

3-2012

The NEBLINE, March 2012

Follow this and additional works at: <http://digitalcommons.unl.edu/neblines>

"The NEBLINE, March 2012" (2012). *The NEBLINE Newsletter Archive from UNL Extension in Lancaster County*. 260.
<http://digitalcommons.unl.edu/neblines/260>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in The NEBLINE Newsletter Archive from UNL Extension in Lancaster County by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

National Agriculture Week is March 4–10

A Time to Celebrate and Reflect About Nebraska’s Leading Industry

Gary C. Bergman, UNL Extension Educator

Travel during Nebraska’s growing season and you will soon discover why our state is an agricultural leader. Expansive fields of corn, soybeans, wheat, sorghum, dry beans, sugar beats, and hay showcase a diverse and prominent agriculture. In some regions, vast rangelands will greet you with more grazing cattle than people. Most everywhere, one will see a tremendous natural resource that is precious to our economic well being.

When you think about it, just about everything we eat, wear, or use comes from agriculture.

Often agriculture is visualized as only farmers tilling the soil or ranchers tending their livestock. And, while farmers and ranchers represent a fundamental part of agriculture, they actually represent the production aspect of a very large agricultural industry fueling our state’s economy and creating millions of jobs nationwide.

In fact, one in three Nebraska jobs are tied to agriculture. This includes everything from supplying basic inputs to supporting animal health, crop genetics, land management, financing, insuring, distribution, storage and handling, processing, manufacturing, retailing, and more.

No matter where we live, the agricultural industry is responsible for the necessities of everyday life. When you think about it, just about everything we eat, wear, or use comes from agriculture.

Agriculture is something to highly value. During our recent economic turn-down, Nebraska agriculture mitigated our state’s financial losses. So, occasionally it is important to reflect on how agriculture contributes to our quality of life, and in many cases, livelihood. During National Ag Week (March 4–10, 2012), please take time to think about the contributions the agricultural industry makes for us all.

Ag Literacy

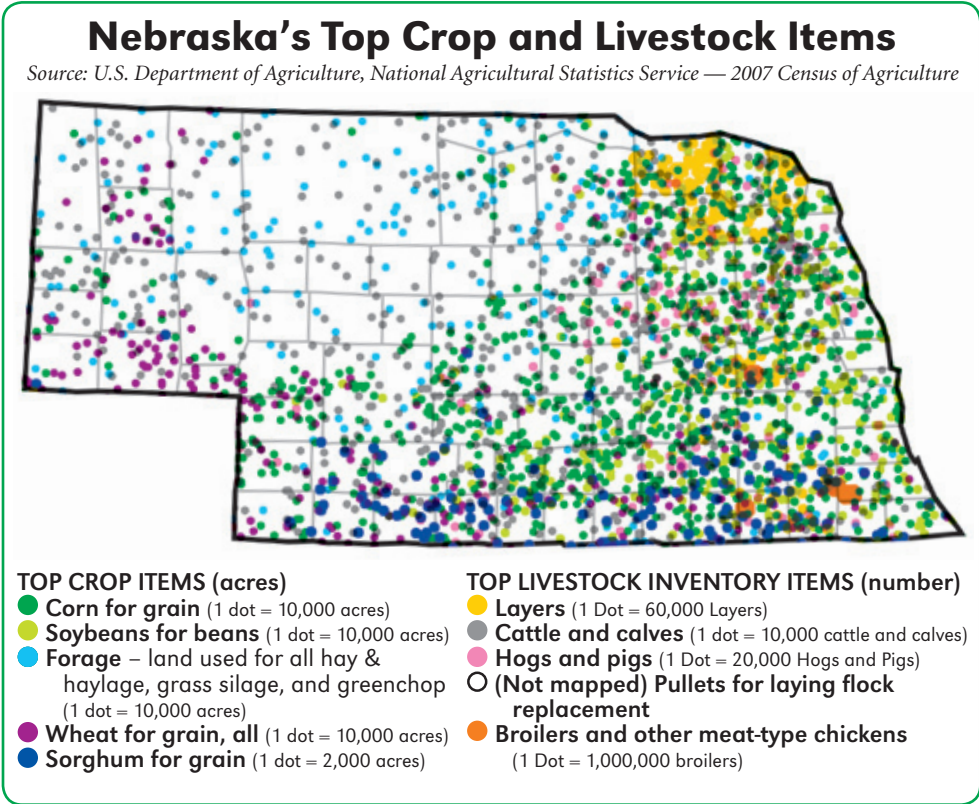
Often, the agriculture industry is not completely understood. Urbanization of our population has perhaps been responsible for this loss. Today the majority of our population is generations removed from living on a farm or ranch, and a basic knowledge about food production has also been lost. Occasionally, employees of agribusiness even fail to see a connection



There is nearly 23 million acres of pastureland and rangeland in Nebraska — half of which are in the Nebraska Sandhills.



Farms and ranches utilize 45.6 million acres of land — 93 percent of Nebraska’s total land area.



tion between agriculture and their very own employment.

To some people, this lack of understanding is a troubling concern — particularly in a leading agricultural state. Feeding a global population expected to exceed nine billion people by 2050 coupled with decades of urbanization has led many to conclude a strong need for agricultural literacy education exists.

To address this need, UNL Extension in Lancaster County teaches agricultural awareness in numerous ways:

- **Ag Awareness Festival** — Annually, more than 500 fourth graders gain a better understanding of agriculture and how it impacts their daily lives at a two-day festival. Hands-on activities and opportunities to see, touch, and experience animals, feedstuffs, and farming equipment are often a first time exposure to understanding where food originates.

- **4-H Embryology and EGG Cam** — Nearly 4,000 third graders from 51 Lancaster County schools incubate, candle, and watch the hatching of baby chicks. This hands-on science project helps develop a better understanding of life, the life cycle, and the embryo. Through EGG Cam, anyone around the world can watch chicks hatch live and access information on raising poultry at <http://lancaster.4h/embryology>.

- **4-H Horse Program** — Through the 4-H horse program, 4-H members learn many life skills and relate to the important contribution horses made in earlier times. Today, approximately 200,000 horses in Nebraska contribute to pleasure, sport, and ranch/feedlot work. In Nebraska, the horse industry which includes, veterinarians, equine nutritionists, stables, feed/supply stores, breeders, etc. annually generates revenue of over \$700 million. In January

Nebraska Ag Facts

#1 NATIONAL RANKING
Commercial red meat (7.1 billion pounds in 2010)
Great Northern bean production (180 million pounds in 2010)
Irrigated land harvested (8.5 million acres in 2007)
Popcorn production (294.5 million pounds in 2007)

#2 NATIONAL RANKING
Pinto bean production (1.6 million pounds in 2010)
Proso millet production (2.6 million bushels in 2010)

#3 NATIONAL RANKING
Corn for grain production (1.4 billion bushels in 2010)
All dry edible bean production (320 million pounds in 2010)

#4 NATIONAL RANKING
Cash receipts from all farm commodities (\$15,309,098,000 in 2009)
Cash receipts from all livestock and products (\$7,283,326,000 in 2009)

#5 NATIONAL RANKING
Cash receipts from all crops (\$8,025,772,000 in 2009)
All hay production (6,349,000 tons in 2010)

Source: USDA NASS Nebraska Field Office

2012, Team Nebraska (which included 4-H horse members from Lancaster, Douglas, and Sarpy counties) earned High Overall State Award — National Champion at the 4-H/FFA Western National Roundup in Denver, Colo.

- **Lancaster County Super Fair** — Many 4-H members work on projects throughout the year which they exhibit at the annual Lancaster County Super Fair held at the Lancaster Event Center. Youth learning about animal husbandry or growing vegetable gardens often

see AGRICULTURE on page 7

Clean Your Farm Sprayer to Prevent Problems

Farmers and commercial pesticide applicators apply pesticides mainly as liquid solutions using a boom sprayer. Over time, pesticide residues build up on the tank walls and the plumbing, all the way through to the spray nozzles. When the agitation is discontinued, some of the chemical will settle to the bottom of the tank. For this reason, it is always better to end the work day with an empty tank. Then add one-fourth to one-third of a tank of fresh, clean water to the tank and agitate thoroughly to rinse inside surfaces. The rinsate can be sprayed on a field consistent with the product's labeled use.

Whenever you change the crop you will be treating, you should do a more thorough cleaning. When some herbicides, such as Glyphosate, are left in the tank for a period of time, they absorb products such as Dicamba (Banvel, Clarity or Sterling) from the tank walls.

Some chemicals require special cleaning agents. UNL Extension publication "Guide for Weed Management" (EC130) lists the recommended cleaning agents for many of the common herbicides. The table also lists crops that would be sensitive to pesticide residues left in the spray tank.

—Tom Dorn, UNL Extension Educator

Managing Pastures and Hay Lands in Lancaster County — Part 1

Tom Dorn
UNL Extension Educator

This is the first of a three part series.

Forage grasses fall into two general classes, cool-season and warm-season. Each class of grass has distinctive growth characteristics and when managed correctly, can provide high-quality feed to grazing animals. Cool-season grasses alone or combined with warm-season grasses, can provide season-long forage production, if used in a rotational grazing system.

In eastern Nebraska, cool-season grass pastures are the most common. Cool-season grasses begin growth in early spring and often produce 70–80 percent of their total annual forage production by July 1. They are largely unproductive during the hot summer months unless irrigated. If moisture is available in the fall, they grow again until freezing temperatures bring on dormancy.

When planting a cool-season pasture, it is wise to plant a mixture of species as each has slightly different growth habits. This will extend the grazing time and prolong the productivity of the pasture. Inclusion of legumes in the mix is also a good idea.

One recommended cool-season grass mix for this part of Nebraska is a combination of 3 lb orchard grass, 4 lb smooth brome grass, 1 lb red clover, and 1 lb grazing-type alfalfa per acre. For horse hay or pasture, add 1–2 lb of Timothy per acre to the mix.

Warm-season grasses start growth about a month later in the spring than cool-season grasses and grow slowly until soil temperatures exceed 65°F and air

temperatures exceed 80°F. As a result, in a purely warm-season pasture, spring soil moisture is conserved and used from June 1 to Sept. 1 when forage growth is most rapid.

Most warm-season grasses become dormant in September and provide no new forage production for fall grazing. No matter the species or forage type, (warm- or cool-season), forage quality is highly correlated to maturity, with immature growth stages providing highest nutritional quality.

Forage quality (both energy and protein) drop rapidly once seed heads emerge.

Cool-Season Pastures

If only cool-season grass pastures are to be used, extra management is required to ensure adequate forage for season-long grazing. Forage production and quality can be optimized by splitting the pasture into paddocks, then grazing in a rotation allowing time for regrowth to occur between grazing periods.

If you don't plan to supplement grass production by feeding hay or grain during the slow-growth period in the summer months (summer slump), the stocking rate must be matched to the season-long forage production of the pasture. If you stock a cool-season grass pasture with the number of animals it can carry through the entire five-month grazing season, forage production will exceed utilization by the animals during the rapid-growth period in the spring. Frequent rotation from paddock to paddock in the spring, will help keep the grasses in immature growth stages thus preserving palatability and forage

quality into the summer months. Forage stockpiled for later grazing during the rapid growth stage in the spring can then be utilized during the summer months.

Rotation times can be lengthened once growth begins to slow in the hotter months, but one should not graze the grasses so short there is insufficient photosynthesis to support a healthy root system. A good rule of thumb for cool-season grasses during the summer months, is to turn animals in to graze when there is 12 inches of top growth and rotate to a new paddock when six inches of growth remain.

Alternatively, when managing an all cool-season pasture system, one could harvest one or more paddocks in the spring as hay prior to seed stalk elongation to balance forage production with utilization. This will result in excellent quality hay that can then be fed to animals as necessary to help carry them through the summer forage production slump. If not needed during the summer, this hay can be fed during the winter season or sold.

Warm-Season Pastures

Forage production can be leveled out and rotation management simplified if some of the paddocks in a rotation are planted to warm-season grasses.

Switchgrass. Switchgrass is a warm-season grass and in a pure stand, can provide excellent forage production for beef animals. Before seedstalks develop, forage quality is high and palatability is good. After seed heads emerge, palatability and nutrient levels drop and

Switchgrass becomes unacceptable pasture. You should begin grazing Switchgrass when it is ready to graze, regardless of how much grazing potential remains on the cool-season paddocks. One option is to begin grazing when Switchgrass is 8–10 inches tall, graze to keep plant height between 8–16 inches for 6–8 weeks, then remove livestock for 30–45 days. Any regrowth can then be grazed to a stubble height no shorter than 8 inches. Usually it is better to stock Switchgrass too heavily and move the animals to other paddocks sooner, than to stock lightly which results in abundant seed head development. Switchgrass is often included in warm-season grass mixtures, especially for CRP acres, but it is less palatable than many other species and is generally under-utilized in a mixed warm-season pasture.

Switchgrass does not make good horse pasture because of poor acceptance.

Warm-Season Mixtures.

If Switchgrass is not used, a mixture of several warm-season grasses is recommended.

A good, warm-season mixture for Lancaster and surrounding counties includes 3 lb big bluestem, 2 lb Indiangrass, 1.5 lb sideoats grama, 0.5 lb blue grama, and 0.3 lb sand lovegrass per acre.

Warm-season grasses are slow to become established, often taking three to four years to become the dominate plant community on the site. See the Pasture and Range section of the UNL Extension publication "Guide for Weed Management" (EC130) to see herbicide options for establishing new grass and products that can be used on established warm-season grasses.

Caution Urged When Using Anhydrous Ammonia

Tom Dorn
UNL Extension Educator

Anhydrous ammonia is so familiar, it's easy for agricultural producers to take it for granted but anhydrous ammonia should always be handled with utmost caution.

Anhydrous means "without water." Anhydrous ammonia NH_3 is a gas at normal atmospheric pressures but is pressurized to a liquid for more efficient transport. Anhydrous ammonia has a tremendous affinity for water and will draw water out of any substance it comes in contact with. When depressurized, the anhydrous flashes into a gas (vapor). When gaseous anhydrous is injected into the soil, it immediately combines with the water present in the injection zone and becomes ammonium NH_4^+ which, because of its positive electrical charge, is held on the negatively charged clay and organic matter particles in the soil.

It is the tremendous affinity

for water that makes anhydrous dangerous to handle. Just as anhydrous ammonia draws water out of the soil, it will also draw water out of human tissue. Skin and eyes exposed to anhydrous ammonia will appear to be burned due to the extreme drying effect resulting from anhydrous drawing the water out of the cells. While skin will heal, anhydrous in the eyes can quickly cause blindness. Fumes breathed into the lungs can burn tissue and may result in suffocation. But, handled with caution, anhydrous ammonia is an effective and inexpensive plant nutrient, which makes it the most popular nitrogen source used in agriculture.

As expected, anhydrous safety involves careful handling of hoses and equipment to prevent unwanted escape of anhydrous vapors into the air. Handlers must also prevent any accidental contact to skin and clothing by wearing protective clothing and equipment. Always work upwind of machinery, hoses, valves, couplers, and



applicator tubes. Don't step in front of fittings or valves. Wear insulated gloves made especially for protection against anhydrous ammonia. Protect your eyes with non-vented goggles and wear a respirator equipped with filters made specifically for protection against anhydrous ammonia fumes when connecting or disconnecting hoses or filling anhydrous tanks.

Other safety tips:

- Never fill an anhydrous tank more than 85 percent full of liquid. This reserves room for expansion should the tank warm up after filling. Overfilling the tank can result in dangerous pressure build up, resulting in activation of the pressure relief valve and release of anhydrous into the atmosphere.

