

THE RESPROUTING RESPONSE OF INDIVIDUAL NINEBARK
SHRUBS TO HEATING FROM HIGH, MEDIUM AND LOW SEVERITY BURN,
AND CLIPPING TREATMENTS

A thesis

Presented in Partial Fulfillment of the Requirements for the

Degree of Master of Science

With a

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By

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ABSTRACT

Sixty shrubs at two sites on the Douglas-fir/ninebark (Pseudotsuga menziesii/Physocarpus Malvaceus) habitat type were randomly assigned to high, medium, or low severity burn, or clipping treatments. Treatments were applied in April and May 1990 and the resprouting response of the shrubs was recorded throughout the growing season. Total twig extension and dry weight were measured at the onset of dormancy. Time-temperature curves were developed from temperature measurements recorded during the burn treatments to compare the effects of the three burn severities at 2-, 5-, and 7-cm depths below the soil surface. There was a significant difference in area under the time-temperature curve between high and low severity burns ($p < .0022$). No differences in the biomass of the regrowth were found between the four treatments ($p < .3840$). Timing of regrowth (height and number of sprouts) did not differ between treatments.

Study Site:

Site one was located on the University of Idaho Experimental Forest, the site was on a northwesterly aspects on gentle slopes (5-20%) at an elevation of 2600-2900 feet. Soil on site one was andic fragiochrepts. Average annual precipitation ranged from 24-26 inches. The basal area for the 8-15" DBH ponderosa pine overstory was 70 ft² per acre at site one, with an average age of 46 years. The canopy ranged from 25-40%(ocular estimate). The site is located 2 miles north of Troy.????????????????



Location of Complete Research:

Author & Title: **Lea, Siw Marie,**
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Other Sources: