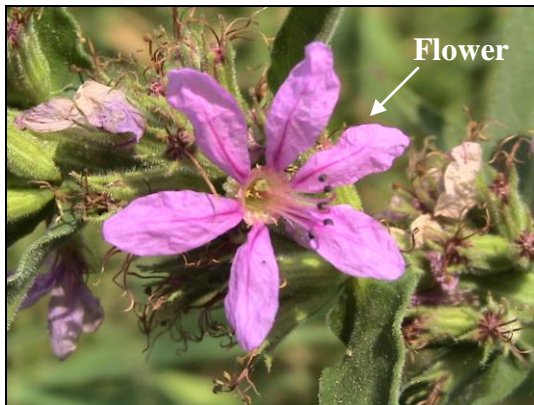


Purple Loosestrife Identification and Management

Purple loosestrife (*Lythrum salicaria*) is a non-native, tap-rooted, perennial forb. It is native to Europe and was introduced to North America as an ornamental plant for gardens and has escaped into natural areas such as streambanks and shallow ponds. Purple loosestrife reproduces primarily by seed. A single, mature plant can produce up to 3 million seeds per year. The seeds can remain viable in the soil for 5 to 20 years. Pieces of roots or stems also can produce new plants. Purple loosestrife produces multiple 4-sided stems that can grow 2 to 8 feet tall. Leaves are 2 to 5 inches long, lance-shaped and whorled on the stems. Flowers are tightly grouped in long, vertical heads; they bloom from the bottom up on heads. They are reddish-purple in color, about 1 inch long, and have 5 to 7 petals. Flowers appear from late June through September.



Purple loosestrife can be found along riverbanks, ditches, and wet meadows throughout the state. Infestations rapidly replace native vegetation, can impede water flow in canals and ditches, and have little wildlife habitat value. If purple loosestrife is left unchecked, the wetland eventually becomes a monoculture of loosestrife.

The key to effective control of purple loosestrife is early detection when infestations are small. It is fairly easy to control small numbers of loosestrife plants when the seed bank in the soil is small. Eradicating large populations is much more difficult. Biological control should primarily be considered when populations of loosestrife have become large or are inaccessible. Small loosestrife infestations should be eradicated by hand-pulling or herbicide application.

On the backside of this sheet are purple loosestrife management recommendations. If you have any questions or would like more information, please contact the Weld County Public Works Dept., Weed Division at (970) 304-6496 ext. 3770. Please visit our website www.weldweeds.org.

Recommended management methods:

Cultural/ Preventive – Prevent the establishment of new infestations by minimizing disturbance and seed dispersal.

Mechanical – Hand removal of isolated individuals can be effective on a small scale. Handpulling should be conducted prior to seed set. It is important to remove the entire rootstalk of the plant to avoid regrowth from root fragments.

Biological – Two species of beetles (*Galerucella californiensis* and *Galerucella pucilla*) are proving to be effective in the control of purple loosestrife. Insects should be used on large infestations only, and releases of at least 500 beetles per infested site are needed. Insects can be obtained at no charge from the Colorado Department of Agriculture’s Insectary. Please call 970-464-7916 or go to www.palisadeinsectary.com for more information.

Herbicides – Purple loosestrife is found in very wet soils, so great care should be used when using herbicides so as to not harm other water plants. For early-season control of seedling and regrowth plants less than 1 to 2 feet tall, use of an aquatic-labeled 2,4-D is effective. Look for seedlings in late May or early June where adult plants have grown. The herbicide Garlon 3A is effective on purple loosestrife and like 2,4-D is specific to broadleaved plants. Rodeo is effective on mature plants at the pre-flowering to post-bloom stages. Use with caution, this is a non-selective herbicide and will kill all other vegetation that is sprayed. Be sure to clip and properly dispose of flowerheads before applying Rodeo. This will assist in the prevention of seed spread.

Always read, understand, and follow herbicide label directions. The herbicide label is the LAW!

Herbicide	Rate	Application Timing/Comments
Aquatic 2,4-D Amine	1.0 to 2 qts./acre or 1.0 to 2.0 oz/gal water	Early spring – prevents seed formation only. Retreatment will be necessary. DO NOT apply when outside temperatures will exceed 85 degrees. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water.
Rodeo	1.0 to 2.0 qts./acre or 1.0 to 2.0 oz/gal water	Summer – during flowering stage. Cut and properly dispose of flowerheads before applying Rodeo. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water.



Weed crew clipping and disposing of flowerheads before applying herbicide to a mature purple loosestrife plant.