- Keep a lot of water available. All anhydrous tanks should have a five-gallon water reservoir in or on them. Fill or replace the water daily. Keep a squirt bottle in the tractor cab. By quickly dowsing tissues that come in contact with anhydrous with an external water source, you can greatly reduce the drying/burning effect. People who work with very large amounts of anhydrous ammonia, such as people who fill nurse tanks at a central location, have large tubs of water (horse tanks) available so they can literally dive into the tank, if exposed to anhydrous.
- Every field applicator and nurse tank should be equipped with an emergency breakaway valve. Keep hoses level when connecting and disconnecting

so liquid anhydrous won't collect in low spots. Any anhydrous left in the hoses could shoot out under pressure onto the person disconnecting the equipment.

- Other hints for safe use of anhydrous ammonia include:
 - Inspect all tanks before moving them.
 - Don't travel faster than 20 miles per hour when moving as anhydrous tank tires are only rated for 25 miles per hour.
 - Always use a safety chain when transporting a tank and make sure all hitch pins have keys.
 - Don't haul more than one tank at a time.
 - Don't de-activate the excess flow valve and be sure it has been tested recently.
 - Use only metal snap couplers.
 - Handle hoses gently.
 - Don't be caught without safety equipment in case of emergency. Keep backup safety goggles, gloves, clean flushing water, and a cartridge respirator in the tractor cab.

Bed Bug Myths — Rely on Research For Facts

Barb Ogg
UNL Extension Educator

Cimex lectularius, the common bed bug, was once thought to be practically eradicated from the United States. Since 2000, this insect has bounced back with a vengeance, crossing the globe and the United States at the speed of human travel. Entomologists say we are seeing just the tip of the iceberg — the bed bug problem is increasing exponentially with no end in sight.

The Internet is a wonderful place and, for many of us, has enriched our lives immensely, but it is also a place where people can spew inaccuracies about bed bugs. Misunderstandings are passed from person to person all too often. Here are the most common misunderstandings about bed bugs and the facts.

Myth #1: Bed bugs are invisible.

Bed bugs hide during the day and they feed at night, so they are often overlooked, at least in the early stages of an infestation. But they are not invisible. Adult bed bugs are reddish-brown and the size of an apple seed, about 1/4-inch long, although immature bed bugs are smaller. The eggs are tiny; they are about the size of a pinhead and, being light-colored, are easy to overlook.

Myth #2: Bed bugs reproduce quickly.

Bed bugs actually reproduce fairly slowly, compared to other insects. The female house fly, for example, lays 500 eggs over several days. During the summertime when temperatures are warm, house flies can go through their life cycle, from egg to adult, in about 10 days.

Recent research from Dr. Dini Millers' research lab at Virginia Tech shows today's female bed bug lays 1–7 eggs per day, but only about 113 eggs in her lifetime. At room temperatures, the life cycle (from egg to adult) takes about 4–5 weeks.

The advantage bed bugs have is they live indoors and are not tied to seasonally-warm temperatures like many outdoor insects are. Even in the wintertime, they are comfortable at room temperatures.

Myth #3: Bed bugs live in mattresses so if I throw it away, I'll get rid of them.

Bed bugs often infest mattresses and box springs because they are close to where people sleep at night. Like other animals, they like to be close to their food. If people fall asleep on the sofa at night, bed bugs will often infest the sofa.

In the bedroom area, the most likely place for bed bugs to hide is the box springs. To find them, tear the dust cover off the bottom of the box springs, and look for bugs and fecal spots where pieces of wood butt against each other. Another location is near staples; peel back the fabric where it is stapled to the wooden frame.



Bed bugs next to staple which held a dust cover underneath a couch.

Once bed bugs are found, it is common for people to throw the bed away in disgust, not thinking about where they will sleep afterward. Sleeping on the floor makes it easy for bed bugs to feed.

And, if you purchase a new mattress and box springs before treatment is complete, new bedding will likely become infested, too.

A better option is to keep the mattress and box springs, if they are reasonably new and in good condition, and encase them to seal bed bugs inside. The best encasements cost \$45–80 for each piece, but it is a lot less than buying new mattresses. If the mattress/box springs are old, ripped, and in poor condition, it does make sense to throw them away and buy new ones. Encasing the new mattress and box springs will protect them from infestation.

Myth #4: Bed bugs can live a year or more without a meal.

In 1941, a research study done by a Japanese researcher named Omori showed adult bed

bugs lived longest — about 15 months — at lower temperatures (50°F). But, when held at higher temperatures, they did not live nearly as long. Why is this? Without a blood meal to replenish body fluids, bed bugs desiccate faster at higher temperatures.

Recent research at Virginia Tech found pesticide-resistant bed bugs — the ones most commonly encountered today — held at 78°F and 69% relative humidity, lived about 3 months.

So, when people ask how long they can wait before renting out a vacant apartment or house that has been infested, these data suggest it largely depends on temperature. At room temperatures, it is safe to say bed bugs may be able to live 3–5 months without a blood meal. If it's cooler, they may survive longer.

Myth #5: I can kill bed bugs by turning off the heat in the wintertime and subjecting the house/apartment to freezing temperatures.

Probably not ... even in Nebraska it may not get cold enough. Bed bugs are much more resistant to low temperatures than to high ones. Millions of years ago, bed bug ancestors lived in caves and parasitized bats. Bed bugs are pre-adapted to surviving well in cold temperatures which actually increases their life span.

Many insects have physiological mechanisms to withstand the cold temperatures of winter. When temperatures get cold slowly over time, water in cells is replaced by substances like ethylene glycol and glycerol which prevent cells from bursting in freezing temperatures.

To kill bed bugs with cold temperatures, "flash freezing" is needed, either using a freezer or extremely cold, sustained, outdoor temperatures in the wintertime. Stephen Kells, University of Minnesota, says five days at 23°F are needed to kill bed bugs. One of his graduate students, Joelle Olson, found eggs are more resistant to cold temperatures. She found four days at 8.6°F are needed to kill eggs. In a home freezer, they recommend two weeks will be needed to kill all stages of bed bugs.

Most recently, Chanlu Wang, Rutgers University, sealed 3 lb of dry ice and 20 lb of clothing in a heavy duty, 3 ml plastic garbage bag and found all bugs were dead after 24 hours. This technique could possibly be used to disinfect other items, like electronics.

Cold temperatures aren't practical for whole house treatments, although some cold treatments, like Cryonite (frozen carbon dioxide), may kill bed bugs on mattresses and in wall voids.

Myth #6: I've heard heat will kill bed bugs. I can rent a space heater and save money by doing my own treatment.

Bed bugs are susceptible to heat, but they often hide in insulated locations, like under carpets and inside wall voids. To kill them successfully, the heat must be distributed evenly throughout the room and monitored with sensors to make sure it is hot enough. The temperatures also must be sustained for a period of time to allow the heat to dissipate into all bed bug hiding places.

Stephen Kells reports bed bug adults die at 119°F (48.3°C). Eggs are more resistant, dying at 130.5°F (54.8°C). Companies doing heat treatments seal the room or apartment to prevent heat escape. To promote even temperatures throughout the rooms, they move furniture away from walls, stand mattresses/box springs on end, remove dresser drawers, open closet doors, and use fans to move the air around. After a baseline temperature is reached at all the heat sensors, the heat is sustained for 3–5 hours or more.

Myth #7: I've heard DDT was the reason bed bugs were gone so long. We need to bring it back.

Yes, it's true, the use of DDT is one of the reasons bed bugs disappeared for such a long time. But many people do not realize today's bed bugs are resistant to DDT, as well as the pyrethroid class of insecticides. Both DDT and pyrethroid insecticides kill bed bugs the same way.

New research has shown that today's bed bugs also have a thick cuticle which prevents insecticides from penetrating the body.

They also have very high levels of enzymes in their body which convert the toxic insecticide into less toxic chemical and allow the bugs to survive the treatment.

Myth #8: I found products at a store with bed bugs on the label, so they should solve my bed bug problem, right?

Wrong. Manufacturers of many over-the-counter (OTC) products used inside the home have added bed bugs to the label. These products often have the words *bed bugs* prominently on the label to entice people to buy their product. If these are pyrethroid products, it is likely bed bugs are highly resistant to them. Look at the product label and see what insecticide is listed. Most pyrethroids can be identified with a characteristic suffix "-thrin." For example, permethrin, cyfluthrin, bifenthrin, and deltamethrin are insecticides in the pyrethroid family. Fluralinate and esfenvalerate are also pyrethroids.

There are also other OTC products which may claim to kill bed bugs. The EPA allows products containing active ingredients on their "25B list" to make pesticidal claims, produce a pesticide label without EPA approval, and market them without any efficacy or safety testing. The active ingredients in this list are considered "safe," so the EPA has relaxed its normal requirements for pesticide safety testing and label language approvals. To see what active ingredients are on the 25B list, go to www.epa.gov/opbppd1/biopedicides/regtools/25b_list.htm.

The most effective products are being marketed to pest control professionals which is why we recommend hiring an experienced professional for fastest and safest bed bug extermination.

FOR MORE INFORMATION

For additional resources on bed bugs, go to <http://lanaster.unl.edu/pest/bugs.shtml>. You can bring insects for free identification to the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln during office hours Monday–Friday, 8 a.m.–4:30 p.m.

Skunks Active Now

Soni Cochran
UNL Extension Associate

In Nebraska, skunks typically begin looking for mates in mid-February to mid-March. Males will travel up to five miles in one night in search of a female. Males are not always successful in their quest, as they frequently are struck by cars during this time. Since skunks are more active now, it is a good time to be sure you take steps to prevent rabies exposure. Although rabies can infect any warm-blooded creature, skunks

are particularly susceptible to the disease.

The best way to avoid rabies exposure is to avoid skunks. Warn children to never approach pet skunks or other wild animals. If an animal appears sick, injured, or if a wild animal seems tame, contact your local animal control office. Vaccinate dogs, cats, and livestock against rabies.

You may also notice skunks are more active because you will smell them. Skunks have a superior defense mechanism — their famous spray. Skunk spray is an odorous, yellow-tinted, oily liquid that can permeate clothing

and the environment for many days, whether the animal is alive or dead. If a skunk has sprayed you, your pet, or your property, there are steps you can take to help reduce the odor. Removing skunk spray may involve deodorizing treatments, home remedies, and there are multiple commercial products including foggers and deodorizers available.

For more information on skunks, rabies, and removing skunk odor, contact the extension office or visit the website at <http://lanaster.unl.edu/pest/skunks.shtml>.

earth wellness festival needs volunteers

Volunteers are needed for the 2012 **earth wellness festival** on Monday, March 26 and Tuesday, March 27 at Southeast Community College in Lincoln. Approximately 3,000 fifth-graders participate in this annual event which involves students in creative and innovative environmental education activities.

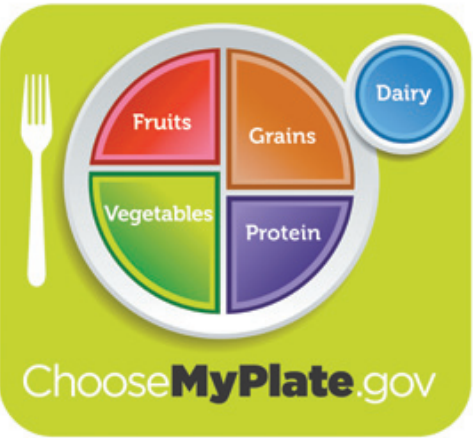
Each year, over 250 volunteers take part in **earth wellness festival** activities as classroom escorts, bus greeters, presenters, and registration assistants. Volunteers are essential to the success of this event. You may choose to volunteer one or both days. In return, you receive the opportunity to participate in a rewarding volunteer experience, a festival T-shirt, coffee, rolls, and lunch. For more information, contact Tonya Bernadt at tbernadt5@unl.edu or 402-472-2712 as soon as possible.



How \$hould You \$pend Your Calorie \$alary?

Alice Henneman, MS, RD
UNL Extension Educator

USDA'S MyPlate symbolizes a simple, personalized approach to remind consumers to make healthy food choices and to be active every day.



Think of MyPlate as a “calorie salary” guide that helps you get the most health and enjoyment from what you eat. Plan calories the same as major expenses — a car, house, vacati on, etc.

Four “budgeting” steps follow: \$tep 1 — Stay Within Your Calorie Budget

Knowing one’s daily calorie needs from a calorie table based on age, gender, height, weight, and level of physical activity may be a useful reference point in determining if the calories a person eats and drinks are appropriate in relation to the number needed daily. However, monitoring whether you maintain your weight over time by adjusting calories and physical activity is the most helpful.

Be aware that 100 extra calories per day can add up to a 10 pound weight gain in one year! Examples of 100 calories include:

- 2/3 can of a regular soft drink
- 2 tablespoons of sugar, jelly, jam, or syrup
- 1 tablespoon of butter or margarine
- 1/3 large (4-inch diameter) doughnut
- 2/3 (12-oz.) regular beer

Balance food calories with activity level. Recommended minimum levels of physical activity include:

Adults: 2 hours and 30 minutes of moderate-intensity activity (i.e. 30

11 Ways to Get Physically Active Without Going to the Gym

1. Walk up and down the soccer or softball field sidelines while watching the kids play.
2. Replace a coffee break with a brisk walk. Use a distant restroom.
3. Take a brisk walk around the mall BEFORE you shop.
4. Use the stairs as much as possible — even if you don’t need anything upstairs or downstairs!
5. Stand while you’re on the phone.
6. Walk while waiting for your plane.
7. Get off the bus or out of your car a distance from your destination.
8. Use your exercise bicycle or tread-mill while watching TV.
9. Speed clean your house!
10. Take the dog for a walk — don’t watch the dog walk!
11. Dance!

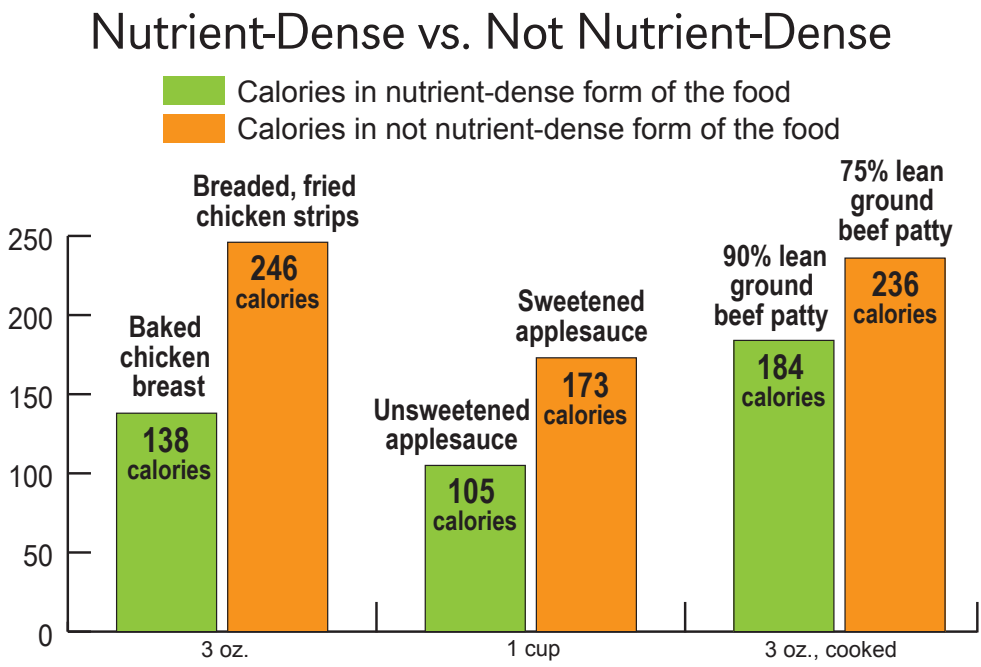
minutes, 5 times/week) OR 1 hour and 15 minutes of vigorous-intensity activity (i.e. 15 minutes, 5 times/week)
6–17 years: 60 minutes daily of moderate and vigorous activity
2–5 years: No specific recommendation other than to play actively several times each day
Moderate aerobic activity increases breathing and heart rate somewhat while **vigorous aerobic activity** greatly increases heart rate and breathing. If you are short on time, get active 10 minutes 3 times a day.

