

Control of Purple Loosestrife

Hand-pulling. Young purple loosestrife plants can be pulled by hand or with a garden fork, as long as the entire plant and the roots are removed completely. If the roots become broken during removal, they may sprout new shoots and regrow. Hand-pulling older, larger plants is more difficult, and may need to be repeated several times each year until the desired control is achieved.

Cutting or mowing. Flower spikes can be cut from the plants before or at the beginning of bloom to reduce seed production. Entire plants can be cut or mowed to the ground, but this method will also need to be repeated because new shoots will continue to be produced during the summer.

Herbicides. Approved herbicides labeled for purple loosestrife will kill all other broad-leaved plants that the herbicide spray comes in contact with, and some herbicides non-selectively kill all broad- and narrow-leaved plants. (Note: to apply herbicides on purple loosestrife growing in standing water, a permit is required from the Connecticut Department of Environmental Protection).

Biological control. Biological control is recommended as a sustainable, long-term method to reduce populations of purple loosestrife. The goal of biological control is to *reduce, not eliminate*, purple loosestrife, so that it becomes part of a diverse community of wetland plants. In 1992, the U.S. Department of Agriculture approved six different species of insects for biological control of purple loosestrife infestations, including *Galerucella californiensis* and *Galerucella pusilla*, two leaf-feeding beetles, and *Nanophyes marmoratus*, a flower-feeding weevil. The beneficial insects are very host-specific, feeding only on purple loosestrife and not on native wetland or garden plants. Approximately one million *Galerucella* beetles were released in the U.S. in 1997. In Connecticut, 37,000 biological control agents have been introduced into wetlands across the state since 1996. The wetlands will be monitored for several years to study the impact of the insects on purple loosestrife populations.

