

Woody Weed Management

Invasive weeds, woody brush, and seedling trees in landscapes often present management problems. Gardeners encounter these when clearing land for cultivation or when maintaining existing landscapes, especially those adjacent to uncleared properties.

Host/site

Any disturbed site providing a bit of open ground with sufficient light for seed germination can potentially become invaded by woody weeds. Forest edges, pastures, and road cuts as well as gardens offer hospitable conditions for woody weeds. They shade and crowd out desirable plantings.

Identification/appearance

Woody weeds are perennials, with root systems that store food reserves. They also form trunk and branch structures that may lose leaves in winter but persist to grow again the following season, becoming larger with each season. Common ones difficult to handle in the maritime Puget Sound area include Himalayan blackberries (*Rubus procerus*), Scot's broom (*Cytisus scoparius*), gorse (*Ulex europaeus*), poison oak (*Rhus diversiloba*) and seedling trees from vigorous seed producers such as red alder (*Alnus rubra*) and big-leaf maple (*Acer macrophyllum*). Many of these have escaped into landscapes after being introduced to the Northwest as potential ornamental plants; some, like English ivy (*Hedera helix*) may continue to be sold in nurseries despite their invasive character. Get specific identification of the weeds when researching control options.

Life cycle

Seedling woody weeds generally sprout in spring and early summer, and grow vigorously until cold weather. Woody weeds such as Himalayan blackberry that also spread by tip rooting will root through cool weather as well as warm.



Natural enemies

Insects, in general, don't contribute much control of woody weeds. Some natural conditions such as shade, competition from other plants, and lack of sufficient water for germination and growth will restrict woody weeds.



Top: Close-up of Weed Wrench, Barry Meyers-Rice/The Nature Conservancy

Bottom: Stalking and pulling the wild Scots broom, King County Noxious Weed Control Program

Monitoring

The longer woody weeds inhabit a landscape the more difficult they are to control. Look for seedlings in early spring and summer; larger woody weeds will produce masses of from 1 to 20 feet in height that are easy to spot. Make several observations per season to determine how fast a plant is spreading.

Action Threshold

Use of the landscape dictates how woody weeds must be managed. Woody weeds can crowd out and kill desirable plants. Aesthetic tolerance in a landscape will also affect action choices. A "wilder" area may require mowing but no further action. Red alder and big-leaf maple are native trees that can be useful plants in some situa-

tions but are inappropriate in others (Big-leaf maple is prohibited as a new street tree planting in Seattle because they break badly in storms).

Note that weeds such as Scot's broom and gorse that are classified as noxious by the state or King County must be controlled or eradicated when identified. Check with the King County Noxious Weed Control Program (206-296-0290) if you have questions or need a weed list. A current noxious weed list with some photos is available on the Internet at <http://splash.metrokc.gov/wlr/lands/weeds.htm>. Listing as a noxious weed requires control but does not mean that control must be chemical.

(continued/over)



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Cultural/physical controls

Perennial woody weeds are easiest to control in the seedling stage, when they can be managed without chemicals. Cultivating or hoeing in landscapes will manage woody perennial seedlings in their first growing season; when larger, they cannot be controlled by hoeing. Pruning will often take down shrubby growth. Digging or grubbing out woody weeds using a tool such as a mattock can often remove sufficient root that the plant stops growing. Another useful hand tool is the “weed wrench,” which levers out small trees or bushes such as Scot’s broom up to 3 inches in trunk diameter (see photos).

Mowing can keep woody weeds from developing along roadsides and in pastures, and regular, frequent mowing will help to reduce seed reservoirs. A machine nicknamed “brush hog” cuts out tree seedlings and larger bushes, chopping them into mulch as it cuts. Mulching doesn’t eliminate woody weeds but will make seedlings easier to spot.

Landscape plantings will shade out woody weed seedlings as the desirable plantings mature. This long term strategy should be integrated with short term control methods.

Mowing or weed-whacking blackberry repeatedly during the growing season keeps it confined in size and weakens it so that it is susceptible to chemical control in the fall (see below).

Chemical Controls

Herbicides are the last resort but may be appropriate in some situations. However, an ongoing need for herbicides year after year indi-

cates a design problem with the landscape that should be addressed before continuing to rely on chemical controls.

Many different herbicides exist for managing woody weeds, but careful selection is essential to minimize health and water-quality hazards. When possible, use wipe-on applications to reduce the amount of chemical required and minimize the possibility of drift and runoff.

Identify the weed first, since not all chemicals work against all weeds. As shown in WSU Extension Bulletin EB1551, glyphosate gives equal or better control of many weeds (e.g. blackberry, alder, Scot’s broom, poison oak, and willow) than other herbicides that may be more toxic and more prone to movement in soil.

Plan chemical application to coincide with a vulnerable stage in the plant’s life cycle. Systemic foliar applications such as glyphosate work poorly when plants are under water stress, or when they are dormant. Full-grown woody weeds such as Himalayan blackberry respond to wick-applied glyphosate treatments in fall when sugars are being translocated to root systems for winter storage and herbicides are also carried down to the roots.

References

Hortsense: <http://pep.wsu.edu/hortsense>

Howard, Stott and Parker, Robert; *Chemical Control for Woody Plants, Stumps, and Trees EB 1551*, Cooperative Extension Washington State University. Describes specific methods of applying herbicides to trees with diameters over 5 inches.
