



2018 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>

Why Do I Have All These Weeds? How Did They Get Here?

As the days grow longer and the sunny days of spring arrive, we look forward to getting out into our yards, acreages or farms and planting our flowers, gardens and crops. We work the soil and choose our seeds, plant them and excitedly wait to see them come to life. Even with all the best preparation and planning, we know along with our plants, will come WEEDS! No matter how much we try to prevent them, weeds are everywhere and have the ability to infest all types of land.

Let's explore some of the ways weeds end up where they do and what each of us can do to slow the spread of invasives.

How Do Invasive Species Spread?

Every species evolves in its home territory to have one to several ways to expand its range. They may be wind blown, rain splashed, carried by animals or moved in soil or water. Almost all short-distance spread is through these natural dispersal mechanisms. In their home territory, short distance spread is rarely a problem because the resident plants and animals have evolved to coexist more or less peaceably.

On its own, emerald ash borer will generally move less than four miles a year. But with help from people, it can cover 55 miles per hour in firewood, nursery stock or personal belongings.

On the flip side, long distance spread is almost always human assisted. Because long distance spread takes the species a long way from home, the resident plants and animals are not often prepared to cope with their new neighbor. Natural enemies are missing and



This home decor rooster was located at a local retail store in Lincoln by an inspector with USDA APHIS-PPQ. The company's fact sheet, as well as lab results, confirmed the tail and wings were actually *phragmites australis*, which is a Nebraska Noxious Weed and one of the most invasive plants in the United States. The retailer willingly pulled the rooster from its stores nationwide and also removed it from its website. This product was being shipped in from China, providing an example of how invasive species rapidly move around the world in today's global economy.

host species often lack the natural defenses necessary to survive an attack by the introduced species.

Once introduced, aggressive species are free to expand their range using their short distance dispersal mechanisms with a competitive advantage over native plants and animals due to the lack of natural enemies.

Pathways of Spread

Invasive species have many pathways of spread.

- For instance, weed seeds move easily in soil so muddy boots or vehicles can move weed seeds.
- Some weed seeds have special hooks to help them hitch a ride. Thus, they can spread on our shoes, socks, clothing and pets.
- Some invasive plants are quite

attractive, so they show up in nurseries as ornamental plants.

- Weed seeds can also hide in nursery stock, potting mixes or home décor made from raw wood products.
- A number of insect and disease pests of trees can move in cut firewood, pallets or solid wood packing material.

Being aware of these pathways of spread can help us reduce the risk of accidentally moving harmful invasive species. By learning how to inspect and clean our belongings and knowing the source of the

things we buy, we can begin to reduce the chance of inadvertently spreading something that could harm those things we cherish.

Why Should I Care?

Everyone should care because unless we can slow the spread of invasive species, life as we currently know it will change dramatically; from where we live and work, to the places we go, the products we buy, how we relax and play with our kids. All of it has the potential to change with the spread of invasive species.

And because so much of the spread is associated with the activities of private individuals, it's up to us to become informed, attentive and accountable for our potential role in the spread of invasive species.

Stop Invasive Species in Your Tracks

The future of your land or favorite recreation areas are in your hands! There are many things you can do to protect them. Preventing new invasions and preventing the spread of existing invasions are top priorities.

There are many things you can do to help slow the spread of invasive species. One of the most effective ways to manage invasive species is to take action and get involved. Learn steps homeowners, field workers, campers and trailusers can take at www.playcleango.org.



Difference Between Noxious and Invasive Weeds

In the plant world we often throw around the terms "noxious" and "invasive" when referring to weeds. This often raises the question — what's the difference?

Only the worst of the worst weeds make it to Nebraska's noxious weed list. "Noxious weed" is a legal definition and requires landowners to control the plant on their property to prevent spread to neighboring properties. All noxious weeds are invasive; **not all invasive plants are noxious weeds.**

What Are Noxious Weeds?

