



2014 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.

444 Cherrycreek Road, Bldg. 'B', Lincoln, NE 68528 • 402-441-7817 • <http://lancaster.ne.gov/weeds>

Attack of the Alien Weeds!

Lancaster County is under attack from alien invaders, although they are not from outer space, they are not native to the United States and are infesting our agriculture and natural resources.

These invasive plants cause harm to our economy, the environment and human health. In today's global marketplace, the volume of international trade brings increased potential for these invaders to enter our county. Interstate 80 is a major pipeline for potential weed invasions. Will it be yellow star thistle from California, tropical soda apple from Florida or some other invader showing up at our door step?



ALIENBUSTERS



Phragmites on a Platte River channel by Lexington. Invasive species can take over ecosystems and create adverse economic impacts.

What Are Invasive Species?

An "invasive species" is a species that is non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

An invasive species grows/ reproduces and spreads rapidly, establishes over large areas and persists. Species that become invasive succeed due to favorable environmental conditions and lack of natural predators, competitors and diseases that normally regulate their populations.

This includes a wide variety of plants from exotic places. As invasive species spread and take over ecosystems, they decrease biodiversity by threatening the survival of native plants.

In addition to negatively impacting ecosystems, invasive species are also costly. It is very expensive to prevent, monitor and control the spread of invasives, not to mention the damage to crops, fisheries, forests and other resources.

Most non-native plants do not become problems; but too often, plants out of their natural range crowd out

natives and create adverse economic impacts.

You can help control known invasive plants and avoid introducing new threats by understanding the problem:

How Do Invasives Spread?

When a species ends up in a new ecosystem, it is considered "introduced." Often, invasive species are spread by humans who do not realize these plants are highly destructive.

This may happen, for example, when people plant garden ornamentals, feed range forage plants to cattle or use plants for erosion control and habitat enhancement for wildlife.

Other species are introduced accidentally on imported nursery stock, fruits and in ship ballast waters, on vehicles, on ATV's and UTV's, in packing materials and shipping containers, through human-built canals and from human travel.

Lack of natural controls.

Insects and plant diseases that kept the plant in check in its native environment seldom travel to new habitats with their invasive host. Without these natural controls to keep them in check, they spread rapidly.

Why Should I Care?

Everyone who lives in Nebraska should care, because unless we can reduce or stop their spread, invasive species will continue to require significant dollars to treat, control and to remedy damage caused to public resources.

Also if you love the outdoors, recreate in the outdoors or are in a business that depends on the health of the natural resources, you should care about invasive species. Whether you are a hiker, biker, camper, bird watcher, gardener, fisherman, boater, hunter, logger, forester, rancher or farmer, invasive species can ruin your favorite outdoor activity — or your livelihood.

What Can I Do?

Get involved in the fight. If you find any on your property, eradicate it. Get to know the common invasive threats. Inform friends and neighbors. If you see these offered for sale, explain the problem to your nursery, grower or supplier. Support national, state and local efforts of early detection and rapid response to newly-found invasive plants. Volunteer as a Lancaster County **Weed Watcher** (see next page)!

continued on next page



Cutleaf teasel

New Invaders to Watch For: Cutleaf and Common Teasel

Appearance — Cutleaf teasel (*Dipsacus laciniatus* L.) is a monocarpic perennial (produce seed only once in a lifetime) that form basal rosettes for at least one year until enough resources are acquired to send up flower stalks. Cutleaf teasel can reach 6–8 ft. in height. The plant dies after flowering.

Foliage — Opposite leaves are joined at the base and form cups surrounding the prickly stem.

Flowers — The small, white flowers densely cover oval flower heads and are present from July to September. Spiny bracts are located on the ends of flower stems.

Fruit — A single plant can produce up to 2,000 seeds and can remain viable in the soil for at least two years.

