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Two Extension Programs Help Grow Lincoln's Healthy Environment

Kristen Houska, MS
Extension Educator, Lancaster Co.

Choose Healthy Here and Double Up Food Bucks are both statewide programs offered by Nebraska Extension with the help of program partners. Major partners who have given resources for these healthy programs to be carried out through Nebraska Extension are the Department of Health and

Human Services, Community Health Endowment, Department of Agriculture, CHI Health and Children's Center for the Child and Community.

Both Choose Healthy Here and Double Up Food Bucks are carried out by Extension's Supplemental Nutrition Assistance Program Education (SNAP-Ed) and Expanded Food and Nutrition Education Program (EFNEP) staff in Lincoln. SNAP-Ed and EFNEP

staff help families and individuals on a limited budget make healthier food choices and choose physically active lifestyles by acquiring the knowledge, skills, attitudes and behavior changes necessary to improve their health. These programs aim to create healthy environments through policy, system and environmental changes for Lincoln residents by giving equitable access to healthy foods.



Sarah Smith, Sunday Market



Vicki Iedlicka, Nebraska Extension in Lancaster County

Choose Healthy Here

Choose Healthy Here's mission is to increase access to affordable, nutritious and safe foods while contributing to the viability of food retailers in high-need areas. Through smart marketing, nutrition education and careful evaluation, Choose Healthy Here increases both the supply and demand of healthful foods while decreasing the demand and supply of less healthful foods in Nebraska communities.

How Does Choose Healthy Here Work?

Extension's Nutrition Education Program (NEP) staff work with participating convenience and grocery stores to follow the four categories of the statewide Choose Healthy Here program, which address the supply and demand of nutritious foods:

Find — Can I physically find healthful foods? All people deserve access to all five healthy food groups. NEP staff target stores in neighborhoods which have a low vehicle ownership according to Community Health Endowment of Lincoln Place Matters

maps. These residents rely on their neighborhood convenience or grocery stores for their shopping needs.

Afford — Are healthy foods economical for me? Participation by the Lincoln community in nutrition programs such as the Supplemental Nutrition Assistance Program (SNAP) contributes to the affordability of healthy foods by our community members and increases buying power of neighborhood stores for healthy items, contributing to a better local economy.

Choose — Does the community culture encourage healthful foods? Stores that promote fresh, healthy foods create excitement and promote healthy habits which help to contribute to the store's sustainability.

- NEP staff help promote healthy foods through Choose Healthy Here signage and prominent product placement.
- NEP staff work with store staff to display healthy foods in ways which make them appealing to the customer and also easy to locate with 'Great Choice' stickers on select items.

see **CHOOSE HEALTHY** on back page

Double Up Food Bucks

Double Up Food Bucks is a way for SNAP participants to stretch their food dollars and buy more fruits and vegetables. Double Up Food Bucks was created to provide community members with more fresh, local produce and to support local farmers.

How Does Double Up Food Bucks Work?

Nutrition Education Program (NEP) staff administer the program by working with farmers market and grocery store managers to promote the program and give participants vouchers. Staff also give healthy food samples at each participating location.

At participating grocery store locations, when a SNAP customer pays for fresh fruits, vegetables and herbs with their SNAP Electronic Benefits Transfer (EBT) card, they will be given Double Up Food Bucks vouchers for fresh produce FREE — up to \$20 — to spend that day or on a future visit.

At participating farmers market locations, when a SNAP customer purchases SNAP-eligible items, they will be given FREE Double Up Food Bucks vouchers to spend on fresh fruits, vegetables and herbs — up to \$20 per market day.

Vouchers from the farmers market locations can be used at the grocery store locations and vice versa. Food Bucks are good through May 31, 2021.

Where Can I Find Participating Locations?

- The following grocery store locations are open year-round.
- Leon's Gourmet Grocer, 2200 Winthrop Road.
 - Open Harvest Co-op Grocery, 1618 South St.

The following farmers markets are

open only during market season. For information on when they will open for 2019, please visit their websites or Facebook pages.

- Sunday Farmers' Market at College View, 48th Street and Prescott Avenue.
- Fallbrook Farmers Market, 570 Fallbrook Blvd.
- Community Crops Veggie Van, location TBA.

Community Impact

From 2017 to 2018, there was a 564 percent increase in families using Double Up Food Bucks (locations in Lincoln, Omaha and Beatrice).

In 2018, the participating farmers market locations saw an average of \$32 spent by SNAP customers utilizing their SNAP and Double Up Food Bucks dollars together, a 51 percent increase from \$21 in 2016.

Open Harvest was new to Double Up Food Bucks in 2018. From 2017, they saw a 35 percent increase in total SNAP EBT sales and a 15 percent increase in fresh produce SNAP EBT sales.

Amy Tabor, Open Harvest General Manager, says, "When this program started, they gave away about \$4,000 in vouchers. Between last year in 2018 and to 2019 so far, just at Open Harvest, we've been able to distribute almost \$9,000 in these vouchers."

FOR MORE INFORMATION

- Learn more about the Double Up Food Bucks program at <https://food.unl.edu/DoubleUp>.
- To become a participating retailer, go to the above website or contact Kristen Houska at 402-441-7180 or khouska2@unl.edu.
- To help support this program, go to <https://food.unl.edu/DoubleUp>

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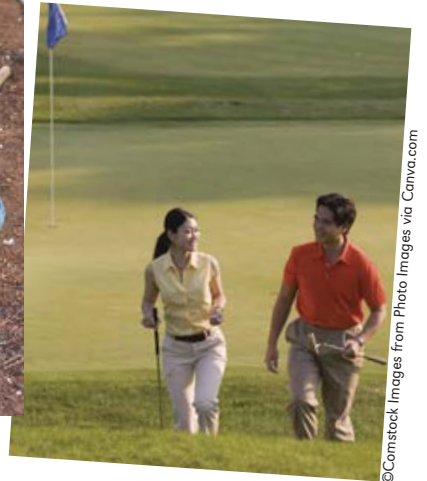
Focus on Moving More in April



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Kayla Colgrove, MS, RDN, ACSM-CPT
Extension Educator,
Lancaster Co.

April is "Move More Month," and the American Heart Association encourages all Americans to commit to being more active on a regular basis. One of the most important things you can do to improve your health is be physically active. Research shows being active can help boost your mood, improve your sleep, lower your risk of heart disease and some cancers, and help keep diabetes and high blood pressure under control. Focus on moving more in April by following these tips.

How Much Activity

In order to stay healthy, adults need a mix of aerobic and muscle-strengthening activities according to the Physical Activity Guidelines for Americans. It is recommended to aim for at least 150 minutes a week of moderate-intensity aerobic activity that gets your heart beating faster and at least 2 days a week of muscle-strengthening activity that make your muscles work harder than usual.

Chronic health conditions may affect your ability to do regular physical activity safely. Always check with your doctor before starting a physical activity routine. Older adults can follow

the guidelines for adults, but it is recommended to also add balance training and evaluate their level of effort based on their level of fitness.

Increase Activity Gradually Over Time

If you are just getting started, just remember some activity is better than none. Remember to start gradually and increase the amount and intensity of physical activity over time. Evaluate your age, level of fitness and level of experience to help reduce injury risk when increasing physical activity. The best way to get started is to focus on a light- to moderate-intensity activity, such as walking 5-15 minutes per session, 2-3 times a week. Research has shown walking to be a low risk of musculoskeletal injury and no known risk of severe cardiac events.

Enjoy the Outdoors

Now is the time to be more active by going outside and enjoying the warmer weather. Try to incorporate some of these activities:

- Walking to brisk walking
- Walking your dog
- Jogging or running
- Biking
- Golfing (without a cart)
- Playing catch
- Parking farther away from the door

If you live in Lincoln, its trail system is a great way to get

active. Learn more about the trails at <https://lincoln.ne.gov/city/parks/parksfacilities/trails>.

Think Outside the Box

Activities you have to do or don't feel like exercise still count as long as you are moving. Some examples include:

- Gardening and weeding
- Yardwork
- Mowing the lawn with a push mower
- Household chores such as vacuuming
- Home repairs
- Dancing

It is important to move more and sit less. Don't stress about having to complete 30 minutes of activity at one time. All activity adds up and even 5 minutes of physical activity has health benefits. Build your weekly activity plan using the Move Your Way Activity Planner at <https://health.gov/MoveYourWay/Activity-Planner>.

Sources:

- Move More Month. American Heart Association. www.heart.org/en/healthy-living/fitness/fitness-basics/move-more-month
- Move Your Way. Office of Disease Prevention and Health Promotion. <https://health.gov/moveyourway>
- Physical Activity Guidelines for Americans 2nd Edition. U.S. Department of Health and Human Services. <https://health.gov/paguidelines/second-edition>



RECIPE OF THE MONTH

Kayla Colgrove, MS, RDN, ACSM-CPT, Extension Educator, Lancaster Co.

I'm highlighting this recipe by Cami Wells, Extension Educator in Hall County, because the recipe is a simple and healthy snack for all ages. Plus, it includes three out of the five food groups: dairy, fruits and grains.

STRAWBERRY CHOCOLATE BITES

(Makes 1 serving)

- 1/4 cup diced fresh strawberries
- 2 tablespoon low-fat vanilla yogurt
- 2 squares chocolate graham crackers

1. Spread yogurt on graham crackers.
2. Top with chopped strawberries. Enjoy!

Cami's notes: Feel free to use any type of fresh or canned fruit in place of the strawberries. Greek yogurt works well because of its added thickness.



Cami Wells, Nebraska Extension in Hall County

Nutrition information per serving: 99 calories, 2g fat, 18g carbohydrate, 1g fiber and 92mg sodium.

Field Conditions and Planting

Tyler Williams

Extension Educator, Lancaster Co.

Every year in eastern Nebraska we seem to deal with cold and/or wet soils during planting. This limits the windows of opportunity for good planting conditions and many operations will push the limits when getting their crops in the ground.

Check Soil Temperature

It is best to check the soil temperature in your field down to a depth of 4 inches. You can use the Nebraska Mesonet (<https://mesonet.unl.edu>) or CropWatch (<https://cropwatch.unl.edu>) to find soil temperatures at a nearby station. The sources listed above provide a daily average soil temperature and a 7-day average soil temperature. It is important to check temperatures daily and try to get a 7-day average near the optimal temperature of 50°F. Check the soil temperature at the same time each day (do it in the morning) because the temperature can vary significantly throughout the day, especially in bare, dry soils, which can vary 10–15°F from morning to afternoon.

Cold Tolerance of Seeds

Before planting, check the seed tag or check with your dealer regarding the cold tolerance of your hybrid/variety. Hybrids and varieties vary in their cold tolerance and those that are more cold tolerant should be planted first.



Soil temperature can be measured using an inexpensive thermometer.

Imbibitional chilling, which is when the seed takes in water below 50°F (likely in the mid-to low-40s) within 48 hours of planting corn (24 hours of soybeans), can impact seed germination and growth, so pay close attention to the weather forecast. Soil temperatures dropping below 50°F after that 48-hour window do not create as big of an issue.

