



Lancaster County Weed Control
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<http://lancaster.ne.gov/weeds>

Weed Watcher

Resource Guide

for volunteer early detection and reporting of invasive plants



*Weed Watchers practice
preventive medicine for the land.*

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Using the Weed Watcher Resource Guide

This Weed Watcher Resource Guide is intended for use by both Lancaster County Weed Control Weed Watcher volunteers and organizations interested in promoting early detection on their land and in the State in general. It is divided into five sections. The first three sections contain everything you need to be a Lancaster County Weed Control Weed Watcher. It has background information, plant identification, and instructions for documenting and reporting plants. Section four is a list of tools provided by the Lancaster County Weed Control that will be used by the Weed Watcher. Sections five and six will help you prepare for your Weed Watcher outings including a few safety tips and an equipment list. This resource guide will also be available to download at <http://lancaster.ne.gov/weeds>

Section 1: Introduction

Weed Watcher Program Overview

The Lancaster County Weed Control Weed Watchers program in Nebraska is designed to train and support volunteers to find and report new occurrences of harmful invasive plants in 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 less strenuous than managing large plant infestations after they are 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, or recruiting and training new volunteers to survey high priority weed-free sites on your property.

Every spring we provide training to new and current weed watchers. The training is also presented as a model for people who may be interested in starting their own Weed Watcher program. At the training we review all of the information provided in this guide. We also cover what plants to look for, how to identify them, how to document and report them, and provide printed resources and materials for being a weed watcher. Attending the training is highly encouraged if you would like to learn more about the Weed Watcher program, become a Weed Watcher, or start your own program. Please contact the Weed Watcher Program Coordinator, at 402-441-7817 or weeds@lancaster.ne.gov



Who are the Weed Watchers?

Weed Watchers are people who care about the health of our lands and want to help prevent the ecological and economic damage associated with plant invasions by looking for and reporting new weeds. Weed Watchers can be anyone from private citizens who simply want to scan for new invaders while they hike, to government officials looking for invaders while performing other duties. **Weed Watchers can be anyone interested in helping protect our environment.**

What does a Weed Watcher do?

“Weed Watchers Trek to Protect”

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

One: Learn the weeds. Familiarize yourself with the invasive plants that are threatening to invade your area of concern. At the Lancaster County Weed Control we are concerned about new invaders establishing in our County.

Two: Look for weeds. Look out for invasive plants in your area of concern. Many Weed Watchers will keep an eye out for invasive plants while enjoying the outdoors.

Three: Document and report weeds. Lancaster County Weed Control Weed Watchers will fill out a **“hit report”** form and return it to Lancaster County Weed Control. It is also very helpful if you take a photograph, GPS, or make a sketch of its location or mark its location on a map. *“Good Weed Watchers always carry a camera and a map”*



Section 2: Background

Why worry about invasive plants?

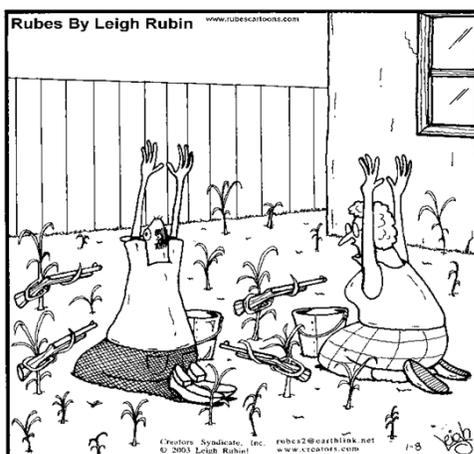
Invasive plants are non-native plants that usually come from foreign countries and end up in the United States away from their natural environment

and natural enemies. Once here they can cause ecological and economic problems by reproducing and growing so prolifically that they displace native plants. It is important to note that not all non-native plants are harmful; in fact, most are beneficial or harmless. However, even just a few invasive plants have the potential to transform entire ecosystems. Once established, invasive plants reproduce and spread prolifically, often forming monocultures that slowly take over more and more territory, displace native plants and animals, hybridize with those natives, and may potentially alter ecosystem functions and processes. Often the transition is so gradual that it goes unnoticed until it is too late. Native plants, along with the communities that depend on them for food, shelter, and habitat, begin to disappear. In fact, invasive plants are now recognized worldwide as posing threats to biological diversity.

Not all non-native or exotic plants are evil. Often exotic plants are cast by the media as the epitome of evil, the wreckers of our precious ecosystems. While this may be effective at mobilizing public opinion, it does not leave much room for the more complicated reality – ecosystems are dynamic and complex, and there is much we do not understand about the process of invasion by non-native plants or the long-term impacts of these invasions. We are not crusaders against all introduced plants!! Rather, we are only concerned with those plants which are invasive (*those that can reproduce and spread outside of cultivation and negatively impact what we want*). You will be provided training on which plants are harmful and how they behave in our native ecosystems.