To be listed as a "noxious" weed, Nebraska has a process used to evaluate the plant before it is considered for the noxious weed list, and before it would go to the Director of Agriculture for consideration.

The failure to control noxious weeds on lands in Nebraska is a serious problem which is detrimental to the production of crops and livestock, the welfare of

residents of this state may devalue land and reduce tax revenue. The process begins with a scientific review of the plant called a Weed Risk Assessment (WRA). This assessment is used to determine if the plant poses a threat to Nebraska. A plant will also need to meet at least six of the following nine criteria to be considered.

1. The plant poses a documented and immediate threat to Nebraska's economy, environment, social welfare, wildlife or safety. The plant is either directly or indirectly poisonous or injurious to man, animals and/or desirable plant species and favors a habitat that results in difficult control and is in direct conflict with human activities.
2. The plant reproduces and disseminates rapidly under normal land management practices.
3. The plant is not native to Nebraska (required criteria to be considered).

4. At least two bordering states have designated the plant as noxious, and the plant has a documented history of causing considerable difficulties in those or other areas.
5. Infestations of the plant within Nebraska have been properly surveyed and documented by the Nebraska Department of Agriculture's noxious weed program staff, together with, and in association with, county weed control superintendents.
6. The Nebraska Department of Agriculture has reviewed and researched published literature concerning the plant and has prepared a written objective report on the plant for review and discussion by the Nebraska Noxious Weed Advisory Committee.
7. At least 5 percent of Nebraska's counties favor the designation of the plant as noxious. The Director of the Nebraska Department of Agriculture will solicit this opinion by contacting

each county weed control authority for a response.

8. The Nebraska Weed Control Association has recommended to the Director of the Nebraska Department of Agriculture the plant be designated a noxious weed.
9. The Nebraska Noxious Weed Advisory Committee has recommended to the Director of the Nebraska Department of Agriculture the plant be designated a noxious weed in Nebraska.

To become a state noxious weed in Nebraska the plant goes through an extensive review and only the most aggressive, harmful, destructive plants make it on the Noxious Weed list.

What Are Invasive Species?

Invasive species are plants, animals and microorganisms not native to a particular area. They are also species capable of causing *continued on next page*

Invasive Plants To Watch For

The following are the top four invasive (non-noxious) plants in Lancaster County which pose a threat to native species.



Garlic Mustard



Sulphur Cinquefoil



Wild Parsnip



Hoary Cress

WEED AWARENESS

Noxious vs. Invasive

from previous page

severe damage in areas outside their normal range, harming the economy, the environment or human health once they become established.

Not all non-native species are harmful. Wheat is a non-native whose introduction has been very beneficial. The term “invasive” is reserved for the most aggressive non-native species capable of changing site or living conditions for the worse where they establish.

Invasive species are found in water and on land. In fact, invasive species can occur in just about every habitat type you can imagine: lakes, streams, cities, fields and farms — all of the native areas of the state. There are invasive plants where control is recommended, but they do not meet the criteria to be listed as noxious.

Poison ivy is often considered an invasive plant and some think it should be “noxious,” but poison ivy is a native plant to Nebraska, so it will not likely ever make it to Nebraska’s noxious weed list.

One common misconception is, if a plant is considered invasive in one U.S. state, it must be an invasive plant in every state. This simply isn’t true. Conditions vary wildly in a country as big as the U.S.A. An exotic plant capable of swallowing the South may be incapable of spreading very far in the North, due to the colder climate (Kudzu).

In fact, there are a number of factors to keep in mind before prejudging a plant for invasiveness. The characteristics which enable an invasive species to outcompete native species include fast growth, a short life cycle and the ability to tolerate a wide range of habitat types and environmental conditions. Successful invasive plant species often have high rates of seed production and very adaptable reproductive techniques. When a species is taken out of its natural range and placed into a new habitat, it is removed from its natural predators and any pathogens which help to control its population. Without these, population growth may become

out of control and the invader can rapidly colonize its new habitat.