\$tep 2 — Consider “True Cost” of Poor Nutrition

Foods that do little to meet nutrient needs — even if they’re within our calorie salary — can put our HEALTH and MONEY at risk.

The 2010 Dietary Guidelines recommend a diet rich in fruits and vegetables, whole grains, and fat-free and low-fat dairy products for persons aged 2 years and older.

Healthy diets may help reduce or eliminate the need for, and cost of, medications for some people. Also, foods may contain additional substances and provide benefits not available from fortified foods, nutrient supplements, and vitamin/mineral pills. Many interactions occur



among food constituents (such as fiber, nutrients, and phytochemicals) that affect disease risk. The “Dietary Approaches to Stop Hypertension” (DASH Eating Plan) clinical study showed:

- fruit and vegetable consumption lowers blood pressure,
- adding low-fat, high-calcium foods to a diet high in fruits and vegetables further lowers blood pressure, and
- even greater reductions occur when sodium intake is restricted.

According to the Centers for Control and Prevention, “Healthy eating is associated with reduced risk for many diseases, including several of the leading causes of death: heart disease, cancer, stroke, and diabetes.”

\$tep 3 — Choose the Most Value for Calorie \$alary

Get the most for your “calorie salary” by eating more “nutrient-dense” foods.

Nutrient-dense foods and beverages provide vitamins, minerals, and other beneficial substances and relatively few calories without solid fats in the food or added to it and without added sugars, refined starches, and sodium.

Nutrient-dense foods retain naturally occurring components, such as dietary fiber. When choosing foods from the grain group, make at least half your grains whole grains.

All vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted

nuts and seeds, fat-free and low-fat dairy, and lean meats and poultry are nutrient dense when prepared without solid fats or sugars.

Reducing or eliminating some less nutrient-dense foods saves calories and MONEY!

David Bach, author of *The Automatic Millionaire*, popularized the term Latte Factor® to demonstrate the power of saving a few dollars daily by forgoing unnecessary purchases. Over several years, you can save thousands of dollars! The same can apply to calories — by saving a few calories daily, you can save thousands of calories over several years!

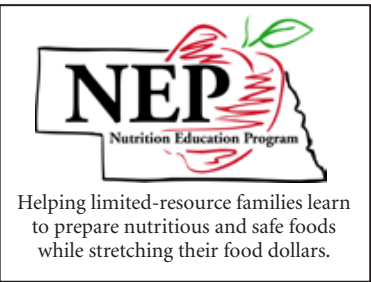
\$tep 4 — Plan a Budget for YOU

Fine-tune what you’re already eating to meet MyPlate guidelines. As you “budget,” choose foods that taste good as well as are good for you! Spend your “calorie salary” wisely!

References:

- Choose MyPlate at <http://ChooseMyPlate.gov>
- Dietary Guidelines for Americans, 2010 at <http://www.cnpp.usda.gov/DGAS2010-PolicyDocument.htm>
- Dietary Guidelines, 2010 at a Glance Slide Presentation, USDA Center for Nutrition Policy and Promotion
- Nutrition Facts, Centers for Disease Prevention and Control at www.cdc.gov/healthyyouth/nutrition/facts.htm
- Selected Messages for Consumers, USDA Center for Nutrition Policy and Promotion at <http://cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolDoc/Selectedmessages.pdf>
- U.S. Secretary Kathleen Sebelius, Department of Health and Human Services, May 16, 2011 <http://geneva.usmission.gov/2011/05/16/sebelius-chronic-diseases-a-growing-health-problem-for-countries-everywhere>

It’s Easy to Make Half Your Grains Whole



Lisa Kowalski
UNL Extension Assistant

Are you resolving to eat healthier this year? Try adding more whole grains. Regular consumption of whole grain foods has been linked to a reduced risk of heart disease, diabetes, certain types of cancers, and other diseases. In addition, whole grains help in managing weight because they give the feeling of fullness due to their nutrient density.

The 2010 Dietary Guidelines recommend making at least

half of your servings of grains as whole grain. Foods from the grain group are classified into two categories: whole grains and refined grains.

While all foods from the grains group are good sources of complex carbohydrates and other vitamins and minerals, whole grain foods are more nutrient dense than refined grains because they contain all the naturally-occurring nutrients of the entire grain kernel. Refined grains are milled to create a finer texture and improve shelf life. During the milling process, parts of the grain kernel are removed thus removing some B vitamins, iron and dietary fiber.

Whole grains are better sources of dietary fiber and other important nutrients than refined grains. Though iron and certain B vitamins (such as thiamin, riboflavin, niacin, and folic acid)

Homemade Pizza

(12 servings)

CRUST:

- 1 cup all-purpose flour
- 1 cup whole wheat flour
- 1 teaspoon salt
- 2 teaspoons baking powder
- 3/4 cup water
- 1/4 cup vegetable oil

PIZZA:

- 1 cup tomato sauce
- 1 cup cooked ground meat (hamburger, sausage, chicken, etc.)
- 1 cup chopped vegetables (onion, mushrooms, green pepper, etc.)
- 8 ounces shredded cheese

Preheat oven to 425°F. Spray a baking sheet with non-stick cooking spray. Set aside. In a large bowl, mix flour, salt, baking powder, and water until flour is moistened. Place dough on lightly floured surface. Knead dough for about 2 minutes. Place dough on prepared baking sheet. With fingers, spread dough out to cover the bottom of a baking sheet. Spread vegetable oil over crust (the oil will keep the tomato sauce from soaking into the crust). Spread tomato sauce over crust. Top with your choice of meat and/or vegetables. Top with shredded cheese. Bake 20 minutes or until pizza is heated through and cheese is melted.

Source: Recipe from UNL Extension Nutrition Education Program 2010 Calendar.

FAMILY & COMMUNITY EDUCATION (FCE) CLUBS

President's View – Marian's Message

Marian Storm
FCE Council Chair

March seems to be the month of wind and snow storms. Usually we have a bad storm when we have boys and girls basketball tournaments. I always make sure the snow blower is ready to use.

On March 11, we will spring forward as Daylight



Savings Time begins. Don't forget to set the clock forward when you go to bed.

St Patrick's Day is March 17. Remember to wear green.

March 20 spring begins.

My spring flowers are peeking already.

March 26 and 27 is **earth wellness festival** at Southeast Community College. If you can help,

contact Tanya Bernadt as soon as possible at 402-472-2712 or tbernadt5@unl.edu.

April 2 will be the council meeting at 1 p.m. Note this is a change from when we normally meet.

When you read this, I will be enjoying warm weather with some of my family living in Mesa, Ariz.

Remember: Every day is a gift.



FCE News & Events

Upcoming FCE & Community Leader Training Lessons

These FCE and Community Leader Training Lessons give you the tools to present the topic as a program. Extension provides a teaching outline for the facilitator and a handout for participants.

All trainings will be presented at 1 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. Non-FCE members or groups should call Pam at 402-441-7180 to register for these lessons so materials can be prepared.

"Save Time, Money, and Energy with

Homemade Master Mixes," Wednesday, March 28 — presented by Extension Educator Alice Henneman. Learn how to prepare "master mixes" for future use, featuring common household ingredients. Homemade master mixes can include basic baking mixes (pancakes, muffins, cookies, etc.), soup mixes, meat mixes, and more. You control the amount of sugar, salt, fat, and calories when you make your own mixes.

"Making It Happen: Building Positive Relationships with Children," April 25 — presented by Extension Educator Lorene Bartos.

FCE Council Meeting — Date Change to April 2

The March FCE Council meeting is scheduled for Monday, April 2, 1 p.m., at the Lancaster Extension Education Center. The date change is due to a conflict with **earth wellness festival**.

The program "Button History and Displays" will be presented by LaVonne Uffelman. The business meeting will follow the program.

All FCE members are invited to attend.

Strategies for Spring Cleaning Success

Did you ever think about how the spring-cleaning ritual developed? Before the advent of electricity, homes were heated with coal, oil and/or wood, and lit by gas or candlelight. Soot and grime were the natural companions of winter. Once spring arrived, the doors were thrown open, and everything was aired out, cleaned out, swept out, and scrubbed out. Although today's centrally heated homes don't collect the intensity of dirt, somehow the winter dingies seem to creep inside.

Some recommendations to get you started are:

Clear It Out

Start by getting rid of the things needlessly filling up your home.

Recycle it. Even with the availability of reading online, some people still prefer the paper versions. Gather up any newspapers and those magazines no one has ever quite gotten around to reading. If your community also recycles mixed papers, check the regulations, and start a bin where you can toss those papers as you clean.

Sell it. Garage sales, tag sales, or consignment shops are a great way to get rid of items in excellent condition but you no longer need. Collect them in

one spot, and then, once spring cleaning is done, decide how to dispose of them.

Donate it. Items in good condition but no longer fit your lifestyle can be donated to a charity or "free-cycled" away. Free-cycle is a grassroots, web-based, nonprofit movement of people who are giving and getting stuff for free in their own towns. Each local group is moderated by a volunteer, and membership is free. Visit www.freecycle.org for more information.

Inventory Your Supplies

Before you start cleaning, make sure you have all the necessary supplies on-hand.

The basics should include:

- all-purpose spray cleaner (for small, washable areas)
- all-purpose powder or liquid cleaner (for large washable surfaces like floors and walls)
- abrasive cleanser (to remove heavy amounts of soil in small areas)
- non-abrasive cleanser (for gentle cleaning on easily scratched surfaces, including porcelain sinks and ceramic tile)
- chlorine bleach (an effective disinfectant, particularly where mold and mildew are present)

- glass cleaner
- furniture-dusting product (such as a spray and a clean cloth, or a microfiber cloth, mitt, or duster)
- toilet bowl cleaner

You may also need to add cleaners specific to your surfaces, such as metal polishes and granite cleaners, or your personal preferences, such as wipes and special-purpose sprays. Don't forget to check your supply of vacuum cleaner bags and trash bags.

Make a Plan

Decide on your cleaning style. Some people find it more effective to clean one room at a time. Others prefer to group tasks — such as cleaning windows in several rooms at once or leaving all the vacuuming until the end.

Prioritize. If one room at a time is your style, decide on the order. Generally, it's best to do the rooms needing the most work or gets the most traffic first. That way, if your cleaning plans get derailed, you can still be proud of what you've accomplished.

Consider the big stuff. Do the curtains need to be laundered? What about comforters, blankets, bed skirts, slipcovers, and shower curtains? Are your area rugs and draperies due for

professional cleaning? Once these items are removed from the room and on their way to getting cleaned, it will be easier to tackle the rest of the space.

Recruit Help

It's not necessary to do everything yourself.

Enlist family members. Establish a spring cleaning day. Start early. Assign tasks according to age and ability. Have lunch preplanned — maybe even delivered — so your helpers don't lose momentum. And make it fun. Hide some favorite treats in places needing to be cleaned. Playing lively music keeps everyone's energy up.

Pair up with a friend. If you live alone or family members can't help, find a like-minded friend and clean together — your house in the morning, his/hers in the afternoon. If needed, schedule a second day.

Call in the professionals. If your budget allows, you don't have to do every bit of cleaning yourself. Someone else can come in and wash the windows, buff the floors, shampoo the carpets, clean the upholstery, or even do the majority of the cleaning after you've removed the clutter.

Source: American Cleaning Institute



Lorene Bartos, UNL Extension Educator

Disinfecting Dishcloths and Sponges

Odor in sponges and dishcloths is caused by germs and bacterial growth. To prevent odor, soak them in a disinfecting solution on a regular basis. Mix 3/4 cup of liquid household bleach with 1 gallon of water. Soak dishcloths and sponges for 5 minutes, then rinse and allow them to dry. Wash dishcloths regularly.



You Color
My World

A conference for those who provide child care.

In-service hours will be given for this conference.

Saturday, March 31

8 a.m.–3:30 p.m.

**Lancaster Extension Education Center
444 Cherrycreek Road, Lincoln, NE**

Cost is \$15 (includes lunch from Brown Baggers/refreshments)

Pre-registration is due March 16

For more information, call 402-441-7180 or go to <http://lanaster.unl.edu/family>



New UNL Program, March 8–May 10

Climate Masters of Nebraska, a new program at University of Nebraska–Lincoln's School of Natural Resources, will teach proven ways to act locally to save money, protect the environment, and reduce greenhouse gas emissions. In exchange, participants must commit to volunteering 30 hours of community education.

Cleaner Greener Lincoln, the mayor's sustainability initiative, is a project partner.

The first 10-week Climate Masters course will run Thursdays, March 8–May 10, from 6–8:30 p.m. Classes will convene at Hardin Hall on UNL East Campus. Apply by March 1.

The program is open to anyone ages 19 and up. No cost. A second round of training will begin in January 2013. For more information and registration form, go to <http://climatemasters.unl.edu> or call 402-472-2712.

Starting Transplants Inside

Mary Jane Frogge
UNL Extension Associate

Starting flower and vegetable transplants at home can be fun. Growing quality transplants requires good seed, a sterile, well-drained growing medium, proper temperature, proper moisture requirements and adequate light. Since the home is usually not the best environment for growing transplants, problems occasionally develop.

Poor or erratic germination of seed may be caused by improper planting, for example, planting too deeply. Uneven moisture and cool temperatures can also cause problems. Medium to large seeds are sown at a depth of two times their minimum diameter. Fine seed is usually dusted on the surface of the seedbed. Cool potting mix temperatures, below 70°F, delay germination. Maintain the proper germination temperature and even moisture conditions for rapid, uniform germination.

Tall, spindly growth is a common problem when growing transplants indoors. Poor or insufficient light, excessive watering, high temperatures, excessive fertilization, and crowded growing conditions are factors which contribute to spindly growth. It is best to place the seedlings under artificial light. It is not necessary to have an expensive plant stand. A standard fluorescent shop fixture with one cool and one warm fluorescent tube works fine. For best results, the lights should be approximately 1 inch above the seedlings. Raise the light as the seedlings



grow. Leave the lights on 12–16 hours a day. When the first pair of “true leaves” appear, thin the seedlings so they are not crowded. Allow the soil media to become slightly dry between waterings. The best quality transplants are short, stocky, and dark green.

Green algae or brownish fungal growth may appear on the soil surface or sides of peat pots. While their appearance generally causes little harm, their presence usually indicates excessive moisture levels. Allow the potting mix to dry somewhat before watering.

A lack of essential nutrients produces characteristic deficiency symptoms. Phosphorus and nitrogen deficiency symptoms sometimes occur on vegetable and flower seedlings. Phosphorus deficient plants frequently have purplish leaves and growth is stunted. Yellow lower leaves may indicate a nitrogen deficiency. Other symptoms of a nitrogen deficiency are stunted growth and small leaves. Apply a soluble fertilizer, such as 15-30-15, to the seedlings. Fertilize weekly with a one-quarter-strength solution.

