

Purple Loosestrife

Lythrum salicaria

Iowa Aquatic Invasive Species

Fact Sheet

Description: Purple loosestrife is a stout, hardy perennial most easily identified by purple to magenta flowers that appear from late June to September. Flowers are five to six-petaled and are crowded on long terminal spikes. Leaves are linear, smooth-edged, and hairy. Leaves are usually arranged in opposite pairs that alternate down the stalk at 90° angles; however, they may be in whorls of three or four. Stems are stiff, four to six-sided, and angular. Plants grow up to seven feet tall. Purple loosestrife spreads primarily from seed but also from underground shoots and roots of established plants. Mature plants can produce over 2,000,000 seeds. The tiny, flat seeds can live in soil and water for many years and can be transported great distances by humans, animals, water, and wind.

Distribution: Purple loosestrife is native to Europe and Asia where it is a minor component of wetland vegetation. European settlers introduced purple loosestrife to North America in the 1800's probably as an ornamental plant. Because of its popularity as a garden plant and its prolific reproduction, purple loosestrife has spread to almost every state in the United States and all Canadian provinces. It is unknown when purple loosestrife first invaded Iowa; however, infestations are scattered across the state and on many of the islands of the Mississippi River.

Threats: Purple loosestrife is highly invasive and forms dense, monotypic stands that reduce both plant and wildlife diversity. It is not a desirable food or habitat for wildlife, provides poor spawning habitat, and clogs drainage ditches. Purple loosestrife can infest almost any shallow water site (wetlands, streambanks, lakeshores, ditches) because it is tolerant of a wide range of moisture, nutrient, and climate conditions. It adapts readily to disturbed sites such as dredged ditches or eroding streambanks.

Control: Preventing new introductions is the best method of control for purple loosestrife because it has no natural controls (insects, fungi, bacteria) in Iowa. Limiting the spread of purple loosestrife infestations and minimizing the impacts of infestations are much more difficult than preventing introductions. Purple loosestrife infestations are managed with conventional methods such as hand-pulling, cutting, burning, water level manipulation, and herbicide treatments. Most of these methods kill purple loosestrife plants but not the large seedbank in the soil that supports reestablishment; therefore, these control methods may have to be repeated on a yearly basis. Biological control agents are being evaluated for their effectiveness in controlling purple loosestrife. In Iowa, two leaf-eating beetles, *Galerucella pusilla* and *Galerucella californiensis*, have been released at several purple loosestrife sites and are being monitored for population growth and reduction of purple loosestrife density.



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Laws: Iowa law makes it illegal to 1) possess, introduce, purchase, sell, propagate, or transport aquatic invasive species in Iowa, 2) place a trailer or launch a watercraft with aquatic invasive species attached in public waters, and 3) operate a watercraft in a marked aquatic invasive species infestation. The scheduled fine is \$500 for violating any of the above regulations. The law also requires the DNR to identify waterbodies infested with aquatic invasive species and post signs alerting boaters. The DNR may restrict boating, fishing, swimming, and trapping in infested waters.

