



# Poison oak

**Description:**

Poison oak (*Toxicodendron diversilobum*) is a woody plant that is native to North America and is abundant west of the Cascade and Sierra Mountains. It can be found in diverse environments; open areas as well as forested areas. Poison oak tends to grow as a shrub 3-10 feet tall in open areas or a woody vine in shaded areas. Vines will develop rootlets (short woody hairs) that will enable the plant to climb up and attach itself to trees, fences, etc. Initially plants grow from seeds but extend their territory through a lateral root system that produces shoots that grow into new plants.

Poison oak produces small pale-green flowers that emerge from slender stalks at the base of the leaves. Flowers produce small, white, pumpkin-shaped fruit in the late summer to early fall. The fruit is soft with deep grooves (resin canals) and is surrounded by a papery covering. Within the fruit is a stony seed.



Poison oak is most identifiable by its leaf arrangement and shape. Leaves are produced in groups of three leaflets from a common stem (occasionally leaflets are in groups of five, seven or nine) and are about 1 – 4 inches long. Two of the leaves emerge opposite from each other with the third continuing out from the stem between them. Often, the two bottom leaves are less symmetrical than the third and tend to be more deeply lobed on the side closest to the stem (furthest away from the third leaf). However, poison oak leaves can look very different from plant to plant. Some leaves have softly lobed edges while others are more jagged. Leaves can be either smooth, have a blistered appearance, dull, glossy, or have fine hairs. Young leaves tend to emerge shiny green or red with green, turning a glossy green in summer and orange, red, and brown in the fall. Vines and shrubs both lose their leaves each fall.

**Impacts:**

Poison oak produces an oil that can be found anywhere along the stem, roots, and leaves that can cause severe allergic skin reactions. The oil can be transferred to the skin directly from the plant or from objects that have contacted the plant; like clothing, tools, and pets. Severe reactions have also occurred from people inhaling the oil within the smoke from burning poison oak.

**Control Options:**

Integrated pest management emphasizes manual, cultural, and biological techniques to keep pests and vegetation problems low enough to prevent damage. When chemical controls are necessary, the least toxic product is recommended only when no other control methods are effective or practical.

**► Cultural / Habitat**

Maintain a consistent ground cover to provide constant competition for poison oak and it will struggle to get established. Re-plant any area that has had poison oak removed.

**► Manual / Mechanical**

Poison oak can be effectively removed manually with hand tools or mechanically (backhoe, bulldozer, etc.). However, mechanical removal alone will often leave broken roots in the ground that can re-sprout. And, extreme care should be taken to not have any skin contact with anything that has touched plant parts (tools, gloves, clothing, tarps, anything). Wash all clothing (even shoes) and tools after disposing of plant parts.

Mowing or repeated cutting of poison oak is not very effective unless it is performed more than four times in the growing season and even then may need multiple years to prevent root sprouts.

**► Biological**

Maintain a consistent ground cover to provide constant competition for poison oak and it will struggle to get established. Re-plant any area that has had Poison oak removed.

**Do not burn poison oak!**



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► **Chemical**

**Glyphosate** is the active ingredient in many herbicides and is very effective in controlling poison oak. Because glyphosate is a systemic herbicide, it is absorbed and circulated to all plant parts and prevents the roots from producing new shoots. A 2% concentration of glyphosate will be effective, lower concentrations may not be effective. Glyphosate products are non-selective and will likely kill or cause chemical injury to any plant that is sprayed – shield or cover neighboring desirable plants to minimize the chance of unwanted injury. Thurston County rates glyphosate products high in hazard for carcinogenic potential. The risk from spot spraying poison oak is considered low provided that the applicator wears chemically resistant gloves, pants, and a long sleeved shirt.

An area that has had mature plant control will likely require follow-up control of seedlings, either by physical removal or further chemical control. Also, remember to re-plant the area with desirable native plants to prevent establishment of another unwanted species.

**Timing:**

Manual removal of plants and root systems is easiest when the ground is very wet (late fall through early spring). Seedling control is best accomplished before roots get established in early summer. Chemical control of mature plants is effective late in the season when the plant has produced fruit but the leaves are still green (prior to fall leaf colors).

**Pollinator Protection:**

To minimize negative impacts to bees and other pollinators, treatment prior to blooming is recommended. Removal of flowers before treating can be an option. If treatment must occur during blooming period, try to spray early or late in the day or on cloudy cool days.

**READ AND FOLLOW ALL PESTICIDE LABEL DIRECTIONS AND RESTRICTIONS.**

Use of brand names is not an endorsement and is for reference only; other formulations of the same herbicides may be available under other names. Information provided is current as of the date of the fact sheet. Pesticide product registration is renewed annually and product names and formulations may vary from year to year.



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