Weed Awareness

Prepared by

Weed Control Authority
Lancaster County

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.

The County Commissioners serve as the Lancaster County Weed Control Authority. Russell Shultz serves as the superintendent and supervises a seasonal staff of six weed inspectors with the assistance of Chief Inspector Barb Frazier and Lori Pracheil, Account Clerk.

444 Cherrycreek Road, Bldg. 'B', Lincoln, NE 68528 • (402) 441-7817 • www.lincoln.ne.gov/cnty/weeds

2007 Annual Report

The major goal of the Lancaster County Weed Control Authority is to get landowners to voluntarily comply with the Nebraska Noxious Weed Control Act and City of Lincoln Weed Abatement Program.

The first step is to make the landowner aware of these responsibilities and obtain their willingness to abide by them. The second step is to provide any needed assistance to landowners. And the third step is to carry out an inspection program, as needed, to identify infestations and violations for the purpose of getting landowners to prevent and control the noxious weed infestations or to avoid and correct weed abatement violations when they occur.

Noxious Weed Program

The Lancaster County Noxious Weed Program promotes awareness and educates landowners how to control noxious weeds. The program provides general awareness through the Lancaster County Weed Control Authority Web site, this annual Weed Awareness insert in the University of Nebraska–Lincoln Extension Nebline, exhibits and newsletters.

The most direct awareness effort is carried with an extensive survey and inspection program. This program utilizes a computer data base of all inspections since 1994 and the Lincoln Lancaster Geographic Information System used to record the locations of noxious weed infestations found.

Sites are selected for inspection from previous year's inspection information which indicates the severity and extent of the infestation and the control efforts made by the landowner. Sites are selected where it is felt the landowner needs a reminder letter or assistance in control efforts and, in a few cases, the need for possible forced control.These landowners are provided with an aerial photograph showing the location(s) of the noxious weeds found by the inspector and recommended options for control. Additional sites are inspected when observed by an inspector or when a complaint is received. Follow-up inspections are made to assure control is accomplished.

Musk Thistle—In 2007, 407 sites were selected for inspection. An additional 30 sites were inspected because of complaints received and 92 sites observed by the inspectors during the season or when they surveyed the roads and adjacent lands when driving the 1,400 miles of county roads at the end of June. Over 8,800 acres were inspected, confirming 451 infestations on 1,298 acres. Cards were sent to 18 landowners with only trace infestations, reminder letters were sent to 265 and 94 legal notifications were sent. The Authority contracted for forced control at two sites and the inspectors provided control at six sites. Landowners controlled 310 sites on 1,008 acres. Inspections were made of 57 sites in the fall that did not get their sites controlled in the spring.

Leafy Spurge—A total of 319 leafy spurge sites were selected for inspection. The 175 county roadside sites were contracted for spraying. The county has been spraying these roadside sites since 1989. Even with this annual spraying effort, all the sites have not been controlled. The number and acres of sites have probably been reduced by 50%. This is a reflection of how difficult leafy spurge is to control. There was a total of 491 acres found infested on 259 sites. Reminder letters were sent to 75 landowners and legal notices were sent to six landowners.

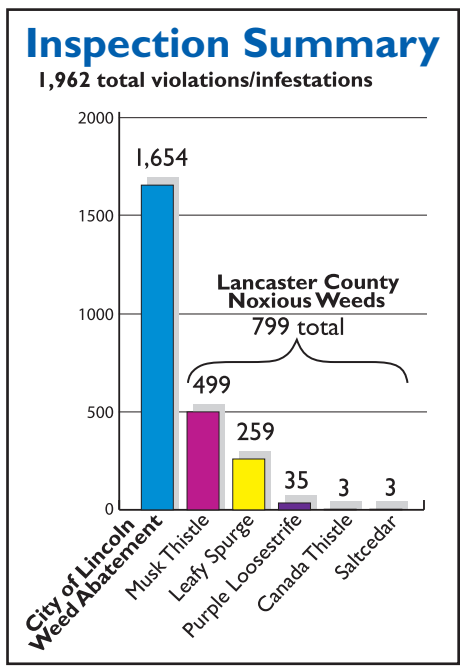
Purple Loosestrife—All 50 known wild purple loosestrife infestations were selected for inspection. No ornamental sites were selected because all of the plants on the 1,380 sites inspected since 2000 have been removed. Four ornamental sites and two wildlife sites were also inspected as a result of being observed by inspectors. A total of 97 inspections were made on the 56 sites. Inspectors found 35 violations on 16 acres. No violations were found on the other 22 sites. Landowner notifications included four legal notices, 31 reminder letters and one personal contact. Landowners controlled 26 sites. Follow-up will be made on all 35 violations.

