



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.

TAKE 2 | Two minutes to **read about** two invasive plants which are working to establish themselves in Lancaster County



Queen Anne's Lace (*Daucus carota* L.)

Queen Anne's lace is a white, flowering plant and is often invasive, native to Europe and southwest Asia. It earned its common name from a legend that tells of Queen Anne of England (1665–1714) pricking her finger and a drop of blood landed on white lace she was sewing. Belonging to the carrot family, Queen Anne's lace is a biennial also known as wild carrot. Early Europeans cultivated Queen Anne's lace, and the Romans ate it as a vegetable. American colonists boiled the taproots, sometimes in wine as a treat. Interestingly, Queen Anne's lace is high in sugar, second only to the beet among root vegetables.

Distinguishing Features

The Queen Anne's lace flower resembles lace, and oftentimes, the flower has a solitary purple dot in the center. **In addition, the root smells like carrots!**

Flowers

Queen Anne's lace flowers have a flat-topped white umbel, sometimes with a solitary purple flower in the center. These flowers bloom from late spring until mid-fall. Each flower cluster is made up of numerous tiny white flowers. The flower cluster start out curled up and opens to allow pollination. The cluster then rolls itself shut again, like a reverse umbrella when it goes to seed at the end of the season.



Ansel Oommen, Bugwood.org

Habitat

Queen Anne's lace is found in fields, meadows, waste areas, roadsides and disturbed habitats. They are very hardy and thrive in a dry environment.

Means of Spread and Distribution

This plant spreads primarily by its tiny seeds that are easily spread by the wind. Seeds remain viable in the soil for several years.

Edible Parts

Using first year Queen Anne's lace plants are recommended. Roots are long, pale, woody and are finger-thin. They are used in soups, stews and in making tea. First year leaves can be chopped and tossed into a salad. Flower clusters can be "french-fried" or fresh flowers can be tossed into a salad. The aromatic seed is used as a flavoring in stews and soups.

Toxicity

Skin contact with the foliage of *Daucus carota*, especially wet foliage, can cause skin irritation in some people. It may also have a mild effect on horses.

ID and Control

Queen Anne's lace was recently added to the Nebraska Invasive plant Watch List to be monitored. It is known to be very aggressive, especially in roadsides. Watch for this invader on your property.

For help with identification or for recommendations for control, contact your local county weed control superintendent.



Wild Parsnip (*Pastinaca sativa* L.)

Wild parsnip is an invasive plant that originally came from Europe and Asia. It was brought to North America by European settlers and grown as a root vegetable. Over time, it escaped from cultivation, and is now common throughout the U.S.

Description

Wild parsnip is an aggressive, monocarpic perennial plant that germinates from seed, spends the first year or more as a rosette, eventually bolts to a height of 4–6 feet into a mature plant in the second year or later, flowers June through late August, sets seed and dies.

Habitat

Wild parsnip invades along road and rail rights-of-way. It is also found invading a variety of disturbed landscapes including trails, natural areas, pastures, forest and field margins, waste areas, unmaintained gravel pits and idle lands. It can tolerate dry, moist or wet soils, but does not grow in shaded areas.

Means of Spread and Distribution

This plant spreads primarily by seeds. Seeds remain viable in the soil for several years.

Impact

Wild parsnip is highly invasive and, if ignored, can spread rapidly, developing into large monocultures that replace native animal and plant habitat. It reduces the quality of agricultural forage crops and can negatively impact livestock if ingested. The plant sap contains toxic chemicals that are



Ohio State Weed Lab, Bugwood.org

activated by sunlight and can cause serious burns and blisters to human skin after contact.

Management

A sound management plan of foliar herbicides, mowing or digging is necessary to manage this species and will take several years of commitment to ensure that the population has decreased significantly and is not a serious problem.

Hand pulling is not recommended as the sap is toxic to human skin. Small numbers of plants can be removed by hand if using gloves and clothing to protect the skin from sap exposure.

