

STEVE'S Weed of the Month

Perennial Pepperweed

Also Known As: broadleaved peppergrass, tall whitetop, broadleaved pepperweed, tall whitetop, ironweed

Perennial Pepperweed is a Class B Noxious Weed. Class B noxious weeds are nonnative species whose distribution is limited to portions of Washington State. In some regions where a class B species is already abundant, control is decided at the local level.

Perennial Pepperweed (*Lepidium latifolium* L.), native to Eurasia, is a creeping-rooted perennial that invades a wide range of habitats, including riparian areas. The crowns of established plants become enlarged and very woody near the soil surface. The plant, with its semi-woody stems, grows about 1 to 4 feet tall, but can grow much taller. Leaves are alternate, lance-shaped, and waxy, and have smooth or toothed margins and a prominent, whitish midvein. Basal leaves have long stalks (petioles) and grow to 1 foot long, while stem leaves are smaller with smaller petioles. Abundant small, white, 4-petaled flowers are borne in dense clusters at branch tips. The fruits are small, 2-chambered pods, each containing 2 seeds. Despite its prolific seed production, the plant more commonly spreads by a creeping root system, which has buds capable of regenerating new shoots. Perennial pepperweed is able to quickly form large, dense stands that displace desirable vegetation.



Photo by: Joseph DiTomaso, University of California-Davis



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University of California-Davis



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INFESTATION



Photo by: L L Berry

Control Methods

Mechanical/Integrated: Perennial pepperweed is difficult to control because of its deep-seated rootstocks, waxy leaves, and tendency to inhabit riparian/wetland areas, and any non-chemical control method by itself will probably not be effective. Leaving even small pieces of rootstock can cause problems because perennial pepperweed can quickly regenerate from pieces as small as 1 inch. Although alone ineffective, mowing may be necessary to remove accumulations of woody stems before grazing or applying herbicides. Spring grazing or mowing followed by herbicides applied at the appropriate stage, typically flower bud stage, are effective strategies. After flowering, an alternative strategy is to mow and then apply herbicides to resprouting shoots.

Chemical: Infestations near open water must be treated carefully, following all guidelines and regulations. Although not for use near water, chlorsulfuron (Telar®) has proven most effective for single application control in rangeland, pasture, and noncrop areas. Metsulfuron (Escort®) is another sulfonyleurea compound. Both products should be applied with a nonionic surfactant. Other chemicals include 2,4-D ester or amine and imazapyr. To improve efficacy, herbicides may have to be reapplied, and revegetation of desirable species also improves control.

**More information can be found in the
PNW Weed Management Handbook**

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Biological: Biocontrol agents are not available, and prospects are not imminent because perennial pepperweed is closely related to several valuable crop species (e.g., canola, mustard, cabbage), as well as native *Lepidium* species. Native pathogens (e.g., white leaf rust) may ultimately provide a possible biocontrol option.

Questions: contact [Steve Van Vleet](#) or phone (509) 397 - 6290