

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 spatially. 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

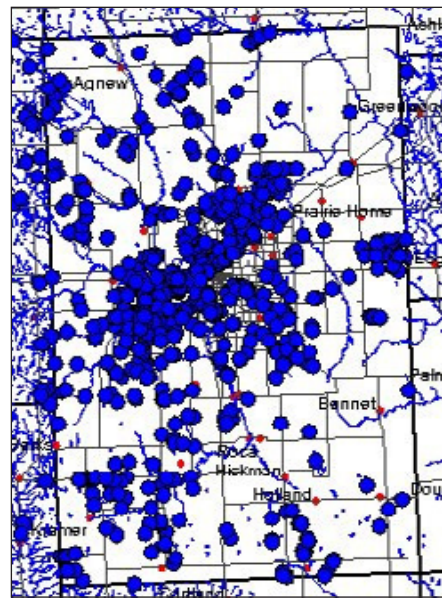
The Nebraska Weed Control Association's statewide mapping project is nearing its final stages. This unique system will allow for land managers and county agencies to map, monitor and control invasive plants within the State of Nebraska and keep everything standardized for all partners in Nebraska concerned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

Key points about this system:

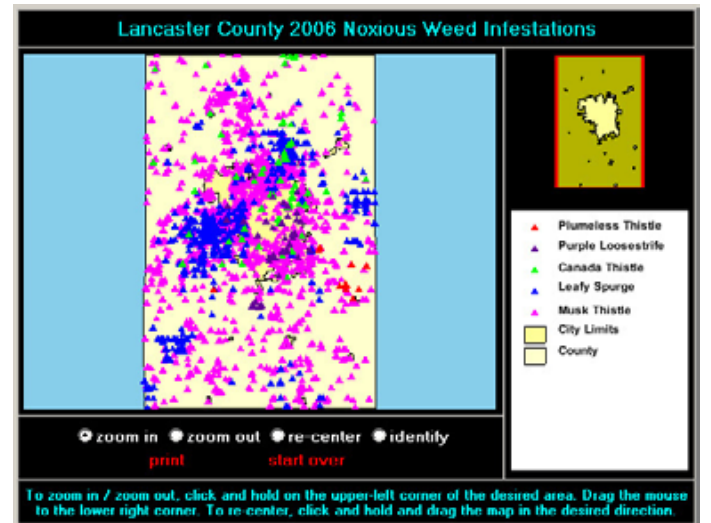
- Noxious and invasive weed management using ArcIMS

- 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



Nebraska Weed Control Map of Lancaster County Noxious Weed Sites



Lancaster County GIS Network Map showing Noxious Weed Sites

into the Lancaster County and City of Lincoln Geographic Information System (GIS) Network.

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 Plumless 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,



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

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.

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.

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."

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