Toxicity

Wild parsnip causes phytophotodermatitis when skin comes in contact with plant sap in the presence of sunlight, it can cause severe rashes, blisters and discoloration of skin. Appropriate protective clothing including gloves, long sleeves and long pants should be worn and direct contact with the plant should be avoided. If sap comes in contact with skin, avoid exposure to sunlight, immediately wash skin with soap and water and seek medical attention.

ID and Control

Wild parsnip is on Nebraska's Invasive Plants Watch List and its spread being monitored.

For help with identification or control recommendations, contact your local county weed control superintendent.

Source: Minnesota Department of Agriculture

Lancaster County Weed Control 2020 Review

The Lancaster County Noxious Weed Control Authority serves the citizens of Lancaster County to protect effectively against designated noxious weeds which constitute a present threat to the continued economic and environmental value of lands in Lancaster County.

Our office implements the mandates of the State of Nebraska Noxious Weed Control Act by setting forth management objectives and plans, methods or practices which utilize a variety of techniques for the integrated management of noxious weeds. In establishing a coordinated program for the integrated management of noxious weeds, it is the County's intent to encourage and require all appropriate and available management methods, while promoting those methods which are the most environmentally benign, and which are practical and economically feasible.

Noxious Weed Program

The Weed Control Authority utilizes a three-phase program to assist landowners in reducing the number of noxious-weed-infested acres in the county.

Phase 1: Prevent the development of new noxious and invasive weed infestations.

Phase 2: Provide education and public outreach on noxious and invasive weed control.

Phase 3: Provide ongoing management of State of Nebraska and Lancaster County designated noxious weeds, as well as the City of Lincoln Weed Abatement program.

Nebraska's Noxious Weed Control Act states: It is the duty of each person who owns or controls land to effectively

control noxious weeds on such land.

Noxious Weeds in County Roadsides

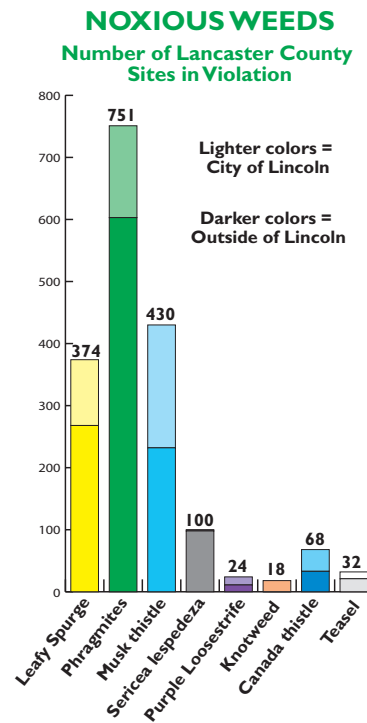
Landowners are encouraged to control noxious weeds along property they own. If not controlled by the adjacent owner, Lancaster County Weed Control will control the perennial noxious weeds such as phragmites, sericea lespedeza and leafy spurge in the county roadsides.

Lancaster County works closely with landowners with specialty crops and offers free-of-charge "NO SPRAY ZONE" signs when an agreement is signed. The agreement requires the landowner to control all the noxious weeds in their adjacent right of way.

City of Lincoln Weed Abatement Program

Lancaster County Weed Control Authority is responsible to carry out the administration of the City of Lincoln's Weed Abatement program since entering an interlocal agreement with the city in 1996.

The City of Lincoln's Weed Abatement Ordinance requires landowners within city limits to maintain the height of weeds and worthless vegetation below six inches. This includes all areas to the center of the street and/or alley that adjoins their property. Our inspector's complete inspections based on pre-selected properties due to their history, request received from the public and by observing severe yards while conducting other inspections. When a property is found to be in violation, the owner of record is notified with a legal notice. If the property remains uncontrolled at the expiration of



