



Ada County July 2011

Pest of the Month

A quick guide to identifying and controlling invasive plants and animals found in the county

PERENNIAL PEPPERWEED

Perennial pepperweed (*Lepidium latifolium*), is an aggressive weed that was introduced from southeastern Europe and Asia, and grows throughout the western United States. It can establish in a wide range of environments and is a common problem in flood plains, irrigation structures, pasture, wetlands, riparian areas, roadsides, and residential sites. Populations form dense monocultures that are easily spread by root fragments and seed. Perennial pepperweed has many common names including tall whitetop, perennial peppergrass, ironweed, perennial peppergrass, and broad-leaved pepperweed.



Quick Facts



Perennial Pepperweed is a member of the mustard and cabbage family and normally grows to between one and three feet, but may grow as tall as six feet. The plants have numerous woody stems, alternating waxy leaves and clusters of small white flowers. It produces small fruits, each containing two reddish seeds.

How To Control

Established perennial pepperweed populations are difficult to control and require multiple years of intensive management.

Prevention is the foundation of any weed management program. Perennial pepperweed root fragments or seeds have been found in straw, hay bales, mulch, and crop seed, so ensure that these items are free of weed seed and propagules before applying them to an area. If construction or soil disturbance occur in infested areas, make sure root fragments and seed are not transported to other sites. Always clean vehicles, machinery, and clothing after visiting infested areas. If livestock graze perennial pepperweed, hold animals in closely monitored paddocks for several days to allow seed to pass through their digestive system before transporting the livestock to new areas.



See other control methods on other side...

How to Control

Cultural Control

Source: University of California . Agriculture and Natural Resources

Establishing and maintaining competitive perennial vegetation can dramatically slow the introduction and spread of perennial pepperweed. Vigorous sod-forming grasses, alfalfa, or cropping systems with annual tillage help prevent perennial pepperweed introduction and establishment in agricultural areas. Closely spaced plantings of herbaceous perennials, shade trees, and/or fabric or plastic mulches can help prevent introduction in ornamentals.

Hand pulling and tillage. Seedlings are easily controlled by hand-pulling or tillage, but these techniques do not control established plants because shoots quickly resprout from vast root reserves. Root segments as small as 1 inch are capable of producing new shoots.

Mowing and burning. Mowing and burning are not effective at reducing perennial pepperweed stands, but they are helpful at removing accumulated thatch. Perennial pepperweed thatch burns best in winter or spring under dry conditions before initiation of spring growth. Mowing breaks old stems into small fragments and helps prevent shading of favorable species. Combining mowing with herbicides has been shown to be an effective control strategy. For best results, mow plants at the bolting or flower bud stage and apply herbicides to resprouting shoots once they have reached the flower bud stage.

Revegetation. Establishing desirable vegetation in disturbed areas is crucial to managing perennial pepperweed and preventing future weed problems. Because perennial pepperweed is very competitive, seed or transplant desirable vegetation after dense perennial pepperweed stands are controlled. Choose vigorous, fast-growing plant species that are adapted to the site. Perennial grasses are a good choice for natural areas and pastures. Grasses are tolerant to some selective herbicides used for perennial pepperweed control and over time form thick sod that prevent future weed establishment.

Chemical Control

Several post emergent herbicides control perennial pepperweed, but repeat applications are usually necessary for several years to treat resprouting shoots and seedlings. Extended control with herbicides is greatly enhanced by establishing competitive vegetation at the site. In areas with a dense buildup of thatch, mow or burn old shoots before applying herbicides.

Herbicide application timing is critical. Herbicides work best when applied at the flower bud stage and worst at the rosette or early bolting stage. Because plant phenology differs between location and year, regularly observe infested areas in spring and begin applying herbicides when flower buds appear. If herbicide cannot be applied at the flower bud stage, mow plants and apply the herbicide to regrowth. With seedlings, apply herbicides as soon as possible to prevent plants from producing new lateral shoots from the root. Herbicide choice depends on label restrictions, land use objectives, and cost.

Note: Chemical control of any weed can be difficult and confusing. If you are not experienced in chemical control or do not understand the product label, you should consult a licensed applicator to assist you. Inappropriate application can kill desirable vegetation, and may violate federal law.



For questions or concerns, please contact :

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