While there are obstacles to growing transplants indoors, home gardeners can produce good quality transplants if they follow good cultural practices.

2012 All-America Selection Winners



Vinca ‘Jams ‘N Jellies Blackberry’

Vinca ‘Jams ‘N Jellies Blackberry’ Flower Award Winner

Extremely unique, velvety, deep purple with white eye flower color will add excitement to summer gardens. Easy-to-grow plants have excellent tolerance to drought and heat. Mature plants will reach 10–14 inches tall making them a perfect garden flower for the center of your flower bed. The 2-inch flowers are complimented by deep green shiny leaves creating a rich background for the richly dark flowers.

Ornamental Pepper ‘Black Olive’ Flower Award Winner

The AAS judges said this entry was a standout because it can handle hot locations. All season long this beauty kept its upright habit with nicely draping leaves and dark purple fruit which appears in small clusters along the stems. As summer progresses, the fruits mature to red giving a beautiful contrast against the dark-purple foliage and bright purple flowers. This multi-use ornamental can be



Ornamental Pepper ‘Black Olive’

Salvia ‘Summer Jewel Pink’ Bedding Plant Award Winner

This dwarf sized, compact plant has a prolific bloom count throughout the growing season. As a bonus, the blooms appear almost two weeks earlier than other pink salvias used as comparisons. Hummingbirds will also love the salvias pink flowers. Gardeners will appreciate the early bloom and uniformity of this excellent plant.

Watermelon ‘Faerie’ Vegetable Award Winner

‘Faerie’ is a non-traditional watermelon in that it has a creamy yellow rind with thin stripes yet still yields sweet pink-red flesh with a high-sugar content and crisp texture. Home gardeners will like growing something unique in their garden, and the fact the vines are vigorous, yet spread only to 11 feet, means it takes up less space in the garden. Each 7–8 inch fruit weighs only four to six pounds



Salvia ‘Summer Jewel Pink’

making it a perfect family size melon. Gardeners will appreciate the disease and insect tolerance as well as the prolific fruit set that starts early and continues throughout the season.

Pepper ‘Cayennetta’ Vegetable Award Winner

‘Cayennetta’ is an excellent-tasting mildly spicy-pepper very easy to grow, even for novice gardeners. This 3–4 inch chili pepper yielded bigger fruits from a very-well-branched upright plant that required no staking, which would make it perfect for a container or patio planter. Unique to this variety is that it has good cold tolerance as well as dense foliage cover to protect the fruits from sun scorch, and it handled extreme heat very well. This pepper is an all-around good choice no matter where you are gardening. Market growers will benefit from the heavy yield and prolific fruit set from each plant. Everyone will love the excellent pepper flavor that outshone all the comparison varieties.

Source: All-America Selections



Watermelon ‘Faerie’



Pepper ‘Cayennetta’

Timing for Pre-Emergent Weed Control in Lawns

Spring is an excellent time to control annual weeds in your lawn. Annual weeds like crabgrass and foxtail can be controlled with a pre-emergent herbicide that kills weed seeds as they begin to germinate. Crabgrass germinates when the soil temperature reaches 55°F and maintains that temperature

for several days. A few hours or even a single day of warm weather is not enough to induce germination.

It is important to put a pre-emergent on the lawn at the recommended time to get the best control of annual weeds. The month of March is too early and the recommended target

time to apply is usually late April through the early part of May. Keeping track of the soil temperature will help insure applications are applied at the correct time. Starting in April, check our website for the current soil temperature in Lincoln at <http://lanaster.unl.edu/>.

— Mary Jane Frogge



Garden Guide THINGS TO DO THIS MONTH By Mary Jane Frogge, UNL Extension Associate

Do not plow your garden when the soil is wet. It will form clods which are difficult to break up and interfere with cultivation during the summer.

Complete the pruning of shrubs and ornamental trees before growth starts, except for spring flowering shrubs. Prune those which bloom in spring, as soon as they finish flowering.

If you have not done it already, check stored tools and outdoor furniture for signs of rust. Remove any surface rust with steel wool and paint with rust-preventing paint.

Buy a notebook and use it to keep all your gardening information. List what you plant in the garden. Include the name of seed companies, plant name, variety, planting date, and harvest date. During the growing season, keep notes on how well the plant does. If the variety is susceptible to disease, record what was used to treat any problems. All this information will be helpful in planning future gardens.

Plan your vegetable garden on a sheet of paper to utilize the space most efficiently. Remember to rotate the vegetables in the garden to reduce insect and disease problems.

Turn the compost pile.

Start transplants indoors of tomatoes, peppers, and eggplant.

Pick a permanent spot for herbs in the garden.

Place birdhouses built this winter outdoors this month. Birds will begin looking for nesting sites soon.

Rake the lawn to remove leaves and twigs.

Some annuals, such as verbenas, snapdragons, and petunias, take 70–90 days to bloom. They should be started indoors in early spring.

Buy some new perennials for your flower border. Spring is a good time to renew and add variety to your landscape.



2012 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>

Phragmites — Explosion in Slow Motion

Phragmites became a statewide noxious weed in Nebraska on April 15, 2008. Since that time, Lancaster County has been witnessing a *phragmites explosion in slow motion*. In 2007, prior to phragmites being put on the State's Noxious Weed list, Lancaster County records show 32 sites were identified. In 2011, the total number of sites infested reached 344. Each year, we continue to find new infestations.



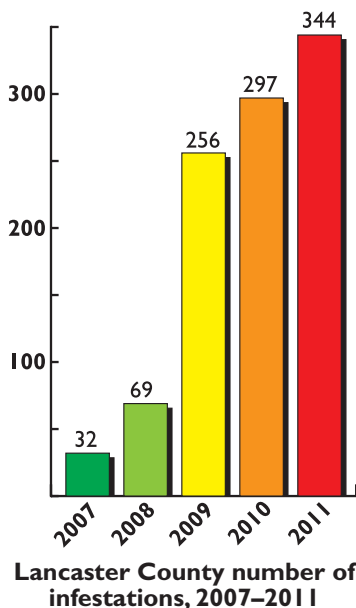
Phragmites infestation in a wetland in south Lincoln.



Phragmites with mature seedheads have a feathery look.



To control phragmites in hard-to-reach areas, Lancaster County has used a helicopter equipped with a specially-designed boom.



What is Phragmites?

Non-native phragmites (*Phragmites australis*), also known as common reed, is a perennial, aggressive wetland warm season grass that outcompetes native plants and displaces native animals.

What Does Phragmites Look Like?

Phragmites plants range from 6–15 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 6 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 form at the end of stalks 6–20 inches long and up to 8-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?

Recreational impacts:

Walking even a few feet into a stand of non-native phragmites can be difficult because the growth can be exceptionally dense and tall, and the vegetation can cut your skin. Phragmites can also reduce native fish

and wildlife populations, limiting recreational values for birdwatchers, walkers, naturalists, boaters, and hunters.

Fire danger for nearby residents: Phragmites grows rapidly, and each fall, plant material dies back, creating large concentrations of tinder-dry vegetation that increase the potential for fast-spreading fires that can threaten residential and commercial developments on surrounding uplands.

Biological impacts: Phragmites outcompetes and blocks out native vegetation and provides little or no food or shelter for most dependent wildlife. Phragmites can also eliminate natural refuge and feeding grounds for invertebrates, fish, and waterfowl. Phragmites can create a dense jungle of vegetation that native birds, furbearing mammals, and even deer cannot penetrate.

Why is Phragmites a Problem?

This invasive variety of phragmites is becoming widespread throughout Lancaster County. Urban areas are just as susceptible as rural areas for phragmites to establish. Even though the infested acres are quite small, infestations are scattered throughout the county and have enough seed production to potentially infest any areas having a saturated soil condition sometime during the year.

The infestations have been found along streams, wetlands, ponds, lagoons, road ditches, and railroads. Once started in these areas, it quickly forms a colony that completely crowds out all other plants, including cattails. If these scattered infestations are not controlled, solid stands

of phragmites will completely cover wetlands and the riparian areas along upland streams, including Salt Creek.

The rapid expansion of this variety of phragmites will result in adverse ecological, economic, and social impacts on the natural resources of the people of Lancaster County and the entire Lower Platte River Basin.

How Does Phragmites Spread?

Phragmites can be spread by wind, water dispersal of seeds, or by intentional introduction by people. Seed viability tests performed by the State of Nebraska Seed Lab in 2011, showed 75 percent viable seed in mature heads collected in Lancaster County.

Most commonly, however, phragmites spreads by 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. Once well-established, phragmites is difficult to control or eradicate.

How Can We Control its Spread?

An aggressive approach is needed now to prevent the rapid expansion to all Lancaster County riparian areas including Salt Creek. The easiest way to control phragmites is to begin a control program as soon as it is identified on your property, before the plants become well established. If aggressive management strategies begin early eradication of phragmites may be achievable.

Biological: Currently, there are not any approved bio-control agents for the control of non-native phragmites.

Mechanical: Mowing or burning is generally unsuccessful, unless the work is repeated for multiple years. Physical removal of the entire plant, including the dense mat of underground rhizomes can also be tried, but it tends to be costly, the heavy machinery required to 'scalp' the wetland can have other negative impacts, and great care must be taken in disposing of the phragmites to avoid introducing it elsewhere.

Herbicide: To date, field experience and research have shown using herbicides is the most effective method and is recommended as the first step toward effective control of phragmites. Glyphosate (Rodeo) and imazapyr (Habitat) are two herbicides known to be effective in controlling phragmites. These herbicides are non-selective and will affect any plant species. However, when applied using the correct method and used according to chemical manufacturer's instructions, impacts to native plants, as well as mammals, birds, and fish can be minimized.

The use of a licensed or certified applicator is recommended to minimize damage to native plants and to ensure safety requirements are met.

Join the Weed Watcher Team

Lancaster County Weed Control plans to begin a new "Weed Watcher" program in 2012. We are currently working to develop and implement our program. It will be modeled after The Nature Conservancy in Oregon's "Weed Watcher" program and will be designed to train and support volunteers to find and report new occurrences of harmful invasive plants in the City of Lincoln and Lancaster County.

Weed Watchers help protect natural areas from the impacts of invasive plants by *detecting new populations early* before they get out of hand.

A second and equally important goal of the Weed Watcher program is to build capacity for other organizations to initiate early detection programs by serving as a potential model and providing educational materials for use and adaptation. Invasive plant early-detection programs can be as simple as informally training your staff or volunteers on weeds to watch for, or recruiting and training new volunteers.

Outreach and education will be a key component in organizing a successful program.

Who Are the Weed Watchers?

Weed Watchers are people who care about the health of our lands and want to help prevent the ecological and economic damage associated with plant invasions by looking for and reporting new weeds.

Weed Watchers can be private citizens who simply want to scan for new invaders while they hike. Often Weed Watchers are people already actively volunteering, such as University of Nebraska–Lincoln Extension Master Gardeners.

What Does a Weed Watcher Do?

"Weed Watchers Trek to Protect." Weed watching is as easy as one, two, three:

- 1) Learn the weeds.
- 2) Look for weeds.
- 3) Document and report weeds.

Interested?

We need everyone's help, so if you would like to become part of the Weed Watcher program, or you belong to a group interested in joining the program, contact the Lancaster County Weed Control office at 402-441-7817.



Phragmites used in a display, not knowing it was one of Nebraska's Noxious Weeds. Weed Watchers will help detect invasive weeds.

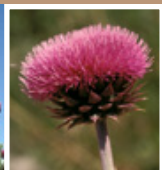
see Phragmites on back page

WEED AWARENESS

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.



Pink to purple flowers



Mature seedhead

Musk Thistle



Large yellow leaves (bracts)

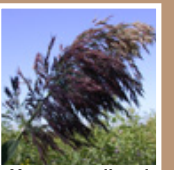


Stems/leaves have milky sap

Leafy Spurge



View in winter



Young seedhead



Mature seedhead

Phragmites



Japanese Knotweed



Giant Knotweed

Knotweed



Purple to magenta flowers

Purple Loosestrife



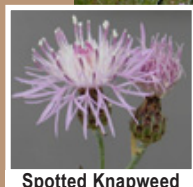
Pink to purple flowers

Canada Thistle



Pink to white flowers

Saltcedar



Spotted Knapweed



Diffuse Knapweed

Spotted and Diffuse Knapweed



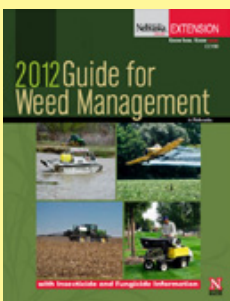
Purple flowers

Plumeless Thistle

Weed Control Resources

University of Nebraska–Lincoln Extension's current *Guide for Weed Management in Nebraska* (EC130) is the Nebraska Department of Agriculture's (NDA) official reference for the herbicide control of noxious weeds. The guide has a special section on noxious weeds prepared in cooperation with NDA. This section provides information options for herbicide control for each noxious weed. Cost for printed book is \$10 or it can be viewed online free.

UNL Extension and the NDA have developed a series of free publications on the biology, identification, distribution, and control of the state's noxious weeds. These UNL Extension publications can be obtained at county Weed Control offices, extension offices, or viewed online at www.ianrpubs.unl.edu.



Sericea Lespedeza Weed Risk Assessment

The Nebraska Invasive Species Advisory Council recently completed the assessment of the weed risk potential of sericea lespedeza, also known as Chinese bush-clover, (*Lespedeza cuneata*) in Nebraska. This assessment was prepared to improve our understanding of the risk of invasion by sericea lespedeza in Nebraska while still in the early invasion stages. The Weed Risk Assessment is designed to aid and support in identifying potential risk species for early detection and rapid response.

Sericea lespedeza was initially planted in the United States in 1896 at the North Carolina Agricultural Experiment Station. In the '20s and '30s, sericea lespedeza was grown and planted for erosion control and mine reclamation but was not widely utilized as a pasture species until the '40s. Initial use as hay facilitated its spread throughout the eastern United States. In 1985, sericea lespedeza was planted with native grasses on crop land retired as part of the



Sericea lespedeza in Lancaster County



Flowers

James H. Miller, USDA Forest Service, Bugwood.org

Conservation Reserve Program.

In 2003, sericea lespedeza infested an estimated 8.6 million acres of the United States. About 15 percent of the tallgrass prairie region was infested, and a total of 5 million acres was considered at risk of invasion. As of 2005, it was estimated sericea lespedeza occupied 5,501,400 acres of the mid- to southern Great Plains.

Sericea lespedeza is a long-lived perennial forb that grows well in grasslands, pastures, along roadsides, drainage areas, fencerows, and in other disturbed areas. It is present and considered invasive/weedy in 31 states, and is a noxious weed in both Kansas and Colorado.

The oldest Nebraska record is in 1974 in Richardson County, and the species has now spread to at least eight counties in the southeast part of Nebraska, including Lancaster County.

Sericea lespedeza is an extremely aggressive invader of open areas. Dense monocultural thickets are formed due to its ability to sprout from root crowns. Established plants will reduce or eliminate competing vegetation and restrict the amount of light reaching other plants.

Although originally introduced as a forage plant, sericea lespedeza has stems that become tough and unpalatable

unless kept continually mowed or grazed. In a mixture with grass, it usually becomes the dominant species after 3-4 years.

In natural areas, these stands can become so dense that native plants are reduced. It also produces chemicals, such as tannins, that can inhibit the growth of other plants and promote the formation of pure stands of sericea lespedeza.

There are reports that 1,500 seeds can be produced on a single stem. Sericea lespedeza is readily spread by livestock and several species of wildlife.