Where Do Invasives Come From?

The majority of invasive plant species established in the U.S. are native to Asia or Eurasia. Since the climates of Europe and Asia are similar to that of the northern United States, these species are well-suited for life in our region. Interestingly, while most of our invasive trees, shrubs and vines originated in Asia, many of our herbaceous (non-woody) invasive plants originated in Europe.

Many of our invasives were first introduced as ornamental plants. Woody invasive plants, in particular, were the result of horticultural introductions. Other invasives, particularly grasses and vines, were introduced and spread by agronomists as potential livestock forage. Likewise, many shrubs and vines (Honeysuckles, Multiflora Rose, Sericea Lespedeza) were widely promoted by state and federal wildlife agencies as cover and food sources for wildlife, thus spreading much more rapidly than they would have by natural dispersal alone. A few introductions represent other miscellaneous attempts at economic stimulus (e.g. the introduction of White Mulberry as a host tree for silkworm moth caterpillars.)

The second group of invasive plant introductions are those truly accidental in nature. Most of these involve herbaceous plants introduced as seed or plant material used as packing.

In hindsight, invasive species introduction has historically been a somewhat preventable occurrence. The horticulture industry has grown more interested in stopping the importation and sale of invasive plants, although many are still widely available. In addition, state and federal agencies are now focused on invasive plant eradication, rather than introduction, reversing the past trend of searching for novel wildlife plants, and opting for a largely-native approach.

Increasing globalization, however, will undoubtedly lead to further spread of plant species worldwide, making an understanding of their ecology and control of utmost importance.

I Bought “What?!”

So you purchased a new acreage this fall and now this spring you are finding your small acreage has a patch of plants or weeds you don’t recognize.

What can be done to solve the problem? With any problem come options for solutions. It’s the same with weed control problems. First step towards a solution is to identify the problem. Your local weed superintendent, extension educator or other professional weed person can help identify the unknown plant.

Is it an annual (one year life cycle grows by seed) a biennial (two years to complete life cycle) or a perennial (three or more years)? Determining the life cycle of the weeds helps establish the most effective means to control the plant. Different techniques can be used to get on the path to controlling the problem weeds. Whether it is biological control, mechanical control or herbicide control, your weed control advisor can help here too.

If the plant is a noxious weed, you are required by law to control it. If it happens to be a Watch List weed (invasive), you are not required to control it, but you are encouraged to control it and keep it from becoming a large infestation.

Herbicides applied at the proper time in the life cycle of biennial or perennial plants are often the most cost effective and efficient means of dealing with noxious and invasive



plants. Owner-operators of small acreages often find it is rewarding to do the job themselves. Using smaller spray equipment ranging from a 2-gallon hand sprayer to a 20-gallon ATV sprayer mounted on a 4-wheeler may meet your needs.

First-time herbicide users should be cautious when deciding which herbicide to use. With the use of any herbicide, always read and follow label directions. The label will tell you what weeds the product controls, the proper rate to apply, what growth stage it works best on (or when to apply).

Talking with a weed control professional can help you do it yourself safely and wisely. As soon as an infestation of noxious, unwanted or unwelcome weeds is spotted, they can be dealt with quickly, efficiently and safely. With a little homework, your small acreage can change from a weedy nightmare to become your dream come true.

Real Estate Commission Adds Noxious Weed Question

In an effort to protect home buyers from purchasing a property with an infestation of noxious weeds, the Nebraska Real Estate Commission recently adopted amendments to the Seller Property Condition Disclosure statement (“SPCD”).

The form now includes a question in the Environmental Conditions section about noxious weeds.

The question reads: **“Have you been notified by the Noxious Weed Control Authority in the last 3 years of the presence of noxious weeds, as defined by Nebraska law (N.A.C. Title 25, Ch. 10), on this property?”** The seller will answer Yes, No, or Do Not Know.

The question should never prevent the sale of a property, but will help the buyer make a more informed decision about their purchase.

