

Background

Extensive old-growth timber harvest occurred on Prince of Wales Island from 1950 – 2000. Over 240,000 acres of habitat are currently in a stem exclusion condition. During the stem exclusion phase of stand development, stand structure becomes extremely simplified with only a single canopy layer as opposed to the multi-canopy layer of the original old-growth forest. Understory plant diversity also becomes simplified, and biomass production declines significantly. In Southeast Alaska, the stem exclusion condition, and its associated impacts to wildlife, are expected to persist for 100-150 years after harvest. These impacts are further exacerbated by the location and timing of past harvest. Much of the harvest took place in valley bottoms important for winter habitat, and in large polygons that span entire watersheds. Although the initial harvest of timber releases a flush of deer forage, this benefit is short-lived. Past harvest has reduced forage production in valley bottom winter ranges, and may have disrupted travel corridor between watersheds, winter ranges, and winter beach refugias. The deer population is expected to decline as a result of these habitat changes. Young growth management can help restore natural landscape function by increasing forage production, improving snow-shedding capabilities, and improving feeding and nesting conditions for many avian species. The thinning is taking place in beach buffers, old growth reserves and various high priority low elevation-south facing winter range sites across the north end of Prince of Wales.



Girdling & gap creation to create deer forage

Outcomes

A 5-year vegetation management plan that prioritized treatment locations and objectives with emphasis on deer winter range was completed in 2005. Most of the high priority sites identified by that effort have been treated. A current and complementary effort focuses on vegetation planning efforts on the most heavily hunted watersheds on Prince of Wales, and develops treatment approaches that improve short-mid term forage conditions for deer in timber production areas. About 300 acres of high priority wildlife habitat are treated annually on Prince of Wales. Treatment methods range from even spaced thinning with 14-16' spacing, to gap creation, girdling, and designation of leave strips within thinned stands to provide for wildlife mobility through the stands.

Successes Gap creation may be the most effective means of increasing forage production in a cost efficient manner. However, there are two significant problems we face: some treatment sites regenerate to salmonberry or hemlock rather than forage species, and slash depths can act as a barrier to deer mobility for several years depending on snowfall accumulation.

Timeline Ongoing

Future Work Slash depth monitoring is conducted annually to track the impacts of thinning on wildlife movement. Artificial gaps created over 20 years ago are being re-measured to track long-term forage production. A retrospective review of all 2nd growth treatments on the Thorne Bay District is underway. This information will be used to help monitor the long-term effectiveness of the program and adapt treatment methods to meet specific habitat objectives.

Details Project coordinator: USFS; Funding: USFS Wildlife and Watershed funds; Business contractors: A variety of small, family owned businesses, some from the NW and six from Prince of Wales.