Ecological Threat — Cutleaf teasel was introduced from Europe in the 1700s and spreads by producing abundant seeds. Cutleaf teasel grows in open, sunny habitats preferring roadsides and other disturbed areas. It can, sometimes, be found in high-quality areas such as prairies, savannas, seeps and meadows. Cutleaf teasel is currently a noxious weed in Missouri and Colorado and is on Nebraska's "watch list" for new invasive species. Cutleaf teasel has been found in Lancaster County and should be eradicated, if found.

Cutleaf vs. Common teasel — There are two species of teasel found in Nebraska. Common teasel (*Dipsacus fullonum* L.) has pale purple flowers while cutleaf teasel has white flowers. Common teasel is typically smaller and the leaves are smoother around the edges. Both varieties can spread rapidly and control is recommended.



Common teasel

Thistles of Nebraska – They're Not All Bad

Lancaster County Weed Control recently updated the "Thistles of Nebraska" identification guide, online at <http://lancaster.ne.gov/weeds/pdf/thistleneb.pdf>. We developed this resource to help people learn how to identify all thistles. Identification is the key in knowing if you have a "bad" or "good" thistle. Yes, native thistles are actually good and provide many benefits to our natural environment.

Did you know there are 10 different species of thistles in Nebraska? Thistles, in general, get a bad rap whenever the word "thistle" is mentioned. However, not all thistles are bad for the environment or agriculture. Out of the 10 species identified in the state — five of these occurred in North America before settlement by Europeans.

The other five are considered "nonnative" or "introduced" thistles. Out of the five nonnative thistles, only three are considered "noxious;" musk thistle, plumeless thistle and Canada



Wavyleaf thistle



Bull thistle



Tall thistle

thistle, and are required by state law to be controlled by the landowner. Canada thistle has been on the Noxious Weed List since 1873. Landowners and homeowners realized this plant was a serious problem and needed to be controlled. It wasn't until 1959 the rapid infestation rate of musk thistle brought out the public concern in Nebraska and was added to the Noxious Weed List in 1962. Plumeless thistle became a noxious weed in 1975.

Thistles commonly found in Lancaster County **not** considered noxious are wavyleaf thistle, bull thistle and tall thistle.

Thistles not commonly found in Lancaster County but can be found in Nebraska and are **not** Nebraska noxious thistles include: Platte thistle, flodman thistle, yellowspine thistle and Scotch thistle. (*Scotch thistle and bull thistle are listed on some individual county noxious lists.*)

More at <http://lancaster.ne.gov/weeds>

Lancaster County Weed Control Authority's website has additional information about Nebraska's noxious weeds, new invaders, a monthly weed report, weed complaint form, and much more.



WEED AWARENESS

Volunteer to Become a Weed Watcher!

The Weed Watcher program is designed to train and support volunteers to find and report new occurrences of harmful invasive plants in the City of Lincoln and Lancaster County. Weed Watchers help protect natural areas from the impacts of invasive plants by **detecting new populations early** before they get out of hand.



Preventing a plant from invading in the first place is more efficient, less ecologically damaging and far less costly than managing large plant infestations after they're already established.

A second, and equally important goal of the Weed Watcher program is to build capacity for other organizations to initiate early detection programs by serving as a potential model and providing educational materials for use and adaptation. Invasive plant early-detection programs can be as simple as informally training your staff or volunteers on weeds to watch for.

Weed watchers can be anyone who simply wants to scan for new invaders. "Weed Watchers Trek to Protect."

Weed Watching is as easy as one, two, three:

1. Learn the weeds.
2. Look for weeds.
3. Document and report weeds.

For more information including a "Weed Watcher Guide" and "Hit Report," visit <http://lancaster.ne.gov/weeds>. To sign up, email weeds@lancaster.ne.gov or call 402-441-7817.

"Weed Awareness" content by Brent Meyer, superintendent of the Lancaster County Weed Control Authority.

Alien Weeds

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Based on your outdoor hobbies or your occupation, here are some actions you can take to prevent the spread of invasives.