Other Noxious Weeds—Canada thistle inspections were made on five sites. Landowners controlled two of the three sites found infested. Saltcedar was controlled on all three sites found.

Surveys for Potential Noxious Weeds—Two potential noxious weeds are showing up in the county. These are phragmites and serecia lespedeza. Surveys have begun to determine their extent and what possible action may be taken. See the stories about them on page four of this insert.

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 six inches. This program uses three seasonal inspectors. Most inspections are carried out as a result of complaints. 145 properties were selected for inspection because of past violations and the lack of response to correct the violations. There were 1,806 complaints on 1,622 properties.



Over 300 additional properties inspected had significant violations where it appeared there was no regular maintenance performed.

It required 4,590 inspections to make the initial and follow-up inspections on 2,103 sites on 1,180 acres. Violations were found on 1,656 sites on 660 acres. Complaints made on 424 sites did not have a violation when inspected within three days of the complaint. These sites either were not in violation when the complaint was made, or they were cut prior to the inspection.

It cost an estimated $6,500 to send 647 legal notifications and 1,164 reminder letters, publish 172 legal notices in the newspaper and to make 20 personal contacts. The 1,529 sites cut by landowners were over 92% of the violations. Forced-cutting was contracted on 115 sites at the cost of $5,465. Each contracted control was also billed an administrative fee of $60. Violators were billed a total of $12,005. Only $2,577 was collected leaving billings amounting to $9,409 being specially assessed.

Learn to Recognize Nebraska's Noxious Weeds

The Nebraska 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. Pictured are Nebraska's noxious weeds which can be found in Lancaster County.*

Musk Thistle

Leafy Spurge

Purple Loosestrife

Canada Thistle

Saltcedar

Plumeless Thistle

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.

**Nebraska's noxious weeds Spotted and Diffuse Knapweeds have not been found in Lancaster County.*

Weed Awareness

Decline in Noxious Weeds

In Lancaster County, there has been an overall decline in the state-designated noxious weeds due to the efforts of landowners. There are other weeds of concern with the potential to be designated as noxious weeds by the state or county.

Acres of Noxious Weeds

Musk Thistle—The acres of musk thistle infestations continue to decline. There are fewer infestations found and the infestations are getting smaller. Most landowners have learned to look for infestations where they were the previous year and apply herbicides with residual control while the musk thistle is still in the rosette stage of growth – April, May. They re-inspect every two weeks the infested areas and spot treat any escapes and any spring germinating plants. Those with the most effective control programs, will also take steps to inhibit germination of new plants, spread of infestations to new areas and initiate their control efforts of the fall germinating seedlings and rosettes.

Leafy Spurge—Leafy spurge infestations are also declining. Leafy spurge being a deep-rooted perennial plant takes even more persistent and long term effort to keep infestations under control and to reduce the size of the infestations.

Purple Loosestrife—The reduction of purple loosestrife has been the most dramatic. The over 2,000 sites planted with ornamental purple loosestrife have been eliminated by cooperative homeowners. Thanks go to the cooperating garden centers that gave discounts for the replacement plants. There are about 40 wild infestations of purple loosestrife in drainage ways in and around Lincoln that need continued follow-up control to prevent the infestations reaching Salt Creek proper.

