THURSTON COUNTY NOXIOUS WEED FACT SHEET

EuropeanColtsfoot (Tussilago farfara)

Description:

European coltsfoot is a rhizomatous perennial that can form extensive colonies in open to shaded habitats following disturbance. It initially sends out a flowering stem with very small leaves (0.2 to 1 inch), each with a solitary yellow flowerhead. After flowering, larger basal leaves develop from the rhizomes in rosettes. The leaves are heart-shaped, shallow lobed, or angled with irregular small-toothed margins with a white, wooly underside.

Impacts:

European coltsfoot was listed as a Class B noxious weed in 2018 by the Washington State Noxious Weed Control Board and designated for control in all of Thurston County. This designation requires control at any level of infestation.

Although European Coltsfoot is an abundant seed producer,



seedling vigor is low and seeds are short-lived. However, the rhizomes are very hardy and spread readily during soil disturbance or erosion. It causes economic loss to agriculture and can displace native species. European Coltsfoot also contains low levels of pyrrolizidine alkaloids, and while limited use in herbal remedies may not have a significant impact on human health, uncontrolled consumption by livestock may contribute to liver damage in livestock.

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 strategy of Thurston County's IPM policy is to minimize the use of pesticides.

► Cultural / Habitat

The most effective control of European coltsfoot is prevention. Wherever possible, prevent plants from going to seed. When an area is known to be infested, it's important to minimize breaking and spreading the rhizomes. It is also important to colonize disturbed and bare areas with native vegetation to prevent es-

tablishment of European coltsfoot. To prevent esplants from spreading from known infestations, carefully clean vehicles, boots, clothing, and pets after visiting infested areas.

Manual / Mechanical

Small, isolated infestations (5 or 6 plants) can be dug out if the soil is loose or sandy and plants are not well established, but manual control is likely to be ineffective due to the deep, brittle rhizomes. Also, any remaining roots can re-sprout after a long, dormant period. For larger infestations (over 6 plants) chemical control should be used.

► Biological

There are no known bio-controls available for European Coltsfoot.





Chemical

Spot spraying with *triclopyr* (example: Ortho Weed B Gon "Chickweed, Clover and Oxalis Killer") is effective in controlling European Coltsfoot. Triclopyr is a selective herbicide that will not kill grass when used according to label instructions, but may damage or kill other broadleaf plants. Triclopyr products are rated as "moderate in hazard" by Thurston County's pesticide review process because broadcast applications of triclopyr at greater than 2 lbs of active ingredient per acre can result in contaminating the food supply for birds and small animals. Since this prescription recommends only spraying individual plants or small patches, the risk to birds and small animals is greatly reduced.

Imazapyr (example: Polaris[®]) is also effective in controlling infestations of European Coltsfoot. Imazapyr is a nonselective herbicide and may damage or kill any other plants that it contacts, including grass. It may also leave persistent bare ground in the treatment area. This can be minimized by using only as directed, spraying at the recommended strength and no more than necessary to wet the surface of the leaves and stems. Products containing the active ingredient imazapyr are considered "moderate in hazard" by Thurston County's pesticide review process for the potential for chemical mobility and persistence.

For selective control of European Coltsfoot in agricultural settings (pastures, hayfields, etc.): an herbicide containing the active ingredient *aminopyralid* (example: MilestoneTM, Milestone VMTM, etc.) may be a preferred choice. Aminopyralid products will not harm grass and can be used around livestock (provided all label precautions are followed). Do not use plant material or hay from treated areas for mulch. Likewise, do not use manure from animals that have grazed or eaten hay from treated areas.

Aminopyralid is currently sold in farm supply stores as an agricultural herbicide that is only to be used in areas listed on the label and *may not be used in urban lawns or landscapes.* Aminopyralid products are considered "moderate in hazard" by Thurston County's review process for the potential for chemical mobility and persistence.

Foliar applications:

- Using a spot application, spray plants thoroughly on the foliage, enough to be wet but not to the point of dripping. Spot application means the herbicide is applied only to the target plants, and not on the surrounding plants or soil.
- Add methylated seed oil or a non-ionic surfactant to the tank mix to allow the herbicide to penetrate the hairy surface
 of the leaves.
- Keep people and pets off treated areas until spray solution has dried.

Product	Product Rates	Mix
Triclopyr Ortho® Weed B Gon "Chickweed, Clover & Oxalis Killer"	5 oz. (10 Tablespoons) per 1000 ft²	To determine the amount of mix needed, first measure the area to be treated, then measure the amount of plain water needed to spray the area using a backpack or tank sprayer. Add 1/2 ounce (one Tablespoon) of product to enough water for each 100 sq. feet of area that needs to be treated. Be sure to allow the area to dry thoroughly before treatment. Spray plants until they are wet but not dripping.
Aminopyralid Milestone ®	1 tsp per 1000 ft²	To treat a 1,000 sq. ft. area: Using a 2 to 4 gallon backpack or tank sprayer, add half of the water needed to cover all plants with one teaspoon Milestone [™] , agitate, then add water to reach desired amount (0.5 - 2.5 gal- lons total volume, depending on quantity and size of plants). Lightly spray all European Coltsfoot plants in 1,000 sq. ft. area, then continue lightly spraying the plants until the tank is empty and all plants have been thoroughly covered. The addition of a non-ionic surfactant (at least 80% active ingredient) is recommended to enhance herbicide activity.
lmazapyr : Polaris®	1%	Add 1.3 oz (2.6 Tablespoons) concentrated product per gallon of water. Add 1.28 oz. methylat- ed seed oil (3 Tablespoons) to the tank mix to allow the herbicide to penetrate the waxy coating on the leaves and stems. Spray plants until wet but not dripping.

Timing: Treatments should occur in mid to late spring when plants are actively growing and leaves have sized up. Flower heads emerge prior to leaf emergence so manual control of flower heads is recommended where possible.

Pollinator Protection: Very few pollinators will be present post blooming, but to further reduce incidental contact, try to spray early or late in the day or on cloudy, cool days when pollinators are least active.

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Obey all label precautions including site specific and safety measures. Always use personal protective equipment that includes coveralls, chemical resistant gloves, shoes plus socks, and protective eyewear. Use of brand names does not connote 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. Product names and formulations may vary from year to year.

REFERENCES:

Innes, Robin J. 2011. Tussilago farfara. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: https://www.fs.fed.us/database/feis/plants/forb/ tusfar/all.html [2020, March 26] ;_ Written Findings of the Washington State Noxious Weed Control Board. Available: nwcb.wa.gov/pdfs/ Tussilago_farfara_draft_WF.pdf



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