When compared with more than 200 other assessments, *Lespedeza cuneata* ranked among top high risk plants based upon its reported impact and ability to establish and spread.

Nebraska Invasive Species Project

For more information about invasive species in Nebraska, including sericea lespedeza, go to <http://lsnr.unl.edu/invasives>.

WEED AWARENESS

Knotweed Family is Nebraska's Newest Noxious Weed

All potentially invasive members of the knotweed family were designated a Nebraska noxious weed in February 2011. These invasive weeds are considered to be some of the worst in the world. They now occupy site(s) every 10km of England. There has been a more rapid spread in the United States. They are now found in 42 states with only a few dozen sites detected in Nebraska. This early designation in Nebraska will allow us an opportunity to eradicate the small infestations detected and to stop the sale of plants on the ornamental market to prevent major infestations of riparian areas and streambeds across the state.

This designation includes Japanese knotweed and giant knotweed, including any cultivars and hybrids. There are several Japanese knotweed cultivars developed for the ornamental market included in this designation since they can contribute to the Japanese knotweed invasion by providing pollen necessary for Japanese knotweed to produce viable seed. Two cultivars recently sold in Nebraska are Pink Fleece Flower and Variegated Fleece Flower.

In Lancaster County, Japanese Knotweed has been found in the wild and in landscaping.

There are several more cultivars available across the country including Compacta, Crimson Beauty, Devon Cream, Milk Boy, and others. If you have any of these cultivars, they are included in the noxious weed designation and are required to be controlled.

Weed Risk Assessment

An assessment was made of Japanese knotweed and it was found to be very high risk to establish, spread, and cause harm in the state. It has the potential to invade all riparian areas in the state as well as establishing in 55 percent of the state's upland areas receiving over 20-inches of rainfall.

Prevent New Infestations by Blocking Invasion Pathways

Small segments of the plant are able to regenerate into new plants. These plant segments are

commonly transported by water and regenerate new plants on the banks of streams. These plant segments may be transported to new sites by foot traffic, equipment, mowing, and improper disposal of vegetation. Sexual reproduction is also possible in the United States as evidenced by viable seeds collected from two Japanese knotweed sites in Lincoln. The seeds move easily by water and wind.

Eradicate Any Plants Found or Report to Weed Control

Timing is key to eradicating knotweed. Treat from July 1 to the first killing frost when carbohydrates produced in the leaves are moved to the rhizomes for growth and storage. Foliar applied herbicides move through the plant with the carbohydrates.

For Small Sites and Ornamental Plantings:

1. Cut the stems about two-inches above ground level. Immediately apply a 25% solution of glyphosate (e.g., Roundup®, or use Rodeo® if applying in or near wetland areas) and water to the cross-section of the stem.

For Larger Sites:

- Some products may not be available in small quantities.*
1. Apply two quarts per acre of imazapyr (e.g., Arsenal®, or use Habitat® if applying in or near wetland areas), use non-ionic surfactants or methylated seed oil (MSO) (consult label) or,
 2. Apply two quarts per acre of Garlon 3A, use non-ionic surfactants (consult label) or,
 3. Apply one quart per acre of glyphosate (e.g., Roundup®, or use Rodeo® if applying in or near wetland areas), use non-ionic surfactants (consult label).

READ AND FOLLOW LABEL DIRECTIONS.
DO NOT COMPOST ANY GREEN PORTIONS OF THE PLANT. PUT IN PLASTIC BAGS FOR REGULAR GARBAGE PICKUP.

Provide Follow-up

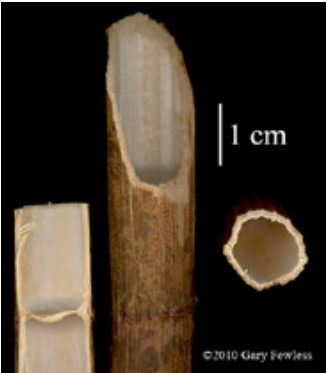
To prevent re-establishment, CONTINUE WITH FOLLOW-UP MAINTENANCE ANNUALLY. It is very important all planted and wild sites be controlled and kept controlled.



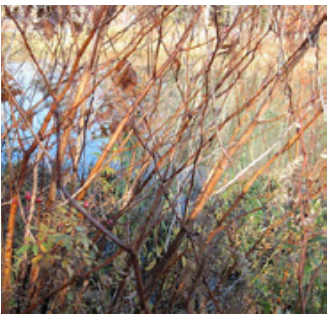
Japanese knotweed infestation.



Japanese knotweed leaves are attached alternately to a zigzag branch.



Japanese knotweed cross-section of stems.



Japanese knotweed stems are reddish in winter.

Japanese Knotweed

Fallopia japonica

Whole plant may be over 10' tall. Stems are stout, cane-like, HOLLOW between the nodes, reddish-brown, and profusely branched. Leaves are SPADE SHAPED, about 6" long by 3-4" wide attached ALTERNATELY to a ZIGZAG BRANCH. Stems die back in the fall and are reddish through the winter (a good time to spot it).

Giant Knotweed

Fallopia sachalinensis

8-12' tall and branches sparingly, leaves are thin heart shaped, 6-12" long and two-thirds as wide.

Bohemian Knotweed

Fallopia bohemica

7-15' tall, zig-zag stems, leaves heart-shaped with size between Japanese knotweed and giant knotweed.

Pink Fleece Flower

Fallopia japonica 'Reynoutria'

Vigorous ground cover, red-veined leaves, showy clusters of red buds open to pale pink flowers.

Variegated Fleece Flower

Fallopia japonica 'Variegata'

3' tall with coral-pink flushed leaves have splashes of white variegation, red stems, and bottlebrush spikes of white flowers.



Giant knotweed leaves are almost twice as big as Japanese knotweed leaves.



Bohemian knotweed is a hybrid of Japanese and giant knotweed.



Pink Fleece Flower is a Japanese knotweed cultivar.



Variegated Fleece Flower is a Japanese knotweed cultivar.

We Need Everyone's Cooperation

Everyone's cooperation is needed in preventing new infestations, spotting new infestations, taking actions needed to assure eradication with follow-up to prevent re-establishment. This early vigilance and action will prevent the potential harm and huge cost of controlling large, established stands of the knotweed family. Contact your local county weed control office for assistance and information.

An Example of How Fast Knotweed Grows

Last year, Weed Control superintendent Brent Meyer was asked to give a presentation about knotweeds at the Nebraska Weed Control Conference in March. Hoping to have a sample plant to show at the conference, he tried growing one in his office. How fast it grew demonstrates why the Knotweed family is on Nebraska's noxious weed list. This is by far one of the most aggressive plants in the world.



Day 1: root stock dug from known infestation and planted indoors.



Day 7: plant begins to grow and is at 1.5"



Day 12: plant is 7" tall



Day 17: a record-setting day, growing 5" to over 23" tall



Day 22: plant is 41.5" tall



Day 27: plant grew to 49.5" tall

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 Barb Frazier and Julie Manske, Account Clerk.

2011 Annual Report

Lancaster County Weed Control offices's purpose is to educate the public concerning noxious weeds, exercise the necessary authority to obtain effective control of noxious weeds county-wide, educate the public concerning weed abatement, and to exercise the necessary authority to cut and clear overgrown weeds and worthless vegetation in the city of Lincoln. We accomplish this by:

- Making the landowners of Lancaster County aware of the legal requirements and benefits of controlling noxious weeds.
- Making the citizens of Lincoln aware of legal requirements and benefits of cutting and clearing overgrown weeds and worthless vegetation.
- Efficiently and effectively exercise authority when necessary to obtain acceptable noxious weed and weed abatement control.
- Improve efficiency and effectiveness of operations through management techniques.

Noxious Weed Program

Lancaster County Weed Control office utilizes a three-phase program to assist landowners in reducing the number of noxious weed infested acres in the county.

Phase 1: Prevent the development of new weed infestations — Prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds. Integrated weed management includes preventing encroachment into land not infested, detecting and eradicating new weed introductions, containing large-scale infestations using an integrated approach, and often re-vegetation.

Phase 2: Provide education and public outreach on noxious and invasive weed control — The public is generally not aware of the economic and environmental impacts of noxious weeds. There is a need to improve awareness of noxious weeds and to provide educational information to cooperators, land managers, and the public. Pamphlets, bulletins, and brochures are useful at meetings, for follow-up consultations, and educational purposes. As people become more aware of noxious weeds, the probability of detecting them is greatly increased, which allows for more effective and timely control. Education and awareness assist:

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

Phase 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.

Noxious Weed Overview

Sometimes noxious weeds are thought of as a rural problem. In 2011, our inspectors found 1,045 sites infested with noxious weeds, 340 of those were within Lincoln City Limits. Noxious weeds don't care if it's rural or urban or if we have tight budgets or not. They will continue to grow and spread without aggressive management.

Musk Thistle — Musk thistle continues to be a problem on poorly-managed pastures, wastelands, and roadsides. A total of 854 inspections were made on 473 sites. There were 379 sites found to be in violation amounting to 1,252 acres infested. Weed Control office carried out 7 enforcements on 109 acres.

Leafy Spurge — Leafy spurge is a very difficult to control perennial plant and infests 527 acres in the county and city. Once an infestation is identified it should be controlled and monitored for many years. Its deep rhizome root system will allow it to continue to grow. There were 475 inspections made at 353 locations in 2011. Leafy spurge was present at 321 sites. We issued 14 legal notices, and 301 sites (94%) had control done by the owner.

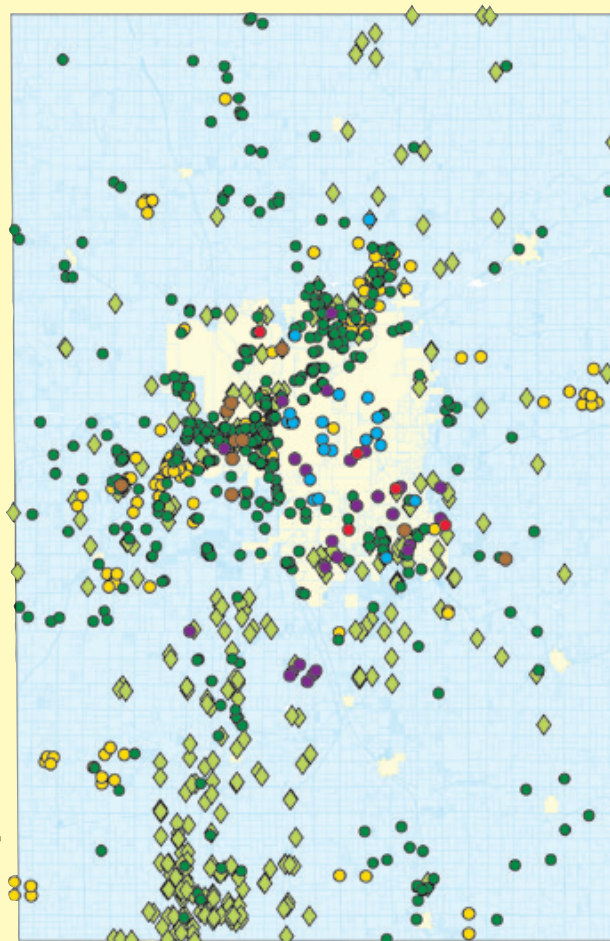
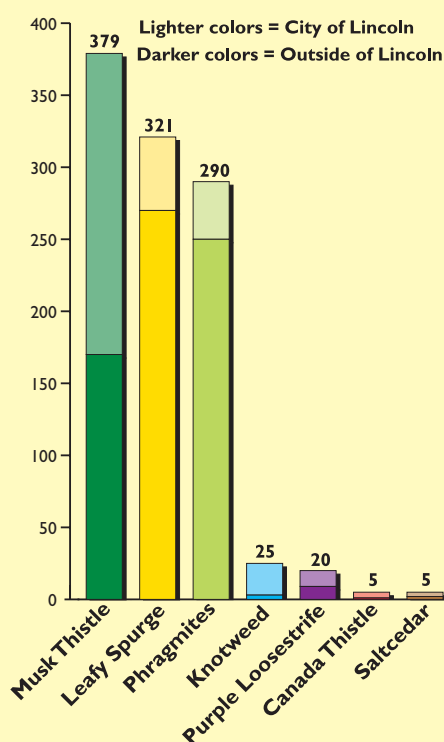
Purple Loosestrife — All 20 known purple loosestrife infestations were selected for inspection in 2011. We found 5 ornamental sites in 2011, 2 were complaints from citizens, and 3 were a result of being observed by an inspector. A total of 51 inspections were made on the 25 sites. Inspectors found 20 violations on 29 acres. Landowner notifications included 4 legal notices and 18 reminder letters. Landowners controlled 16 sites.

Phragmites — We made 402 inspections on 344 sites. In violation were 290 sites and 253 acres. It's important to be aggressive on phragmites while the average site is still less than one acre in size.

Knotweed — There were 19 new sites of knotweed found in 2011; bringing the total to 25. All but 2 of the sites were ornamental plantings. Owners have been

NOXIOUS WEEDS

Number of Lancaster County Sites in Violation



very receptive to removing the plantings once they realize how much damage it can do.

Other Noxious Weeds — Canada thistle inspections were made on 5 sites and are being controlled by the landowners. Saltcedar was controlled on all 5 sites found. Lancaster County has only a couple locations of plumeless thistle, and no known infestations of spotted or diffuse knapweed.

Landfills

The Weed Control office is also responsible for managing both the 48th Street and Bluff Road landfills for all noxious weeds. Musk thistle, leafy spurge, and phragmites are the main problems. Both landfills are annually inspected and mapped. A contractor is then hired to do the control work. We follow up the contractors' spraying with another inspection to ensure proper control.

City of Lincoln Weed Abatement Program

The City of Lincoln Weed Abatement Ordinance requires owners of land within the city limits to maintain the height of weeds and worthless vegetation below six inches to the center of the street or alley that joins their property.

Three seasonal inspectors are used in administering this program. Most inspections are carried out as a result of complaints.

In 2011, there were 149 properties pre-selected for inspection because of past violations and the lack of response to correct the violations. Our office received 1,852 complaints from the public and an additional 306 properties were inspected that were observed as having violations. It required 4,788 inspections to make the initial and follow-up inspections on 2,158 sites.

Properties not in compliance were notified of the violations with 1,128 legal notices, 926 reminder letters, and 15 personal contacts. Landowners cut 1,468 sites and forced cutting was contracted on 261 sites. We had 201 parcels remain unpaid and were filed as liens against the property totaling over \$59,000 dollars.



Weed abatement violation. In 2011, 1,762 properties were in violation.

PHRAGMITES

continued from front page

Use only herbicides labeled for aquatic sites. Always read and follow the label directions.

Control recommendations according to the University of Nebraska–Lincoln Extension *Guide for Weed Management* (EC130) are: Aquatic glyphosate 96–128 ounces per acres or Habitat (imazapyr) at 2–4 pints per acre. An additional surfactant should be added to these aquatic formulations to improve the effectiveness of the treatment.

While the cost per gallon of imazapyr can be significantly higher than Rodeo or other

glyphosate products, results from recent studies suggest that imazapyr used alone or in combination with glyphosate can control phragmites for a longer period of time.

When using herbicides, phragmites should be treated in early to late summer (June – September) using imazapyr, or late summer (August – September) using either glyphosate or a glyphosate/imazapyr mixture, to achieve effective control. Indications are that earlier applications are the most effective.

Methods of Application: Numerous methods may be used to apply these herbicides, depending on the size of the

phragmites stand and existing site conditions.