Hikers, bikers, campers and outdoor enthusiasts:

- To avoid spreading seed of invasive plants, learn to recognize infestations and avoid passing through them.
- Clean equipment, boots, animals and gear between trips, or preferably, before leaving an infested area. Make sure to remove all seeds and other plant parts.
- Report any invasive pest sightings to the local land manager or local weed control authority.
- Always use weed-free hay and feed for your animals.

Hunters:

- Use only native plants for food plots. Native plants provide much better food and cover for wildlife.

- Clean your boots, hunting gear, truck bed and tires after a hunting trip to make sure you are not spreading seeds, to a new location.

Gardeners:

- Plant carefully! There is a wide variety of beautiful, easy-to-care-for native plants available.
- Avoid using invasive plant species at all costs.
- Remove invasive plants from your garden.
- Until you are able to rid your garden of invasive plants, be responsible and remember to remove and destroy seed heads before they can spread. Also, don't share invasives with other gardeners.
- Talk to other gardeners about invasives and how you plan to help in the fight against them.
- If you are worried your garden will lose its luster after removing invasives, talk to your local nursery or county extension. These organizations will be able to suggest suitable native replacements.

Bird watchers:

- To avoid spreading seed of invasive plants, learn to recognize infestations and avoid passing through them.
- Clean equipment, boots and gear between trips or, preferably, before leaving an infested area. Make sure to remove all seeds and other plant parts.

Ranchers and farmers:

- Learn to identify the invasive species in your area.
- Report any sightings to your county weed control authority. The sooner invasive species are detected, the easier and cheaper it is to control them.
- Clean your boots, gear, truck bed, tires and harvesting equipment after working a site to make sure you are not spreading seeds to a new location.
- Be sure to control invasive plants along fencerows, ditches and other areas adjacent to fields.
- Always use weed-free hay and feed for your animals.

Weed-Free Forage Certification Program

You can prevent potential noxious weed infestations by insisting on Certified Weed-Free forage. As a buyer, you should be aware noxious weed infested forage products can cost you hundreds or even thousands of dollars down the road. Ask your forage supplier to have their hay certified **prior to harvest**.

Forage growers must call the Lancaster County Weed Control Authority **one to two weeks prior to harvesting**. There is no charge for the field inspections. There is a small charge for the cost

of bale tags.

Nebraska carries out its Weed-Free Forage Certification Program in accordance with the standards of the North American Invasive Species Management Association standards. Certified weed-free forage products include: straw, alfalfa/grass hay, forage pellets/cubes, alfalfa hay, grain hay and grass hay.

Weed-free forage is required on many U.S. Forest Service and Bureau of Land Management lands, in National Parks, Bureau of Reclamation land, military

locations, new pipelines, tribal lands, as well as, National Fish and Wildlife refuges. The Nebraska Department of Roads requires weed-free forage on all highway projects. Restrictions may apply to other lands administered by county, state or federal agencies.

If you have questions about certification regulations or weeds not allowed in certified forage, go to the Nebraska Weed-Free Forage website at www.neweedfree.org for a complete list of weeds and regulations.



Funding Available for Weeds in Grasslands and Prairies

The Five Rivers Resource Conservation and Development, Inc. has received a grant from the Nebraska Environmental Trust for the "Native Grassland Protection against Invasive Weeds II" Project. This money is in use by the Five Rivers Weed Management Area (WMA) to utilize a cost share program that assists in making effective weed control affordable for landowners, land managers and other entities.

This program is available on a rating basis; dependent on severity of



invasion, type of invasive weed(s), native prairie in an identified biologically-unique landscape and cash match (minimum requirement of 25 percent).

The fee for the chemical and application minus the cash match would be funded through this grant. A five-year maintenance agreement will be required on any entity acquiring grant funds.

The Five Rivers Weed Management Area (WMA) plans to do project promotion workshops throughout the WMA area. The WMA

consists of 10 counties in Southeast Nebraska (Saline, Jefferson, Gage, Pawnee, Johnson, Otoe, Cass, Nemaha, Lancaster and Richardson).

