

Purple Loosestrife (*Lythrum salicaria*)



DESCRIPTION:

Purple loosestrife is an extremely aggressive invader of wetland areas displacing native vegetation and degrading wildlife habitat. This perennial was introduced to North America from Europe and Asia during the early 1800s as a contaminant of European ship ballasts and as a medicinal herb. Until recently it was propagated in the nursery trade as an ornamental. This species readily reproduces from seed and cut fragments, allowing it to quickly spread. Each plant can produce as many as 2 million seeds a season. This species is found invading areas of full sun in shallow waters, shorelines, and disturbed wet soils, stream banks, wet pastures, and roadside ditches.

Usually between 2 and 6' tall, established plants have 20 to 50 stems that are pubescent and distinctly four-sided. They may appear woody at the base of large plants. The leaves are primarily opposite or in whorls of three and lack teeth. Leaves are lanceolate and up to 4" long and 0.6" wide with and have no leaf stalk because the leaves clasp the stem. Purple loosestrife has showy, attractive flowers with 5-7 purple petals occurring in dense compound spikes 6-12" long. The flowers bloom from June to September. Each plant may bear as many as 3,000 flowers.

Monkey flower, obedient plant, germander, woundwort, willow herb, mountain mint, cardinal flower and blue lobelia are all native species that can be confused with purple loosestrife when not in bloom. However their leaves are serrated and purple loosestrife has entire (smooth) leaf margins. Swamp milkweed is similar with entire margins but produces milky sap when damaged. Winged loosestrife and yellow loosestrife are native plants that look very similar and you will have to wait until they are flowering to differentiate them. Yellow loosestrife has yellow flowers. Winged loosestrife is a shorter plant with smaller, more ovate leaves and flowers which emerge in small clusters along the stalk rather than in terminal spikes.



CONTROL METHODS:

Organic: Early detection and removal is the most effective way of managing this species. Younger plants (1-2 years old) can be hand-pulled. All plant parts should be carefully bagged and removed from the site. Any plant fragment that is not disposed of properly could spread purple loosestrife on your control site or along your travel route. In addition, all clothing, boots, and equipment should be properly cleaned to ensure that no seeds are transported. Do not cut or mow purple loosestrife. These methods will simply increase the spread of plants since they can sprout vegetation.

The release of loosestrife beetles as a biocontrol has been very successful at greatly reducing, but not eliminating purple loosestrife in the Midwest.

Chemical: A spot application of an aquatic approved formulation of a glyphosate-based herbicide is recommended. A cut-and-treat method can be used with the stems cut about 6 inches above the ground and 20-30% solution of glyphosate sprayed or painted directly on the stem. If purple loosestrife covers a large area, a foliar spray can be applied using a 2% glyphosate solution and water plus 0.5% non-ionic surfactant. To be most effective, herbicide should be applied just when plants have begun flowering. Where feasible, flower heads should be cut, bagged, and removed from the site before application to prevent the production of seed. Always read herbicide labels carefully before use and always apply herbicide according to the product label.

NATIVE ALTERNATIVES:

All of the species mentioned in the last paragraph of the "Description" will work in wet or clay soils as alternatives to purple loosestrife. Additionally, consider marsh blazing star or blue vervain.