

Perennial sowthistle

Sonchus arvensis ssp. *arvensis*

Description:

Perennial sowthistle is a vigorous, deep-rooted perennial, spreading by seeds and creeping roots. The plant contains a bitter, milky juice. Stems branch only near the top of the plant. Leaves clasp the stem, are alternative and variable in size and shape. Flowers, stalks, and bracts are covered with gland-tipped hairs. The flowers open two to three hours after sunrise and close around noon. A plant may have 20 seed heads during the flowering season, which lasts from June to September, but usually only a few flower at the same time. The plant may produce nearly 10,000 seeds per year. Usually only a few flower at the same time.



Impacts:

Perennial sowthistle is commonly found in cultivated fields, waste areas, meadows, woods, lawns, road-sides, and ditches. Compared to other sowthistles found in Thurston County, this one seems to spread primarily through its root system, which creates clones of perennial sowthistle.

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 pesticide use policy 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

Evaluations of perennial sowthistle infestation sites over three seasons, indicated a 26.3 percent effective control rate using manual control.

► Chemical

There are two types of herbicides that can be used to control Perennial sowthistle; selective and non-selective. Selective herbicides kill or inhibit growth of certain types of plants (like broad leaf plants) and do not kill other types (like grasses). Non-selective chemicals kill nearly all types of plants. Glyphosate is a non-selective active ingredient found in a number of products (like RoundUp Pro®, with 41% glyphosate) that are effective in controlling thistle. Glyphosate works well because it is a systemic herbicide that is taken in through the stems and leaves and distributed to kill all parts of the plant.

Glyphosate products can be used to treat individual plants or small patches. Glyphosate will not prevent future thistle seed germination or prevent the growth of more desirable species. Products with an initial glyphosate concentration of 40% or greater should be used to mix to a 2% product spray solution (this excludes pre-mixed/ready-to-use products).

Another effective active ingredient for Perennial sowthistle is aminopyralid. It is a selective herbicide for control of broadleaf weeds and is especially effective at targeting plants in the thistle (asteraceae) family. It can, however, cause significant damage to other broadleaf plants, including desirable forbs such as clover. Aminopyralid products are currently only sold in agricultural herbicides (like Milestone). Agricultural herbicides are available in farm supply stores, and are only to be used on areas listed on the label. One quart of Milestone can control 18 acres of thistle.

Timing:

Glyphosate products: Apply when most plants are at or beyond the bud stage of growth. Fall treatments must be applied before a killing frost.

- 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.

Method and Herbicide	Product Rates	Mix RoundUp Pro®
RoundUp Pro® Spot/Foliar	2%	To 1 gallon of water add 2.66 oz. RoundUp Pro®, apply to foliage at or beyond bud stage.
Milestone® Spot/Foliar	1 tsp per 1000 ft ²	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 gallons total volume, depending on quantity and size of plants). Lightly spray all thistle plants in 1,000 sq. ft. area, then continue lightly spraying the thistle 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.



Aminopyralid products: Apply [aminopyralid](#) products in the spring to plants in the prebud to early bud growth stage—the goal is to insure all plants have emerged. Applications are also effective in the fall before a killing frost.

- Please read the Milestone® label for precautions. Follow all label precautions and safety measures.
- As a spot treatment only at a rate of 4 to 6 ounces (pastures section) fluid ounces per acre. Do not apply more than 7 fluid ounces per acre per year.
- Do not enter into treated areas during the restricted entry interval of 12 hours. Keep people and pets off treated areas until spray solution has dried.
- Milestone should not be applied on residential or commercial lawns or ornamental plantings. 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 within the previous 3 days.

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.



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