Optimal Planting Date

Many use a calendar date for planting, often based on the crop insurance date; however, the soil temperature can vary significantly from year to year, so this

may not be the best method. For example, for the last 30 years, the soil temperature at the Eastern Nebraska Research and Extension Center near Mead on April 10 of each year averaged 49°F, but ranged from 37°F (1997) to 61°F (2011). The average temperature for this station-date is near the optimal planting temperature, but the variation is significant.

Research done in Iowa has shown the optimum planting windows for corn, to obtain at least 98 percent yield potential, range from April 17–May 8 for southwest Iowa (closest location to southeast Nebraska). The optimum window for soybean planting is late-April through mid-May, again, if conditions and forecasts are adequate.

Increasing Wetness

Moisture conditions in your field will also play a role in finding the optimum planting window. Planting in wet soils can cause tire compaction, side-wall compaction, tire ruts, etc. There may also be a risk of soil-borne pathogens if soils remain saturated for an extended period after planting.

Opportunities for dry weather keep getting smaller and smaller over time due to an increasing precipitation trend in the spring. In 2015, Shulski, et al. found that 68 percent of the stations in Nebraska showed a significant trend of 8 more days of measurable precipitation in the spring (from 1895–2012). Just in the month of April, every climate division in Nebraska has seen an increasing 30-year

trend of >0.4"/decade of precipitation (1987–2016). This equates to nearly an extra 1.5 inches of precipitation in April, as compared to 30 years ago.

Obviously, finding an extended period of optimum planting conditions is challenging, so take advantage of any window of opportunity with soil temperatures remaining above 50°F for 48 hours and adequate soil conditions. Large planters, auto-steer and other technology should help increase the number of acres covered in a short window.

AgriTools Mobile App

Nebraska Extension's AgriTools mobile app is a useful tool, which uses your GPS location to look at interpolated soil temperature from the Nebraska Mesonet. The app provides the 5-day forecast from the National Weather Service, among other information. AgriTools is available for iPhone and Android devices.

Sources:

- Shulski, et. al. 2015. *A Historical Perspective on Nebraska's Variable and Changing Climate*. *Great Plains Research* 25 (Fall 2015): 109-120
- NOAA National Centers for Environmental Information, *Climate at a Glance: Global Mapping*. www.ncdc.noaa.gov/cag
- High Plains Regional Climate Center – Web Data Access. <https://hprcc.unl.edu>
- CropWatch, University of Nebraska-Lincoln, *Institute of Agriculture and Natural Resources*. <https://cropwatch.unl.edu>
- Nebraska Mesonet, Nebraska State Climate Office, University of Nebraska – Lincoln. <https://mesonet.unl.edu>

Beneficial Fungi and Tree Health

Sarah Browning

Extension Educator, Lancaster Co.

Tree health is often a reflection of root health. Good practices to improve root health include properly applied organic mulch, good water management, and avoiding root damage from construction or changes in soil grade.

Another major contributor to tree health, often unseen and unknown to gardeners, are a vast array of beneficial soil fungi working in harmony with trees to create a win-win situation for both organisms. These beneficial organisms are called mycorrhizal fungi, which comes from Greek “myco” fungus and “rhizae” root, translating to fungus roots (plural — micorrhizae).

Have you ever raked back mulch beneath a tree and found a spider's web of slender white branching “hairs” covering the soil surface? Those were fungal roots, most likely from mycorrhizal fungi.

What Are Mycorrhizal Fungi?

There are many species of naturally occurring micorrhizae. When a tree is planted, fungal roots grow toward, attach themselves to and enter the tree's roots. This connection essentially makes them an extension of the tree's root system. Mycorrhizal fungi collect water and nutrients from the soil and pass them to the tree. In exchange, the tree gives the fungi food, in the form of carbohydrates the tree has manufactured through photosynthesis.

The natural state of trees is to be “infected” with mycorrhizal fungi and a tree often has several different species of fungi associated with its root system. Two types of fungi commonly associated with trees are ectomycorrhizae (EM) and arbuscular mycorrhizae (AM, also syn. endomycorrhizae).



Beneficial fungi pass water and nutrients to trees in exchange for food — in the form of carbohydrates created by the tree.

EM grow into a tree's root by pushing between the outer cortical cells. They can also form a thick, outer layer on tree root hairs, which is visible to the naked eye. Each EM fungal species tends to form an association with a specific tree species. Trees colonized by EM include fir, hemlock, pine, spruce, alder, aspen, beech, birch, hickory, linden, oak and poplar. These fungi reproduce through spores produced on mushrooms and puffballs, which can easily move through the air and recolonize disturbed soil.

AM fungal roots enter into tree root cells and are so small they cannot be seen without a microscope. In contrast to EM, AM fungal species are generalists and can associate with hundreds of host species. Tree species colonized by AM include apple, arborvitae, ash, buckeye, catalpa, cedar, cherry, cypress, dogwood, elm, ginkgo, hawthorn, juniper, magnolia, maple, redbud, redwood, serviceberry, sycamore, sweetgum, tulip tree, viburnum and walnut. They reproduce through soil-borne spores, which are not spread as easily through the wind as EM. Tree species highly dependent on these fungi can exhibit slower growth when planted on disturbed soil if low quantities of fungi are present.

How Do Mycorrhizal Fungi Benefit Trees?

Water and nutrient uptake.

How much can fungal roots expand the total reach of a tree's root system? Estimates range from five times the normal spread of a root system and up. This results in increased water and nutrients available to the tree for growth, defense or storage at a reduced energy “cost” in terms of the amount of carbohydrates the tree has expended to access those resources.

Pest and disease resistance.

Some mycorrhizal fungi can outcompete other harmful fungi and act as armor around fragile roots protecting them from infection. Others produce antibiotic compounds to protect roots from soil pathogens.

Survival on harsh sites. Some fungi help trees tolerate difficult sites with high or low pH, high salt, low fertility or contain heavy metals. Exactly how mycorrhizal fungi do this is not yet well understood, but much of the benefit comes from increased water and nutrient uptake.

Encouraging Mycorrhizae in Your Soil

Many of the practices used to create good tree growth, also encourage fungi growth.

Use landscape fungicides carefully. Foliage sprays of fungicide don't have a high impact on soil fungi, but avoid soil drench applications of systemic fungicides. These can stop the growth of beneficial fungi, as well as the bad guys.

Limit fertilization. High soil fertilization actually reduces fungi growth. Avoid large applications of fertilizer, especially those high in nitrogen and phosphorus.

Maintain native fungi populations. Tilling, removing plant litter and



Ectomycorrhizal fungus fruiting bodies growing among spruce seedlings.

debris, heavy fertilizer applications and the use of systemic soil drench fungicides all reduce natural fungus growth.

Maintain even soil moisture.

Fungal roots dry out and die if soil conditions get very dry during periods of drought. Applying water to maintain the tree's health will also encourage continued functioning from mycorrhizal fungi.

Apply mulch beneath trees.

Fungal roots grow better under organic mulch (wood chips, bark chips, pine straw, etc.) than in turfgrasses.

Is it worthwhile applying mycorrhizal fungal inoculates from your local nursery to plants in your landscape? Research hasn't provided clear answers yet, but is ongoing. Applying them won't hurt plants, but for now, the benefits of these products compared to their cost suggests just using good tree care and management practices provides a more reliable benefit to help both the tree and native fungi grow best.

FOR MORE INFORMATION

The Nebraska Forest Service has information, *How To Care For Trees*, at <https://nfs.unl.edu/tree-care>

Response to Bed Bugs: Panic vs. Reasonable Actions

Jody Green, PhD

Extension Educator, Lancaster Co.

The first thing people think about when they hear the word bed bug is “Ewww!” The truth is, bed bugs do not discriminate and can affect all individuals, families and communities regardless of cleanliness, ethnic group, race, age or socioeconomic status.

Despite the fact that bed bugs have not been shown to transmit disease to humans, these cryptic, blood-feeding insects are associated with negative social, economic, psychological and public health impacts. It is through scientific education and myth-busting that Extension hopes to reach people so they are better equipped to protect themselves and prevent bed bug infestations, rather than spread fear, create anxiety and cause reactive responses.

Do Not Panic

Panic is the sudden uncontrollable fear or anxiety that often leads to erratic, sometimes unreasonable behavior. Panic associated with bed bugs include throwing away all furniture, spraying general pesticides in the bedroom and/or refusing to travel to any place, by any means, at any time. Please do not panic! Panic can make the situation worse.

How Bed Bugs Spread

Panic comes from not knowing and understanding the bed bug. We must get to know the pest before we can win the battle against bed bugs. Bed bugs may get more press from plaguing large metropolitan cities and preying on unsuspecting guests staying in hotels, but the truth is, bed bugs go where we go. They cannot fly or jump, rather, they crawl and hide, sometimes onto or into our belongings. We physically and unknowingly transport



Various life stages and feeding status of bed bugs (magnified).



(actual size)

Photos by Jody Green, Nebraska Extension in Lancaster County

them from one location to another on backpacks, purses, luggage, furniture, car seats, books and even wheelchairs.

How to Identify a Bed Bug

Bed bugs are wingless, reddish-brown, oval-shaped, flattened bugs with long, segmented antennae and visible eyes. As adults, they can be approximately 1/4-inch long (often compared to the apple seed). Younger bed bugs, called nymphs, can be as small as 1/16 inch, light brown and almost transparent — revealing a dark digestive tract. After a bed bug has fed, it turns a deep, dark red and its body will look less oval and more elongated.

This variation in shape, size and color, — depending on life stage and feeding status — often leads to the misidentification of bed bugs. If you see what looks like a bed bug, try to catch it without squishing it (if you squish it, blood or

digested blood may spurt out) and have it identified. Many bugs found in the house are not bed bugs, and may be bat bugs, carpet beetles or other occasional home invaders.

Why and How Bed Bugs Bite

All bed bugs require a blood meal to survive. They locate their host by detecting exhaled carbon dioxide, usually when the host is sleeping. Bed bugs use their piercing-sucking mouthparts to pierce the skin and consume a bloodmeal, which takes 5–15 minutes.

Although bed bugs feed on the body, they do not live on the body. After feeding, the bed bug moves off the host to an undisturbed location, like the seam of a mattress or crevice of a bed frame. For the next 3–5 days, the engorged bed bug rests, digests and molts to the next stage of development, or as in the case of an adult female, lays eggs.

For some people, the bites from bed bugs result in itchy, red bumps, but for others, there is no evident reaction.

What to Look for and Where to Look

Skin reactions may prompt individuals to investigate their surroundings to search for potential biting pests. Very carefully inspect the mattress (under the bed linens), box spring, bed frame looking closely at the seams, corners, folds, cracks and crevices. Pay particular attention to any dark, fecal spotting (digested blood), shed exoskeletons and live or dead bugs.

Introduction vs. Infestation

There is a difference between an introduction and infestation. Not every location with a bed bug discovery is an infestation. An introduction occurs when a bed bug is transported and dislodged

from a place with an infestation. An infestation is when there is a population of bed bugs which are regularly feeding, developing, breeding and multiplying.