Other Noxious Weeds—There is some plumeless thistle in the eastern part of the county intermingled with musk thistle and is controlled along with the musk thistle. There are also several small infestations of Canada thistle throughout the county. Many of these infestations in Lincoln are brought in with tree and shrub plantings or lawn sod in the past. These infestations are very persistent but are only spreading underground roots and not by seed. Saltcedar has been found in the wild at four locations and four individual trees planted as ornamentals were also located. All of these have been controlled.

There needs to be a continued alert for the diffuse knapweeds, state designated noxious weeds not found in the county and phragmites, serecea lespedeza and other potential noxious weeds.

Riparian Vegetation Management Task Force Created in 2007

Legislative Bill 701 passed by the Nebraska Unicameral on April 26, 2007, and signed into law by Governor Dave Heineman on May 1, 2007, created the Riparian Vegetation Management Task Force. This task force was created in response to the many concerns and threats to Nebraska's riparian areas. Many of the streams are being clogged with vegetation and other obstructions and the vegetation in areas adjacent to the streams are being replaced by invading plants. This is creating a multitude of impacts.

Stream capacities are being reduced dramatically which will increase flood damage potential and is affecting the required delivery of water to Kansas. The invading plants are affecting wildlife and endangered species habitat. It is the job of the task force to address concerns and threats.

The task force was to develop and prioritize vegetation management goals and objectives; analyze the cost-effectiveness of available vegetation treatment; and develop plans and policies to achieve such goals and objectives. The legislation requires the task force to make recommendations to the Governor and the Legislature by Dec. 15, 2007, and June 30, 2008 and 2009, regarding funding and legislation needed to achieve its goals.

Governor Dave Heineman appointed task force members on June 21, 2007. The task force members include surface water project representatives, representatives from eight state entities, representatives from NRD's, representatives from the Nebraska Weed Control Association, riparian landowners and five state senators.

Lancaster County Weed Control Authority Superintendent Russell Shultz was appointed to the task force as one of the Nebraska Weed Control Association representatives. He is serving as vice chair of the task force.

The task force has met three times and had two field tours. Minutes from the three task force meetings can be found at www.agr.ne.gov under the Riparian Vegetation Management Task Force button. This Web site includes other important information regarding task force activities.

Seven work groups were created to aid the task force in identifying, and then framing, issues critical to meeting goals and objectives. It was determined groups could solicit information, and include in discussions, experts who are not task force members.

The groups created are:

- Task Force Goals, Objectives and Reports
- Vegetative Management and Treatment
- Survey and Monitoring
- Education and Awareness
- Funding and Incentive Program
- Streambed Ownership
- Vegetation Water Use

The Nebraska Department of Agriculture (NDA) is administratively responsible for the task force. If you have any comments or desire to provide input into this process hit the contact NDA button at the top of the Riparian Vegetation Management Task Force. The first report has been completed and can be viewed at above identified URL.

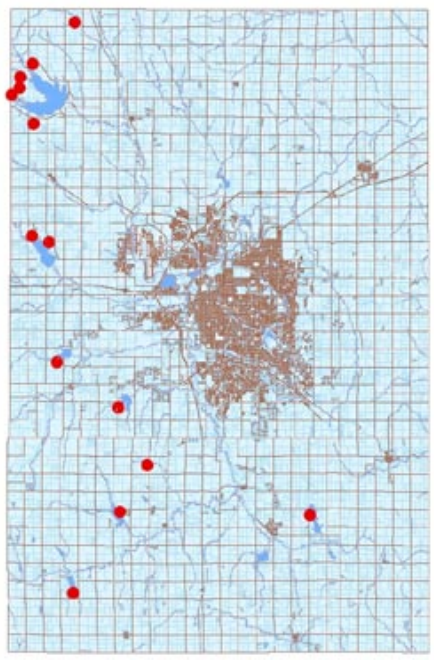
Be on the Look Out for Sericea Lespedeza