The Nebraska Weed Control Association worked with the Nebraska Real Estate Commission to make the change possible.

Several neighboring States already had similar language on their disclosure forms, allowing the Commission to use them as examples to draft the current language.

Noxious Weeds know no boundaries and are found on any type of landscape. They are found in the cities, villages, towns and acreages as easily as on rural agriculture land. Purple loosestrife, saltcedar and knotweed are three of Nebraska’s Noxious Weeds that were actually sold as ornamentals when they were added to the Noxious Weed list. This makes them as likely to be found on residential lots as in rural areas.

The new form became effective Jan 1, 2017 and is used on all sales of properties that include a residence. This form is not used on agriculture land, so landowners buying pasture/rangeland, farmland, etc., are encouraged to check with the local county Weed Control Authority for information on the property prior to purchase.

Weed Crossword

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 16.**

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.

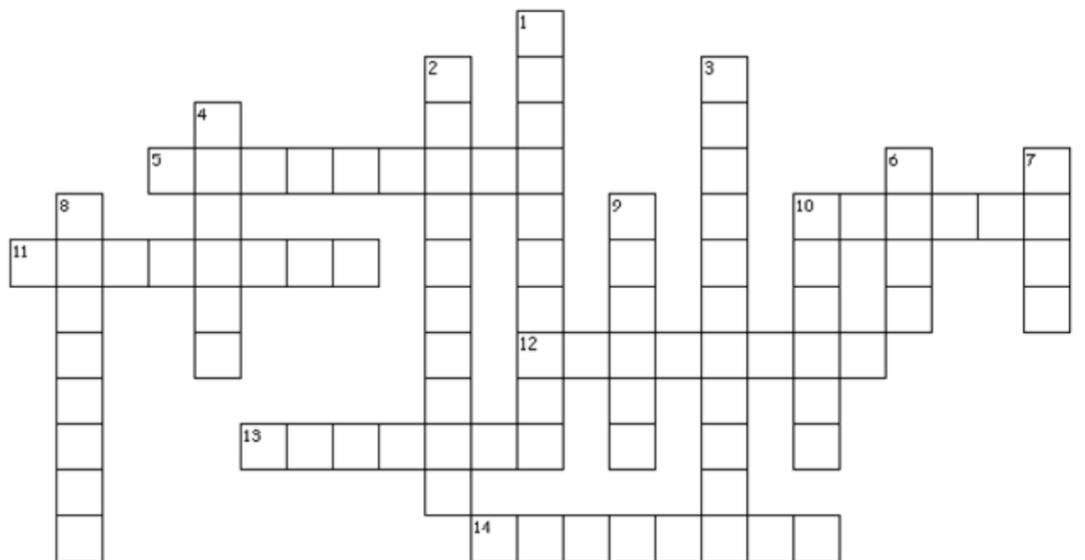
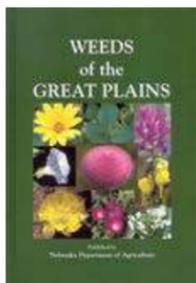
Enter drawing to win:

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



DOWN

- 1) This perennial grass is a major weed species in Nebraska wetlands (noxious)
- 2) _____ is the least expensive and most effective way to halt the spread of weeds
- 3) Purple _____ was originally sold as an ornamental (noxious)
- 4) Lancaster County’s noxious weeds — includes cutleaf and common
- 6) Most reported thistle in Lancaster County (noxious)
- 7) A plant out of place
- 8) Includes Giant, Japanese and hybrid Bohemian (noxious)

- 9) A plant has to be not _____ to be considered a noxious or invasive weed
- 10) Weeds have many pathways of _____

ACROSS

- 5) Sericea _____ is a perennial legume (noxious)
- 10) Leafy _____ can reduce pasture capacity up to 75% (noxious)
- 11) Aggressive weed which poses a threat in areas outside their normal range
- 12) Prolific seed producers — includes musk, Canada and plumeless (noxious)
- 13) Destructive or harmful weeds — control is required by law
- 14) Includes spotted and diffuse (noxious)

Nebraska's Noxious Weeds

It is the duty of each person who owns or controls land to effectively control noxious weeds on such land.