Infestations are likely to occur in places where there are regular sleeping humans, such as an apartment building, hotel, college dorm, summer camp cabin or long-term care facility. Places where introductions can occur are endless, but it is uncommon for an infestation to occur in places that do not have a consistent food source (i.e., sleeping humans). It is important to understand that bed bugs have been introduced from an infestation site, and it is the infested location that needs to be treated.

Reasonable Preventive Measures

- Communicate with others about bed bug experiences.
- Perform inspection and preventative measures when traveling (See “Bed Bugs: Souvenirs to Avoid When Traveling” online at <https://lancaster.unl.edu/pest>).
- Practice regular sanitation at home: Declutter, vacuum, wipe down surfaces and monitor for signs of infestation.
- Reduce the number of belongings brought into suspected locations.
- Inspect furniture and items (new, used and borrowed) before bringing them into the house.
- For fabrics that can be heat treated, heat in home dryer on high for 30 minutes.
- Suspected items can be bagged and kept in freezer for 4–7 days.
- Store luggage, purses, backpacks away from bedrooms.
- Install bedbug interceptors/pitfall traps around beds to monitor/prevent bed bugs from crawling from the floor to beds.

Cleaning Up After Rodents

Soni Cochran

*Extension Associate,
Lancaster Co.*

Spring is a terrific time to do some sprucing up around the home. This is also when people discover rodents have been at work nesting, chewing and leaving their droppings behind for you to find. This article focuses on how to safely clean up after rodents.

Getting Started

Use caution when cleaning up after rodents:

- Wear personal protective equipment like vinyl or latex gloves.
- Properly air out the building. The Center for Disease Control recommends opening doors and windows prior to clean-up. You need to allow at least 30 minutes for the airing-out period and during this time, leave the area. An airing-out period also applies to storage rooms, attics, sheds, barns, cabins and any other outbuildings.

Cleaning Up Dead Rodents and Nests

- Spray the nest or dead rodent until soaked with a household disinfectant solution or one part bleach to ten parts water. Other disinfectants can also be used as directed. Let the area soak thoroughly 10–15 minutes. If the rodent is in a trap, spray the trap and the rodent. Note: Some surfaces may stain or be discolored after using disinfectants or bleach.



Deer mouse

David Cappaert, Bugwood.org

- Turn a sealable plastic bag inside out. Put your gloved hand in the bag and pick up the mouse and/or nest then turn the bag right side out so the mouse and/or nest is in the bag.
- Dispose of the plastic bag with the mouse and/or nest outdoors with your household trash. You can also choose to dispose of the trap with the mouse in it this same way.

Cleaning Up Area

IMPORTANT: Do not use a broom or vacuum to clean up rodent droppings or nests. It is important droppings and dust in the surrounding area do not become airborne.

- Spray the rodent droppings and surrounding area with disinfectant until wet. Let the area soak for 10–15 minutes. Wearing gloves, use a wet towel, rag, or paper towels to wipe up the droppings.
- Clean any area which may have been contaminated by rodents using a

disinfectant or the bleach solution.

This includes countertops, cabinets, appliances and flooring. Again, use caution as disinfectants and/or bleach may discolor surfaces.

- Steam clean or shampoo upholstered furniture or carpets exposed to rodents.
- Wash bedding or clothing in hot water with laundry detergent if exposed to rodent urine or droppings.
- Insulation contaminated by rodents should be removed, placed in plastic bags and disposed of.

Cleaning Items Stored in Containers

- Move storage containers/tubs outside and place in a well-ventilated area in direct sunlight. Wipe down the outside of the container with disinfectant or bleach solution (1 part bleach, 9 parts water).
- Remove items from storage container/tub after disinfecting the outside of the container. Once the items are removed the inside of the container can be disinfected.
- Clothing, bedding, stuffed toys: Launder in hot water and detergent. Dry on high heat or hang in sun to dry.
- Books, paper, non-washable items: Leave outdoors in direct sunlight for several hours. You can also leave in a rodent-free area for one week before wiping down with cloth moistened with disinfectant.
- Plastic, glass and metal items can be sprayed with disinfectant and wiped down with rags or paper towels before washing. Rags and paper towels should

About Hantaviruses

Deer mice and white-footed mice are known hosts for hantaviruses. Both of these mouse species are found in our area. We can be exposed to hantaviruses in a host rodent's droppings and urine. Once a rodent excretes droppings or urine into the environment, the virus remains infectious for 2–3 days. The sun's ultraviolet rays inactivate hantaviruses.

then be discarded in the trash.

- Cardboard boxes contaminated by rodents should be discarded in the trash.

Following Cleanup

Wash your hands thoroughly.

If you feel ill or develop a fever after five days of handling rodents, nests and/or their droppings, seek medical attention. Inform medical personnel of your activities.

Controlling a Rodent Problem

If you are dealing with a rodent problem, it is important to take steps to trap and prevent rodents from entering your home or building. Snap traps or spring mouse traps are effective and inexpensive tools to use. For information on how to set traps, read Nebraska Extension's NebGuide Controlling House Mice (G1105), available at the Extension office and online at <http://lancaster.unl.edu/pest>.

Source: Centers for Disease Control



2019 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>

10 Years of Growth — Not Always a Good Thing!



Mature phragmites during the growing season.



Phragmites can spread by horizontal, above-ground or above-water stolons.



Phragmites remains standing in the winter with their seed-head attached — making them easy to spot.

In most cases, we think of “growth” as a good or positive thing. Growth in our retirement is good; stock market growth makes us happy; population growth can sometimes lead to good things; when a company grows, we see it as something positive happening; but, when we see 10 years of continued growth with a noxious weed, it is **never** a good sign.

The rapid expansion of non-native phragmites has resulted in adverse ecological, economic and social impacts on the natural resources and people of Nebraska.

Phragmites *australis*, also known as common reed, became a Nebraska noxious weed on April 15, 2008. Since that time Lancaster County has been witnessing a **phragmites explosion!** The number of parcels known to have phragmites infestations grew from 71 in 2008 to 680 in 2018, resulting in an 858 percent increase over the last decade. If we continue with the same rate of growth, by the year 2028, Lancaster County would face a **full-blown epidemic** of 6,514 parcels.

Before we hit the panic button, let's take a look at how we got to this point and what the future realistically looks like. While the number of parcels infested continues to climb, most of the parcels have very small infestations that can still be eradicated. The key is learning how to identify phragmites and everyone using the best management practices available to control it.

The phragmites expansion we're seeing today would be similar to what happened in the mid-1960s and early-1970s when musk thistle was first added to Nebraska's Noxious Weed list. Records from the 1970s show there were more parcels infested with musk thistle at that time, than we have today. Once landowners recognize the

problem caused by phragmites and learn how to control it, we will start to see a reduction. It won't be easy, and it will take every landowner working together to get phragmites under control. Once this happens, our chart should level off and begin to decline.

What Is Phragmites?

Non-native phragmites, also known as common reed, is a perennial, aggressive wetland warm-season grass that out-competes native plants and displaces native animals.

How Did Phragmites Get Here?

In the early 19th century, the non-native variety, most likely European in origin, appeared in coastal ports in the

eastern United States. The rapid spread of phragmites in the 20th century was related to the construction of railroads and major roadways, habitat disturbance, wind and animals.

What Does Phragmites Look Like?

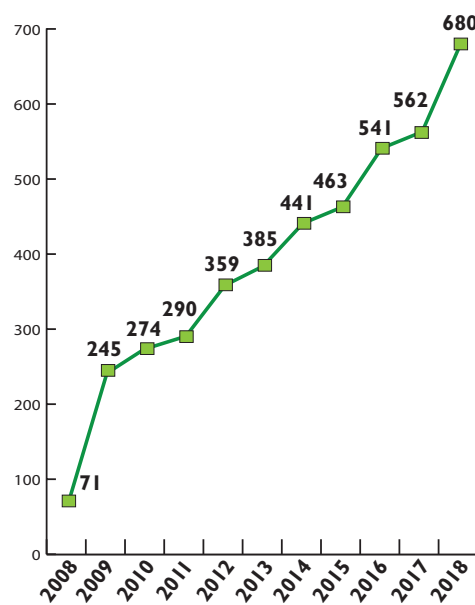
Phragmites plants range from 6 to 15 feet in height, yet 80 percent of the plant is contained below ground in a dense mass of roots and rhizomes that can penetrate the soil to a depth greater than 12 feet. In the summer, its flat, grayish-green leaves are 2–2.5 inches wide, 8–15 inches long and alternate along the stem. Phragmites

has a distinctive purple-brown seedhead with plumes appearing by late July. These feathery plumes that form at the end of stalks are 6–20 inches long and up to eight inches wide with many branches. Phragmites turns a tan color in the fall and most leaves drop off, leaving only the stalk and plume-topped shoot commonly seen throughout winter.

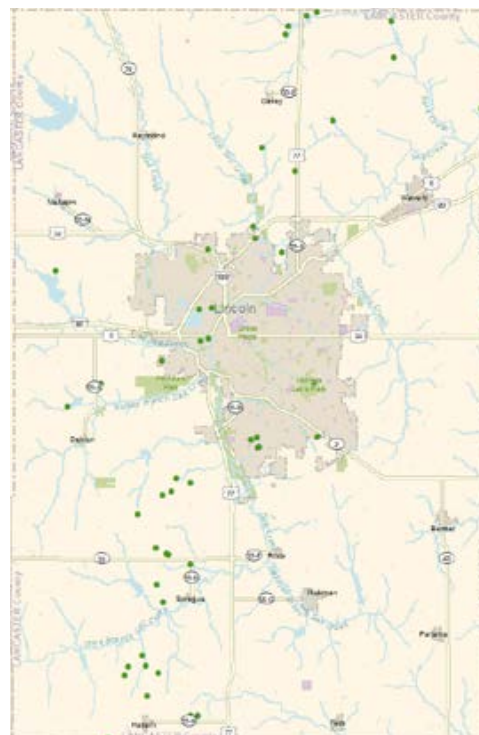
Why Should I Be Concerned?

Phragmites is becoming widespread throughout Lancaster County. Urban areas are just as susceptible as rural areas

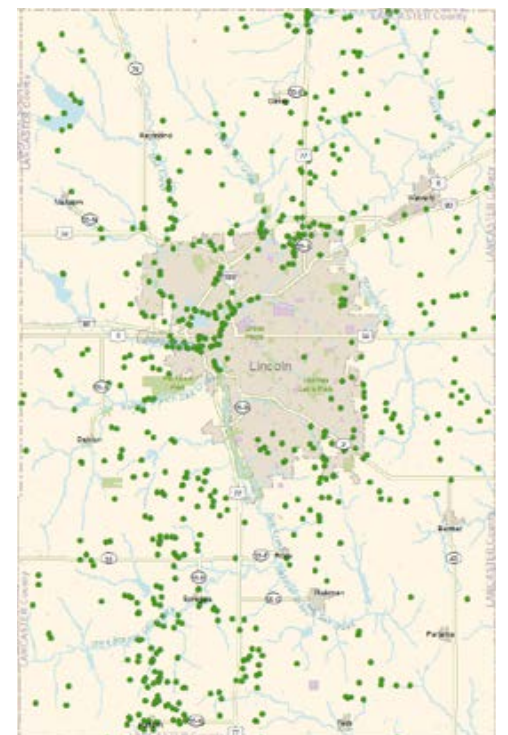
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Number of phragmites sites in Lancaster County, 2008–2018



Locations of phragmites infestations in 2008.