Sericea lespedeza (*Lespedeza cuneata*), or Chinese bush clover, is an introduced perennial legume native to eastern Asia. It is recognized for its tolerance of drought, acidity and shallow soils of low fertility. It will tolerate soils ranging from very acidic to slightly alkaline, but is best adapted to a pH of 6.0 to 6.5. It does best on clay and loamy soils deep, fertile and well-drained, but will also grow on poor sites. It has few insect and disease problems. Sericea lespedeza's ability to thrive under a variety of conditions and its tendency to crowd out more palatable forages, are among the reasons it has been declared a noxious weed in Kansas and may be considered a noxious weed in Missouri, Nebraska and Oklahoma. Both Gage and Pawnee Counties in Nebraska have designated sericea lespedeza as a county noxious weed.

Sericea was planted in the past to control soil erosion, provide forage for livestock and provide cover and food for wildlife. In Lancaster County, it was planted in wildlife areas. Sericea lespedeza was originally considered valuable as food and cover for wildlife. This has not been supported by research or practical experience. From these plantings, it has spread by animals and movement of hay contaminated with sericea seed to native prairies, shrublands, forests and pastures. Normal management practices such as grazing, burning and applying herbicides do not adequately control sericea lespedeza.

Current Status in Lancaster County

Sericea lespedeza has been identified in 14 sites in Lancaster County as shown on the map. Most of these sites are on wildlife lands. Wildlife managers are currently addressing sericea lespedeza on these lands. Private landowners need to be aware and control any infestations spreading to their property. It is likely to show up along road ditches and grasslands. It seems to invade native grasslands more than introduced grasses. Special attention should be made of CRP lands. We have not found infestations on CRP lands, but infestations are being found in many Kansas CRP plantings. Efforts are under way to identify infestations and conduct an aggressive public awareness campaign. Please let the Weed Control Authority office of sightings you feel may be sericea lespedeza. It can be found easier in the fall when the grass starts to brown up while sericea is still green and actively growing.



Sericea Lespedeza sites in Lancaster County in 2007

Identifying Sericea Lespedeza

Sericea lespedeza is a shrubby, deciduous perennial about two- to five-feet tall. Coarse stems are single or clustered with numerous branches. New growth each year comes from buds located on the stem bases or crown about one- to three-inches below the ground. Stems and branches are densely leaved. Leaves are trifoliate and attached by short petioles. Leaves are club- or wedge-shaped (wider at the tip than the base) 1/4- to one-inch long and 1/16 to 1/4-inch wide. The leaf is round to flat at the top, with a conspicuous point at the tip. The lower leaf surface has silky hairs. Scale-like stipules are present on the stem.

Flowers are yellowish-white with purple to pink markings and appear from mid-July to early October. The flowers occur in clusters of one to three in the upper leaf axils and are 1/4-inch long, fused at the base.

Sericea may be confused with desirable native legumes. Several species of lespedeza occur in the Midwest. Native perennial lespedezas in the Midwest include roundhead, violet and slender lespedeza. None of these species has shown the invasive nature of sericea lespedeza. Slender lespedeza is the easiest to confuse with sericea lespedeza. Slender lespedeza has the same tall, coarse, branched stems as sericea lespedeza but has different-colored flowers and a different leaf shape. Flower color of slender lespedeza ranges from purple to pink, and the leaves are linear or elliptical with a rounded tip (without a conspicuous point) and base.

Sericea Lespedeza Information

Sericea lespedeza information including control recommendations can be found at the Multi-State Sericea Lespedeza Work Group Web site www.oznet.ksu.edu/sericea

