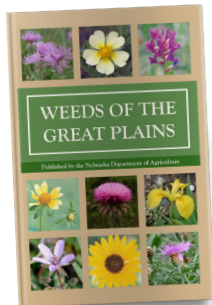


NOXIOUS WEEDS ARE EVERYONE'S CONCERN

Noxious weeds compete with pastures and crops, reducing yields substantially. Some noxious weeds are directly poisonous or injurious to man, livestock and wildlife. The losses resulting from noxious weed infestations can be staggering, costing residents of Nebraska millions of dollars due to production losses. This not only directly affects the landowner, but erodes the tax base for all residents in the State of Nebraska.

The business of noxious weed control is everyone's concern, and noxious weed control benefits everyone. The support of all individuals within the state is needed and vital for the control of noxious weeds within Nebraska. It is the duty of each person who owns land to effectively control noxious weeds on their land.

If you have questions or concerns about noxious weeds, please contact your local county noxious weed control authority or the Nebraska Department of Agriculture.



Material derived from *Weeds of the Great Plains*, published by the Nebraska Department of Agriculture.

For more information, visit nda.nebraska.gov.

PURPLE LOOSESTRIFE



NEBRASKA NOXIOUS WEED

PREPARED BY THE
NEBRASKA DEPARTMENT OF AGRICULTURE
AND THE
NEBRASKA WEED CONTROL ASSOCIATION

PURPLE LOOSESTRIFE FACTS

Common Name: Purple loosestrife (purple lythrum, spiked loosestrife, salicaire)

Growth Form: Forb

Life Span: Perennial

Origin: Eurasia

Flowering Dates: July–October

Reproduction: Seeds and rhizomes

Height: 0.4–2.5 m (1.3–8 ft)

Inflorescences: Spikes of cymules, terminal; cymule flowers 1–5

Flowers: Rose purple to magenta corollas, cylindrical (4–10 mm long, to 2 cm in diameter), petals 6 (5–7); petals crinkled; calyx teeth 6, teeth alternating with the petals; stamens 12; showy

Fruits: Capsules (4–7 mm in diameter), cells 2; seeds many

Seeds: Ovoid (1 mm long or less)

Leaves: Opposite or in whorls; blades simple, lanceolate to linear (2–11 cm long, 5–15 mm wide), reduced to bracts above; tips sharply pointed, bases rounded or heart shaped, margins entire, surfaces pubescent; sessile

Stems: Erect, not highly branched, usually from a woody base, 4-angled, surfaces without hair to pubescent

Underground: Taproot and short rhizomes

Where Found: Scattered across the region, less common in the southwestern Great Plains, in marshes, along rivers, ditches, ponds, and wet meadows. (NE, SD, ND, KS, OK, TX, MN, IA, MO, MT, WY, CO, NM; Canada: Alberta, Saskatchewan & Manitoba)

Uses and Values: Purple loosestrife is an escaped ornamental. It is an excellent honey plant.

Poisoning: None

Other: Purple loosestrife is rapidly and aggressively spreading and has been placed on the noxious weed list in some states. It crowds out native species and is extremely difficult to control. Concentrated efforts should be made to keep it from spreading.

Similar Species: Winged loosestrife (*Lythrum alatum* Pursh) and California loosestrife (*Lythrum californicum* Torr. & A. Gray) are native species similar in appearance. They differ from purple loosestrife by having solitary or paired flowers in the leaf axils rather than many flowers in terminal spikes and 6–8 stamens rather than 12. Winged loosestrife leaves are gray green and often somewhat fleshy. California loosestrife leaves are green and glaucous.

IMPACT OF PURPLE LOOSESTRIFE

Purple loosestrife currently infests 8,000 acres in Nebraska. While wetlands, marshes, stream and river banks tend to carry the largest infestation levels, sub-irrigated hay meadows, recreational lakes and irrigation canals are equally threatened.

Landowners spend thousands of dollars each year to control purple loosestrife. This aggressive wetland invader crowds out native vegetation that is essential for waterfowl, fish and wildlife. It can also clog waterways, canals and streams used for irrigation, flood control and recreation. We can all do our part by controlling purple loosestrife infestations or by reporting uncontrolled infestations to your local county weed control authority.



Flowers have 6 rose-purple to magenta petals, and cymules are in terminal spikes.

CONTROLLING PURPLE LOOSESTRIFE

Mechanical and Cultural Control

Small infestations can be dug or pulled by hand taking care to remove as much of the root mass as possible. Plants should be placed in a dry area that is not subject to flooding or water runoff. Dried plants can be burned or buried in an approved landfill. It is necessary to monitor controlled areas for regrowth from roots or seeds. Mature plants are capable of producing over 2 million seeds. Mowing is not recommended since this creates many small pieces of plant that can re-vegetate. Purple loosestrife will primarily be located in wetlands, marshes or on the edge of bodies of water. It is usually not located in dry areas, but has been documented several hundred feet from a wet area.

Purple loosestrife is usually not associated with agricultural crops but has been reported to grow in sub-irrigated hay meadows and pastures. It can also infest irrigation canals which in turn could become established in crop ground.

Biological Control

The use of natural enemies (biocontrol agents) for the control of purple loosestrife is currently being studied in Nebraska. These agents work slowly, and favorable results may not be seen for many years. Biocontrol agents are considered a tool to assist in control and should never be relied on to completely control any noxious weed. To be deemed acceptable, this method of control shall be as effective as the use of herbicides and shall be approved by your local county weed control authority.

Purple Loosestrife Control Summary

A combination of two or more control methods is the best approach to take when controlling purple loosestrife. By utilizing several control options, your odds become better that more of the targeted plant will be controlled. Purple loosestrife is capable of producing millions of seeds that may lay dormant for many years. Continued monitoring and follow-up control measures are essential for maintaining purple loosestrife infestations at a low level.

Herbicide Control

The use of herbicides can be an effective tool to assist in controlling noxious weeds. A person needs to identify the problem and the appropriate herbicide for the plant as well as the site that the plant is growing. If the noxious weed infestation is severe and scattered across a large area, then a broadcast application may be warranted. However, if the noxious weeds are in patches or a few scattered plants here and there a person may be able to spot treat individual plants or patches. This approach requires less herbicide and has minimal impact on native plants and the environment. Controlling noxious weeds with herbicides is only one tool and should never be the only control option.

Additional information regarding herbicide use can be found through the Nebraska Cooperative Extension EC130 (*Guide for Weed, Disease, and Insect Management in Nebraska*) or your local county weed control authority at neweed.org.