Locations of phragmites infestations in 2018.

Noxious Weed Spotlight: Cutleaf and Common Teasel



Common teasel (inset photo shows flowering stage)

Early Detection Rapid Response (EDRR) is the most economical way to attack invasive weeds. Getting after the problem early is the most economical way to control invasives. The longer we wait, the more expensive it will become to eradicate.

Lancaster County designated Cutleaf teasel (*Dipsacus laciniatus* L.) and Common teasel (*Dipsacus fullonum* L.) as noxious weeds in 2014. Saline County and Johnson County have since followed our lead and have designated both teasels noxious in their counties as well. This designation requires that each landowner in Lancaster,

Saline and Johnson County is responsible for controlling teasel growing on property they own or manage.

Cutleaf or common teasel has been identified in at least 17 Nebraska counties and nine states have already declared one or both teasels as noxious — Iowa, Missouri, Minnesota and Colorado being the closest.

Description

Although usually called a biennial, teasel is better described as a monocarpic perennial. The plant grows as a basal rosette for a minimum of one year until enough

resources are acquired to send up tall flowering stalks and dies after flowering. The period of time in the rosette stage varies depending on the amount of time needed to acquire enough resources for flowering to occur.

Distribution

Teasel is native to Europe. It was introduced to North America as early as the 1700s. Common teasel was introduced for use in raising the nap of cloth. Possibly, cutleaf teasel was introduced with common teasel or introduced accidentally with other plant

continued on next page

WEED AWARENESS

10 Years of Growth

from previous page
for phragmites to establish. Left untreated, it will create a monoculture and crowd out all other vegetation creating a dense jungle of vegetation that native birds, furbearing mammals and even deer cannot penetrate. Phragmites will eliminate natural refuge and feeding grounds for invertebrates, fish and waterfowl as well as limit recreation values for birdwatchers, walkers, naturalists, boaters and hunters.

In some cases, it will close off flowing water and create flooding potential. The tender-dry vegetation left in the fall creates the potential for fast-spreading fire that can threaten surrounding areas including homes and buildings.

How Does Phragmites Spread?

Phragmites can be spread by wind or water dispersal of seeds or by intentional introduction by people. Each mature plant can produce as many as 2,000 seeds annually. Seed viability tests performed by the State of Nebraska Seed Lab showed 75 percent viable seed from mature heads collected in Lancaster County.

Most commonly however, phragmites spreads by horizontal above-ground stolons and underground rhizomes. (Stolons grow from an existing stem and are thin, horizontal structures that grow above-ground, sprouting new plants. Rhizomes are underground horizontal stems that also send out roots and shoots to start new plants). Stolons can grow dozens of feet annually and new plants can sprout at nodes located every few inches along the stolon.

Rhizomes, which create thick underground mats, can expand at the rate of 30 feet per year, with new plants sprouting all along the rhizome. In addition, rhizomes broken by natural actions, such as waves, water current in streams or man-made actions — such as dredging or disking — readily root down in new locations. Maintenance equipment used in a wetland with phragmites must be carefully cleaned to avoid transporting phragmites to new locations; it only takes a small piece of rhizome to start new plants.

Phragmites has also been unintentionally introduced by people planting it as a garden ornamental, using it for floral displays or camouflage for duck blinds. Even phragmites that appears to be dead is likely to have viable seeds and rhizomes.

Is There Anything Good About Phragmites?

Uses and values: It is readily eaten by cattle and horses when it is immature. Seeds are eaten by waterfowl, and the rhizomes and stems are eaten by muskrats. Redwing blackbirds preferentially nest in common reed. However, this is also how the plant is spread from one location to another.

Historical: Pieces of the stems were used to make pen points in early America. Some Native Americans used common reed for thatching, mats and arrow shafts. Rhizomes were used as emergency food.

How Can We Control the Spread of Phragmites?

Phragmites control requires a commitment to an integrated and long-term management approach. The easiest way to control phragmites is to begin a control program as soon as it is observed on your property, before the plants become well

established. Few techniques are fully effective when used alone, and reinvasion by phragmites is likely when the management strategy is not maintained.

To achieve desired results, herbicides must be used in conjunction with mechanical methods or burning, and re-applied in subsequent years to spot-treat individual plants or patches of plants not completely eliminated in the first application. University of Nebraska's Guide for Weed Management list herbicide control options as:

- Aquatic glyphosate at 96-120 ounces per acre + surfactant.
- Imazapyr at 2-4 pints per acre + surfactant.
- Apply during the growing season before flower or in the fall before frost.

Use only herbicides labeled for aquatic sites when applying in and around water and wetlands. Always read and follow the label directions for proper use.

Will My Phragmites Come Back Once I've Treated?

Large, dense phragmites stands will likely require follow-up spot treatments, and phragmites will continue to re-establish from remnant and neighboring populations, as well as the existing seedbank. Phragmites typically begins to recover two to three years after treatment and will become re-established unless follow-up annual maintenance occurs, including spot treatment with herbicides. Scout the area several times during the late summer and into the fall looking for any sign of regrowth. Re-treat any phragmites you find re-sprouting. This will likely take several years and you will need to be persistent in order to continue to weaken the root structure.

How Can I Learn More About Phragmites?

Contact the Lancaster Weed Control Authority office for assistance in developing a management plan. Visit our website <http://lancaster.ne.gov/weeds> and click on the link for the "Landowners Guide for Controlling Phragmites."

Teasel

from previous page
material from Europe. Teasel has spread rapidly in the last 20-30 years, spreading from Canada to the northeast United States and now moving southward and is beginning to show up more abundantly in Nebraska.

Teasel has colonized many areas along interstates. Common teasel sometimes is used as a horticultural plant, which has aided in expansion of its North American range. In particular, the use of teasel in flower arrangements has aided its dispersal, especially to cemeteries.

Habitat

Teasel grows in open, sunny habitats such as roadsides and pastures. It prefers disturbed areas, but can invade high-quality areas such as prairies, savannas, seeps and sedge meadows. Lack of natural enemies allows teasel to proliferate. If left unchecked, teasel quickly can form large monocultures excluding all native vegetation.

Life History

A single teasel plant can produce more than 2,000 seeds. Depending on conditions, up to 30-80 percent of the seeds will germinate, so each plant can produce many offspring. Seeds also can remain viable for at least 2-5 years. Seeds typically don't disperse far; most seedlings are located around the parent plant. Parent plants often provide an optimal nursery site for new teasel plants after the adult dies. Dead adult plants leave a relatively large area of bare ground, formerly occupied by their own basal leaves that new plants readily occupy.

Seeds have the capacity to be water-dispersed, which may allow seeds to be dispersed over longer distances. Immature seedheads of teasel are capable of producing viable seed.

Identification

Root: Taproot up to 2 feet long.

Rosettes: Both rosettes are similar when small. As they get bigger the cutleaf leaves are more deeply lobed than the common.

Height: Cutleaf teasel typically grows taller than common. Cutleaf grows up to 8 feet while common may reach 6 feet tall.

Leaves: The leaves of cutleaf teasel are deeply lobed and prominently fused toward the bases, forming cups that may hold water. Common teasel leaves are oblong and taper to a point. In both species the leaves are opposite, stemless and prickly, especially on the lower midrib.

Bracts: The bracts on the cutleaf are shorter, more leaf-like around the base of the seedhead, the common bracts are usually thinner and extend up past the seedhead.

Flower: Cutleaf usually has white flowers and will flower from July to September while the common has lilac to lavender flowers and will flower from April to September.

Impacts

Both teasels form large, dense stands that choke out desirable plant species. This can reduce forage, wildlife habitat and species diversity. Teasel is not eaten by livestock and has no forage value. Because of the thorny nature of the plant, livestock avoid the areas where teasel grows.

Prevention and Management

Do not plant teasels or intentionally move soil, including soil adhered to recreational vehicles or lawn/garden equipment, containing seed of this species. Do not use seedheads in floral arrangements.

Infested sites will need to be monitored and treated repeatedly until the seedbank is depleted. Teasel seedbanks

remain viable for a relatively short time, 2-5 years. With diligent control, eradication may be feasible within this time frame.

Hand pulling and digging are management options for small infestations, but the large, fleshy taproots are difficult to remove. Flowers and seedheads will need to be bagged and disposed.

This species also responds favorably to annual herbicide treatments. The University of Nebraska Guide For Weed Management (EC-130) recommends treatment at the rosette stage in the fall or early spring. The three different treatment options are:

- 2,4-D 4# Amine at 32 ounces per acre.
- Garlon 3A at 3-4 pints per acre.
- Overdrive at 4-8 ounces per acre.

Always read and follow the label directions.

Biological control is not a management option at this time, but is in development.

Failed or Ineffective Practices

Mowing is ineffective because the root crown will re-sprout and flower after being cut. Even repeated mowing is ineffective. Repeated mowing will stop some plants from flowering, but others will produce short, flowering stems that may be short enough to be below the height of the mower. Plants knocked over by a mower and not cut off will lie horizontally and produce short, flowering stalks below the height of the mower.

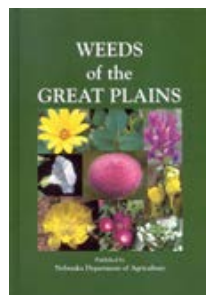
Prescribed burning alone is ineffective. Prescribed burning may kill some of the isolated small seedlings, but is ineffective against dense seedlings or large rosettes.

