Purple Loosestrife
*Lythrum salicaria* L.
Loosestrife Family
Vermont Class B Noxious Weed

**Description:** Purple loosestrife is an erect, hardy perennial most easily identified by its showy magenta flowers that appear from July to September. Flowers are 5 to 6-petaled and are borne close to the stem on terminal spikes. Flowers from a mature plant can produce more than 2 million seeds annually. Purple loosestrife leaves are long and narrow. Opposite leaf arrangement is typical but leaves may also be found in whorls of 3 or 4, and sometimes are alternate on the stem. Stems are stiff, 4 to six-sided, and angular. Mature plants grow from 1.5 to 8 feet (.5-2 meters) tall. As many as 30 to 50 stems may arise from one root system, forming a large bushy cluster. Purple loosestrife spreads primarily from seed but also from the underground shoots and roots of established plants. Loosestrife’s tiny flat seeds can live in soil and water for many years, and can be transported great distances by humans, animals, water, and wind.

**Habitat:** Purple loosestrife invades ditches, streams, rivers, lakes, wetlands, and other moist, shallow freshwater sites. It is tolerant of a wide variety of moisture and nutrient conditions as well as variations in climate. Plants are most successful on slightly acid or neutral soils. Purple loosestrife will especially take advantage of sites where there are human disturbances to the landscape, such as dredging, draining, or filling.

**Threats:** In spite of its spectacular beauty, purple loosestrife is a particularly troublesome plant. It quickly replaces native species such as cattails, grasses, sedges, and vulnerable rare plants. The impact of this plant on native wetland vegetation has been disastrous, with monotypic purple loosestrife stands virtually eliminating all other plants. It is not a desirable food or habitat for wildlife, provides poor spawning habitat, and may clog drainage ditches. Despite these impacts, purple loosestrife is still sold commercially as a landscape plant for perennial gardens in some states. More than 20 different cultivars have been developed, many of which are believed to be sterile. However, these plants become fertile when crossed with wild populations of purple loosestrife and therefore continue to promote its spread. Purple loosestrife is considered to be such a noxious weed that in many states, including Vermont, it is illegal to purchase and plant it.

(In Illustration by Judy Preston - The Nature Conservancy of CT)
Purple Loosestrife
Loosestrife Family (Lythraceae)

Distribution: Purple loosestrife originates from the temperate regions of Europe and Asia where it is a minor component of wetland vegetation. It is believed to have been introduced to northeastern North America in the 1800s, probably because of seeds inadvertently transported in the ballast of ships. Because of purple loosestrife’s popularity as a garden plant as well as a honey plant, intentional introduction has continued. Purple loosestrife currently occurs in nearly every state in the U.S. and all Canadian provinces. The heaviest infestations are in the northern half of the U.S. and in southern Canada. In Vermont, purple loosestrife covers thousands of acres and can be found in all counties.

Control: Control methods have included hand-pulling, cutting, burning, water level manipulation, and herbicide treatments. Most have been tried with varying degrees of success. Most of these methods will kill plants but not the large seed banks in the soil that allow rapid reestablishment. Current management efforts have focused on biological control agents, specifically four species of host specific, plant-eating insects from Europe. In Vermont, work has begun to evaluate the effects of two leaf-eating beetles (Galerucella pusilla and G. calmariensis) on purple loosestrife and to investigate rearing of these insects for future purple loosestrife management.

References:
Florida Department of Natural Resources. February, 1990. Florida Prohibited Aquatic Plants.