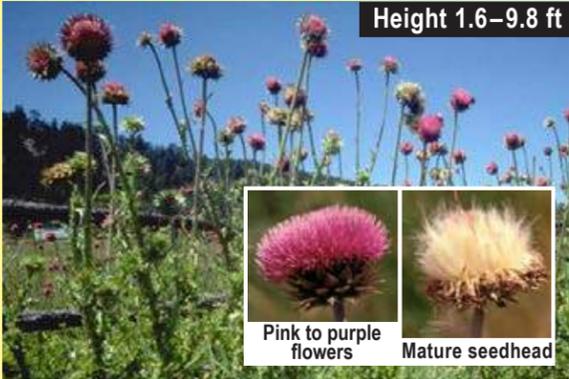
Noxious weed is a legal term used to denote a destructive or harmful weed for the purpose of regulation.

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

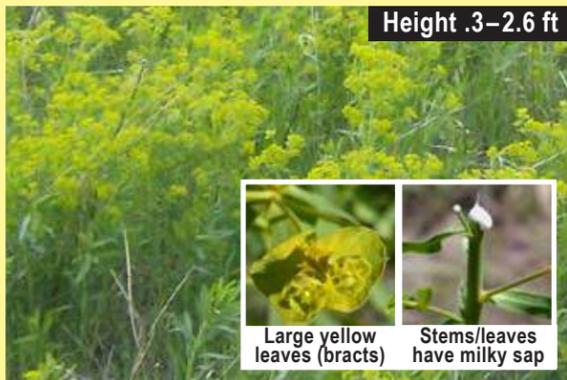


Young seedhead

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

Lancaster County's Noxious Weeds

Cutleaf Teasel

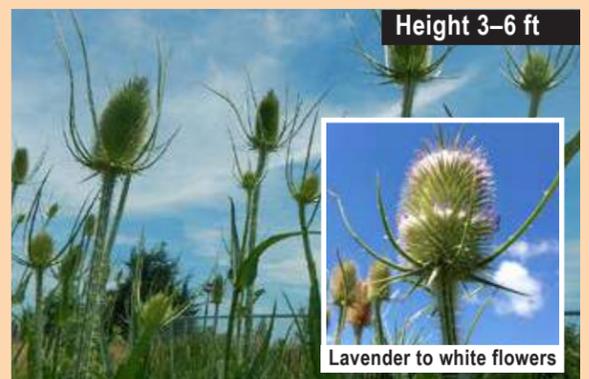
Height 4–8 ft



White flowers

Common Teasel

Height 3–6 ft



Lavender to white 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.

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 an Account Clerk.

2017 Annual Review

Today's noxious weeds aren't your regular "run of the mill," variety and need to be managed differently. We are seeing a time where weeds are becoming chemical resistant and our global trade moves products around the world more rapidly, allowing new invasives to take root in Nebraska. As the times change, we need to constantly update our management efforts to meet today's challenges.

Today's Lancaster County Noxious Weed Control Authority is focused on being the education and outreach resource for the residents in our county. Our staff is constantly trained on the latest management tools of today's invasives and we are always working on ways to help our landowners with the latest techniques to protect their property. Think of Lancaster Weed Control Authority as your Lancaster County Protective Property Management Division — helping citizens manage invasive weeds more efficiently and effectively!

The Weed Control Authority only becomes an enforcement agency when the landowner refuses to control noxious weeds on property they own. This is necessary to protect neighbors from having infestations spread to their property and potentially devaluing their land.

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.

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.

