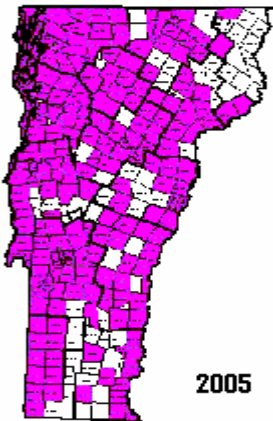


Success!!

Vermont's Purple Loosestrife Biocontrol Program is proving to be a huge success! There are many beetle release sites that are showing significant reductions in purple loosestrife flowering.

Currently, the Vermont Purple Loosestrife Biocontrol Program utilizes volunteers to help raise and release the biocontrol beetles. As the program continues to grow, it is becoming more and more dependent upon its community-rearing program. Volunteers are greatly appreciated as they expand the program's outreach and efficiency. The program certainly will not be able to expand without community support.

If you or your community group would like to help combat purple loosestrife, while having fun and learning at the same time, please contact the Purple Loosestrife Biocontrol Program (802-241-3777).



A map showing Vermont towns in which purple loosestrife is present.

What You Can Do:

REMOVE: Hand-pull isolated plants, being sure to completely remove all parts of the plant. Place all vegetation in a plastic garbage bag and dispose of properly. Remember to do this and any cutting of the flower spikes before August in order to prevent the spread of seeds.

REPORT: Call the Department of Environmental Conservation to report infestations of purple loosestrife. Phone: (802) 241-3770

EDUCATE: Inform your neighbors, friends, and local businesses about purple loosestrife, especially garden centers and landscaping companies. **FYI:** An invasive plant quarantine has recently been passed making this plant illegal to buy, sell, plant, transport, etc. **Help increase awareness!**

VOLUNTEER: Help raise and release beetles, do site monitoring, contact landowners, etc. This program relies on volunteers for statewide success and positive results.

For more information or to report an infestation of purple loosestrife, **contact:**

Vermont Agency of Natural Resources
Department of Environmental Conservation
Water Quality Division, Wetlands Office
103 S. Main St., Bldg 10 North
Waterbury, VT 05671-0408
Phone: (802)-241-3777
Website:

http://www.anr.state.vt.us/dec/waterq/wetlands/html/wl_purpleloosestrife.htm

Purple Loosestrife



A Beautiful Plant Threatens Vermont's Wetlands

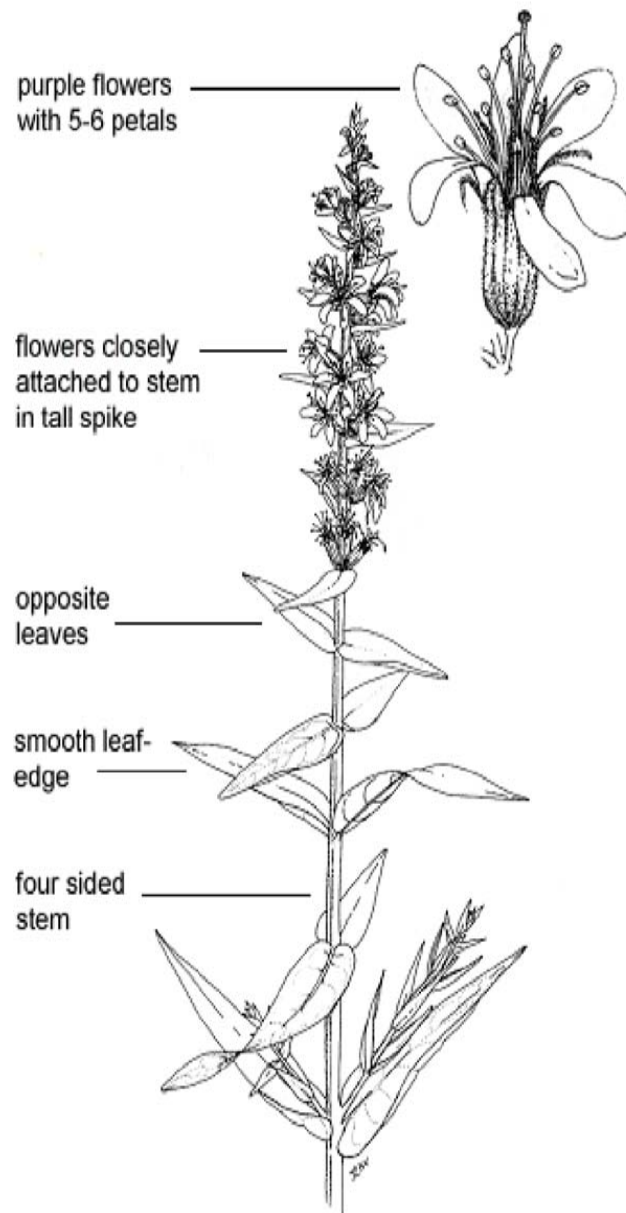
What is Purple Loosestrife?