Early Detection = Prevention

Established invasive plants are almost impossible to control or remove. Also, once an invader builds its populations to levels that are easily noticeable and begins to cause damage, it may be too late to consider eradication as a viable management strategy. Fortunately, many potentially harmful plants have not yet arrived to Nebraska or still have a low enough abundance to be contained or eradicated. It is important to contain these invasive plants in order to prevent their further spread. Detecting and controlling these plants before they are widely established is the best way to prevent their potential negative impacts.



"We never should have waited this long ...
Now the weeds have completely
taken over."

Weed Watchers play a vital role in early detection and rapid response as they participate in a coordinated network of fellow concerned citizens that look for and report new invaders. Finding and controlling these early invaders while populations are still scarce will require dedicating resources toward surveying areas plants are likely to invade. Early detection and rapid response still remains the most low-impact and cost-effective way to address the problem of invasive plants, short of preventing the problem in the first place.

Section 3: Field Protocol

Four of the best tools of the weed watcher are patience, vigilance, neatness and co-operation. Learn these tools and you will see small things that escape the eye of most people, signs of what has passed, what is happening and what is yet to come.

Know your site

The first step as a Weed Watcher is to “know your site”. Learn where streams, ridges, hills, floodplains, etc. are located. Become comfortable navigating your site. You should develop a familiarity with your map, and understand the relationship between a field location and where that point lies on the map. This will take some time to accomplish, but it is key to accurately documenting the location of the new invasive plants you come across. Using GPS coordinates (*latitude & longitude*) to document the location is encouraged, along with providing a detailed description of the infestation location.

Know your plants

Like a criminal investigator, you will have a higher detection success by “getting inside the mind” of your invasive plant. That means understanding the plant; (when it emerges in the spring, when it flowers and fruits, and when it loses its leaves in the fall) and its habitat (is it shady, sunny, forest, prairie, wetland, lake, or riparian areas?). You should also imprint in your mind a “search image” for each plant on your watch list. What key characteristics makes that plant stand out from the rest of the vegetation? What image are you looking for at a distance vs. very close up? Lancaster County Weed Control staff will assist you in learning how to “know your plants”.

When, Where and What to Look For

Plan your visits in accordance with when the plants will be most easily identified. Consult the [Weed Calendar](#) provided for information about when each plant emerges in the spring, flowers and fruits, and lose leaves in the fall. The Brochures (*provided at training and also available at Lancaster County Weed Control*) for each plant will have information about the habitat it invades. Carefully consider the habitat in which target plants will be found and plan your outings accordingly.

Keep in mind that invasive plants are known to occur when soil is disturbed. We often see an invasion of exotic or weedy plants following roads, trails, construction areas or other areas highly influenced by human activities. Invasive plants, however, can also take advantage of natural disturbances such as floods, deer trails, or tree falls. This correlation between invasive plants presence and both human and natural disturbance can give us clues as to where and when to look for new invasions.

Overall, be sure to have a broad range of vision, noticing plants at both the herbaceous and canopy levels. Also remember that we are looking for new invasions, so it is important that you scout for small populations as well as great expanses of a particular plant. This means that careful observation is very important.

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.



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)

Links to Nebraska's Noxious Weed Fact Sheets

[Musk thistle](#)

[Canada thistle](#)

[Plumeless thistle](#)

[Leafy spurge](#)

[Purple loosestrife](#)

[Phragmites](#)

[Saltcedar](#)

[Spotted & Diffuse knapweed](#)

[Japanese & Giant knotweed](#)

[Sericea lespedeza](#)

Other sites that may be useful to help you learn to identify and report new invaders.

[Nebraska Weed Control Association](#)

[Nebraska Department of Agriculture Noxious Weed Program](#)

[Nebraska Invasive Species Project](#) – Monitoring Mapping Risk and Management

[EDD Maps](#) – Early Detection and Distribution Mapping System

Links to other Invasive Species Fact Sheets

[Nebraska's Watch List](#) (a list of weeds that are known to be invasive in specific habitats and have the potential to be invasive in Nebraska.)



[Giant Reed](#)



[Garlic mustard](#)



[St. Johnswort](#)

Document Invasive Plants

Documenting and reporting Watch List plants are at the core of being a Weed Watcher. Once you encounter a plant infestation you need to follow the steps listed below.

