

Perennial Pepperweed

Lepidium latifolium Mustard Family

Identification Tips

- Multi-stemmed herbaceous perennial 1-5 feet tall
- Leaves waxy, bright green to gray-green, hairless, with a prominent whitish midvein
- Flowers small, dense, white, in rounded clusters near branch ends
- In summer, the entire top of a plant blooms, forming a bright white dome of 1000's of flowers
- Roots deep, spread from a semi-woody root crown

Biology

Rosettes form first, then main flowering stem. Flowers June-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, has extensive, creeping root system. Mainly propagates via root fragments; spread by floods, tides, and other disturbances. Rosettes growing in late summer to early fall may overwinter.

Impacts

Spreads quickly to form dense patches. Accumulation of semi-woody stems degrades 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 areas such as coastal marshes, beaches, cultivated fields, pastures, and wetlands. Also grows in open areas with disturbed soil such as logged sites, roadsides, and vacant lots. In King County, most abundant on the Duwamish River, Puget Sound beaches, and on Vashon-Maury Island.

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 Noxious Weed Control Program. Clean all earthmoving/tillage equipment and vehicles used in an area with or near a perennial pepperweed infestation.

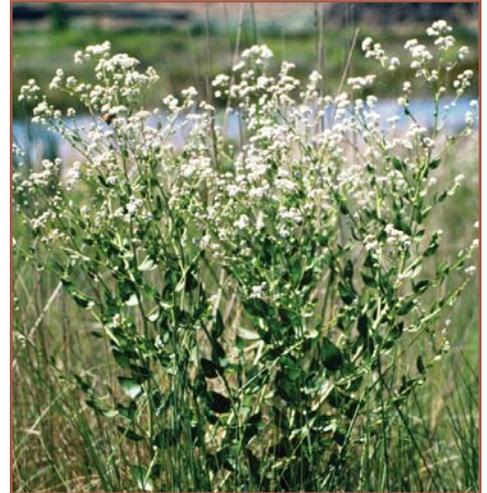
Control Methods

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

Questions?

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

**Class B Noxious Weed:
Control Required**



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



The waxy leaves are often slightly toothed and have prominent midveins.



Flowers are small, white, and dense, appearing in rounded clusters at branch ends.

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 root system as possible. Roots can remain dormant for several years, so it is necessary to closely monitor the site to prevent future infestations. Reseed or replant with desirable vegetation.

Mechanical:

Due to its brittle and deep, extensive root system, mechanical methods alone typically are not effective, and may spread and increase the density of the infestation. However, spring mowing with subsequent herbicide application to resprouting 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 revegetate 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 regrowth 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 specified rates. 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. Treat entire infestation since roots will spread from uncontrolled areas into adjacent controlled areas.

The broadleaf herbicides chlorsulfuron and metsulfuron are effective when applied at bud stage. 2,4-D is somewhat effective at bud stage as well. Maintaining grass coverage will reduce regrowth of pepperweed. For non-grassy areas, imazapyr is effective when applied at bud stage, and glyphosate is effective when applied at flower stage. For wetland or riparian areas, use aquatic formulations of imazapyr or glyphosate. Chemical control options may differ for private, commercial, and government agency users. Permit and license requirements will be different in critical areas and near water. For more information, contact the Noxious Weed Control Program.



Perennial pepperweed's brittle, extensive root system makes mechanical methods alone largely ineffective.

Could be confused with:

Puget Sound gumweed (*Grindelia integrifolia*) is a native plant that looks like and grows in similar places as perennial pepperweed.

However, at 1/2 to 2 1/2 feet tall, gumweed is usually shorter than pepperweed, and its stem leaves lack stalks. It also produces daisy-like composite yellow flowers with bracts covered in a white, sticky "gum" (bracts are leaf-like structures around the base of the flower head).



Puget Sound gumweed's stalkless stem leaves.



Puget Sound gumweed's composite yellow flowers with sticky bracts.