



## Where did Purple Loosestrife come from?

Purple loosestrife (*Lythrum salicaria*) is a wetland plant from Europe and Asia. It was introduced into the east coast of North America in the 1800s. It first spread along roads, canals and drainage ditches, then later was distributed as an ornamental. This exotic plant is found in at least 40 states.

## Why are we concerned about Purple Loosestrife?

Purple loosestrife is an attractive plant. It is vigorous and durable. We plant it once and it seems to last forever. Why should we be concerned? We should be concerned BECAUSE native diseases and insects do not hurt it. Without pests to attack it, purple loosestrife can take over wet areas such as lake shores,

streambanks, and marshes, crowding out native plants and reducing habitat diversity. It can seriously impact a wetland area in just a few seasons. Each mature plant produces over a million seeds and can resprout from a small part of a root or stem. No wildlife species are known to use this plant, and the dense thickets of dead stems deter waterfowl and other wildlife access to waterways.

Surveys in 1997 and 1998 located isolated plants and moderate populations along the Truckee River from Sparks to Nixon. It has the potential to destroy riparian habitat along the river all the way to Pyramid Lake and Stillwater Wildlife Refuge if not controlled immediately.



## What does Purple Loosestrife look like?

**Flower:** Individual flowers have five or six pink-purple petals surrounding small, yellow center. Each flower spike is made up of many individual flowers. Flowers appear in July and may continue into September.

**Seed Capsule:** Following flowering, many capsules containing numerous seeds are produced along the stalk.

**Seed:** Each mature plant can produce up to 2.7 million seeds annually. As tiny as grains of sand, seeds are easily spread by water, wind, wildlife and humans. Germination can occur the following season, but seeds may lay dormant for several years before sprouting.

**Leaves:** Leaves are downy, with smooth edges. They are usually arranged opposite each other in pairs which alternate down the stalk at 90° angles, however, they may appear in groups of three.

**Stalk:** Stalks are square or five or six-sided, woody, and up to six or more feet tall. Several stalks grow on mature plants.

**Perennial Rootstock:** Rootstocks of mature plants are extensive and can produce up to 50 shoots, creating a dense web above and below ground which chokes out other plant life.

## What can I do to help?

The entire plant must be removed to minimize the chance for regrowth. Dig out the root mass, making sure that you have removed ALL pieces. Remember, the roots can extend 30 cm (1 foot) or deeper into the soil.

Place ALL plant material in a carton so that it can dry completely without the danger of being spread by wind, water, human or animal activity. Once totally dried, it can be burned or bagged for disposal. When burning be sure that all plant matter is destroyed. When bagging, wrap securely in a dark plastic bag or container to avoid contamination at landfills.

## DON'T intentionally plant this invasive weed!

Purple loosestrife can re-root from small pieces of root, stalk, seed head, or other small bits dropped after digging out the plant. For this reason, it is important to work carefully and be sure that no plant parts remain in the soil or are spread to other areas, especially water.

All such work should be completed by mid-summer BEFORE the flowers begin to go to seed. New shoots that come up from the root remnants should be dealt with quickly. The site can be replanted to grass or other perennial flowers and should be reinspected for regrowth of purple loosestrife plants.

If chemical controls are needed, glyphosate (Roundup® or Rodeo®) has been effective in controlling purple loosestrife. Other broadleaf herbicides may also kill the plant, but only Rodeo® is both effective and registered for use in and near waterways. It should be applied during the bloom stage, taking care to avoid application to nearby desirable plants.



## What's being done to protect the Truckee River?

After the flood of January 1997, an action team was formed by the U.S. Fish and Wildlife Service to determine what should be done to rid the Truckee River of purple loosestrife. With the help of the Nevada Division of Agriculture, the Agricultural Research Service, and University of Nevada Cooperative Extension, purple loosestrife was identified and mapped in the lower Truckee River and irrigation ditches during the fall of 1997.

During the summer of 1998, efforts were made to further map and eradicate plants by digging and herbicide application. Because we were able to map some plants and start control measures during what appeared to be their first growing season, it is possible that we will be able to eliminate purple loosestrife from the Truckee River in a few years.

As part of this effort, you may see sheriff's honor inmate crews or other entities removing or spraying this weed. Don't be alarmed! All vegetation will NOT be eradicated. Instead, you will notice a gradual removal of this invasive plant.



A Joint Project of the US Fish & Wildlife Service, Nevada Division of Agriculture, USDA Agricultural Research Service and University of Nevada Cooperative Extension

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