If anyone is interested in applying for grant funding to control *Sericea lespedeza*, *St. Johnswort*, *Garlic Mustard*, *Cutleaf Teasel* or *Caucasian Bluestem*, please contact Bobbie Meints at 402-869-2355 or 5rivers.meints@gmail.com or feel free to contact your local weed superintendent in your county.

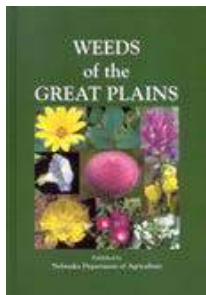
First deadline for applications is April 1. Applications will be reviewed on a monthly basis at Five Rivers WMA meetings.

Hidden Word Find

Responsible landowners take pride in their management efforts to control weeds in order to protect our environment. Sometimes the greatest challenge is to understand how invaders spread, the groups involved in treating them and tools they use.

Find the words in the puzzle and send your completed form to Lancaster County Weed Control for your chance to win the "Weeds of the Great Plains" book published by Nebraska Department of Agriculture. **All entries must be postmarked by April 18.**

If your name is drawn, the book will be mailed to you. This information will not be used to contact you with any other offer.



Enter drawing to win:

Name _____

Address _____

City/State/Zip _____

Send completed Word Find to:
Lancaster County Weed Control, Weed Book Drawing
444 Cherrycreek Rd., Bldg. B, Lincoln, NE 68528

- Annual
- Biennial
- Canada thistle
- Knapweed
- Knotweed
- Herbicide
- Introduced
- Invasive
- Lancaster
- Leafy spurge
- Mapping
- Musk thistle
- Noxious weeds
- Perennial
- Phragmites
- Plumeless thistle
- Purple loosestrife
- Saltcedar
- Sericea lespedeza*
- Weed watcher

E O P P S P H R A G M I T E S F T I A
D S G N I P P A M I I D M L N N S V V
V L A I N N E I B T P W I T D E Y A R
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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.

Musk Thistle

Height 1.6–9.8 ft



Pink to purple flowers Mature seedhead

Canada Thistle

Height 1–3.9 ft



Pink to purple flowers

Plumeless Thistle

Height 1–4.9 ft



Purple flowers

Phragmites

Height 3.2–20 ft



Young seedhead Mature seedhead

Leafy Spurge

Height .3–2.6 ft



Large yellow leaves (bracts) Stems/leaves have milky sap

Sericea Lespedeza

Height 1.5–6.5 ft



White or cream to yellowish white flowers

Japanese Knotweed

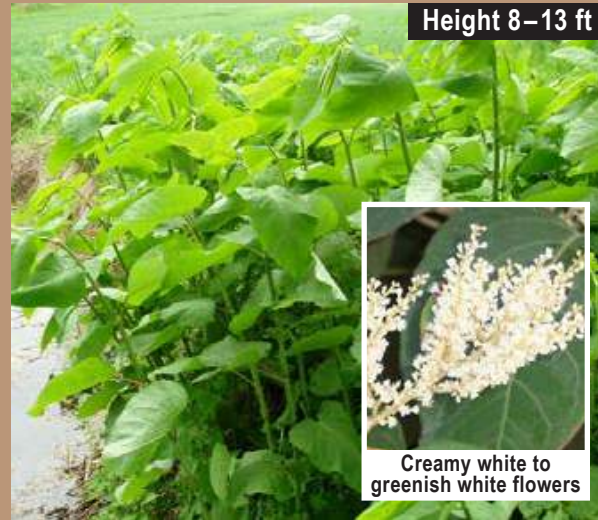
Height 3–10 ft



Creamy white to greenish white flowers

Giant Knotweed

Height 8–13 ft



Creamy white to greenish white flowers

Purple Loosestrife

Height 1.3–8 ft



Purple to magenta flowers

Saltcedar

Height 3.3–20 ft



Pink to white flowers

Spotted Knapweed

Height 1–3.9 ft



Lavender to purple flowers

Diffuse Knapweed

Height 1–3.9 ft



White/purplish flowers

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 (www.agr.ne.gov/noxious_weed)

WEED AWARENESS

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 Ashley McAllister.

