington.

**2010 – Treatment Year 1**
- Forest stands were thinned by Tulalips’ Tribal staff and brush adjacent to road pulled by Tulalip youth for chipping to minimize fire hazard and provide access to huckleberries.

**Monitoring:**
- Plots were installed, with measurements of canopy cover and huckleberry cover before and after thinning treatments.
- The post thin data indicated average overstory canopy cover was reduced in the thinned units to 22% to 28% of pre-thinning overstory canopy cover. The untreated units and the old growth area were essentially unchanged.

**2011 – Treatment Year 2**
- Additional stands were thinned by Tulalip forestry staff, leaving islands of residual trees and site with < 30% canopy cover.
- Brush was pulled away from live trees.
- Site was prepared for a broadcast burn. A second year of monitoring measurements were collected. There is increased huckleberry plant cover, but treated sites do not differ statistically from untreated sites in berry production.

The project goal is to increase fruit production in target huckleberry fields. These fields have been producing substantial huckleberry fruit since the mature forest was harvested in the area in the 1980’s but fruit production is now declining at the same time conifer species have become established in the fields and have begun to overgrow the huckleberry plants. Based on the hypothesis that huckleberry fruit production will increase if conifer species competing for light and soil resources are removed, the goal is to reduce forest overstory cover by approximately 70% in one-half of the huckleberry release area and to monitor the project in such a way as to determine if forest removal had the desired effect. The study plans to contrast huckleberry fruit production in areas where forest overstory is removed versus areas where forest overstory is not removed.

* Jason Gobin, The Tulalip Tribes’ Forestry Manager, Russel Moses, Tulalip Tribes’ Forestry, and Phyllis Reed, Wildlife Biologist/Environmental Coordinator, USFS, were lead persons in project planning, but many additional persons from the Tulalip Tribes, including their forestry crew and youth were critical to the successful site treatment in planning, thinning, brush pulling and chipping activities.
* There was also the assistance of the USFS (Mt. Baker-Snoqualmie N. F.) Fire staff and Initial Attack crew in preparation of the burn plan and site for the proposed broadcast burn.
* Monitoring design and implementation included efforts from Dr. Ralph Riley, Western Washington adjunct faculty and Hallie Adams, Western Washington University student.
* Numerous others supported the effort through their encouragement and knowledge.