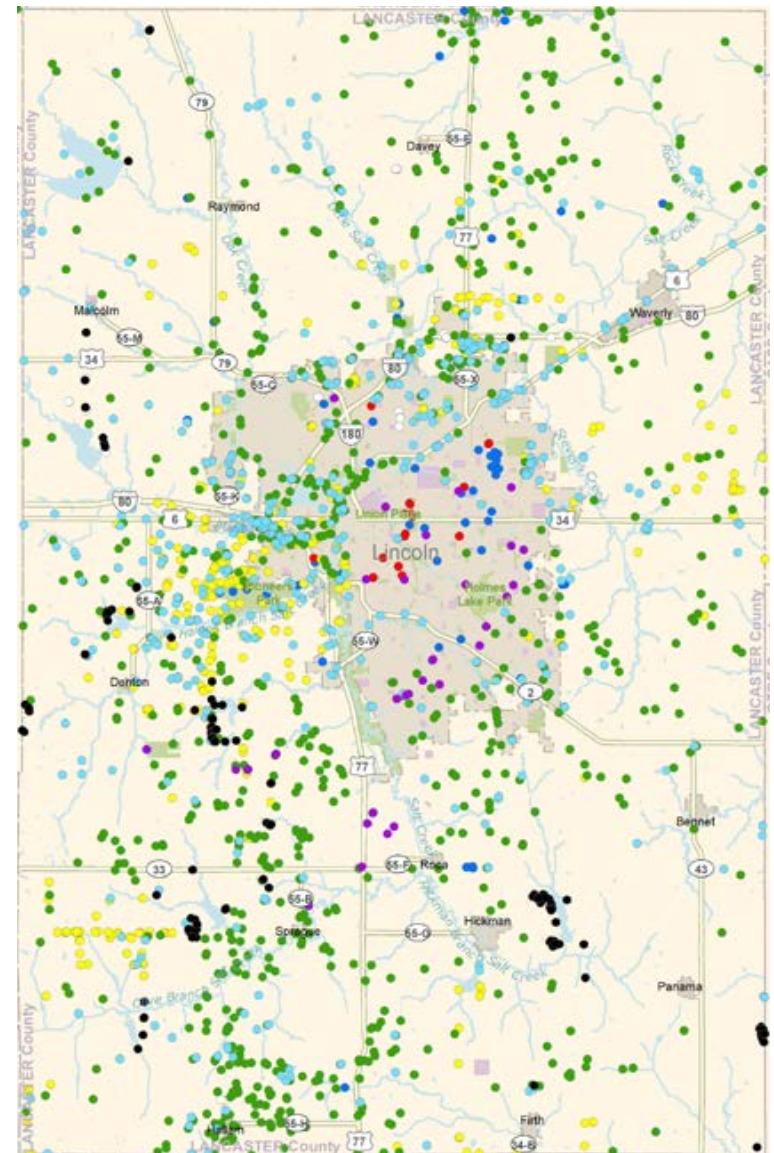
the legal notice, the Weed Control Authority will hire a contractor to cut the property. Landowners are responsible to pay the cost of control plus an administrative fee. If the cost of control remains unpaid, a lien is placed against the property until paid.

City of Lincoln Landfills

The Weed Control Authority is responsible for managing noxious weeds at the 48th Street and the Bluff Road landfills. To track of the spread of noxious weeds and the effectiveness of the control, the landfills are annually inspected and mapped prior to treatment.

Lancaster County Abandoned Cemeteries

Mowing and general maintenance on six abandoned cemeteries throughout the county falls under the supervision of the Weed Control Authority.



- Musk thistle
- Phragmites
- Leafy spurge
- Sericea lespedeza
- Purple loosestrife
- Knotweed
- Canada thistle
- Teasel

Cemeteries included are the County Poor Farm, Dietz, Evangelical, Highland Precinct, Jordan and Uphoff.

Special recognition goes to the following volunteers:

- Lincoln Tree Service for tree trimming and removal
- Dave Miller for mowing Jordan

- Terry Briley for mowing Evangelical
- Clark Liesveld and Boy Scouts of America Troop 64 for mowing Dietz
- Troy Henning for mowing Highland Precinct & Uphoff
- Larry England for mowing the Poor Farm

The County Commissioners serve as the Lancaster County Weed Control Authority. Currently Brent Meyer serves as the superintendent and supervises a seasonal staff of six weed inspectors with the assistance of Chief Inspector Pat Dugan and Account Clerk Danni McGown.

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.

