

SITE PREPARATION

Much of the information contained in this handout is from the 'Guide to Reforestation in Oregon' by Robin Rose and Diane Haase.

Decide How to Prepare the Site

Site preparation is nothing more than creating the best growing environment for your tree seedlings at the time of planting. Logging slash, weeds, and compacted areas can create unfavorable conditions for establishment of seedlings. Typically, timber harvesting (clear cutting, small patch cuts and thinning) leaves residual logging debris (slash) lying on your harvest site. The slash can restrict access for planting and other activities as well as pose a fire hazard. New openings encourage rapid growth of many herbaceous plants and shrubs that will compete with tree seedlings for moisture, nutrients, and light. The best time to prepare your site to enhance seedling survival and vigorous growth is immediately after harvest and before planting.

Common Choices for Site Preparation

Depending on your goals, finances, and site conditions, you may wish to:

- 1) Clear the land with machinery (mechanical), placing debris in piles
- 2) Clear the land by hand (manual), piling debris or cutting it and leaving it lie (slashing)
- 3) Clear the land with aerial or ground-based herbicide applications (chemical)
- 4) Clear the land with fire (slash or pile burning)

There are also many combinations of choices, and it is wise to seek professional advice, especially if the land is steep or riparian areas might be impacted. Some choices, such as use of heavy equipment like bulldozers, may be expensive. Steep slopes may preclude operation of heavy equipment, or the presence of tall trees may make aerial operations difficult. Conversion of grass or pasturelands to a forest may require disking or ripping with a subsoiling tool. Heavy grass or sod mats may require burning beforehand to ease the tilling process. In developing your site preparation plan, consider the following:

- 1) Before harvesting, identify who is responsible (the logger or landowner) for site preparation, seedling purchase, and planting. Include this information in your logging agreement.
- 2) Before harvesting, consider what type of vegetation is likely to appear after the land is cleared.
- 3) Do only the minimum amount of site preparation necessary for replanting to reduce fire hazards, save money, and reduce disturbance to the site.
- 4) After harvest, identify the competing vegetation on the site and determine the correct vegetation control method if one is required.

Mechanical

If using mechanical site preparation minimize soil disturbance and compaction, for instance by using an excavator, if possible. If you use a bulldozer, be sure to use a brush blade. To reduce compaction and displacement, pile brush when soils are frozen or soil moisture is low. Avoid creating ruts that can channel surface water to streams, wetlands or other sensitive resources. Do not use heavy equipment when soils are saturated or damp enough to be compacted easily.

Chemical

If you plan to use herbicides for site preparation, refer to WA Forest Practices Rules for application of chemicals. Determine whether the terrain is suitable for aerial or ground equipment. If there are unwanted scattered hardwoods present, treat them individually by injection (hack and squirt) or backpack sprayer (basal or thin-line).

- Refer to Pacific Northwest Weed Management Handbook for chemical recommendations - <http://pnwhandbooks.org/weed/>

Burning

If you plan to use controlled burning as a site preparation technique, contact WA Department of Natural Resources for fire permit requirements.

- For more information go to- <http://www.dnr.wa.gov/programs-and-services/wildfire/outdoor-burning/burn-permits>

Slash Abatement – Landowner Responsibilities

See http://file.dnr.wa.gov/publications/rp_burn_forest_fire_protection_book.pdf for complete information on WA Forest Fire Protection laws and requirements.