



Herbicide Use in Forestry

Forest Fact Sheet

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What are “herbicides”?

Herbicides are a class of pesticides used to control unwanted plants. Herbicides are used in agriculture, residential and urban areas, forestry, industrial sites, railroads, and other settings.

How are herbicides used in forestry?

In many cases, vegetation that competes with tree seedlings for water, nutrients and light is actively managed to meet reforestation goals. Herbicides are used to prepare a reforestation unit for tree planting and again to release tree seedlings from competition. Some landowners consider herbicides the most cost-effective means to achieve reforestation goals while other landowners meet their goals without using herbicides. Other integrated pest management tools for controlling unwanted vegetation include cutting brush by hand or with power tools, grubbing/removing sod around individual trees, mowing/mulching around individual trees, and distributing biological control agents that attack specific weed species. Regardless of the tactic employed, Oregon’s Forest Practices Act (FPA) outlines reforestation standards that provide tree seedlings with ‘free-to-grow’ status within six years following timber harvest.

Herbicides are also used by many forest landowners to control damaging, exotic invasive plants, which can overtake roads, streams and wildlife areas. Invasive noxious weeds, such as Scotch broom, Himalayan blackberry and Japanese knotweed, clog forest roads and riparian areas, raising concerns regarding fire protection and wildlife habitat. Controlling the spread of “Class A” noxious weeds is required by the Oregon Department of Agriculture.

How often are herbicides used in forestry?

Forest landowners are responsible for only four percent of all pesticides (including herbicides), by weight, used every year in Oregon. Within the first few years of a timber rotation in a managed western Oregon Douglas-fir/hemlock forest, herbicides are typically applied 1-3 times during site preparation and competitive release applications. Because of different management methods on the slower-growing forests in eastern Oregon, herbicides are used much less frequently than western or southern Oregon.

What laws regulate forest herbicide use?

All pesticides used in the United States must be registered with the U.S. Environmental Protection Agency (EPA) and must carry federally approved labels describing permitted uses and appropriate protection measures. To be registered, pesticides must be tested for effects on humans and the environment. In Oregon, pesticide sellers and applicators must also comply with the state's Pesticide Control law (Oregon Revised Statute Chapter 634) which requires state product registration and applicator licensing, and prohibits faulty, careless or negligent applications.

Users of pesticides on forest land must also follow Oregon’s FPA, administered by the Oregon Department of Forestry (ODF). The FPA requires operators to protect human health & safety, soil, air, fish, wildlife, and water quality through measures that include:

- Providing a minimum buffer of 60 feet around schools and dwellings during aerial pesticide applications
- Preventing leaks and spills
- Prohibiting aerial herbicide applications within 60 feet of fish-use or drinking water streams,

and prohibiting ground-based applications within 10 feet of those streams

- Leaving and protecting trees and plants along streams following logging

ODF Stewardship Foresters work with landowners, loggers, and pesticide applicators to help them comply with forest practice rules. To find your local Stewardship Forester, please visit

<http://www.oregon.gov/ODF/Working/Pages/FindAForester.aspx>

Measures to protect water quality

The Board of Forestry and ODF have worked with Oregon State University and many other federal, state and local partners to monitor water quality and stream health during reforestation practices. Herbicides, sediment and temperature have been studied in watersheds downstream from timber harvesting. A 2012 study in the McKenzie River Basin concluded that forestry pesticides were rarely detected, and when present, were not at levels that would be harmful to human health. A similar two-year study conducted by Oregon Department of Environmental Quality in the Siuslaw watershed and north coast region failed to find pesticide residue at levels that would be a risk to the environment or public health. ODF staff in the Private Forests Division continue to monitor stream health as it pertains to reforestation laws.

Requirements to notify ODF prior to applying pesticides

Before applying herbicides on forestland, the chemical applicator must file a notification of operations with ODF that describes the planned application. The notification must be filed at least 15 days prior to beginning the operation. The ODF *Forest Activity Electronic Reporting and Notification System* (FERNS) is an internet-based system that allows users to submit notifications. Notifications are required for herbicide applications where the desired outcome is forest management, but they are not required for vegetation management around households and personal property. To file a notification visit the FERNS website <https://ferns.odf.state.or.us/E-Notification> or contact your local ODF Stewardship Forester: <http://www.oregon.gov/ODF/Working/Pages/FindAForester.aspx>. For more information, visit <http://www.oregon.gov/ODF/Working/Pages/ENotification.aspx>

How can I get information on planned herbicide applications?

The E-Notification system (FERNS) maintains the database of the information contained in each submitted notification. To allow easier access to this information, ODF is developing a web-based subscription service that will provide notification and information of upcoming forest operations to registered users. More information on the E-Notification system and the *upcoming* subscriptions service is available at

<http://www.oregon.gov/ODF/working/pages/ENotification.aspx>.

What if I think a violation of the law has occurred?

If you think a violation of the ODF FPA laws has occurred, please contact your local ODF office: www.oregon.gov/ODF/aboutODF/Pages/MapOffices.aspx. ODF staff will investigate your report and provide information back to you on their findings.

What if there is a pesticide spill?

If you have an immediate emergency please call 911. Under rules administered by the Departments of Forestry and Environmental Quality (DEQ), if a spill occurs on forestland, those responsible are required to report the incident. To report a pesticide spill call the Oregon Emergency Response System (1-800-452-0311) or the National Response System (1-800-424-8802) and contact your local Stewardship Forester.

For additional information:

- Oregon Department of Agriculture (Oregon's lead agency for pesticide use), <http://www.oregon.gov/ODA/PEST/www.oregon.gov/ODA/PEST/>
- Pesticide Analytical and Response Center, <http://www.oregon.gov/ODA/PEST/pare.shtml> www.oregon.gov/ODA/PEST/pare.shtml
- US Environmental Protection Agency, <http://www.epa.gov/pesticides/>
- Oregon Department of Environmental Quality, <http://www.oregon.gov/DEQ/www.oregon.gov/DEQ/>
- Oregon Department of Forestry Forest Health Unit <http://www.oregon.gov/ODF/ForestBenefits/Pages/ForestHealth.aspx>
- Oregon Department of Agriculture Noxious Weed Program, <http://www.oregon.gov/ODA/programs/Weeds/Pages/Default.aspx>