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 15.**

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
Common Teasel

Cutleaf Teasel
Diffuse Knapweed
Giant Knotweed
Herbicide

Introduced
Invasive
Japanese Knotweed
Lancaster

Leafy spurge
Mapping
Musk thistle
Noxious weeds

Perennial
Phragmites
Plumeless thistle
Purple loosestrife

Saltcedar
Sericea lespedeza
Spotted Knapweed
Weed watcher

W P I C O M M O N T E A S E L P N A L
I A L E A F Y S P U R G E M S W P Y A
J T C I R N M A P P I N G R B E U O N
M A G U N W A H N L T F O T I E R G C
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J P L U M E L E S S T H I S T L E M R

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

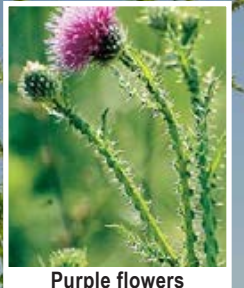
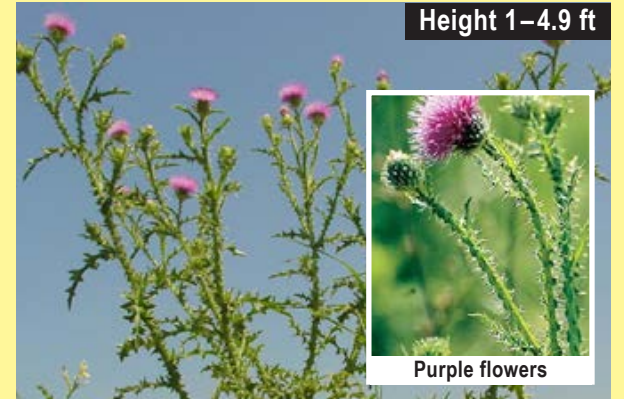
Height 1–3.9 ft



Pink to purple flowers

Plumeless Thistle

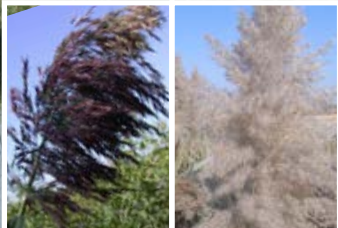
Height 1–4.9 ft



Purple flowers

Phragmites

Height 3.2–20 ft

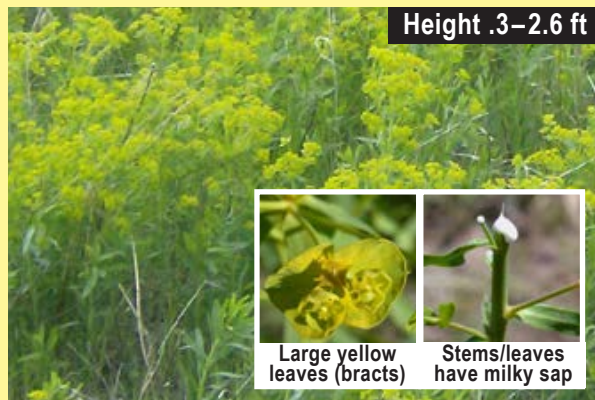


Young seedhead

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

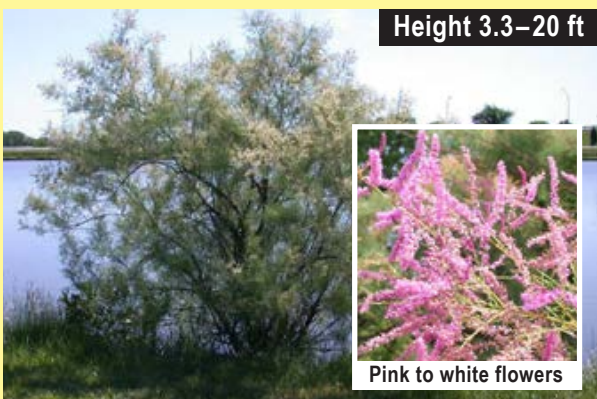
Height 1.3–8 ft



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

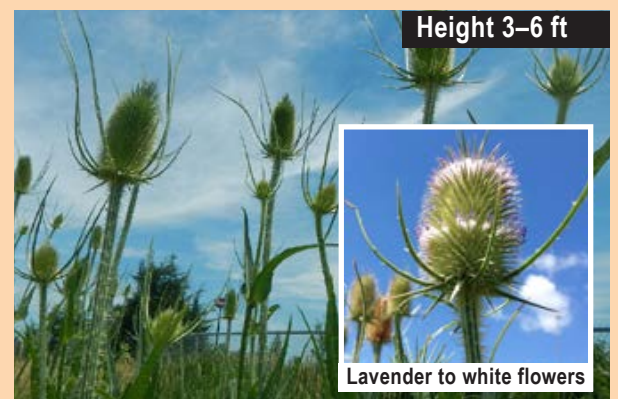
Height 4–8 ft



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 Account Clerk Danni McGown.

2018 Annual Review

The Lancaster County Noxious Weed Control Authority serves the citizens of Lancaster County to protect effectively against designated noxious weeds which constitute a present threat to the continued economic and environmental value of lands in Lancaster County. Our office implements the mandates of the State of Nebraska Noxious Weed Control Act — known as Title 25, Chapter 10 — by setting forth management objectives and plans, methods or practices which utilize a variety of techniques for the integrated management of noxious weeds. In establishing a coordinated program for the integrated management of noxious weeds, it is the Weed Control Authority's intent to encourage and require all appropriate and available management methods, while promoting those methods which are the most environmentally benign and which are practical and economically feasible.

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 noxious and invasive weed infestations — Prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds. Integrated weed management includes identifying the pathways of how weeds spread, preventing encroachment onto land that is not infested, 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 and invasive weeds, providing educational information to cooperators, land managers and the public. As people become more aware of noxious and invasive weeds, the probability of detecting them is greatly increased, which allows for more effective and timely control.

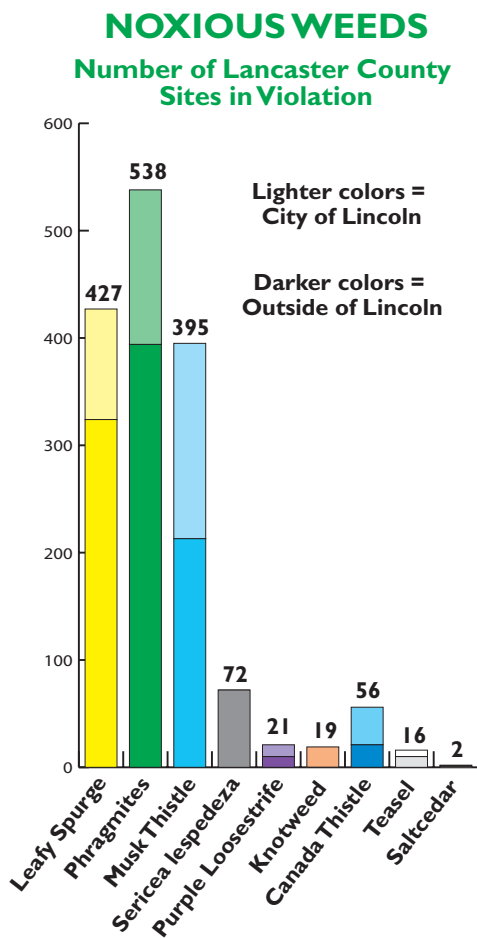
Education and awareness assist:

- 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 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.

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.

Lancaster County Noxious Weed 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 is charged with enforcing the State of Nebraska Noxious Weed Control Act when a landowner fails to control noxious weeds on property they own. This is necessary to protect neighbors from having noxious weeds spread to their property and potentially devaluing their land.

Noxious Weeds in County Roadsides

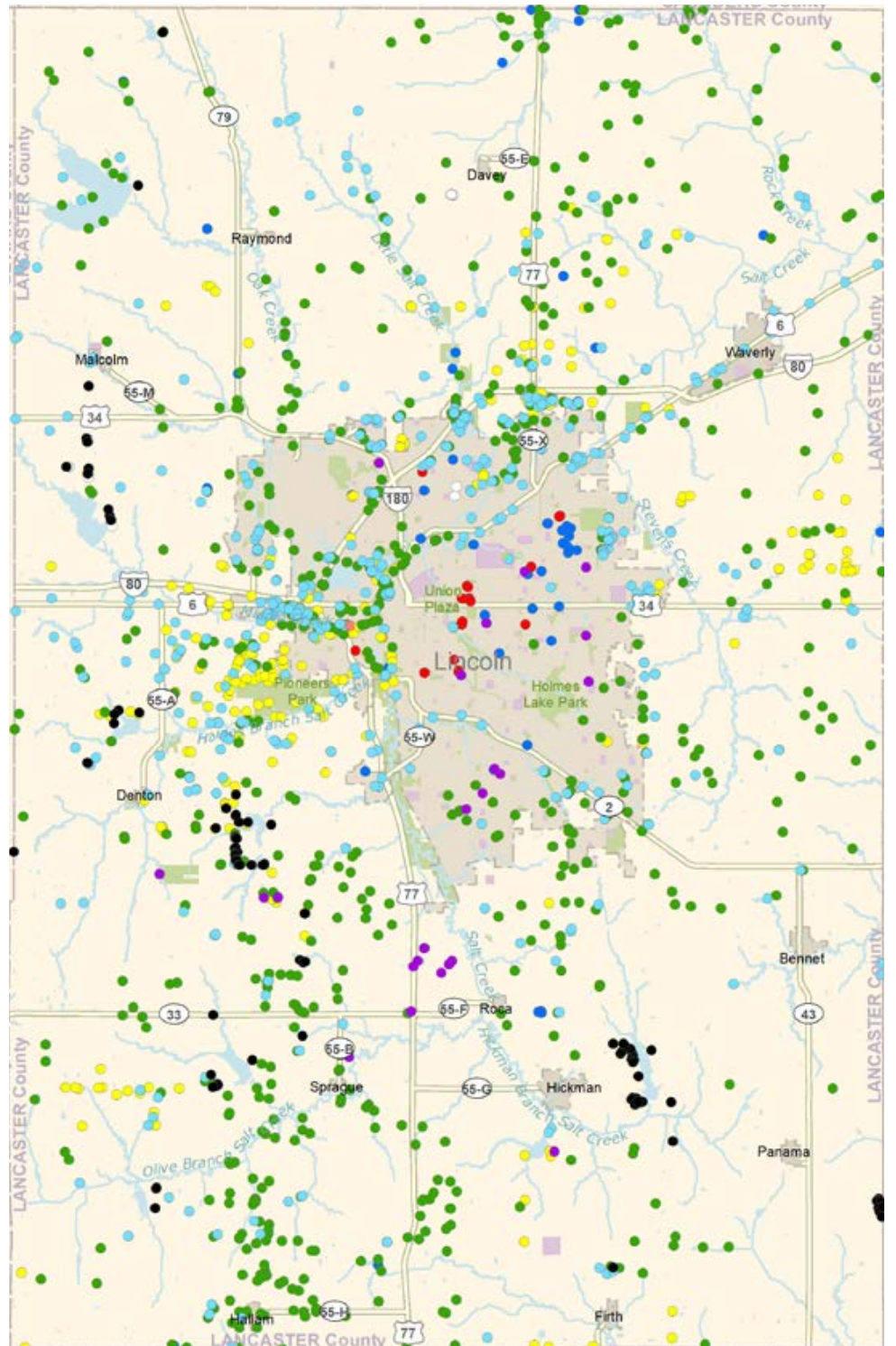
Landowners are encouraged to control noxious weeds along property they own. If not controlled by the adjacent owner, Lancaster County Weed Control will control the perennial noxious weeds such as phragmites, sericea lespedeza and leafy spurge in the county roadsides. A GPS point is recorded for each noxious weed location, making it very easy to find when the time is right to do the application.

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,



Lancaster County Noxious Weeds

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

complaints from the public that are received in our office and by observing severe yards while conducting other inspections.

In 2018, the Weed Control Authority received 2,246 complaints from the public and additional 449 properties were observed as having violations. Our office made 5,891 initial and follow-up inspections on 2,695 sites.

When a property is found to be in violation, the owner of record is notified with a legal notice sent by certified U.S. mail to the last known legal address obtained from the Lancaster County Assessor's office. If the property remains uncontrolled at the expiration of the legal notice, the Weed Control Authority will hire a contractor to cut the property. Our office

carried out enforcement on 183 properties in 2018. Landowners are responsible to pay the cost of control plus an administrative fee. If the cost of control remains unpaid, a lien is placed against the property until paid.