Weed Awareness

Lancaster County Phragmites—Native or Non-Native

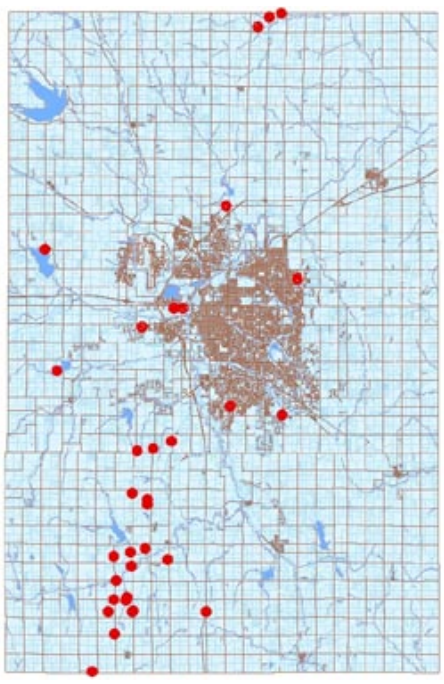
Common reed, *Phragmites australis*, a relatively new invader of Nebraska's riparian areas, is rapidly expanding its range in Nebraska to the detriment of native wetland communities. In the past ten years it has shown up along the entire Platte River and Republican River systems. Almost 100 miles of the Platte River from North Platte to Kearney have solid stands of phragmites on banks, adjacent wetlands and islands. It is spreading at an alarming rate. Common reed is reducing the flow capacity of the streams and impacting wildlife such as cranes, waterfowl, least terns and piping plovers. The clogging of the streams will increase the threat of floods as rainfall returns to normal or above. It is a heavy water user. The scattered infestations along the Lower Platte River have been doubling in the past three years and will become solid stands if not controlled. This expansion has gone pretty much unabated until this past year.

The Lower Platte Weed Management Area, a ten county cooperative and coordinated group, began purple loosestrife control four years ago along the Lower Platte River and soon became aware of invading infestations of phragmites coming from upstream and began control efforts. Weed Management Areas on the Republican and Central Platte River basins began strong control efforts this past fall with grant funding recently provided by LB 701. Nebraska Department of Agriculture (NDA) director made an emergency designation of phragmites as a noxious weed in the Republican River Basin to aid in this effort. Cass County has made phragmites a county-designated noxious weed.

There are native and introduced phagrmites. The introduced phragmites is much more aggressive. The phragmites found along the Platte and Republican Rivers seem to be introduced stands.

Lancaster County Situation

There are stands of phragmites along upland streams and wetlands in Lancaster County. A survey is being made of these stands and an attempt is being made to determine if they are native or introduced stands. So far, 32 stands on 63 acres have been found as shown on the map. This survey will continue. Native and non-native determinations will be made. All reported stands of phragmites will be inspected and added to the survey, if found to be phragmites. This information will be used to decide if to seek a county designation as a noxious weed.



Phragmites sites in Lancaster County in 2007

Identification

Phragmites is characterized by its towering height of over 15 feet and its stiff wide leaves and hollow stem. Its feathery and drooping inflorescences (clusters of tiny flowers) are purplish when flowering and turn whitish, grayish or brownish in fruit. They wave like plumes in the breeze. Flowering occurs from July-October.

Phragmites is a colonial plant, spreading by rhizomes (underground stems) and capable of forming large stands or colonies arising from one or a few seeds or plant pieces. These colonies form along the margins of streams and in marshes and ditches. They can form in wetlands and in disturbed areas and their aggressive growth and tendency to outcompete other plants and form monospecific (one species) stands creates concerns.

Control

At this time no means of biological control are available in the United States for treating phragmites infestations. HABITAT™ and Glyphosate-based herbicides (e.g., Rodeo®) are the most effective control method for established populations. If a population can be controlled soon after it has established, chances of success are much higher because the below-ground rhizome network will not be as extensive. Herbicides are best applied in late summer/early fall after the plant has flowered either as a cut stump treatment or as a foliar spray. It is often necessary to do repeated treatments for several years to prevent any surviving rhizomes from resprouting. When applying herbicides in or around water or wetlands, be sure to use products labeled for the purpose to avoid harm to aquatic organisms.

Any suspected infestations of phragmites should be reported to the authority.