2013 Annual Report

Lancaster County Weed Control Authority's purpose is to educate the public concerning noxious weeds, exercise the necessary authority to obtain effective control of noxious weeds county-wide, educate the public concerning weed abatement and to exercise the necessary authority to cut and clear overgrown weeds and worthless vegetation in the City of Lincoln. We accomplish this by:

- educating the landowners of Lancaster County about the legal requirements and benefits of controlling noxious weeds,
- providing information to the citizens of Lincoln about the legal requirements and benefits of cutting and clearing overgrown weeds and worthless vegetation,
- efficiently and effectively exercising authority when necessary to obtain acceptable noxious weed and weed abatement control, and
- improving efficiency and effectiveness of operations through management techniques.

Noxious Weed Program

Lancaster County Weed Control office 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 weed infestations — Prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds. Integrated weed management includes preventing encroachment into land that is not infested, identifying the pathways in which weeds are spread, detecting and eradicating new weed introductions, containing large-scale infestations using an integrated approach and often re-vegetation.

Phase 2. Provide education and public outreach on noxious and invasive weed control — The public is generally not aware of the economic and environmental impacts of noxious weeds. There is a need to improve awareness of noxious weeds and to provide educational information to cooperators, land managers and the public. As people become more aware of noxious weeds, the probability of detecting them is greatly increased, which allows for more effective and timely control. Education and awareness assist:



Beginning in 2013, educational kiosks are being placed along hiking trails.

- weed identification
- reporting new infestations
- prevention
- control
- fostering cooperation and partnerships

Phase 3. Provide for ongoing management of State of Nebraska-mandated noxious weeds — Noxious weed management is the systematic approach to minimize noxious weed impacts and optimize intended land use. It is very important for all infested areas to be treated with effective methods. Integrated management is a program of noxious weed control that properly implements a variety of coordinated control methods. Types of control methods include mechanical, cultural, chemical and biological. Integrated management greatly improves the success rate for your weed control plan. All noxious weed management must be applied and evaluated over an extended period of time to be successful.

Noxious Weed Overview

Noxious weeds know no boundaries. They find themselves at home in cities and villages, along creeks, in wetlands and waste areas, as well as in the rural areas.

In 2013, our inspectors documented 1,631 sites infested with noxious weeds, 493 (33.1%) of those were within Lincoln city limits. While the total number of acres infested in the city is small, we continue to find noxious weeds all around the city. Saltcedar, purple loosestrife and knotweed are found more in the city than in rural areas, because they were first introduced as ornamentals and planted in our landscapes. Without aggressive management, these sites will continue to grow and spread.

Musk Thistle — Musk thistle continues to be a problem on poorly-managed pastures, wastelands and roadsides. A total of 1,028 inspections were made on 494 sites. There were 425 sites found to be in violation amounting to 802 acres infested. The Weed Control office carried out 10 enforcements.

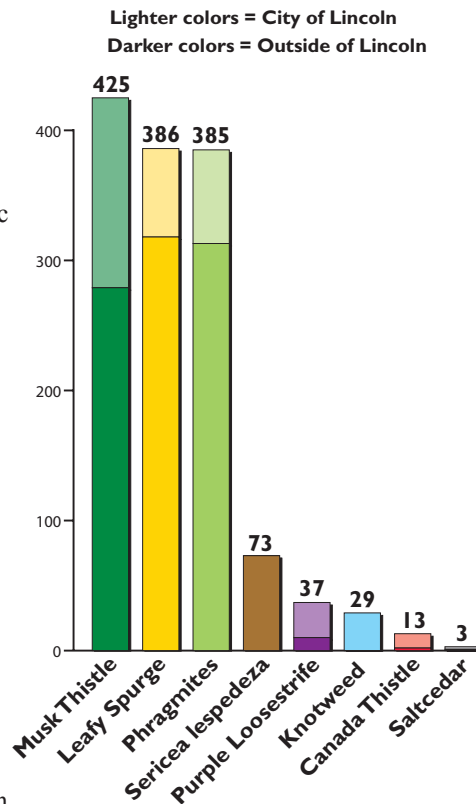
Phragmites — Phragmites continues to increase in Lancaster County with 385 sites found to have infestations. The number of sites rose 7.2%, up from 359 sites reported in 2012. It's important to be aggressive on phragmites while the average site is still less than 1 acre; we are seeing it spread at alarming rates.