Herbicide application methods for scattered plants or isolated plant stands include: injecting stems, hand swiping, or selective hand spraying. Spot treating areas with scattered plants or isolated stands can prevent the establishment of large, dense stands and is more cost effective.

Large, dense stands may require use of commercial equipment. Recently, Lancaster County has used a helicopter equipped with a specially-designed boom to minimize drift to control phragmites in hard-to-reach areas.

Difficult to Eradicate

As with most invasive plants and animals, complete eradication of phragmites is unlikely. **Phragmites control requires a commitment to an integrated and long-term management approach.** To achieve desired results, herbicides must be used in conjunction with mechanical methods or burning (burning gets rid of old vegetation to make it more effective to apply herbicides). Treatments will need to be re-applied in subsequent years to spot-treat individual plants or patches of plants not completely eliminated in the first application.

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 seed bank.

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.

How Can I Learn More?

Contact the Lancaster County Weed Control at 402-441-7817 or go to <http://lancaster.ne.gov/weeds>. We can also provide assistance in developing a control plan.

Pruning Fruit Trees — Part 3

This is the third of a three part series.

Years 3, 4, and Beyond

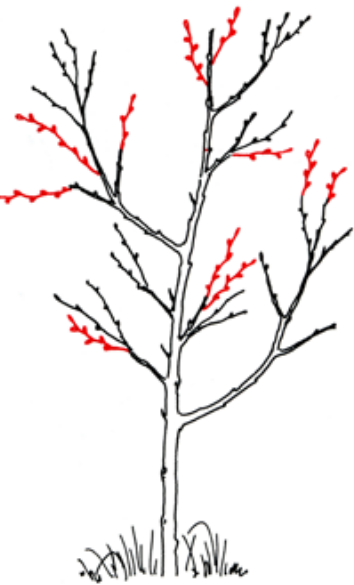
By the third dormant season after planting a new fruit tree whip, the main trunk should have three or more side branches that you have chosen for their even placement up and around the trunk, and their good branch angles. These will be the tree's lowest main scaffold branches throughout its life.

During each pruning session, in subsequent years, choose additional scaffold branches as the tree grows taller. If side shoots do not form in the locations needed for additional scaffold branches, then head back the central leader 12 inches above the last scaffold shoot. This will encourage the trunk to send out additional side shoots. Then a new central leader shoot should be chosen and allowed to continue growing.

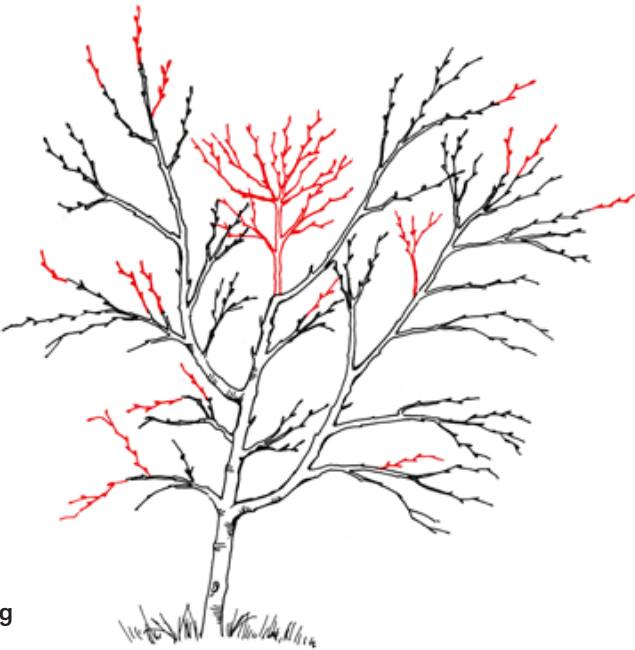
Years 3–5

Maintenance pruning during years 3–5 should start with removing suckers and dead, diseased, or damaged branches as needed. Remove branches growing toward the center of the tree, and the weakest of crossing or closely parallel branches. Also remove branches with poor trunk placement or those that form narrow angles with the trunk.

Finally, maintain the dominance of the central leader by heading back long, lower laterals. Likewise, do not let the



Remove the weakest of crossing or closely parallel branches. When pruning, treat each of the scaffold branches as a young tree. Don't allow secondary shoots of the scaffold branch to compete with the leader of that branch.



When the tree begins to bear fruit, remove the central leader shoot to create the modified central leader form.

upper branches overgrow and shade the lower portion of the tree. Maintain the tree's pyramidal shape.

Prune trees as little as possible during these years prior to fruit bearing, except for normal maintenance pruning. Excessive pruning will delay bearing, and result in fewer and smaller fruits in the first few years of production.

By the fifth year after planting, the tree's structure should be well established with 6–8 scaffold branches. Allow the central leader to grow for 1–2 more years until the tree begins bearing, or until the desired height is reached, then head the leader shoot back to an outward growing shoot. This creates a new form, called the modified central leader, which allows the gardener to maintain the tree at a manageable height for easy harvesting.

Pruning Different Types of Fruits

Apple cultivars differ in their growth habit, being either open or upright. Open structure trees naturally produce shoots with wide branch angles, while upright cultivars create narrow branch angles. Use branch spreaders, when needed, to encourage narrow angle branches to create a stronger, wider angle with the trunk. Apples may be either spur or non-spur trees. Spur-type trees produce short, long-lived branches called fruiting spurs. Each will produce flowers and fruits, so do not cut them off. Older cultivars may

be non-spur types, and although they may develop some spurs, they are not productive as long as in newer cultivars. Limbs with older spurs should be removed to encourage new growth.

Pears tend to have an upright growth habit, and are prone to suckering if pruned too heavily. Use branch spreaders to develop scaffold branches with wider angles. Prune trees very lightly to avoid stimulating suckers.

Cherry trees also tend to have an upright growth habit. Use branch spreaders to improve the tree's structure and health. The modified central leader system is most commonly used due to the brittle nature of cherry wood.

Plums should be pruned lightly, thinning when necessary, to promote spur growth. European plums, like 'Stanley' and 'Green Gage,' produce mostly on long-lived spurs and should be pruned using the modified central leader system. Japanese plums may be pruned to either the open center or modified central leader system.

Peaches and nectarines should be pruned to create an open center, allowing more light penetration into the center of the tree's canopy. They fruit on one-year old wood, so new growth should be stimulated by heavier pruning than is used on other tree types. Apricots should be trained to a modified central leader system. However, keep in mind that peaches, apricots, and nectarines are not well-adapted to Nebraska's climate and are not considered the best choice for a home orchard.

Using Branch Spreaders

Branches spread to a 45–50 degree angle or greater with the trunk will be stronger, producing less vegetative growth and more fruit. Spreading scaffold branches of young fruit trees can help bring about earlier fruit production and improve tree form. The technique involves bending upright growing branches down to a nearly horizontal position and holding them there. Vigorous growing lateral branches can usually be repositioned during their first growing season. Soft, young branches can be held in place using clothes pins, while branches 2–3 years of age can be bent into an appropriate position and held there with properly cut lengths of wood or commercially purchased branch spreaders.

To position young branches with clothespins, place the head of the pin against the branch and push it down into



Spreading scaffold branches of young fruit trees can help bring about earlier fruit production and improve tree form.

position. Place the arms of the pin against the tree's trunk, with one arm on each side of the trunk. Position the clothespins tightly enough against the trunk that they will not easily be blown out of the tree. Several times throughout the year check to make sure the clothespins are not cutting into or girdling the trunk or branch.

For older branches, a spreader can be made using wood pieces 3/4–1 inch square and cut to the desired length. Pound a nail into each end, then cut off the head of both nails using wire clippers or hack saw. Leave a sharply angled point on the head of each nail. The pointed nail in each end is used to hold the spreader in place by poking it gently into the bark of the trunk and branch. A similar type of branch spreader can be made out of tongue depressors by cutting a V-shaped notch out of each end of the depressor. One notch is used to hold the branch into position, while the opposite end is levered against the trunk. Inspect trees frequently and replace spreaders which have been dislodged or are beginning to cut into the branch or trunk.

Another method of branch spreading involves pulling the branches down and holding them in place with a weight. Again it is very important when using this method to avoid cutting into the branches' bark or girdling the branch. Use a wide piece of burlap or upholstery material as a sling to pull the branch down. Attach a string or rope to the sling and weight the branch in place with a brick or bag of sand.

Branch spreaders may be removed after two or three years. Repositioning branches older than 3 years may take more than one growing season to accomplish. Spreaders of increasing length can be used over a period of several years until the desired angle is obtained.

Source: UNL Extension publication "Pruning Fruit Trees," EC78-1233B

Agriculture

continued from page 1

identify an interest, learn responsibility, and develop an understanding of the agricultural industry. Often, 4-H'ers share information about their projects with families attending the fair. These 4-H projects and experiences have led many 4-H'ers in determining their future career area of interest.

- **Fair Fun Day** — During the Lancaster County Super Fair, up to 300 youth have the opportunity to experience Fair Fun Day. Lincoln's child care groups participate in guided tours which include hands-on activities, demonstrations, displays, and animals. Divided into manageable groups, teen volunteers serve as tour guides to educational stops throughout the fair. When the tour ends, a nutritional snack is provided with a lesson about the many sources of food.
- **earth wellness festival** — Local agencies partner to teach 3,000 fifth graders annually about the interdependence of water, land, air, and

living resources through science-based curriculum and activities. At the festival, students have had opportunities to learn about agriculture-related topics such as:

- conservation practices such as the use of terraces, buffers, and windbreaks
- development of energy resources using wind and ethanol
- protection of groundwater
- wildlife habitat

Other Nebraska organizations also promote ag literacy:

- Nebraska Agriculture in the Classroom — 402-421-4408 or 800-546-3496; www.agclassroom.org/ne
- Nebraska AgRelations Council — 402-472-2821; www.neagrelations.org

Alternative Agriculture

Sarah Browning, UNL Extension Educator

Alternative agriculture also plays an important role in Nebraska's ag economy, encompassing a diverse mix of growers,

wholesale and retail outlets, and installation or service businesses.

- Growers include producers of fruits and vegetables, wholesale trees, shrubs, ornamental plants, bedding plants, sod, poinsettias and other floral crops, Christmas trees, and woody plants harvested for floral use such as red twig dogwood, pussy willow, or curly stem willow.
- Landscape contractors and service providers include golf courses, arborists, landscape architects, landscape design and installation firms, and lawn and landscape maintenance providers.
- Retail garden centers, home centers and mass merchandisers with lawn and garden departments, florists, and wholesale horticultural distributors provide products ultimately available for consumer purchase.

According to the 2009 Census of Agriculture, the value of sales for green industry crops mentioned above, including fruit and vegetable produce, totaled \$34,284,000 in Nebraska. A study was done based on the 2002 U.S.

Economic Census and the Census of Agriculture to evaluate the economic impacts of the U.S. green industry.* Based on this study, Nebraska's green industry provides an estimated 13,383 jobs, and total revenue for all sectors, including growers, contractors and wholesale/retail outlets, totaling \$961 million dollars measured in 2004 dollars.

Aside from the employment and monetary impacts of the green industry, studies have shown that attractively landscaped and maintained homes can demand a 7–11 percent higher sales value.

The environmental value of urban forests and green spaces include energy savings for building heating and cooling costs, reduction of atmospheric carbon dioxide, improved air quality, and reduction of stormwater runoff. Finally, psychological benefits of green spaces include faster hospital recovery times, and reduced stress, aggression, and violence.

* This study was funded by the USDA Forest Service and undertaken by the Green Industry Research Consortium, a multi-state research committee of USDA/CSREES.



March

Ann Pickrel

Lancaster County 4-H is proud to announce Ann Pickrel as winner of March's "Heart of 4-H Award" in recognition of outstanding volunteer service.

Ann started volunteering with 4-H more than 11 years ago with the Yankee Hill Kids club. She moved to the South Prairie Wranglers club when it started, which is now Lancaster County 4-H's largest club (currently with 67 members) and is a Nebraska 4-H Club of Excellence. She is an assistant leader and has helped with foods, clothing, and rabbit projects. Ann is currently president of 4-H Council and has contributed to the Council's food booth at the Lancaster County Super Fair.

"I grew up in 4-H and realize the importance that 4-H gives kids and adults to have a 'hands on' experience for leadership and real-life relationships needed in this day and age to succeed," Ann says. "My favorite experience as a 4-H volunteer is working hand in hand with the kids, whether it is to complete a project for fair or while side by side with them at the food booth promoting 4-H. Each time they succeed, it is well worth seeing the pride in their faces."

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

Nominate your favorite 4-H volunteer by submitting the form available online at <http://lancaster.unl.edu/4h> or at the extension office. Nominations of co-volunteers welcome.



4-H Enrollment Forms Due!

Attention 4-H club leaders and independent members — your fall enrollment forms **MUST** be updated with member and volunteer information, and returned to the extension office in order to be enrolled for the 2012 year. Project information can be updated until June 15.

Jammie Jamboree, March 17

Practice basic sewing skills as part of the 4-H Clothing Level 1 project and make jammie bottoms at the "Jammie Jamboree" sewing workshop on Saturday, March 17, 9 a.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. Open to all youth (need not be in 4-H). No cost to attend. Adults are welcome to help.

Bring your sewing machine, basic sewing equipment (scissors, pins, measuring tape, etc.), pull-on pajama bottom pattern (one simple pattern is Simplicity 3553), prewashed flannel or 100% cotton fabric (no one-way design fabrics or plaids) 1 yard ½-inch elastic, and matching thread. Also bring a sack lunch.

Sign up by March 14 by calling 402-441-7180. 4-H'ers may enter jammie bottoms at the county fair and styled in Style Revue under Clothing Level 1.

Painting Barrels for Event Center, March 18

It has been ten years since Lancaster County 4-H'ers painted trash barrels for the Lancaster Event Center and county fair.

All 4-H families are invited to participate in this group community service project on Sunday, March 18, 1:30–3:30 p.m. at the Lancaster Event Center, Pavilion 4 - Amy Countryman Arena. All paint and brushes will be supplied.

To help plan supplies, please let us know if you are planning to attend by calling 402-441-7180.

Updated 4-H Childcare Curriculum

The 4-H childcare curriculum has been updated. The project books "The Sitter," "The Infant," "The Toddler," "The Preschooler," and "The Middle Childhood" will no longer be used.

Created through a 4-H Military Partnership, the new teen babysitter curriculum "I Have What it Takes to be Your Babysitter" is comprised of a facilitator guide, a student guide, and a set of student worksheets.

The curriculum is free online. Go to www.4-hmilitarypartnerships.org and click "Curriculum Resources" on the left. Then scroll down and click on "Youth Babysitting."

If you would like to see a hardcopy version, visit the extension office.

Dog Skill-A-Thon, April 10

Want to test your dog knowledge? Come to the third annual 4-H Dog Skill-A-Thon Tuesday, April 10, 3–7 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road. Youth do not need to be present the entire time. Just come at your convenience — it usually takes one to two hours. Open to all youth ages 8–18 (need not show a dog in 4-H). Non-4-H members are invited to participate and enroll in 4-H at the contest. There will be a variety of topics including: parts, parasites, breeds, confirmation, and more. Preregister by March 30 by calling 402-441-7180.

Furniture Painting Workshop, May 12

Mark your calendars for the upcoming "Junque to Jewels" furniture painting workshop on Saturday, May 12, 9 a.m. at the Lancaster Extension Education Center. Open to all youth ages 8–18. Check upcoming NEBLINES for more information.