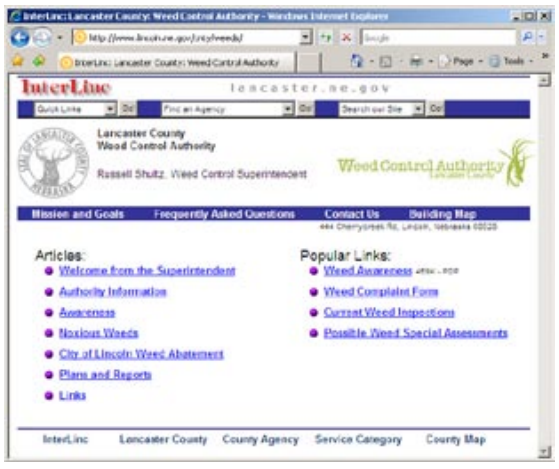
Should Phragmites be Designated a Noxious Weed?

Consideration is being given to designating phragmites a noxious weed in Nebraska. Phragmites is becoming a serious problem in wetlands and river basins across the state. The most affected river basins are the Platte and Republican. In 2006, counties reported that 20,765 acres were infested with phragmites. Several weed management areas across the state have secured funding through numerous grants to apply control measures not only to phragmites, but also to saltcedar and purple loosestrife.

On Aug. 3, 2007, phragmites was declared a noxious weed in the Republican River Basin. This was done to facilitate two projects funded by LB 701 (water legislation passed last year). These two projects are for vegetation removal from the streambed that is impeding the natural flow of the river. This vegetation, including phragmites, is having a major effect on the delivery of water to Kansas as required by a river compact. Additional streambed management projects are anticipated on the Platte River using state and federal funds. It is felt that a statewide designation of phragmites is needed to facilitate these projects and other control efforts in stemming this rapidly expanding, invasive weed.

Comments are being sought regarding adding phragmites as a noxious weed. The article above describes the situation in Lancaster County as we know it now. Anyone wishing to make comments—please provide them to the Lancaster County Weed Control Authority by e-mailing lpracheil@lancaster.ne.gov or calling 441-7817.

Lancaster County Weed Control Web Site



The Lancaster County Weed Control Authority Web site at **www.lincoln.ne.gov/cnty/weeds** provides very useful information about the Authority's program and activities and about weed control and management.
The site is continually being updated.

Via the Web site, you can:

- ➜ Contact the Weed Control Authority.
- ➜ Make a weed complaint.
- ➜ Make a real-time search of current weed inspections.
- ➜ Look at a map of noxious weed locations in the county.
- ➜ See the latest listing of possible weed special assessments.
- ➜ Study noxious weed and weed abatement laws and regulations.
- ➜ Learn about noxious weed identification.
- ➜ Read about the County Noxious Weed and City Weed Abatement Programs.
- ➜ See plans and reports.
- ➜ Check on noxious weed controls.
- ➜ Learn about managing natural areas in an urban setting.
- ➜ Test your knowledge about Nebraska weeds.
- ➜ Link to other weed control Web sites

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

For More Information

If you have questions about certification regulations or weeds not allowed in certified forage, please see the North American Weed Management Association's (NAWMA) Web site at http://www.nawma.org for a complete list of weeds and regulations.

Weed Awareness

Mapping Invasive Plants in Nebraska

Mapping is an integral part of management for any land manager. Mapping allows for a means to record a species temporally and spacially. While it's one of many land management tools, it's important to know while a particular plant species can be mapped to a particular area, they may not be consistently found. Continuous monitoring aids mapping efforts and give valuable information to the land manager.

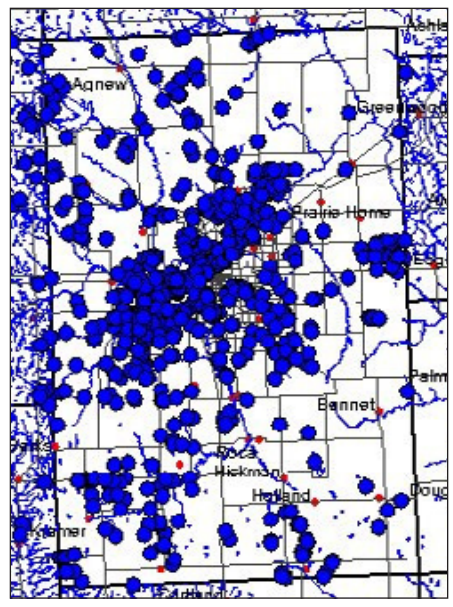
Nebraska Weed Control Association Statewide Mapping Project

The Nebraska Weed Control Association's statewide mapping project is nearing its final stages. This unique system will allow for land managers and county agencies to map, monitor and control invasive plants within the State of Nebraska and keep everything standardized for all partners in Nebraska concerned with invasive plants.