Leafy Spurge — Leafy spurge is a very difficult-to-control perennial plant and infests 545 acres in the county and city. Once an infestation is identified, it should be controlled and monitored for many years. Its deep rhizome root system will allow it to continue to grow. In 2013, there were 626 inspections made at 446 locations, finding 386 infestations.

Purple Loosestrife — Most of the purple loosestrife

NOXIOUS WEEDS

Number of Lancaster County Sites in Violation



found are ornamental plantings. There are a few waterways with wild purple loosestrife, but for the most part, this has been a success story in Lancaster County. In 2001, when purple loosestrife was added to the State Noxious Weed list, we reported 490 locations. In 2013, we had 37 sites that had either ornamental or wild purple loosestrife.

Knotweed — In 2013 there were 29 sites of knotweed reported. Almost all of the sites are ornamental plantings with only 2 sites being wild infestations. Most owners have been very receptive to removing the plantings once they realize how much damage it can do. Knotweed is often considered one of the 10 most invasive plants in the world, so early detection and control is important.

Canada thistle — Canada thistle is a deep-rooted perennial thistle; it is the most difficult thistle to control. While we don't have a large number of infestations, what we are finding is that it is showing up in landscaping. Meaning, it is likely coming in with some of the trees and shrubs being planted. Always make sure the root stock you are getting is noxious-weed-free. Currently, we have 13 locations, totaling just over 6 acres infested.

Saltcedar — Saltcedar is a great example of Early Detection – Rapid Response (EDRR), getting on a problem early and eliminating it before it gets out of control. Lancaster County has only a few locations of saltcedar and those are being eradicated by the owners. We are working on 3 locations and no new locations were found in 2013.