City Landfills

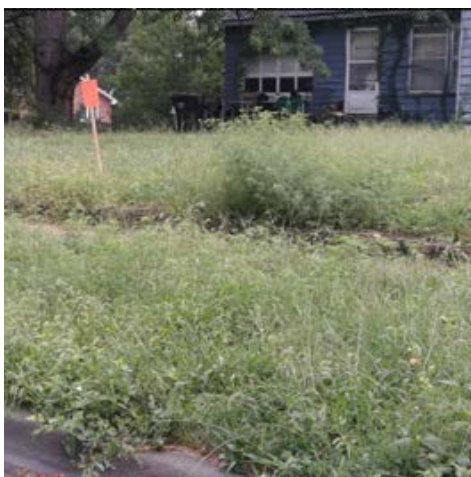
The Weed Control Authority is responsible for managing noxious weeds at the 48th Street and the Bluff Road landfills. Presently, we treat the infestations of musk thistle and leafy spurge at both landfills, and phragmites at the 48th Street landfill. The landfills are annually inspected and mapped prior to treatment. This helps to keep track of the spread of noxious weeds and the effectiveness of the control.

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.
- Clark Liesveld and Boy Scouts of America Troop 64 for mowing Dietz.
- Troy Henning for mowing Highland Precinct and Uphoff.



A property in violation of the City of Lincoln's Weed Abatement Ordinance.

2019 Perennial Plant of the Year

The Perennial Plant Association has awarded the 2019 Perennial Plant of the Year Award to *Stachys* 'Hummelo'.

Hardiness: USDA Zones 4–8.

Light: Full sun to part shade.

Soil: Well-drained soil, water as necessary.

Uses: This colorful and compact plant makes an excellent addition to the full sun perennial border. Terrific in combination with native grasses, purple coneflower and other hardy perennials. Wiry stems make for a great cut flower as well.

Unique qualities:

Pollinators like the striking midsummer spikes of magenta flowers rising above bright green, trouble-free foliage. 'Hummelo' was the highest rated *Stachys* in the Chicago Botanic Garden Evaluation Trials for its strong flower production, vigor, habit, quality and winter hardiness.

Maintenance: Spreads slowly by creeping rhizomes. *Stachys* may benefit from division every few years. Strong stems and seed heads add to winter interest. This plant is considered deer-resistant.

Source: Perennial Plant Association



Stachys 'Hummelo'



GARDEN GUIDE

THINGS TO DO THIS MONTH

Mary Jane Frogge, Extension Associate,
Lancaster Co.

The last Friday in April is National Arbor Day. Plant a tree or support an organization which plants trees.

Consider planting native perennials that are beneficial to native pollinators like solitary bees, bumblebees and butterflies. Native plants include coreopsis, coneflower, aster, liatris, goldenrod, pasque flower, butterfly milkweed, pitcher sage, bee balm and purple poppy mallow.

Do not add organic matter to the soil when planting trees. It does not help the plant become established and it may create conditions that encourage the roots to stay inside the planting hole instead of spreading to surrounding soil. Do dig a large planting hole, but fill it with the original soil removed from it.

Do not restrict yourself to buying plants in bloom. Petunias that bloom in the pack are often rootbound or overgrown and after planting, will actually be set back and cease to bloom for about a month. Plants without blossoms will actually bloom sooner and will grow better as well.

To extend the blooming period of gladiolus, plant early, middle and late-season selections each week until the middle of June. Choose a sunny location and plant the corms four to six inches deep and six to eight inches apart.

Seed bare spots in your fescue or bluegrass lawn.

Scatter annual poppy seeds in flower borders. The fine seeds need not be covered. The plants grow rapidly and provide colorful flowers in early summer.

Prune spring blooming shrubs such as forsythia and spirea after they have completed flowering.

Measure the rainfall with a rain gauge posted near the garden so you can tell when to water. The garden needs about one inch of rain per week from April to September.

When chrysanthemums start to grow, dig up and divide large plants. Discard woody portions and replant divisions 12–15 inches apart.

Laugh Out Loud — Developing Humor in Children

Lee Sherry

*Extension Educator,
Madison Co.*

Something special happens when people laugh together over something genuinely funny and not hurtful to anyone. It's like magic, creating the feelings of safety and belonging to a group. It's important to remember that humor isn't a science. Humor is intuitive and spontaneous. You can't really teach people to be funny in an appropriate way. Nor can you train them to laugh on cue. But you **can** prepare the ground, plant the seeds and provide opportunities. It **is** possible to create the kind of environment in which healthy humor has a chance to grow.

Humor appreciation does not appear to have a genetic basis (Martin, 1998) but because the humor response does seem to be an in-born social phenomenon (Chapman, 1973 and 1979), there is evidence that humor can be encouraged and taught. Carson et al. (1986) discuss humor as a function of learned, communicative abilities. Positive reinforcement of humor increases its use (Ziv, 1981b – cit. by Nevo et al., 1998).

Humor is really just another form of **communication**. It's part of our communication skills set. Children need to be allowed and encouraged to be funny, in his or her own way. Laughter can unite groups. Laughter not only creates a shared experience in



the moment, but it also creates a memory to recollect and laugh at over and over.

It's never too early to start developing a child's sense of humor. Babies' smiles and laughs are so delightful that we often do this intuitively — smiling, or tickling them many times a day just to hear a chuckle. Babies don't really understand humor, but they do know when you're smiling and happy. When you make funny noises or faces and then laugh or smile, the baby is likely to sense your joy and imitate you. He or she is also highly responsive to physical stimuli, like tickling.

Sometime between 9 and 15 months, babies know enough about the world to understand that when you quack like a duck, you are doing something unexpected — and that it's funny.

Toddlers appreciate physical humor, especially the kind with an element of surprise (like peek-a-boo). One of the best ways to

do this is to spend time every day being receptive to the many opportunities each child gives you to smile or laugh. As children develop language skills, they'll find rhymes and nonsense words funny and this continues into the preschool years.

Tips for Childcare Providers and Teachers

As preschoolers explore their world, they are more likely to find humor in a picture with something out of whack like a car with square wheels or a pig wearing sunglasses than a joke or pun. Incongruity between pictures and sounds (a horse that says moo) is also funny. As they become more aware of bodily functions, preschoolers often start delighting in bathroom humor. Preschoolers have difficulty determining when using bathroom humor is appropriate, so you might set guidelines for your classroom.

Kindergartners find basic wordplay, exaggeration and slapstick funny. They have discovered the pleasure of telling simple jokes (especially knock knock...), it is fun to be the one who knows the punchline! Jokes are repeated over and over. Older grade-schoolers have a better grasp of what words mean and are able to play with them — they like puns, riddles and other forms of wordplay. Also, be game enough to laugh so the jokes don't fall flat.

It's important to keep encouraging humor development as children grow. When you're playful and humorous with a child, delighting in silliness and laughter, you help him or her develop a playful and humorous attitude about life. Be spontaneous, playful and aware of what each child finds funny at different ages.

Add humor to your curriculum by starting with a "Funny Day." By creating a day focusing on humor, you can build on that day's experience to build humor into your daily curriculum. Invite everyone to dress in funny costumes to begin the humor day. Create a humor-rich environment. Surround the children with funny pictures on the wall, and funny books — for toddlers and preschoolers, these include picture books or nonsense rhymes; older kids will love joke books and comics. Also check YouTube for funny songs,

rhymes and finger plays you can teach the children. Create funny games and use large motor skills. In your art center, have children draw or paint funny pictures of their pets.

The teacher should be the humor model and set the tone for the day. One of the best things you can do to develop each child's sense of humor is to use your own. Tell jokes and stories. **Laugh out loud!** Take each child's humor seriously. Encourage the child's attempts at humor, whether it's reading (potentially unfunny) jokes from a book or drawing "funny" pictures. Praise your child for trying to be funny.

The more you incorporate humor into your classroom, the easier it will be to use. Make humor a part of your day-to-day interactions with each child and encourage them to share funny observations or reactions.

Upcoming Early Childhood Trainings

Nebraska Extension teaches several early childhood development classes for child care providers. Listed are upcoming classes held at the Lancaster Extension Education Center, 444 Cherrycreek Road (unless location otherwise noted). For additional information or to sign up, contact Jaci Foged at jfoged2@unl.edu or 402-441-7180. Some registration forms are at <http://lancaster.unl.edu/family>

Emergency Preparedness Training for Childcare Providers — Thursdays, April 4 & 11, 6:30–9:30 p.m. Cost is \$10. Receive 6 in-service hours. Learn what items you should have ready to evacuate, what items you should have ready to shelter-in-place, how to teach children about emergencies and how to keep children calm during an emergency.



HEART OF 4-H VOLUNTEER AWARD

Megan Starner

Lancaster County 4-H is proud to announce Megan Starner of Bennet as winner of the April "Heart of 4-H Award" in recognition of outstanding volunteer service.

Megan is a parent volunteer with the Esprit de Corps Horse Dressage 4-H club and member of 4-H Horse Volunteers in Program Service (VIPS) committee.

About five years ago, she took on the role of coordinating the annual Spring Fling Dressage Schooling Show which raises funds for the 4-H horse program. Three years ago, Megan became superintendent of the 4-H Horse Dressage Show at the Lancaster County Super Fair, with the assistance of the rest of the club.

"I like being a 4-H volunteer because, in coordinating shows, I help bring in extra funds for the horse program to be able to offer extra incentives for the kids whether it be awards for time they put in with their horses, or educational opportunities," Megan says. "I enjoy the kids, parents, leaders, Extension staff and exhibitors who are all part of 4-H. I also enjoy being able to help in some small way, and seeing how that shapes these kids and their futures is pretty exciting."

Lancaster County 4-H thanks Megan for donating her time and talents. People like her are indeed the heart of 4-H!



Pick Up 4-H Awards From Achievement Celebration

All 4-H awards not picked up at the recent 4-H Achievement Celebration must be picked up from the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. This includes certificates, plaques, awards, activity certificates, and 3-year member and senior pins, etc. Lancaster County 4-H seniors who graduate in spring 2019 are eligible for a free 4-H alum T-Shirt, courtesy of Lancaster County 4-H Council. Unsure if you have an item to pick up? Call Extension at 402-441-7180.

4-H Kids K9 Clinic, April 6

Lancaster County 4-H Dog VIPS Committee is presenting a fun-filled and informative Kids K9 Clinic on Saturday, April 6, 11 a.m.–1 p.m. at Kenl Inn, 10241 Old Cheney Road, Lincoln. No cost to attend. Register by March 25.

4-H members ages 8 & up are invited, though ages 10–15 may benefit most. This clinic will help prepare youth and their dogs for the 4-H dog shows at Super Fair and/or State Fair.

Topics will include:

- Showmanship
- Obedience
- Agility
- Grooming/basic husbandry

To register or for more information, contact Ivy Dearmont at ivydearmont@gmail.com or 402-429-8632 (call or text). Register by providing:

- 4-Hers name, age and years handling dog.
- Name and age of dog attending.

Bring a leash and portable dog carrier/kennel. Dogs not well-behaved will be asked to leave the premises.

