

Purple loosestrife

Colorado Dept. of
Agriculture
Conservation
Services Division
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Key ID Points

1. Showy rose-purple flowers bloom in long vertical racemes.
2. Lance-shaped leaves have smooth edges.

Purple loosestrife Identification and Management



Identification and Impacts

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. It 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 three 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 four-sided stems that can grow two to eight feet tall. Leaves are two to five inches long, lance-shaped and whorled on the stems. Flowers are tightly grouped in long, vertical heads; they bloom from the bottom up. They are reddish-purple in color, about one inch long, and have five to seven 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. Infested wetlands eventually become a monoculture of loosestrife.

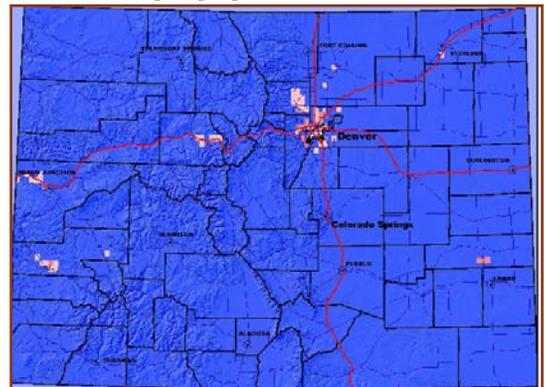
If purple loosestrife is growing in your garden, remove plants

immediately and consider a substitute. There are many planting alternatives that are better suited to Colorado and beneficial to wildlife. Alternatives include spotted gayfeather, Rocky Mountain Penstemon, beebalm, purple coneflower, and Colorado Columbine. For more information refer to Colorado Native Plant Society's website, www.conps.org.

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 low. Eradicating large populations is much more difficult. Persistent management and monitoring of site is a long-term program to ensure eradication. Small loosestrife infestations should be eradicated by hand-pulling/cutting in combination with herbicide application. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Purple loosestrife is designated as "List A" species on the Colorado Noxious Weed Act. It is required to be eradicated wherever found in the State. For more information visit www.colorado.gov/ag/csd and click on the Noxious Weed Program link or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Map of purple loosestrife infestation.



All photos © Kelly Uhing. Infestation map above, Crystal Andrews, Colorado Department of Agriculture.

Lythrum salicaria

**CULTURAL**

Prevent the establishment of new infestations by minimizing disturbance and seed dispersal.

**BIOLOGICAL**

Biocontrol agents are not included in the prescribed management plans by the State for List A Species. Eradication is the management objective of all List A's. For more information on biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916.

**MECHANICAL**

Hand removal of isolated individuals can be effective on small infestations. Hand removal should be performed prior to seed set. It is important to remove the entire rootstalk of the plant to avoid regrowth from root fragments. During the flowering stage, flowerheads must be cut and disposed of properly before a herbicide is applied. This will prevent or reduce seed production.

Integrated Weed Management:

Since purple loosestrife has been identified in Colorado, preventing the populations from spreading is important in management of the weed. Prevent new seeds from being added to the seed bank by managing purple loosestrife before it flowers or by clipping and disposing of the flowerheads prior to seed set and using herbicides to control plants.

Follow up control efforts the same growing season and for several years afterwards. Maintain a healthy cover of perennial plants.

HERBICIDES

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. Rates are approximate and based on equipment with an output of 30 gallons per acre. Please read label for exact rates. **The herbicide label is the LAW!**

HERBICIDE	RATE	APPLICATION TIMING
Triclopyr (Garlon 3A)	1-2 qts./acre or 1.3-2.5 oz/gal water	Apply in summer. If plants are flowering, cut and properly dispose of flowerheads before applying Garlon 3A. Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Glyphosate (Rodeo (aquatic safe) *nonselective, will kill all vegetation it contacts*)	1-2 qts./acre or 1.3-2.5 oz/gal water	Apply in summer during the flowering stage. Cut and properly dispose of flowerheads before applying Rodeo. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
Aquatic 2,4-D Amine	1-2 qts/acre or 1.3-2.5 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 @ 0.32oz/gal water or 1qt/100 gal water.

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