

Perennial Pepperweed

Lepidium latifolium

Mustard Family

Class B Noxious Weed: Control Required

Identification Tips

- Multi-stemmed herbaceous perennial 1 to 5 feet tall
- Waxy leaves are bright green to gray-green and hairless with a prominent whitish midvein
- Small, dense flowers are white, with rounded clusters near ends of branches
- In summer, the entire top of plant blooms forming a bright white dome of thousands of flowers per plant
- Roots are deep and spread from a semi-woody crown

Biology

- Rosettes form first; then main flowering stem
- Flowers June to September
- Produces tiny, egg-shaped pods, each containing 2 reddish-brown seeds that remain on plant, dropping irregularly throughout winter
- In addition to spreading by seed, also has extensive, creeping root system
- Mainly propagates from root fragments; spread by floods, tides and other disturbances
- Rosettes growing in late summer/early fall may overwinter



Because of its profusion of white flowers, this weed is sometimes called tall whitetop but is much taller than whitetop and flowers later in the summer.



The waxy leaves are often slightly toothed and have prominent white veins.



Pepperweed forms dense patches, crowding out forage grasses and degrading native habitat especially in riparian areas.

Impacts

- Spreads quickly to form dense patches
- Accumulations of semi-woody stems degrade nesting habitat for wildlife
- Crowds out forage grasses in pastures and rangelands
- Reduces crop yields and pasture productivity, especially in hay meadows
- Acts as a 'salt pump' by bringing salts from deep in the soil and depositing them on the surface, further inhibiting other plants from establishing

Distribution

- Adapts to a wide range of habitats, but favors salty soils
- Found in wet areas such as coastal marshes, beaches, cultivated fields, pastures, wetlands and in open areas with disturbed soil such as logged areas, roadsides and vacant lots
- In King County, most abundant on the Duwamish River, Puget Sound beaches and on Vashon-Maury Island.

Questions?

King County Noxious Weed Control
Program Line: **206-477-9333**
www.kingcounty.gov/weeds

What You Can Do

Do your part by checking for perennial pepperweed on your property and along public beaches, waterways and wetlands. If a new infestation is spotted, please contact the King County Noxious Weed Control program. Also clean all earthmoving/tillage equipment and vehicles if used in an area where an infestation of perennial pepperweed exists or is nearby.

Control Methods

Due to its extensive root system, perennial pepperweed can be very difficult to control. For best results, a variety of control methods should be employed throughout several growing seasons. Do not allow plants to go to seed.

Manual: Very small patches and individual seedlings can be controlled by hand digging if repeated for several growing seasons to remove any new growth. Dig out as much of the roots as possible. Roots can remain dormant for several years so it is necessary to closely monitor the site to prevent future infestations. Re-seed or replant with desirable vegetation.



Seedlings and small infestations can be controlled manually.

Mechanical: Due to its brittle and extensive, deep root system, mechanical methods alone typically are not effective and may spread the weed and increase the density of the infestation. However, spring mowing with subsequent herbicide application to re-sprouting plants can be effective.

Cultural: Maintain healthy, competitive grasses in pastures by fertilizing and using proper pasture management techniques. Avoid overgrazing. Seed or plant disturbed or open areas and re-vegetate with desirable species after removing weeds.

Chemical: Only foliar application methods have proven effective. (This plant will not absorb herbicides through its roots.) Treating perennial pepperweed with herbicides is most effective when it is done at the flower bud/flowering stage. For best results, first mow pepperweed at bud stage, then treat re-growth when it reaches bud stage again.

Always use herbicides wisely. Follow label directions and only use products appropriate and legal for the site and at rates specified on the label. Some herbicides have restrictions when pastures are grazed, especially by lactating dairy animals. Addition of a suitable surfactant to the spray mix will improve control. In pastures, use selective broadleaf herbicides that won't harm grasses. Control entire infestation since roots will spread from uncontrolled areas into adjacent controlled areas.

The broadleaf herbicides chlorsulfuron (Telar) or metsulfuron (Escort) are effective when applied at bud stage and 2,4-D is somewhat effective at bud stage as well. Maintaining grass coverage will reduce re-growth of pepperweed. For non-grassy areas, imazapyr (Stalker, Arsenal) is effective when applied at bud stage and glyphosate (Round-up) is effective when applied at flower stage. For wetland or riparian areas, use aquatic formulations of imazapyr (Habitat) or glyphosate (Rodeo, Aquamaster). For more information about chemical control methods, please contact the King County Noxious Weed Control Program at 206-477-9333 or consult the PNW Weed Management Handbook (<http://pnwhandbooks.org/weed>).

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