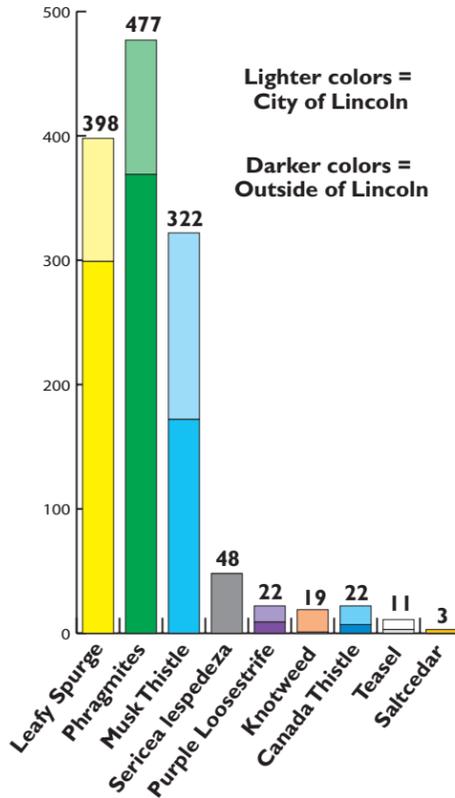
2. Provide education and public outreach on noxious and invasive weed control — The public is generally not aware of the economic and environmental impacts of noxious weeds. There is a need to improve awareness of noxious weeds and to provide educational information to cooperators, land managers and 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:

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

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

NOXIOUS WEEDS Number of Lancaster County Sites in Violation



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.

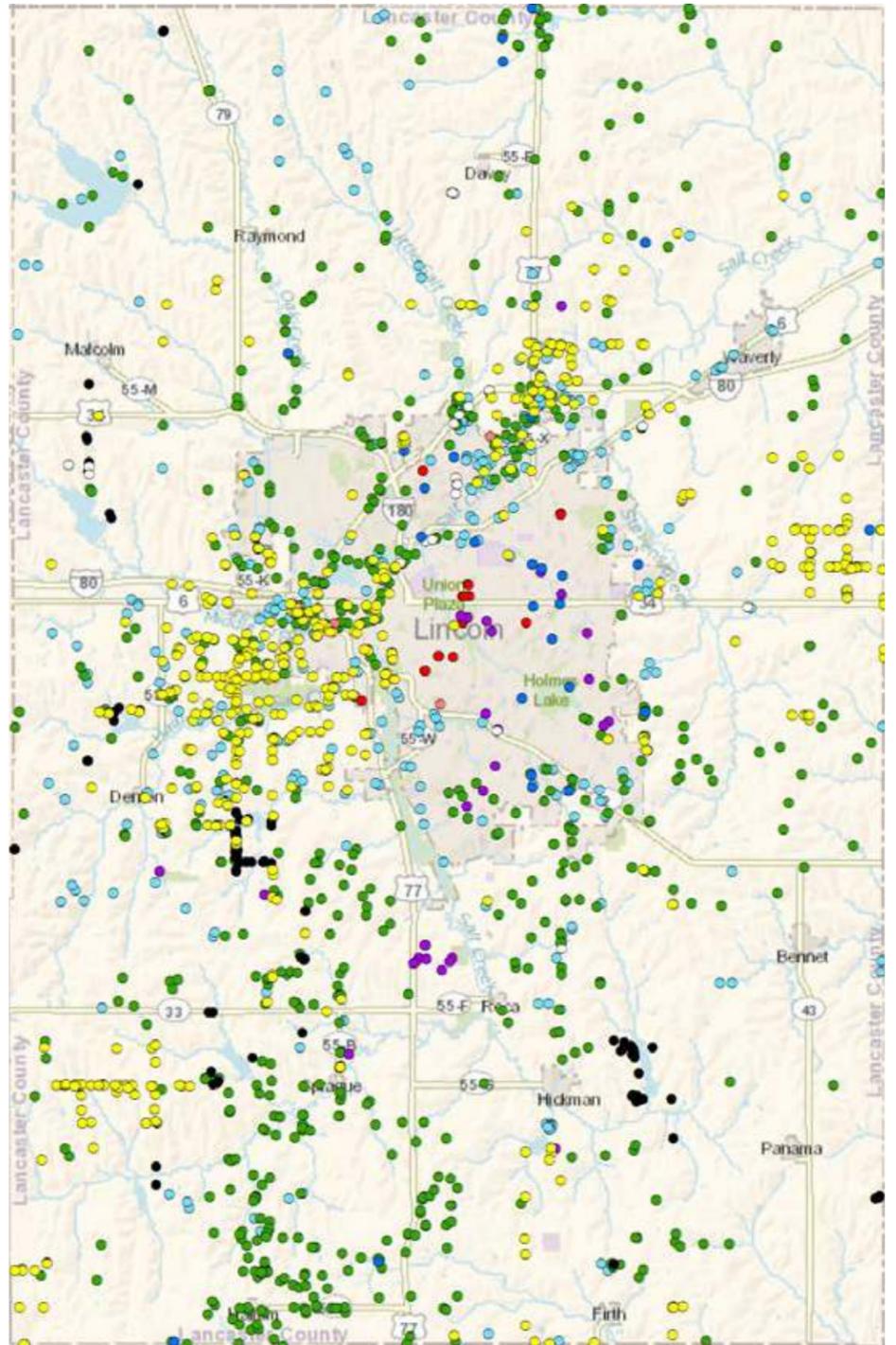
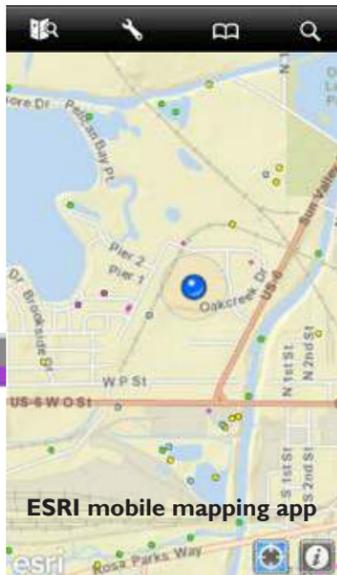
A couple tools Weed Control Authority uses as we transition into a paperless program are:

