



# 2021 Weed Awareness

The Weed Control Authority is responsible for implementation of the Nebraska Noxious Weed Control Act throughout Lancaster County. The authority has also provided the inspection and administration of the City of Lincoln's Weed Abatement Program since entering into an interlocal agreement with the city in 1996.

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## Controlling and Managing Phragmites

An aggressive, nonnative variety of phragmites (*Phragmites australis*), also known as common reed, is threatening the ecological health of Nebraska's wetlands and riparian areas.

- This invasive is rapidly invading, with over 800 documented locations in Lancaster County.
- Phragmites is a long-living perennial, warm-season grass that can grow in dense clonal stands.
- Plants can reach 20 feet in height, yet more than 80% of the yearly biomass is contained below ground in a dense mass of roots and rhizomes.

### The Problem

Once phragmites invades, it causes adverse ecological, economic and social impacts including:

- Threats to waterways, wetlands and riparian areas, which are our most biologically diverse and productive ecosystems.
- Domination of native vegetation, displacing desirable native plant species and reducing our plant diversity.
- Reduction of wildlife habitat diversity resulting in loss of food and shelter.
- Alteration of water conveyance, restricting waterways, causing erosion of banks and field edges due to its ability to clog waterways.



- Causing "drying" of wetlands through increased evaporation and trapping of sediments.
- Reduction of property values due to use impairment.
- Restriction of access for recreation, boating, swimming, fishing and hunting.
- Creation of potentially serious fire hazard to structures due to dry biomass during the dormant season.

### Recommended Management

Because of the physiology of phragmites, well-established stands are difficult to control with only one herbicide treatment.

- An initial herbicide treatment stresses the plants, making them particularly vulnerable to subsequent treatments.
- Herbicide treatments in conjunction with prescribed fire, mechanical treatment or flooding have proven to be effective in controlling phragmites and allowing native plants to reestablish.
- Monitoring and follow-up

treatments will be necessary to successfully manage phragmites.

### Herbicide Control Methods

Few techniques are fully effective when used alone, and reinvasion by phragmites is likely when the management strategy is not maintained.

- The optimal methods for a site will depend upon existing conditions and management goals.
- Effective control of phragmites, especially larger, well-established stands, is likely to require multiple treatments using a combination of methods.
- The use of herbicide treatments in mid- to late-summer is recommended as the primary control method and the first step toward effective control.
- The best time to get control is when the patch is new and there are just a few scattered plants. Once it gets established, it will form a dense

patch and control will become much more difficult and expensive.

- Research and field data results show that herbicide control with the active ingredient imazapyr (Polaris, Arsenal, Ecomazapyr, Habitat) has proven to be the most effective. Glyphosate (Rodeo or Roundup) will have some effect but does not have the residual of imazapyr. Always use a good surfactant to help achieve successful results.
- Both imazapyr and aquatic glyphosate can be used in and around water.

### Long-Term Management And Monitoring

Because of the pervasiveness of this species and its ability to aggressively recolonize through seed or rhizomes, long-term management and monitoring are necessary.

- The control method using imazapyr described at <https://www.lancaster.ne.gov/DocumentCenter/View/7797/Guide-to-Long-term-Phragmites-Management> is likely to be successful in controlling phragmites for 1–2 years without additional action. However, phragmites typically begins to recover 3 years after treatment and will become reestablished if follow-up management is not implemented.
- Annual maintenance is essential to the success of any long-term management plan.



### Drones Help Manage Phragmites

2020 marked the start of what will, most likely, be a common sight in future years. An Unmanned Aerial Vehicle (UAV) — more commonly known as a drone — was used to apply an herbicide treatment to invasive phragmites in Lancaster County. Rantizo, a private company with a local applicator located in McCool Junction, Neb., was hired to apply the treatment to private land. They did work across the state for Cooperative Weed Management groups as well as private landowners.

As technology continues to improve, the use of drones will play a huge roll in getting ahead of this wetland invader. Phragmites tends to grow in hard-to-reach areas, and traditional application methods are not very feasible or economical. Lancaster County Weed Control Authority is always looking at new ways to manage this aggressive plant.







# Nebraska's Noxious Weeds

It is the duty of each person who owns or controls land to effectively control noxious weeds on such land. Noxious weed is a legal term used to denote a destructive or harmful weed for the purpose of regulation.

The Director of Agriculture establishes which plants are noxious. These non-native plants compete aggressively with desirable plants and vegetation.

Failure to control noxious weeds in this state is a serious problem which is detrimental to the production of crops and livestock, and to the welfare of residents of this state. Noxious weeds may also devalue land and reduce tax revenue.



STOP INVASIVE SPECIES  
IN YOUR TRACKS.

PlayCleanGo.org

**Musk Thistle**

Pink to purple flowers

Mature seedhead

Height 1.6–9.8 ft

**Canada Thistle**

Pink to purple flowers

Height 1–3.9 ft

**Plumeless Thistle**

Purple flowers

Height 1–4.9 ft

**Phragmites**

Young seedhead

Mature seedhead

Height 3.2–20 ft

**Leafy Spurge**

Large yellow leaves (bracts)

Stems/leaves have milky sap

Height .3–2.6 ft

**Sericea Lespedeza**

White or cream to yellowish-white flowers

Height 1.5–6.5 ft

**Japanese & Giant Knotweed**

Creamy-white to greenish-white flowers

Height 3–10 ft

Height 8–13 ft

**Purple Loosestrife**

Purple to magenta flowers

Height 1.3–8 ft

**Saltcedar**

Pink to white flowers

Height 3.3–20 ft

**Spotted & Diffuse Knapweed**

Lavender to purple flowers

White/purplish flowers

Height 1–3.9 ft

**Lancaster County's Noxious Weeds**

White flowers

Lavender to white flowers

Height 4–8 ft

Height 3–6 ft

**Good neighbors control noxious weeds** — If you have questions or concerns about noxious weeds, please contact your local county noxious weed control authority, Nebraska Weed Control Association ([www.neweed.org](http://www.neweed.org)) or Nebraska Department of Agriculture.