Clover College Instructors Needed

4-H Clover College is four days of fun-filled, hands-on workshops for youth ages 6 and up, June 12–15 at the Lancaster Extension Education Center. If you have workshop ideas, or if you would like to teach a workshop or volunteer to help, please contact Tracy at 402-441-7180 or tanderson14@unl.edu. All help is very much appreciated!

4-H Speech & PSA Contests

The Speech and Public Service Announcement (PSA) contests provide 4-H'ers the opportunity to learn to express themselves clearly, organize their ideas and have confidence. Contests are open to all 4-H'ers ages 8–18 (by January 1 of the current year) — need not be enrolled in a specific project. Youth may choose to participate in either or both the Speech and PSA contests. For resources, guidelines, and examples go to <http://lancaster.unl.edu/4h/Contest/speech.shtml>. If questions, contact Cole Meador at cmeador2@unl.edu or 402-441-7180.

Speech/PSA Workshop, March 29

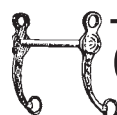
Learn more at a Speech/PSA workshop on Thursday, March 29, 6 p.m. at the Lancaster Extension Education Center. Out of ideas? We will help you get started. Already started? Bring your completed speech/PSA's to practice or get suggestions. This is also a good time to record your PSA. We will teach you Audacity basics so you can add sound effects and edit to make your final PSA perfect. There will be computers available to work with, or bring your own.

PSA Contest, Due April 13

In the Public Service Announcement (PSA) Contest, 4-H'ers submit a 60 second "radio commercial" promoting 4-H. The PSA contest will be held via audio only (not in person). Submit a PSA via CD playable on any standard stereo equipment to extension by Friday, April 13. If you do not have the capabilities to record a PSA, contact Cole to set up a recording time. Results and comment sheets will be handed out at the 4-H Speech Contest on April 22.

Speech Contest, April 22

The 2012 4-H Speech Contest will be held Sunday, April 22, 1 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. Register by April 13 by calling 402-441-7180 or emailing cmeador2@unl.edu with your name, speech title, and your age division.



HORSE BITS

Win Awesome Prizes in 4-H Horse Incentive Program

The 2012 Lancaster County 4-H Horse Incentive Program began Jan. 16 and runs through June 30. 4-H'ers can log hours they spend on horse-related activities and win awesome prizes. Forms are available online at <http://lancaster.unl.edu/4h/horsenews.shtml> or they can be picked up at the extension office.

This year there are new ways to earn incentive points along with activity spent directly with the horse. Points can be earned by turning in horse course quizzes to Marty. Points can be earned by asking pre-set questions of vets and farriers.

Hours and points earned must be logged on an official log sheet (two options this year). It's not too late to get started. If you have any questions, contact Marty at 402-441-7180 or mcruckshank2@unl.edu.

4-H Spring Tack Swap, March 31–April 1

Come and shop the 1st Annual "4-H Spring Tack Swap," Saturday, March 31–Sunday, April 1 at the Lancaster Event Center held in conjunction with the Shaggy Horse Dressage Schooling Show sponsored by the Hunter's Pride 4-H club and Cornhusker Pony Club. The swap will include leather goods, riding attire, books, and everything horse-y you can think of! A portion of all proceeds will support Lancaster County Horse VIPS Committee fundraising efforts. Items will be accepted day of, so dust off unused items in your closets, garages, and barns for a good cause and some extra cash! Unsold items can be donated or picked up Sunday at 2 p.m. For more information about the tack swap, contact Jennifer Cusick-Rawlinson, 402-488-7879 (home); 402-560-3319 (cell). For more information about the show, contact Becky Robinett at 402-202-2363.

Horse VIPS Dressage Schooling Show, April 28

The 4-H Horse VIPS Committee is hosting a Middle Cross Dressage Schooling Show on Saturday, April 28 at Middle Cross Stables (Lowell Boomer's historic facility, 500 Sprague Road, Roca). The show is a fundraiser for Horse VIPS and funds support the 4-H Horse program. We will be applying for NDA-recognized show status so you can count these scores toward the end-of-year championship. Open to all youth and adults (need not be in 4-H). Watch for more details.

4-H Achievement Night

University of Nebraska–Lincoln Extension in Lancaster County and 4-H Council presented Lancaster County 4-H Achievement Night on Feb. 2. 4-H'ers, 4-H clubs, and 4-H leaders were recognized for their 2011 achievements. City of Lincoln Mayor Chris Beutler signed a proclamation declaring Feb. 2 as "4-H Achievement Day." Lancaster County 4-H congratulates all 4-H youth who commit themselves to excellence! We also thank all 4-H volunteers who donate their time and talents to youth! For a complete list of award, scholarship, and pin recipients (as well as additional photos) go to <http://lancaster.unl.edu/4h>.

**Lancaster
County 4-H 2011
Year in Review Video**
<http://lancaster.unl.edu/4h>



Age 14 and over



Age 13 and under

COMMUNITY SERVICE AWARDS

Presented to 4-H'ers who have completed the most hours of community service. Award recipients receive a \$30 Activity Certificate from Lancaster County 4-H Council redeemable towards 4-H activities and supplies.

AGE 14 AND OVER: Maddie Gabel, Victoria Garza, Holly Hillebran, Paige Roach, Emily Steinbach, Lexi Trumbley

AGE 13 AND UNDER: Cassie Brown, Nathan Gabel, Valerie Gabel, Elizabeth Garza, McKenzie Kapperman, Kylee Plager, Emma Lanik, Sheridan Swotek, Bethany Wachter, Katie Wirthele



Level 1 – Amethyst



Level 2 – Aquamarine



Level 3 – Ruby

NEBRASKA DIAMOND CLOVER

The Nebraska 4-H Diamond Clover Program is a statewide program which encourages 4-H members to engage in a variety of projects and activities. At the beginning of the 4-H year, youth choose goals from a provided list, and at the end of the 4-H year, complete a report which documents their accomplishments.

LEVEL 1 – AMETHYST: Cassie Brown, Ashley Clegg, Holly Cushman, Jennifer Daharsh, Annalise Ferguson, Nathaniel Gabel, Dylan Hafer, Anna Hamm, Brett Heinrich, Olivia Hinrichs, Megan Hoelsing, Kayla Humphrey, Braeland Jones, Brianna Kroeger, Hanna Leigh Rohda, Kristen Loudon, Alyia Whitehall

LEVEL 2 – AQUAMARINE: Elizabeth Garza, Dalton Hellwege, Sean Hummel, McKenzie Kapperman, Brooke Kreikemeier, Jared Nielsen, Madelaine Polk, Joshua Ronnau, Collin Schmidt, John Swotek, Bethany Wachter, Jenna White, Alyssa Zimmer

LEVEL 3 – RUBY: Morgan Cuttlers, Victoria Garza, Jaclyn Heinrich, Holly Hillebran, Emma Lanik, Nicole McConnell, Caleb Nielsen, Lucy Polk, Paige Roach, Jacob Ronnau, Jacob Rushman, Brandon Sieck, Renae Sieck

LEVEL 4 – SAPPHIRE: Hannah Bellinghausen, Kylee Plager, Sheridan Swotek

LEVEL 5 – EMERALD: Ivy Dearthmont, Hannah Ronnau



Level 4 – Sapphire



Level 5 – Emerald



4-H MERITORIOUS SERVICE

Paula Peterson (pictured with Extension Assistant Cole Meador) has volunteered with Rock Creek Ranchers 4-H club for 15 years — 12 years as leader. She served on 4-H Council for six years — helping with numerous committees, chairing the Spaghetti Feed, and helping in the 4-H Food Booth. Paula was superintendent at the Lancaster County Fair of the 4-H Bucket Calf Show for six years and 4-H Photography for two years. In addition, she has helped with Clover College and hosted Speech and Public Service Announcement workshops. Paula often hauled livestock to the Ag Awareness Festival, 4-H Kick Off, and various petting zoos to teach the public about agriculture.

NEBRASKA 4-H CLUBS OF EXCELLENCE

Nebraska 4-H Clubs of Excellence have met criteria outlined by the State 4-H office.

4-H Explorers, All American Kids, Fantastic 4, The Green Explorers, Harmony Hill Horse Club, Joe's Clover Knights, South Prairie Wranglers, Sunflowers, Sunshine Clover Club, Super Shamrocks

COLLEGE SCHOLARSHIPS

LANCASTER COUNTY 4-H COUNCIL — \$500: Katlyn Kimmen, Maci Lienemann, Erica Peterson, Abbey Spencer, Emily Steinbach, Erika Warner

4-H TEEN COUNCIL – \$250: Abbey Spencer, Emily Steinbach, Lexi Trumbley

LANE COMMUNITY – \$200: Coryn Woodward

LINCOLN CENTER KIWANIS – \$1,000: Emily Steinbach

I DARE YOU LEADERSHIP AWARD

Awarded on behalf of the American Youth Foundation to juniors or seniors who strive to achieve their personal best and make a positive difference in their community.

Sadie Hammond, Chandler Kramer



CAREER PORTFOLIOS

Career Portfolios are a record of an individual's 4-H career.

COUNTY WINNER

McKenzie Kapperman: Leadership & Citizenship

NOMINATED TO REPRESENT LANCASTER COUNTY AT DISTRICT COMPETITION

Maddie Gabel: Consumer & Family Science; Healthy Lifestyles

Jacob Rushman: Communications & Expressive Arts; Science & Technology;

Sheridan Swotek: Consumer & Family Science; Leadership & Citizenship



OUTSTANDING 4-H MEMBERS

Presented to individuals 14 years of age or older who have excelled in his/her involvement with the Lancaster County 4-H program. Selection is based on participation in a wide variety — and depth of — 4-H activities.

Erica Peterson, Cory Peters, Emily Steinbach

4-H Stories Submitted to Nebraska 4-H Foundation

Last year, Nebraska 4-H Foundation asked 4-H members and alumni to “Tell Us Your Story.” Nearly 800 people submitted stories. Janice Tordrup won the opportunity to donate \$1,000 to the county 4-H of her choice — Nuckolls County. Nebraska 4-H Foundation plans to use some of the stories in its newsletters and other literature. Here are some of the stories shared by Lancaster County alumni and members.

Jen Smith 4-H Alumni and 4-H Club Leader

Through 4-H, I learned to set goals and work to achieve those goals, by myself with support of my family. For myself, one of my favorite memories is of a cow named Hazel. As the best milking cow from our herd, Hazel was beautiful with a perfect udder — and she was MEAN. No one liked to milk her, she kicked. She snorted and threw her head around. Mom told me to pick another cow, for goodness sake. But no, Hazel was the best, the only choice.

I asked dad to help me break her, to which I got a “you can do it.” I wanted to show her bad enough that I decided to figure it out. After getting the halter on her, which was a process in itself, I tied her up in our holding pen to let her fight it out. When she was finally ready for me to try to lead, no go. Again and again.

As you can imagine, this went on for days. I begged dad to help, only to get told “I said you can do it.” I worked with her as much as I could for the summer, but she still liked to drag me around.

The Antelope County Fair came. Loading her was the first challenge, as she kicked and threw herself around in the trailer. Yes, unloading her the next challenge. Dad’s friends were there to help with all this, and didn’t believe that this cow was going to be shown.

I hadn’t spent all summer for nothing. Everyone was sure that Hazel would not only drag me, but get loose. I was terrified. As I got a good hold on the halter, I just started talking to her. I’d tried everything else, and nothing had worked. I told her what we were going to do, how beautiful she was, that she was wonderful.

Guess what? She led perfectly, almost strutted. I am not kidding. I will never forget both my persistence as well as hers, and that I did it MYSELF.

As a parent now, I understand how hard it had to be for my parents. I’m certain my dad wanted to step in and help his girl out, but he obviously knew the lesson I’d learn would be a bigger one if I learned it on my own. Even if Hazel would’ve been her usual wild in the ring, that wasn’t the point. I did it myself. Thank you dad!

I believe in this organization with all my heart. As a parent, I couldn’t wait for my daughter to



Jen Smith with her Holstein dairy cow, Hazel, at the 1989 Antelope County Fair.

join. We’ve had such wonderful memories together, as I’ve had to use the same words my father said to me “you can do it.”

As a leader, I’m proud of the strong commitment our club has to community service. In my opinion, this is what shapes our future. Through 4-H, my club has learned to be creative in helping others, that whatever they dream up we can make happen.

I am thankful for both the memories I’ve had and the future I will continue to have with 4-H.

Jill White 4-H Alumni, 4-H Parent, and 4-H Volunteer

I was a member of 4-H for nearly 10 years and now my daughter is a 4-H member. 4-H is the best experience anyone can have growing up, whether you live on a farm or in a city.

My best 4-H memory is going on the Citizenship Washington Focus (CWF) trip to Washington D.C. 23 years ago. There were so many places I saw, and someday I would love to take my family to D.C.

All the skills, experiences and friendships I gained from 4-H are lifetime treasures. I highly recommend girls and boys join 4-H at any age. It’s never too late to join!

Jill Hraban 4-H Alumni and 4-H Parent

When I think back to my days in Saline County 4-H, the one thing that sticks out in my mind is the Cake Decorating category. I entered a lot of project categories but that was my favorite. It gave me the opportunity to do something I might not have done otherwise. Not many kids probably think about picking up a frosting bag to see what they can do with it.

I was 11 or 12 when I first started. I continued in 4-H until I was 18, so I guess I must have entered seven or eight cakes. The one I remember the most clearly was a small two-tier fancy cake. I remember how hard it was to make! That, of course, was my first experience with stacking a cake.

Even as a teenager, I made and sold cakes to others for birthdays and such. Now, as an adult with three kids (and lots of birthday parties to do!) I still really enjoy creating cakes. I’ve managed to do a lot of “character cakes” over the past ten years, to my kids’ delight of course. They love the cakes I do for their parties!

I can’t thank the 4-H program enough for what they

instilled in me. 4-H is truly a wonderful experience! The memories I have are THE reason I wanted to get my own kids involved. I want them to have those memories too.

Cole Meador 4-H Alumni and Lancaster County Extension Assistant

4-H has been a huge part of my life! I was involved in 4-H ever since I was born because I have two older brothers. When I was in 4-H myself (Douglas County), I was active in showing sheep, dairy goats, dairy cattle, and poultry.



Cole Meador earned grand champion market lamb at the 2004 Ak-Sar-Ben 4-H Livestock Exposition.

It taught me so much I can’t even begin to explain it all. The life skills learned from this organization is tremendous! Sportsmanship, teamwork, responsibility are just a few that come to mind.

Having the opportunity to raise an animal from birth to market is something not everyone has the opportunity to do, but 4-H gives youth that opportunity.

4-H is a family project. It brings families together and makes them work together on projects.

4-H brought me to my current career. If it wasn’t for 4-H I would not be an extension assistant myself. I got so much out of 4-H that this is what I want to do. I feel it is a way to give back to all of the 4-H agents who gave so much to me over the years. It is truly a great organization to be involved with.

Kris Spath 4-H Alumni, 4-H Parent, 4-H Volunteer, and Nebraska 4-H Program Manager

Our family raised dairy cattle so this was the natural selection of a 4-H project. Showing my cattle offered many life lessons for me. I will share two very distinct lessons.

My first memory of showing a calf was at the Dodge County

Fair. I had worked with my intermediate calf all spring and summer and was not expecting any problems with her at the fair. The day of the show, I was walking her around the fairgrounds trying to get her acquainted with her new surroundings. Just as I walked by one of the tractors on display, someone started the tractor and she started running and jumping.