- Weed Eradication Electronic Data System (W.E.E.D.S.) database allows our weed inspectors to report inspections while onsite using a tablet, then the information is synced with the office.
- ESRI mobile mapping app allows our weed inspectors to pull up locations and work order information while onsite.

As budgets continue to be tight, we are constantly evaluating ways to make our program the most efficient and effective as possible while providing the best possible service to county residents.

Noxious Weeds in County Roadside

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



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

leafy spurge in the county roadsides.

Our inspectors are now using GPS to mark the locations, providing this information to our contractor to treat the locations. Since beginning this process in 2014, we are seeing better control while saving the county money.

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 into an interlocal agreement with the city in 1996.

The City of Lincoln's Weed Abatement Ordinance 8.46 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.

Three seasonal inspectors assist in administering this program. The seasonal employees complete inspections based on pre-selected properties due to their history, complaints from the public received in our office and by observing severe yards while

conducting other inspections.

In 2017, our office received 1,785 complaints from the public and additional 907 properties were observed as having violations. Our office made 5,844 initial and follow-up inspections on 2,692 sites.

Properties not in compliance were notified of the violations 1,525 times by posting a notice on the property. We also mailed 865 letters, 849 legal notices, 429 reminder letters and made 119 personal contacts.

Landowners cut 2,439 sites and forced cutting was contracted on 253 sites.

Landowners are responsible to pay the cost of control plus an administrative fee. A lien is placed against the property until the bill is paid.

Lancaster County Abandoned Cemeteries

Mowing and general maintenance on six abandoned cemeteries throughout the county falls under the supervision of the Weed Control Authority. 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.
- Jay Nutter and Boy Scouts of America Troop 64 for mowing Dietz.
- Troy Henning for mowing Highland Precinct & Uphoff.