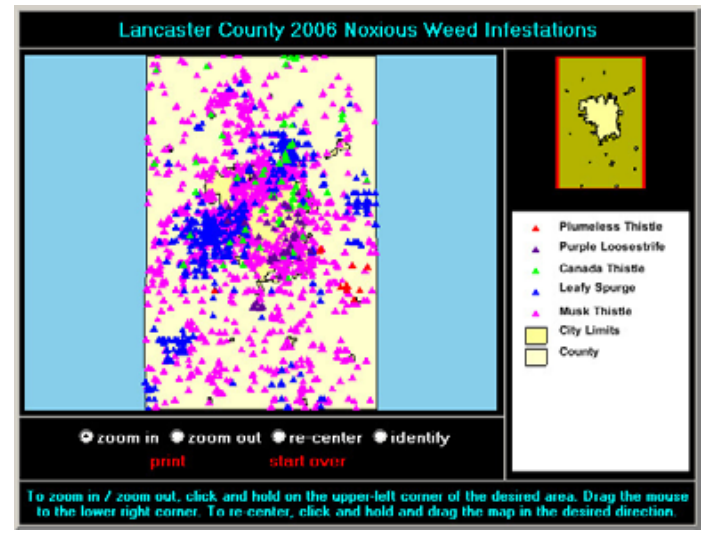
Key points about this system:

- Noxious and invasive weed management using ArcIMS
- Allows for expansion of technology while integrating various Web technologies to disseminate information
- View of real time data from each county in Nebraska as well as partner agencies
- Downloadable data in cvs form to integrate into existing databases in the US
- Creation of maps and control methodology

Lancaster County Weed Control Authority began using the mapping program in 2007. The locations of over 900 noxious and invasive weed infestations found and information about each have been entered into the system. The locations and information have been downloaded into the Lancaster County and City of Lincoln Geographic Information System (GIS) Network.



Nebraska Weed Control Map of Lancaster County Noxious Weed Sites



Lancaster County GIS Network Map showing Noxious Weed Sites

You can view the Nebraska Weed Control statewide map by visiting www.neweedmapper.org or view the Lancaster County Weed Control Authority's map of Noxious Weed Infestations map by visiting www.lincoln.ne.gov/cnty/weeds/. Both mapping programs can be used to find locations of noxious weeds inspected in 2007. You can zoom-in and print 2007 aerial photos with the noxious weed information.

Noxious Weed Control Tips

In order to obtain long-term effective noxious weed control, you must be smarter than the weeds. Here are ten control tips to remember.

1. Your infestations are most likely coming from seeds in your soil and not from other sources. Seeds will remain viable in the soil 10 to 20 years.

2. You are going to find infestations where you have found them in the past and in areas where the soil surface has been disturbed.

3. Prevent the germination of seeds by maintaining or establishing a good vegetative cover.

4. Biennial weeds (Musk and Plumeless thistle) are easiest to kill when small (rosette stage in spring or fall).

5. Perennial weeds should be controlled at the stage of growth the herbicide will be taken into the root system:

• Canada thistle—bud stage and fall regrowth

• Leafy spurge—flowering stage and fall

• Purple loosestrife—flowering stage

6. Fall is the best time to begin control efforts on biennial plants, they germinate in the fall and produce the seeds the next spring.

7. One-time control effort is not enough! You invariably will have some escapes from the first and even later efforts, and there may be plants that germinate after your initial control effort. Follow-up by scouting the area until after the normal flowering time of the plant.

