

Skeletonweed

Chondrilla juncea

Rush skeletonweed is a tap-rooted, perennial plant native to central Asia. This weed germinates in the fall when the rains begin, and develops one or more rosettes from buds on established roots. Leaves are lance-shaped, one-half inch wide and up to two inches long, with a reddish color near the tips during winter. When daylight increases in spring, the plant is stimulated to develop a multi-branched upright stem from the root crown. Flower production begins when stems reach maximum length in midsummer and continues until ended by frost. Rosette leaves die off during flowering, leaving a skeleton-like appearance to the plant. Flower buds, blooming flowers and mature seeds are often on the same stem at the same time. After flowers fall, new rosettes are again established, continuing the cycle.



The root system is slender and vertical, penetrating the soil to depths of eight feet or more. Roots develop laterally in the upper two feet of the soil profile. A research paper from Australia states that rush skeletonweed will sprout from root segments of any length.

Impacts:

This species tends to be very adaptable, preferring gravelly well-drained soils. The plant's extensive root system enables it to compete effectively with crops. Agricultural yields may see up to a 70 percent decrease if skeletonweed is left uncontrolled. Native plants can be displaced and wildlife forage is reduced.

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

Digging and manually removing the plants was tried when this species was first discovered in Thurston County. These have not proven effective because of the extensive root system which has the ability to regenerate from below the soil surface following removal of the above-ground portions of the plant. Using manual control, we were unable to stop the spread of rush skeletonweed, but not control the actual infestations as evidenced by a very low success rate of 12.5 percent.

► Chemical

Spot spraying an herbicide containing the active ingredient [glyphosate](#) (example: Roundup Pro®, Glyphos®, etc.) can be effective in controlling rush skeletonweed. A spot treatment is when you spray each plant enough so that they are wet, but not dripping, and not onto the surrounding soil or other vegetation.

Glyphosate is non-selective, and will injure any plants that it comes in contact with, including grass.

Currently, products containing the active ingredient glyphosate is the only herbicide for the control of Rush Skeltonweed that is considered "low in hazard" by Thurston County's pesticide review process for the potential for chemical mobility and persistence.

Only glyphosate products that have an initial concentration of 41% and are recommended for diluting to exact percentage solutions. Herbicides labeled for spot treatment generally recommend mixing the product with water to create a specified percentage solution. For example, the Roundup Pro® label recommends mixing a 1–2% solution for hand-held or spot applications for control of perennial weeds, the rate depending on size, species and conditions. Because of the extensive root system and waxy coating on the leaves and stems, the higher (2%) solution is the most appropriate. Spraying with a lower percentage solution may not kill the plants, which can contribute to herbicide resistance.

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.

Herbicide and Method	Product Rate	Mix
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 skeletonweed plants in 1,000 sq. ft. area, then continue lightly spraying the skeletonweed 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.

Foliar applications of **aminopyralid** (Milestone®) Another effective active ingredient for Rush skeletonweed is aminopyralid. It is a selective herbicide for control of broadleaf weeds and is especially effective at targeting plants in the (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 rush skeletonweed.



Timing

Glyphosate applications: Apply when most plants are at or beyond the bud stage of growth, but prior to seeding. Fall treatments must be applied before a killing frost.

Aminopyralid products: Apply 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 further precautions. Follow all label precautions and safety measures. 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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