Runza Night for Lancaster County 4-H, April 16

Support 4-H by eating at Runza on 33rd and Pioneers on Tuesday, April 16 from 5–8 p.m. Simply mention 4-H and Lancaster County 4-H Council will receive 10 percent of the proceeds. 4-H Council helps support 4-H programs, activities and scholarships.

Spring Rabbit Show, April 27

The 4-H Spring Rabbit Show will be held Saturday, April 27, 9 a.m. at the Lancaster Event Center – Exhibit Hall. Open to all youth ages 8–18. Show flyer is at <https://lancaster.unl.edu/4h/documents/RabbitShowSpring19.pdf>. For more information, call Bob at 402-525-8263 or the Extension office at 402-441-7180.

4-H/FFA Sheep & Meat Goat Weigh-in, May 14

4-H/FFA market sheep or market meat goat exhibitors planning to participate in the performance class based on rate of gain at the Lancaster County Super Fair must have their lambs and goats weighed on Tuesday, May 14, 6–7 p.m. at the Lancaster Event Center – Pavilion 1. All lambs and goats will utilize USDA Scrapie tags as the 4-H identification. No official 4-H/FFA tags will be utilized. Bring your scrapie tags and we can help tag. Breeding ewes and does are welcome as well if you need help putting in scrapie tags. The breeder must supply scrapie tags or 4-Hers must order their own tags. If you need to order tags, call 866-USDA-TAG (873-2824). For more information, call Calvin DeVries at 402-441-7180.

Now Is a Good Time to Start 4-H Diamond Clover Program

The Nebraska 4-H Diamond Clover program consists of six levels in which 4-Hers plan and report a broad range of age-appropriate accomplishments, which could include (depending on age/level):

- Participate as a member of a 4-H club.
- Recruit a new 4-H member or participant.
- Participate in a service-learning project.
- Complete at least one project from a new project area.

The statewide program is designed to enable every 4-H member willing to exert the effort an opportunity to be recognized, regardless of how they are involved in 4-H. Now is a good time for 4-Hers to plan their goals for next year! Complete information and forms are at <https://4h.unl.edu/diamond-clover>.

Nebraska 4-H Gives Back

The Nebraska 4-H Gives Back program is an opportunity for a 4-H member or a team of 4-Hers to make a meaningful contribution to their community. Formerly a part of the Diamond Clover program (Level 6 service learning project), this award recognizes the impact that 4-H youth make in their communities and celebrates the spirit of service learning, a pillar of the 4-H experience. To achieve the Nebraska 4-H Gives Back honor, a 4-H member or team must complete a major service-learning project that benefits his/her community.

Participants of the Nebraska 4-H Gives Back program receive a certificate of recognition, a diamond crystal and a \$100 award.

Kiwanis Karnival, April 12

Families of 4-H members and Elliott Elementary School students are invited to attend the annual Kiwanis Karnival, a FREE family event. Sponsored by Lincoln Center Kiwanis, Kiwanis Karnival will be held Friday, April 12, 5:30–7:30 p.m. at Elliott Elementary School, 225 S. 25th St., Lincoln. The Karnival features carnival-type games for youth, bingo for adults, prizes, snacks, fun and fellowship. Lincoln Center Kiwanis has sponsored this event for over 50 years — providing prizes and snacks.

4-H clubs are needed to provide carnival-type booths. If your 4-H club or family would like to have a booth or for more information, call Lorene at 402-423-7541 or 402-310-3481, or email lbartos1@unl.edu.

HORSE BITS

4-H Horsemanship Level Testings, April 9 & 23

The first 2019 riding skills level testing will be held on Tuesday, April 9, 5:30 p.m. at the Lancaster Event Center – Pavilion 2 arena. Anyone wishing to be tested must register by April 2. Contact Kate Pulec at kpulec3@unl.edu or 402-441-7180.

A second testing is scheduled for Tuesday, April 23, 5:30 p.m. at the Lancaster Event Center in the Pavilion 2 arena. Registration deadline for the April 23 testing is April 16.

Remember, all other horsemanship level requirements must be completed and handed in to Kate before the riding portion can be done.

It is important to note: 4-Hers need to be testing with their own 4-H projects. The horse is being tested (and acclimated) also. In addition, youth testing for level II must have their horses groomed/clipped for show readiness. This is part of the level II test. If youth/horse do not pass this portion, they will need to come back and retest.

Notice From Horse VIPS About 'No Shows' at 4-H Level Testings

4-Hers must notify Kate (kpulec3@unl.edu or 402-441-7180) at least 24 hours in advance if they can't attend the testing they are registered for. A \$20 fee will be assessed to anyone who register for a testing and then fails to attend or doesn't notify Kate before the testing date. The fee will need to be paid before the 4-Her will be allowed to test on another date.

Spring Fling Dressage Schooling Show, May 4

The annual Spring Fling Dressage Schooling Show, presented by the Lancaster County Horse VIPS Committee and Esprit de Corps 4-H club, will be held on Saturday May 4, 8 a.m.–5 p.m. at the Lancaster Event Center – Pavilion 3. Open to all ages to benefit the 4-H horse program. Entries are due April 24. Show flyer and registration form is at <https://go.unl.edu/2019springfling>.

Dressage Clinic, May 5

The Lancaster County Horse VIPS committee and Esprit de Corps 4-H Club are offering opportunities for 45-minute clinic rides with judge Marie Maloney on Sunday, May 5 at the Lancaster Event Center – Pavilion 3, the day following the Spring Fling Dressage Schooling Show. A limited number of riders will be accepted, and priority will go to youth riders. Times are on a first-come, first-served basis, so register early! Entries are due April 24. Register on the Spring Fling Dressage Schooling Show flyer and registration form at <https://go.unl.edu/2019springfling>.

Discover 4-H Camps

4-H SUMMER CAMP brochures are now available online at <http://4h.unl.edu/camp-centers> and at the Extension office. Camps are open to all youth ages 6–18 (need not be in 4-H). With locations at Gretna and Halsey, there are over 50 camps ranging from 3-day day camps to 4-day/3-night overnight camps. Early bird discount of 10 percent before April 15. The discount is applied as promo code "earlybird2019" during the checkout process.

Early Bird
Discount
Before
April 15!

BIG RED SUMMER ACADEMIC CAMPS are residential, career exploration camps held at University of Nebraska–Lincoln campus and are open to all youth grades 10th–12th. During the week-long camps, participants work with UNL faculty to explore the topic of their particular camp, like animation, teaching, weather & climate science, engineering and veterinary science. Brochures are available online at <http://4h.unl.edu/big-red-camps> and at the Extension office.

Teen Council 4-H'ers Are True Leaders at 4-H Lock-In



The teens in the Games Committee planned and led several entertaining games for the 4th and 5th graders including a "maze" game.



The Craft Committee planned and led four craft activities, including making aliens out of pom-poms.



The Education Committee organized and led activities focusing on topics such as planets and space travel.

In January 2019, 38 4-H Teen Council members organized and led the overnight 4-H Lock-In for 38 4th and 5th graders. This year, teens chose the theme, "Journey to the Stars," and divided into four groups: games, education, crafts and food. At the Lock-In, attendees rotated through each of the four groups, made friends, slept a little and had lots of fun. More photos are at www.flickr.com/photos/unextlanco/albums.

Here's what some of the teens said about this year's 4-H Lock-In.

Valuable Leadership Skills

This year's Lock-In was a lot of fun for both the teens and kids attending. We chose the theme "Journey through the Stars" which lent itself to many fun games, crafts and food. My favorite being the pom-pom

aliens! For the teens planning the event, the Lock-In provides a great learning opportunity. We get to learn valuable leadership and organization skills in addition to learning how to interact with younger kids. For the 4th and 5th graders attending, the Lock-In is a fun event in which they get to make memories with their friends, meet new people and participate in engaging activities. I saw many smiles all throughout the night from everyone involved, and I am excited for next year's Lock-In!

—Abigail Kreifels

Positive Learning Opportunities

A long time ago, when I was in fourth and fifth grade, I participated in the 4-H Lock-In. From my young eyes, the teen leaders seemed so organized, ready for fun and were young people I admired. Now I am

a leader of these activities, promoting learning in a fun way. The 4-H Lock-In brings together positive learning opportunities and a chance to make new friends. It's been a great experience both as a participant and as a teen leader.

—John Swotek

Friends and Fun

We took a journey to the stars at this year's Lock-In. Along the way, the 4th and 5th graders played games, made crafts, had some yummy snacks and learned about space and planets. The youth made new friends and learned something new along the way. The teens had been working since November to make this a fun and enjoyable event. We had a blast interacting with the youth and seeing our hard work pay off. It's the highlight of the year for Teen Council!

—Ellie Babcock

Youth for the Quality Care of Animals Requirements for 4-H/FFA Members Exhibiting ANY Livestock Project at the Lancaster County Super Fair and/or Nebraska State Fair

4-H/FFA youth enrolled in any of the following animal projects will need to complete Youth for the Quality Care of Animals (YQCA) training:

- Beef (bucket calf, feeder calf, breeding beef, market beef)
- Dairy cattle
- Goat (breeding meat goat, market meat goat, dairy goat)
- Poultry
- Rabbit
- Sheep (breeding sheep, market sheep)
- Swine (breeding swine, market swine)

Deadline to complete YQCA is **JUNE 15**. Youth must be currently enrolled at <https://ne.4honline.com>. Only parents/guardians may enroll 4-H members. In Lancaster County, youth may choose one of three options to complete their YQCA requirements:

- Complete online training at <https://yqca.learnrow.io>. Cost is \$12. For directions and more information, visit <https://4h.unl.edu/yqca>. Once training is complete, send completed certificates to Heather at heather.odoski@unl.edu or 444 Cherrycreek Rd., Ste. A, Lincoln, NE 68528. If certificates are not submitted, we have no way of knowing if trainings have been completed.
- Attend a face-to-face training held Thursday, May 30 or Thursday, June 6, 6–7 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Rd., Lincoln. To sign up for face to face trainings, you must go to <https://learnrow.io> before the training. The training will cost \$3 payable by credit or debit card on the website. We cannot take payments in person, all families must register and pay online. You must sign in as proof of attendance — certificates will be available online.
- For a test-out option, contact Heather for details.

If you have further questions, contact Heather at 402-441-7180 or heather.odoski@unl.edu.

New in 4-H at Super Fair



Aug. 1–10, 2019

4-H & FFA Exhibits & Events

Aug. 1–4

4-H Horse Shows July 30–Aug. 4

The Lancaster County 4-H & FFA Fair Book contains entry information for exhibiting in 4-H/FFA at the Super Fair. Fair Books have been mailed to all 4-H/FFA families. It is also available at the Extension office and online at <http://lancaster.unl.edu/4h/Fair>. The online version indicates changes from last year in green text. Many fair handouts, forms and videos are, or will be, on this website.