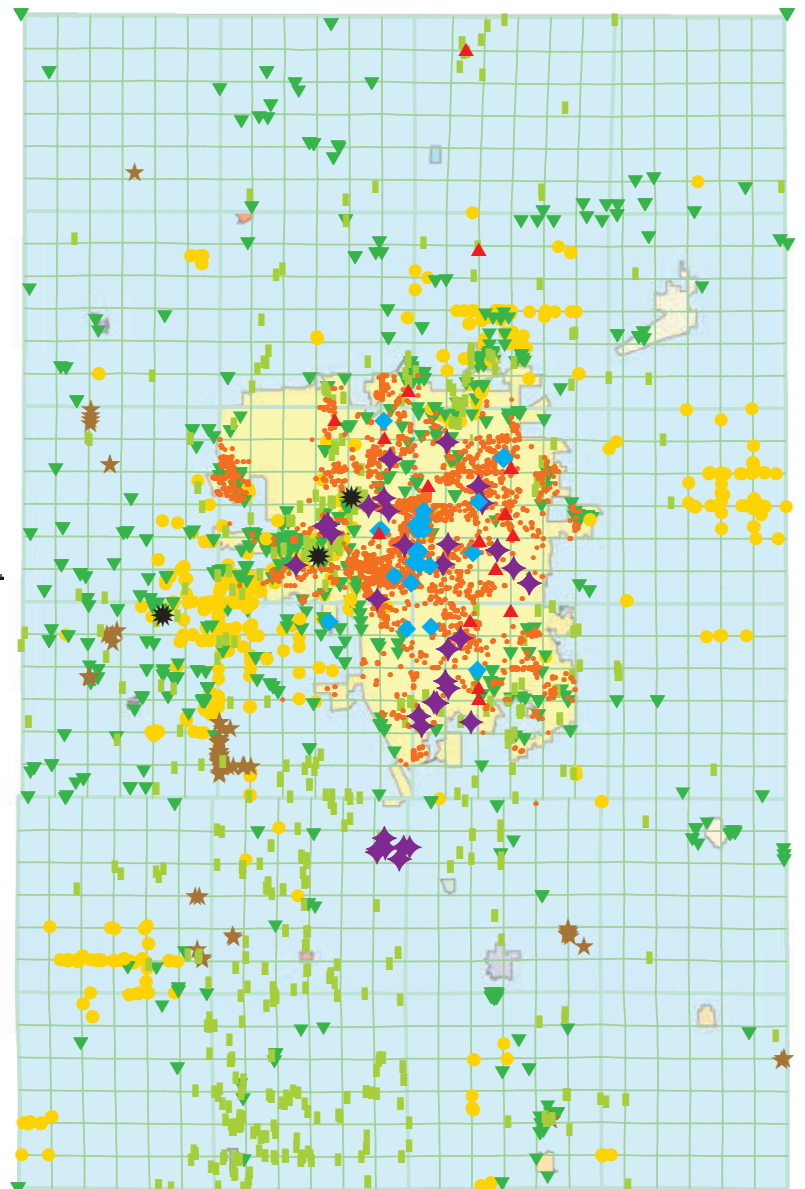
Sericea lespedeza — Sericea lespedeza was added to the state noxious weed list in April of 2013. This designation requires this very difficult-to-control perennial to be controlled by the landowner. Our inspectors found 73 sites infested totaling 129 acres.

Lancaster County Noxious Weeds

- ▼ Musk Thistle
- Leafy Spurge
- Phragmites
- ★ Sericea lespedeza
- ▲ Canada Thistle
- ◆ Knotweed
- ◆ Purple Loosestrife
- ✱ Saltcedar

City of Lincoln Weed Abatement

- Weeds & worthless vegetation above 6"



City of Lincoln Weed Abatement Program

The City of Lincoln Weed Abatement Ordinance requires owners of land within the city limits to maintain the height of weeds and worthless vegetation below 6 inches. This includes all areas to the center of the street or alley that joins their property.

Three seasonal inspectors are used in administering this program. Most inspections are carried out as a result of complaints.

In 2013, there were 265 properties pre-selected for inspection because of past violations and the lack of response to correct the violations. Our office received 1,867 complaints from the public and an additional 967 properties were inspected and observed as having violations. It required 7,099 inspections to make the initial and follow-up inspections on 3,099 sites.

Properties not in compliance were notified of the violations with 1,629 legal notices, 1,546 reminder letters and 45 personal contacts. Landowners cut 2,314 sites and a forced cutting was contracted on 325 sites. Landowners are responsible to pay the cost of control; it remains a lien against the property taxes until paid.

City Landfills

The Weed Control Authority is also responsible for managing both the 48th Street and Bluff Road landfills for all noxious weeds. Musk thistle, leafy spurge and phragmites are the main problems. Both landfills are annually inspected and mapped. A contractor is then hired to do the control work. We do a follow-up inspection once the contractor spraying is complete to ensure proper control.

Lancaster County Abandoned Cemeteries

Mowing and general maintenance on 6 abandoned cemeteries throughout the county is also under the supervision of the Weed Control office. Cemeteries included are the County Poor Farm, Dietz, Evangelical, Highland, Jordan and Uphoff.

Special recognition goes to the following volunteers:

- Lincoln Tree Service for tree trimming and removal
- Steve Wedge for mowing Jordan
- Terry Briley for mowing Evangelical
- Boy Scouts of America Troop 64 for mowing Dietz
- The good Samaritan for mowing Highland & Uphoff (we don't know who is mowing these, but are very appreciative of them for doing it and keeping them looking great.)