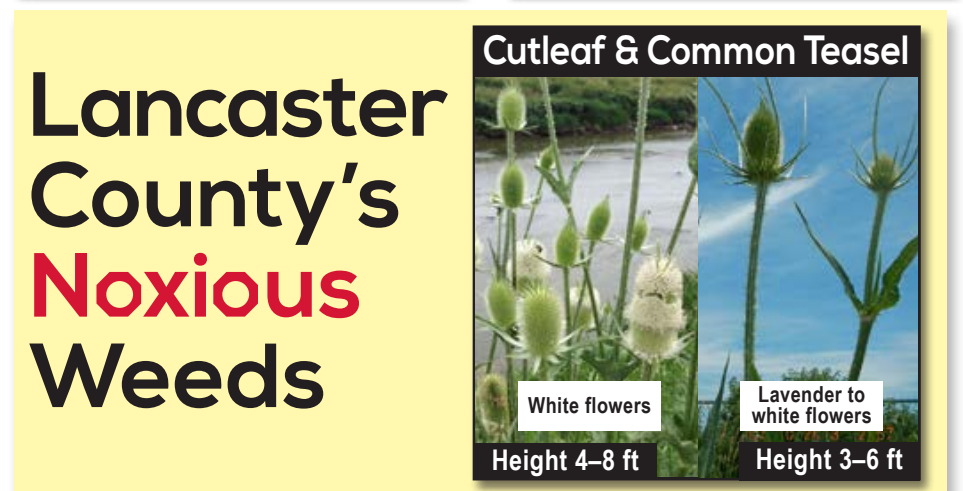
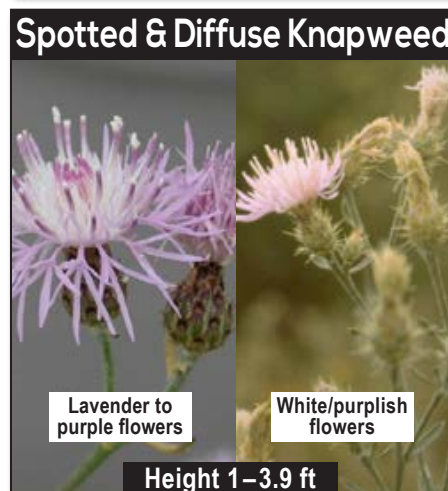
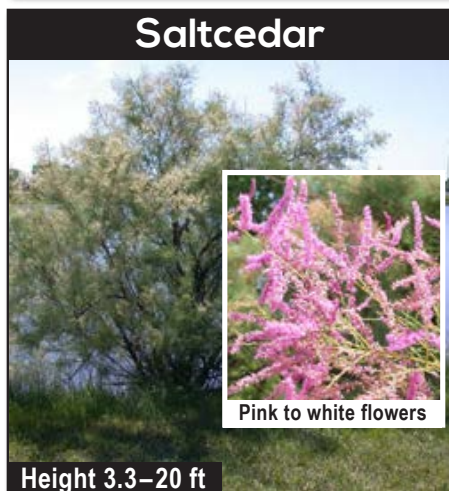
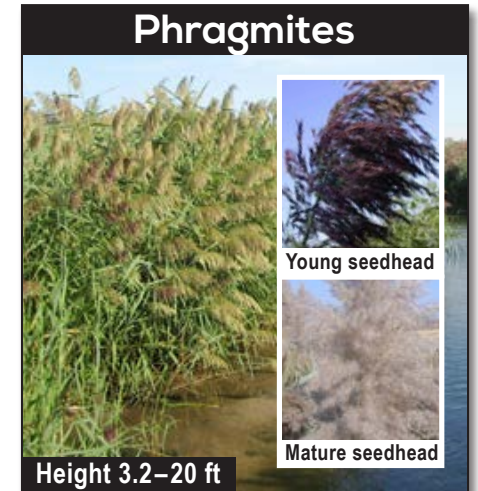
The Director of Agriculture establishes which plants are noxious. These non-native plants compete aggressively with desirable plants and vegetation.

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



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) or Nebraska Department of Agriculture.