



THURSTON COUNTY NOXIOUS WEEDS FACT SHEET

Gorse & Brooms

(*Ulex europaeus*)
(*Cytisus scoparius*)

Description:

Gorse is a spiny evergreen shrub, dense and stiff, forming impenetrable thickets. It's erect angular stems have spreading branches ending in thorns. Green leaves take the form of branching spines. Flowers are yellow and shaped like pea blossoms, clustered near the ends of the branches. Fruit pods (legumes) resemble pea pods that burst expelling seeds. Gorse resembles Scotch broom. Control of gorse is difficult due to its thick stands, and its production of large amounts of seed. Seeds are reported to stay viable in the soil for 40 years or more.



Gorse



Scotch broom

Scotch broom is a perennial evergreen shrub. It has stiff angled dark green broom like branches. Many branches are leafless or have few leaves, the leaves are three parted. Bright yellow flowers are about 3/4 inch long, shaped like pea flowers and bloom from April to June. Black fruit pods (legumes) are flat with hairs on the margins only. Each contains several seeds. Viable seeds can last for 60 years in the soil.

Spanish broom is a perennial evergreen shrub with erect, bright green stems that are rounded and mainly leafless. The stems branch off at the top ending with flowering clusters on leafless racemes. The leaves are simple and one parted. The flowers are fragrant, bright yellow and pea shaped.

Impacts:

Vigorous stands of gorse grow outward, crowding out all other vegetation. It forms a center of dry dead vegetation. This, in combination with the oil content of the plant, presents a major fire hazard. In 1936, the town of Bandon, Oregon, was burned to the ground; 14 people died and only 16 buildings remained unburned. The disaster was fueled by extensive infestations of gorse.

Scotch broom is widespread in Thurston County inhabiting most open areas, especially areas with recent soil disturbance. Scotch broom displaces native and beneficial plants causing considerable loss of grassland and open forest habitat. Seeds and other plant parts are toxic to humans, horses and livestock. Scotch broom is difficult to eradicate due to substantial and long lived seed bank. In year 2000, the Oregon Department of agriculture estimated the cost of Scotch broom infestations to the state of Oregon at 47 million dollars.



Spanish broom

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Control Options:

Thurston County's Integrated Pest Management emphasizes cultural, biological, and manual control methods to keep pests and vegetation problems low enough to prevent damage. The goal of Thurston County's Integrated Pest Management is to minimize the use of pesticides by utilizing and providing information about the most effective control options that are available and practical.

► Manual Techniques

For small sites with few plants, dig up plants and remove as much root as possible so the plants will not re-sprout. This method can be highly labor intensive and to be fully effective all mature plants in the site need to be pulled so that no new seeds are produced. Sites should be monitored for several years because of the large seed bank.

► Mechanical Control

Mechanical control methods can be used on larger infestations with either manually operated brush cutting tools or tractor mounted mowers. Scotch Broom should be cut during the draught stress portions of the year July through September. Up to 80% mortality will occur if cut during this time frame. Cutting in the spring and early summer achieves virtually no control although it may prevent some seed production. Mechanical control techniques alone are not effective on gorse plants as the plants simply re-grow at all times of the year.

► Biological

A seed weevil, and a seed beetle have both been introduced to Thurston County to reduce the populations of Scotch broom in the long term. Both agents are distributed throughout Thurston County.

► Chemical

Contact herbicides kill the plant tissue it touches, and systemic herbicides are taken into the plant and transported throughout the plant to kill all the tissue.

Glyphosate is an active ingredient in many systemic herbicide products that are effective in the control of gorse/brooms. Application methods vary for the type and size of the infestation; foliar applications (spraying leaves and stems) are recommended for large ground infestations, cut stem applications (applying product to cut stems after removing a section) work when upper portions of plants are removed.

Timing:

The best chemical control is achieved when temperatures are above 50° F for several days. Shielding or covering neighboring plants is always a good idea to protect them from herbicidal injury. Spot applications with glyphosate products are effective. Spot application means the herbicide is applied only to the plants and not on the surrounding plants or soil. Spray each plant thoroughly on the stems and leaves enough to be wet but not dripping.

- Remove domestic livestock before application and wait 14 days after spot application before grazing livestock or harvesting. Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours. Keep people and pets off treated areas until spray solution has dried.

Only products with concentrated formulations of glyphosate (at least 40%) will be effective. Pre-mixed products do not contain enough glyphosate to be effective. Foliar applications of ROUNDUP PRO® (a 41% glyphosate product): Gorse/brooms can be controlled by using no less than 2% glyphosate.

Method	Rates, at 4 lb. per gallon A.I.	Mix RoundUp Pro®
Foliar application	2%	To 1 gallon of water add 2.66 oz.
Basal Bark application Cut stem application	50 to 100%	For more tender, greener stems, dilute 50/50 with water. For older, mature stalks, use full strength. *Treat immediately following cutting.

- Gorse/broom control has two stages. Controlling established plants first and monitoring and controlling new plants that emerge from seeds that may last more than 30 years in the soil. The most effective control program usually includes a combination of herbicides, burning, and cultivation or mowing. Establishing competitive species helps resist gorse/broom. When using herbicides it is crucial to thoroughly wet the foliage.

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Use of brand names does not imply 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.



Scotch broom



Gorse



Spanish broom



Thurston County Noxious Weeds Program
 9605 Tilley Road S
 Olympia WA 98512
 Phone: 360-786-5576
 T.D.D. 360-754-2933
www.co.thurston.wa.us/tcweeds/index.htm