Purple loosestrife (*Lythrum salicaria*) is a perennial plant native to Europe. In the early 1800's seeds of purple loosestrife were unintentionally transported to the shores of North America in the ballasts of ships. It was also intentionally brought in by immigrants who valued its striking purple flowers. Since then, purple loosestrife has expanded its range to 49 states (FL is the exception) and all Canadian provinces. It has now become a serious pest in wetlands and pastures.

When purple loosestrife enters a wetland it takes over. Common native wetland plants such as cattails, sedges, and rushes cannot compete with purple loosestrife. Once these native plants are choked out, the wildlife that depend on them for food and shelter are also eliminated. In addition, purple loosestrife has little value as food for animals, and populations of the plant become so thick that they cannot serve as cover for wildlife. Purple loosestrife also invades the shallow waters used by northern pike for spawning, ruining these areas as spawning grounds.

The biology of purple loosestrife and its non-native status give the plant certain ecological advantages. Its size and physiological characteristics allow it to out-compete other plants for light, food, nutrients, space, and water. In addition, purple loosestrife produces a profound number of seeds; One plant can produce several million seeds per summer! These seeds are lightweight and easily dispersed by water, wind, or in mud attached to animals or people.

The greatest ecological advantage that purple loosestrife enjoys as an invader is the absence of specialized predators. In its native Europe and Asia, purple loosestrife has many predators and natural diseases that help to keep it under control. It currently has no significant native predators in the US.



Aquatic plant line drawing is the copyright property of the University of Florida Center for Aquatic Plants (Gainesville). Used with permission.

How to Identify Purple Loosestrife

- Plants are 2-7 feet tall and may appear to be shrub-like
- Magenta flowers bloom on spike inflorescences from June thru September.

Control of Purple Loosestrife

There are several methods available for purple loosestrife control however, given its rapid spread and vigorous growth, some of these methods may be difficult or minimally successful. Control options include hand-pulling, mowing, herbicide application, and biological control. Hand-pulling can be done in small populations but all parts of the rootstock must come out of the ground. Any piece of root that is left will propagate and new plants will emerge from the root pieces.

Mowing can also be done to help control small populations, however, it must be done early in the season and will not get rid of the plants. The primary benefit of mowing is that it will prevent the plant from flowering and going to seed. This might deter purple loosestrife's spread but will not eliminate the problem.

Herbicides can be used minimally, however they negatively impact the environment and water supply as well as killing all surrounding native plants.

The current, most efficient method for controlling purple loosestrife is biological control. Biocontrol works by using a plant's natural enemies against it. Insects that are the plants native predators were tested and approved for importation into the U.S specifically for controlling purple loosestrife. Approval followed years of rigorous testing to make sure the insects did not feed on agricultural crops or species other than purple loosestrife.

In 1996, the Vermont Department of Environmental Conservation began releasing two species of leaf eating beetles: *Galerucella californiensis* and *Galerucella pusilla*. To date more than 550,000 beetles have been released throughout 197 sites in 79 Vermont Towns! Additionally, Vermont citizens have provided considerable support by participating in the community-rearing program. With this help, the Purple Loosestrife Biocontrol Program can continue to be a success.