New Exhibit Opportunities

See the Fair Book for detailed information about each of the following new classes or changes:

- **Fashion Show:** STEAM Beyond the Needle "Wearable Technology Garment."
- **Special County Exhibits:** "Leather item or accessory" and "N|150 Stepping Stone."
- **Citizenship:** "Leadership poster or display."
- **Photography:**
 - ▶ Unit II: "Action display or print," "Theme print – Beautiful Nebraska" and "Digitally altered display or print."
 - ▶ Unit III: "Challenging print," "Theme print – N|150" and "Digitally altered print."
- **Food & Nutrition:** Cooking 101 – "Small or standard size pie."
- **Clothing:**
 - ▶ STEAM Clothing 2: Non-Sewn: "Sewing for Profit."
 - ▶ STEAM Clothing 2 & 3: "Alter/Design Your Pattern" and "Garment Constructed from Sustainable or Unconventional Fibers."
 - ▶ Beyond the Needle: "Advanced Fashion Accessory," "Wearable Technology Garment and Accessory."
 - ▶ Level 2 & 3 Fiber Arts – Knitting: "Arm or finger knitted item," "Loom knitted item" and "Machine knitting."
- **Science, Engineering & Technology:**
 - ▶ Aerospace/Rockets – Drones – Unit 5: "Drone poster."
 - ▶ Computers – Unit 3: "Digital fabrication."
- **Poultry:** classes have been restructured under Large Fowl and Bantam to follow the guidelines of the American Poultry Association.
- **Llama/Alpaca:** Beginner Pack Class.
- **Rabbit:**
 - ▶ New 4-H rabbit substitution rule — a rabbit may be substituted for a 4-H registered rabbit for the fair, based on the following: same breed, same sex, same age, same class number (per the fair book). A maximum of two substitutions per exhibitor may be permitted.
 - ▶ Educational rabbit static exhibits now also include toys.
- **Horse:** There are many changes in the horse show schedule, such as Dressage will be held before the fair. Review carefully.
 - ▶ Western Dressage has now been expanded into age divisions.
 - ▶ English Bareback and Western Bareback are now offered as two separate pattern classes per riding discipline.
 - ▶ English Discipline Rail and Western Discipline Rail are now offered as two separate classes per riding discipline.
 - ▶ Miniature Pleasure Driving will now require an adult header for the class.
 - ▶ ASTM/SEI helmets are required for all Hunt Seat and English classes, both non-jumping and jumping. Hunt caps will not be permitted.
 - ▶ ASTM/SEI helmets will also be required for Miniature Pleasure Driving and Timed Cones.

Grooming of Livestock

2019

Preparation and grooming of an animal should be the primary responsibility of the exhibitor; however, assistance may be provided by other 4-H or FFA exhibitors, immediate family members or another person acting in a mentoring and teaching capacity. The intent of this policy is to promote and foster positive youth development and a high-quality learning experience which are core values of 4-H and FFA.

All animals will be subject to visual inspection and/or toweling (before and/or after entering the show ring) for the presence of any grooming compound not allowed as stated in the species section of the Fair Book. Inspection of the animal may include, but is not limited to, the topline, legs, chest, belly, flank and cod/udder areas. If, after inspection, the animal is found to have any grooming compound not allowed, it will be disqualified from competition. Any premiums (physical or monetary) will be forfeited and no refunds will be made.



EXTENSION CALENDAR

All events will be held at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln, unless otherwise noted.

March

- 23 Lincoln Early Childhood Conference..... 8 a.m.–2:45 p.m.
- 28 Commercial/Noncommercial Pesticide Applicator Recertification Training 9 a.m.
- 30 4-H Horse Stampede, UNL East Campus - Animal Science Building
- 30 4-H Companion Animal Challenge, UNL East Campus - Animal Science Building

April

- 2–4 Ag Literacy Festival (for 4th Graders), Lancaster Event Center
- 2 4-H Council Meeting..... 6 p.m.
- 3 Cultivating Healthy Intentional Mindful Educators (CHIME) Program for Childcare Providers 6:30–8 p.m.
- 4 Emergency Preparedness Training for Childcare Providers 6:30–9:30 p.m.
- 6 4-H Kids K9 Clinic, Kenl Inn, 10241 Old Cheney Road 11 a.m.–1 p.m.
- 9 4-H Horsemanship Level Testing, Lancaster Event Center - Pavilion 4, Amy Countryman Arena 5:30 p.m.
- 10 Cultivating Healthy Intentional Mindful Educators (CHIME) Program for Childcare Providers 6:30–8 p.m.
- 11 Commercial/Noncommercial Pesticide Applicator Initial Training 8:30 a.m.
- 11 Co-Parenting for Successful Kids Class..... 9 a.m.–12:30 p.m.
- 11 Emergency Preparedness Training for Childcare Providers 6:30–9:30 p.m.
- 12 Extension Board Meeting 8:30 a.m.
- 12 Kiwanis Karnival, Elliott School, 225 S. 25 Street..... 5:30–7:30 p.m.
- 14 4-H Teen Council Meeting 3 p.m.
- 15 All 4-H/FFA Market Beef ID's/DNA Due
- 18 Pesticide Applicator NDA Walk-in "Testing Only" Session..... 9 a.m.–2 p.m.
- 23 4-H Horsemanship Level Testing, Lancaster Event Center - Pavilion 4, Amy Countryman Arena 5:30 p.m.
- 27 4-H Spring Rabbit Show, Lancaster Event Center - Exhibit Hall 9 a.m.

EXTENSION NEWS

New 4-H Assistants



Nebraska Extension in Lancaster County recently hired two Extension Assistants to replace outgoing staff. They join a staff of three other 4-H staff members to coordinate the Lancaster County 4-H's program, which reached over 36,000 youth last year.

Morgan Battes began working in January. Some of her responsibilities include leading the Garbology 4-H school enrichment program and the Trash to Treasure after-school program. These programs teach youth why it is important to reduce waste, and how to recycle and reuse.

Morgan graduated from the University of Nebraska-Lincoln in 2017 with a Bachelor of Science in Natural Resource and Environmental Economics with a Leadership and Communication minor. Prior to this position, she worked in Kansas City for an international hunger relief organization, where she facilitated thousands of volunteers in packaging high-protein, highly nutritious meals to be distributed to chronically malnourished people around the world.

Morgan says, "This experience allowed me to realize a passion for working with volunteers and serving others, two things I look forward to continuing to pursue here on the 4-H team!"

Calvin DeVries began working in February. Some of his responsibilities include coordinating the livestock, dog and poultry project areas. He will also lead the Embryology and Ag Literacy Festival 4-H school enrichment programs.

Calvin received his Associate of Science degree from Nebraska College of Technical Agriculture in 2016 and his Bachelor of Science degree from the University of Nebraska-Lincoln in Animal Science Production Systems in 2018. He was a member of the Livestock Judging team at both colleges. After graduation, he worked as an animal care technician providing daily care and maintenance of animals, data collection and analysis.

Growing up in Adams County, Calvin was a 10-year 4-H member who showed sheep, swine and poultry. His experiences in 4-H grew his passion for Animal Science and led him to pursue not only a degree, but also a career in this field.

He says, "4-H is an opportunity to showcase your skills and passions across a large area of different projects and activities. Working for Extension gives me the chance to continue to share this passion with the youth of Lancaster County!"



Photo by Heather and Jameson

4-H'er Ellie Babcock Chosen Again for Omaha Fashion Week

Omaha Fashion Week kicked off with Student Night on Feb. 26 at the Omaha Design Center in downtown Omaha. The runway show included collections from Nebraska 4-H, Omaha High Schools, FCCLA and Joslyn Art Museum's Kent Bellows Mentoring Program.

4-H members who exhibited their garments at the 2018 Nebraska State Fair qualified to apply to be part of the 4-H collection. To be considered, garments had to be fashion forward, runway appropriate and displayed high-quality construction. This was evident to the show's producer, Brook Hudson, who was quoted saying, "Their [4-Hers] construction is top-notch."

Ellie Babcock, Lancaster County

4-H member, was one of 13 4-Hers from across the state chosen to model their sewn garments. Babcock gained full attention of the audience as she walked the runway in her electric blue and white, ombré-dyed, tulle prom gown. This was her second year to be chosen for the student show.

Ellie says, "I was honored to be able to participate in the Omaha Fashion Week Student Night for the second year. All the 4-Hers, models, designers and staff backstage were uplifting and excited for the show. I was glad to be able to help and encourage first timers. This program has made me feel confident to be behind the scenes of a show and that is important for the career in fashion design I want to pursue."

Don't Turn Your Recyclables Into Garbage

Did you know that putting a non-recyclable item into your curbside recycling bin or the public drop-off bins can actually cause everything in the bin to go to the landfill?

Recyclable items jump through many hoops on their path to become new materials. Understanding this process will help us avoid losing valuable materials to the landfill. It's up to you to recycle right and not mix in materials that disrupt the process.

Below are the top five items that spoil recycling bins — look out for these foul plays!

Plastic bags: plastic bags, loose or used to hold other recyclables, can clog the sorting equipment at recycling centers. Take plastic bags to your local grocery or retail store recycling bins.



Glass: not all glass items are recyclable. Dinnerware like plates and drinking glasses, mirrors and ceramic products, can ruin recyclable glass at drop-off sites. Glass mixed in your curbside bin can shatter when collected, ruining your regular recyclables.

Food residue: food and liquids left in recyclable containers ruin the whole load. Give all containers a quick rinse.

Non-recyclable plastics: only plastics #1–7 can be recycled curbside. Only plastics marked #1–5 are accepted at public drop-off sites. When in doubt, throw it out.

Textiles: fabrics mixed with your recyclables require manual separation at the recycling center — which slows the process and increases the cost of recycling. Donate used clothing to thrift shops.

Mixing non-recyclables in the recycling bin both destroys all the work you put into recycling and hampers the efforts of Lincoln's collectors and processors who haul and sort the materials. Recyclables that have contaminants mixed in — plastic bags, broken and incorrect glass, food waste, non-recyclables plastics and fabric textiles — are sent to the landfill.

Let's improve our recycling moves and ensure that we recycle right. Stick to the basics and when in doubt, throw it out. Find out more at recycle.lincoln.ne.gov.

Choose Healthy Here

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Use — Do I have the knowledge and skills to prepare healthy foods?

Healthy store events — such as food preparation demonstrations presented by NEP staff — provide customers with the opportunity to try new, healthful foods while increasing demand for those foods.

Where Can I Find Participating Locations?

- U-Stop locations: 33rd and Superior; 21st and K
- Stop 'N Shop locations: 48th and Randolph; 16th and Old Cheney
- Sun Grocery
- Amin's Kitchen

Community Impact

Chad Wollan, chief operating officer for Whitehead Oil Company, which owns the

U-Stop stores, says, "We are experimenting, trying different things. Consumers say they want healthy options. The challenge is finding exactly what healthy choices they will buy."

Andrea Koopman, Marketing Manager for Stop 'N Shop, says, "We love that we can offer better-for-you options for our health-conscious customers. This program has allowed us to brand those items and make them easier to locate throughout our stores. Customers are pleasantly surprised when they see our better-for-you options and variety."

FOR MORE INFORMATION

- Learn more about the statewide Choose Healthy Here program at <https://food.unl.edu/CHH>.
- To become a participating retailer, go to the above website or contact Kristen Houska at 402-441-7180 or khouka2@unl.edu.