Musk and plumeless thistle are easiest to kill during the rosette stage (pictured).

8. It is always good to use a herbicide that has residual control. It will not eliminate the need for follow-up scouting of the infestation, but it will reduce the amount of follow-up control required.

9. You do need to be alert to the introduction of new infestations. New infestations can begin from noxious weed seed infested hay, bedding and grass seed, flowing water along streams, movement of livestock from an infested area and other means of transportation.

10. Weeds won't wait. Be ready to act. Develop your control plan before the weeds start growing.

FOR MORE INFORMATION

University of Nebraska–Lincoln Extension publication EC130 "2008 Guide for Weed Management in Nebraska" includes herbicide recommendations for noxious weeds. Available at the extension office for $5 or free online at www.ianrpubs.unl.edu/sendlt/weeds

Lower Platte Weed Management Area Report

The Lower Platte Weed Management Area (LPWMA) includes the ten counties in the Lower Platte River Basin. Lancaster County is a part of this basin. Grants have been received from the National Fish & Wildlife Foundation Pulling Together Initiative in 2004, 2005 and 2006 that funded activities through 2007. This report summarizes the accomplishments of the project over this period. The report outlines how these grant funds served as a catalyst in getting the weed management area efforts off the ground, establishing an on-going effort and influencing efforts upstream and statewide.

Summary

The riparian plant invaders, purple loosestrife, phragmites and saltcedar began showing up along the Lower Platte River five to ten years ago. These plants have the potential to replace much of the existing vegetation. A variety of organizations were invited in the fall of 2002 to discuss how a cooperative and coordinated effort of awareness and assistance to landowners could be initiated. This was the beginning of the Lower Platte Weed Management Area.

The objectives and to-date accomplishments are:

1. Eradicate and prevent the establishment of invading non-native plants.

Over $400,000 have been contributed by the county weed control authorities, Nebraska Games and Parks Commission, NRD's, Lincoln Water Works, BNSF Railroad, sand and gravel companies, Nebraska Airboater Association members, individual landowners and others.

Infestations have been controlled on more than 4,000 acres from 2003 to the present along the 170 miles of river. Also, several thousand homeowners removed planted purple loosestrife from their yards in Omaha and Lincoln that will help prevent wild infestations occurring in the streams.

Almost $140,000 of the funds utilized grants from the National Fish & Wildlife Foundation and the Nebraska Department of Agriculture. The purple loosestrife infestations have been reduced dramatically. Phragmites have advanced considerably the past three years. It is more expensive to control. All of the scattered saltcedar infestations have been eradicated.

2. Carry out an awareness program to obtain public support and participation of landowners.

The awareness program has included a Web site www.lowerplattewma.org, a public service billboard, informational kiosks, informational brochures, landowner mailings, exhibits and tours.

The Threats to Nebraska Rivers–Invasive Plants Conference last August contributed to the creation of the vegetation management section of LB 701. This bill was passed by the unicameral. The bill provides grant funding for riparian vegetative management and created a riparian vegetation management task force to provide recommendations to the Governor and the legislature.

3. Develop a survey and monitoring program to determine extent and progress.

The Lower Platte North NRD GIS specialist developed and maintains the Web-based mapping program www.nrdmapmaker.org/loosestrife/viewer.htm to map infestations and progress.

4. Promoting organized control efforts upstream.

A presentation was made at a Nebraska Weed Control Conference and assistance was provided in the formation of seven weed management areas covering 43 counties including all the Platte River and most of its tributaries in Nebraska.

The grants received have been used to leverage cooperation, money and in-kind services from the federal, state and local levels. It has led to very strong cooperative efforts with natural resource districts in developing a streambed vegetative management program for the Lower Platte River. As a result, the goal of the Lower Platte Weed Management Area has been expanded "To improve the health of the riparian areas of the Lower Platte River for the benefit of the owners, users and general public by controlling and preventing riparian plant invaders and improving stream flow capacity by managing the vegetation in the streambed and on the banks."