- ✿ Review the plants identification information to confirm its identity and for special instructions regarding the plant. Depending on the plants, you may be able to control the plant right away.
- ✿ Place or tie a flag near the plant population or individual.
- ✿ If possible, take GPS coordinates.
- ✿ If possible, take a digital photograph. Use the three-shot approach:
 - ↗ Photograph the habitat the plant is occupying
 - ↗ Photograph close up of the flower.
 - ↗ Photograph close up of the leaf.
- ✿ Fill out the "[hit report](#)"
- ✿ Be sure to include a detailed description of the location of the plants, especially for small isolated infestations (*for example, '10-20 plants about knee-height growing at the beginning of the trail near the base of the large cottonwood tree'*).

To pull or not to pull

Pulling a found plant population on the spot could save time and resources; however, many precautions must be taken to avoid further spreading the invasive plant. Some plants may cause skin irritation so it is important to "know your plant".

1) Before pulling insure you have identified the plants correctly. If there is any doubt about your identification, don't pull!

2) Check your fact sheet for plants specific pulling instructions. Whether or not to pull a plant will depend on the plants and the season.

For example, disturbing the root systems of some plants can encourage vigorous growth. Also, early season pulling can stimulate further germination of some plants; for other plants pulling plants late in the season while in seed may further disperse the seeds. **If you determine pulling is appropriate, use GREAT CAUTION not to further spread plant fragments and seeds in the process.**

Visits per Year

In order to find each plant at its peak, or when it is most easily identified, you will need to visit your site several times a year. We recommend you visit your site a minimum of two to three times per year to increase your chances of encountering and noticing all Invasive plants.

Find 'em, don't spread 'em



The objective of a Weed Watcher is to prevent invasive plants by accessing and searching in areas we either suspect they will be, or in highly valued areas we want to keep weed-free. Unfortunately, all of this travelling to and from invaded sites and areas of critical concern means Weed Watchers, if not very careful, are also in a position to spread the very weeds they strive to prevent. Weed Watchers, along with many other well intentioned people who enjoy the outdoors can be some of the most important vectors of weed spread by moving seeds and other viable plants parts from weedy to weed free areas. **PLEASE, it is of the utmost importance to CHECK YOUR CLOTHING, BOOTS & SOCKS, AS WELL AS YOUR PETS FOR WEED SEEDS after visiting a weedy area and before visiting a weed-free area.**

Reporting

After you have gone on a Weed Watching expedition we ask that you return your Hit Report to us in a timely manner. Please feel free to mail or email Hit Reports, photos, maps and GPS coordinates to:

Lancaster County Weed Control
444 Cherrycreek Rd. Bldg. B
Lincoln, NE 68528
402-441-7817
<http://lancaster.ne.gov/weeds>
email: weeds@lancaster.ne.gov

What happens to the report?

Turning in your Hit Report begins a chain of events that eventually leads to improved weed management. The Lancaster County Weed Controls first task is to confirm the identification of the plant. We hope you can include a picture to help us ID the plant without having to re-find it in the field. If the plant is verified, the new population will be mapped. Plants distribution information is essential for prioritizing plants for control. Lancaster County Weed control will now plan their response to this new invasion.

Section 4: Tools Provided to the Weed Watcher

The following materials are provided by Lancaster County Weed Control at the trainings and are available to download at <http://lancaster.ne.gov/weeds>. Bring these items with you on your outings. They will help you locate, identify, document and report new invasive plants.

Weed Watcher Resource Guide

Brochures / Fact sheets

Plant timeline [Calendar](#)

Blank [Hit Reports](#)

Flagging (tape or stakes)

Section 5: Other Supplies Recommended

Compass (if possible)

Map or (if possible)

GPS unit (preferred)

Notebook

Sharpies

Pencils

Seed Removal Brush

Water (at least 1 liter)

Hat and proper clothing

Food

Sunscreen

Weeding tool and plastic bags

First aid kit

Camera and film (digital is preferred)

Section 6: Weed Watcher Preparation

Be prepared before your outing with a few safety tips:

- ✿ Carry a topographic map or trails map of areas in which you are hiking. Learn to use a map and compass if you plan to go off trail.
- ✿ Be aware of Poisonous Plants. Remember “leaves of three leave them be”.
- ✿ Inform someone of where you are going and when you plan to return.
- ✿ Bring a cell phone.
- ✿ Bring sufficient water, food and sun protection.
- ✿ If you have known allergies or other medical conditions bring your medications with you.
- ✿ Avoid Hiking alone
- ✿ Do not Trespass on Private Land

Contact Information

We welcome questions, comments, or suggestions! Please direct them to:

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Lancaster County Weed Control
444 Cherrycreek Rd. Bldg. B
Lincoln, NE. 68528
402-441-7817**

**Email: bmeyer@lancaster.ne.gov
Website: <http://lancaster.ne.gov/weeds>**