I was in my white show clothes which were not so white at the end of the ordeal. Running back to the barn crying, with no calf, I felt like a failure. Dad was quickly on the hunt for the calf who had found a nice quiet spot under a tree enjoying some lush, green grass. Mom explained to me that these things happen and sometimes it doesn’t matter how hard you work to train an animal, surprises happen.

Life lesson: hope for the best but prepare for the worst!

Another lesson offered through showing dairy happened at my first 4-H State Fair showing experience. I was 12 at the time, in Junior High, and thought I had the world figured out. I had selected my own cattle that year because dad didn’t know what he was talking about (later I realized he is a very wise man).

My selection was not based on positive physical characteristics but rather, which animals required the least training. I was very busy with friends that summer with very little time to mess around with training animals. My three animals had achieved blue ribbons at most of the other shows we had attended.

I entered the ring at the state fair with my first animal — a red ribbon was presented to me. This was repeated with the other two animals I had brought to the fair. After coming out of the arena with my milking cow, I was in tears!

Dad was right there to offer comfort. In his comforting words, he told me I had not chosen a very pretty cow for my dairy herd entry, but she milked well and that fact may help me achieve a blue ribbon for my overall herd score. Dad was right, I was wrong.

Life lesson: don’t take the easy road because you may not get where you want to go! AND Father knows best!

Kate Rawlinson Current 4-H Member

Once upon a time, there was an eight-year-old dreamer who dreamt of riding horses her whole life. She was determined that if she begged long enough, her parents would cave and buy her a majestic, noble creature who would bow at her request and carry her valiantly off to wherever she desired.

As with all fairy-tales, this girl got what she sought, and her parents bought her a liver-chestnut Morgan horse named Sailor.

Sailor, now 23 years old, was my dream come true. I started off a horseless child

and joined the Broomtails 4-H club for youth who had always wanted, but never had a horse. My parents hypothesized that if I spent enough time cleaning stalls of other horses and doing all the “dirty-work” that comes with owning a horse, I would eventually become bored and find a new hobby. Much to their dismay, they found themselves writing a check for \$5,000 in the fall of 2006, which was the only document I needed them to sign before I brought Sailor home.

Sailor was never the easiest to ride, and always the most opinionated member of my family. If he were to disagree with the particular patch of grass he was grazing upon at my request, he would clearly warn me with a snort of brown goo all over my face. If I refused to heed his warning, he took it upon himself to stomp on my foot to make his point obvious. Sailor was determined that all humans could be converted if he was convincing and clear enough in his thoughts and actions.

Sailor very quickly made his distaste for horse shows obvious. My first few years of attempting to show Sailor were a bit scary to be honest. Both he and I were the most determined horse and rider that could be found, so we made a very interesting and stubborn bunch.

No longer was I the princess I had imagined. Instead, I had become the most hard-working, stubborn, and therefore, convincing child Sailor had ever met. His attempts at making me fear him were futile. I was GOING to win over that horse. Every year I went without getting a purple ribbon at the Lancaster County Fair made me more determined to get one. The most memorable county fair was just a few months ago.



Kate Rawlinson and her horse, Sailor.

In an English Equitation class, 35-strong, I nailed the pattern that would sort me into the “purple” category with only a few others. Ever since I decided to perfect my riding without stirrups, I anticipated the show where my developed-talent would get to be shown off. This was my chance.

I entered the arena with the scant number of individual junior riders who had also nailed their patterns and waited for the judge to look my direction. I remember being so upset when I looked over and never saw the judge looking back at me. I was so concerned she wouldn’t see me riding without stirrups. I was devastated.

see 4-H STORIES on next page

EXTENSION CALENDAR

All programs and events will be held at the Lancaster Extension Education Center unless otherwise noted.

February (February is Nebraska 4-H Month)

- 22 Family & Community Education (FCE) and Community Leader Training Lesson, "Social Networking Sites" 1 p.m.
- 23 Nut Orchard Planning, Planting, Care, and Harvesting Seminar .. 7–9 p.m.
- 25 4-H Pillow Party Sewing Workshop9 a.m.
- 28 Cornhusker Economics Management and Outlook Conference..... 4:30–9 p.m.

March

- 1 Initial Pesticide Training8:30 a.m.–5 p.m.
- 1 Preference Given to 4-H Council Camp Scholarship Entries Submitted to Extension by this Date
- 1 R.B. Warren 4-H Horse Educational (\$500) and Grand Island Saddle Club Scholarships (\$1,000) Entries Due
- 2 Deadline for Governor's Agricultural Excellence Awards (\$500)
- 6 4-H Council Meeting 7 p.m.
- 9 Extension Board Meeting8 a.m.
- 11 4-H Teen Council Meeting 3 p.m.
- 15 Co-Parenting for Successful Kids (formerly Parents Forever) 9 a.m.–12:30 p.m.
- 17 4-H Jammie Jamboree Sewing Workshop9 a.m.
- 18 Painting Barrels for Event Center, Lancaster Event Center, Pavilion 4 - Amy Countryman Arena..... 1:30–3:30 p.m.
- 20 Guardian/Conservator Training 1:30–4:30 p.m.
- 22 Recertification Pesticide Training 9 a.m.–5 p.m.
- 24 4-H Spring Rabbit Show9 a.m.
- 26–27 earth wellness festival, Southeast Community College
- 28 Family & Community Education (FCE) and Community Leader Training Lesson, "Homemade Master Mixes" 1 p.m.
- 29 4-H Speech/Public Service Announcement Workshop 6 p.m.
- 31 Child Care Conference: A Window of Opportunity8 a.m.–3:30 p.m.

4-H Stories

continued from preceding page

As the class was called to line up facing the ring steward, I was overwhelmed with the idea the judge hadn't even looked in my direction once, so you can imagine my confusion when she pointed me out as the Champion of the Junior English Equitation class. This would mark my first-ever championship trophy at the highly-competitive Lancaster County Fair.

Sailor, displeased that the trophy also meant taking extra time to take pictures in front of the sign that reads "Lancaster County Fair," eventually let me embrace the moment. I don't remember if I cried or not. I don't even remember taking the

pictures. I remember looking up at the "Lancaster County Fair" sign and thinking how incredible of a ride it had been. No, not the equitation ride; the seven-year ride 4-H had taken me on.

I'd been through everything. I'd fallen off, gotten back on, cried for sadness, cried for joy, and everything in between. So, I whispered an inaudible "thank you" to everything and everyone who had helped me become who I was, who I am, and who I want to be.

That eight-year-old is still living her dream. Now, however, she dreams of making other people's dreams come true and creating happy endings for everyone around her. And that's the person 4-H has helped me become.

NACEB Scholarships

Nebraska Association of County Extension Boards (NACEB) annually offers two scholarships due March 15. Applications is online at <http://lancaster.unl.edu/4h/Programs/award.shtml>.

- One \$1,000 scholarship at the UNL College of Agricultural Sciences and Natural Resources (CASNR) or the College of Education and Human Sciences (CEHS) for an incoming student (freshmen or transfer)
- One \$500 scholarship for a current student (sophomore or higher) enrolled in CASNR or CEHS



Open House Events

JUNIOR WEDNESDAYS

Wednesdays March 7, 14, 28 and April 4, 11, 18, 25 — a Husker Weekday visit specifically for juniors.

BIG RED OPEN HOUSE

March 12, April 6 or April 20 — an on campus experience for high school and transfer students to learn about the BIG things happening on the UNL campus.

HUSKER WEEKDAYS

This is Nebraska's most versatile half-day campus visit option. You can schedule a visit for any weekday and select Saturdays throughout the year.

For more information or to register, see <http://admissions.unl.edu/visit>



The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.



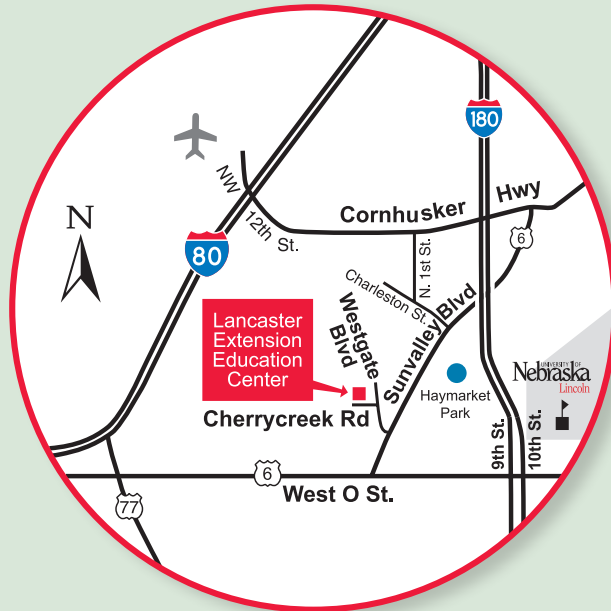
EXTENSION

University of Nebraska-Lincoln Extension
in Lancaster County
444 Cherrycreek Rd., Ste. A, Lincoln, NE 68528-1507
402-441-7180

<http://lancaster.unl.edu>
Email: lancaster@unl.edu • Fax: 402-441-7148

Join us on YouTube, Twitter, and Facebook
<http://lancaster.unl.edu/media>

Lancaster Extension Education Center Conference Facilities
444 Cherrycreek Road, Lincoln



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska-Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

We assure reasonable accommodation under the Americans with Disabilities Act; for assistance contact UNL Extension in Lancaster County at 402-441-7180.

EXTENSION EDUCATOR & UNIT LEADER

Gary C. Bergman

EXTENSION EDUCATORS

Lorene Bartos, Sarah Browning, Maureen Burson, Tom Dorn, Alice Henneman, Barb Ogg, Karen Wobig

EXTENSION ASSOCIATES

Mary Abbott, Tracy Anderson, Soni Cochran, Marty Cruickshank, Mary Jane Frogge, Mardel Meinke, Julie Rasmussen, Dana Willeford

EXTENSION TECHNOLOGIST

David Smith

EXTENSION ASSISTANTS

Teri Hlava, Vicki Jedlicka, Lisa (Connot) Kowalski, Cole Meador, Kristen Neth, Jim Wies

SUPPORT STAFF

Pam Branson, Kay Coffey, Deanna Covault, Karen Evasco, Konnie Robertson, Chris Rosenthal, Karen Wedding

THE NEBLINE

THE NEBLINE is published monthly (except December). Mailed to more than 12,000 households in Lancaster County and can be read online at <http://lancaster.unl.edu/nebline>.

The Nebraska Library Commission's Talking Book and Braille Service records THE NEBLINE for individuals with a visual or physical condition or a reading disability which limits use of regular print. For more information, go to www.nlc.nebraska.gov/tbbs or call 402-471-4038 or 800-742-7691.

THE NEBLINE articles may be reprinted without special permission if the source is acknowledged as "University of Nebraska-Lincoln Extension in Lancaster County NEBLINE." If the article contains a byline, please include the author's name and title.

Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the University of Nebraska-Lincoln is implied.

Email Notifications

Sign up at <http://lancaster.unl.edu/nebline> to be notified by email when THE NEBLINE is posted online.

Mail Subscriptions

Subscriptions to THE NEBLINE via mail are free to Lancaster County residents. There is an annual \$5 mailing and handling fee to addresses in zip codes other than 683-, 684-, 685-, 68003, 68017 and 68065.

☐ Order subscription ☐ Change of address

Name _____

Address _____

City _____ Zip _____

Phone _____

We will only use your phone number in case there is a problem with your mailing address.

Mail to: UNL Extension in Lancaster County
444 Cherrycreek Road, Suite A • Lincoln, Nebraska 68528-1507

Spring Rabbit Show

Saturday, March 24, 9 a.m.
Registrations 7:30–8:30 a.m.
Lancaster Extension Education Center



Awards will be given!
CLASSES: Fancy Rabbits, Commercial Rabbits, Pet Class, and Pee Wee Class.

REGISTRATION FEES: \$2.50 per rabbit or cavy, \$1 fur class, \$1 Showmanship.

FREE CONTESTS: Rabbit Quiz & Breed ID

Open to all youth 8–18

Opportunity to learn and practice your showmanship!

RAFFLE FOR MANY PRIZES!
Tickets 3 for \$1 or 20 for \$5. Please bring an item for raffle such as crafts, rabbit items, plants, Easter/Spring items, books, etc.

All rabbits must be tattooed in the left ear (available at the show 7:30–8:30 a.m. — \$1 per rabbit). All rabbits must be brought in carriers with leak-proof bottoms.

For more information, call Bob at 402-477-6888 or Marty at 402-441-7180

Sponsored by Lancaster County 4-H Rabbit VIPs Committee and UNL Extension in Lancaster County

Kiwanis Karnival, April 14

The annual Kiwanis Karnival, a FREE family event, is sponsored by the Lincoln Center Kiwanis. This year, it will be held Saturday, April 14, 6–8 p.m. at Elliott Elementary School, 225 S. 26th St., Lincoln. The Karnival features carnival type games for the kids, 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. This is a great community service and leadership activity for clubs. If your 4-H club or family would like to have a booth or for more information, call Lorene at 402-441-7180. Come join the fun!



Watch Chicks Hatch Online with EGG Cam!
lancaster.unl.edu/4h/Embryology

Embryology resources include incubation, candling, and more!
Find us on Facebook!

Can You Guess It?



Did you guess it? Find out at <http://lancaster.unl.edu>
Did you guess it from the November/December NEBLINE?
The answer was: *Listeria Bacteria*

Discover, Learn, and Grow at 4-H Summer Camps



2012 4-H Summer Camp brochures are now available online at <http://4h.unl.edu/camp> and at the extension office. Camps are open to all youth ages 5–18 (need not be in 4-H). With three unique Nebraska locations at Halsey, Gretna, and Alma, there are more than 40 camps ranging from half day to seven days/six nights! UNL Extension, through its 4-H Youth Development Program, has been operating 4-H Camps for over 40 years. The 4-H camps and centers all meet over 300 standards established by the American Camping Association. Brochures have complete information about all camps.

Save 10% by registering before April 15!



Applications Open for 4-H Camp Staff

The three 4-H Camps in Nebraska are currently accepting applications for summer staff. All positions provide endless opportunities for growth in a fun, fast-paced outdoor atmosphere. Need not be in 4-H to apply. You may apply for a variety of positions:

- Cabin Mentors** — Ages 17 and up who provide cabin supervision and assist in leading camp programs. Mentors receive an honorarium for their service and are scheduled according to their availability. Mentor for a few days or for the entire summer — the choice is yours! Deadline is April 1.

- Camp Counselors** — Ages 15 and up who assist with cabin supervision and leading of camp programs. Join over 150 volunteer teens in providing valuable leadership to a group of campers by day and assist with cabin supervision at night. Camp counselors are scheduled according to their availability and counseling is a fantastic leadership experience for any young person. Minimum three days over the summer. Deadline is May 1.

More information and applications are online at <http://4h.unl.edu/camp>.

Explore Career Options at Big Red Academic Camps

The Big Red Summer Academic Camps are a chance for youth grades 10–12* to spend time investigating an interest or potential career, explore the UNL campus, meet people from across the state and have lots of fun. Students who graduate in May 2012 are welcome to attend.

Held in June, Big Red Summer Academic Camps features nine career exploration camps hosted by Nebraska 4-H and University of Nebraska–Lincoln faculty members. The camps are residence camps held on UNL campus. Housing and food are provided.

After spending several fun-filled days exploring a specific topic such as filmmaking or environment, youth showcase their work at a special “capstone event” which family members are invited to attend.

Brochures and registration forms are available at <http://bigredcamps.unl.edu> or at the extension office. Limited scholarships are available. For more information, call 402-472-2805.

Save \$50 by registering before April 1!



Camp	Dates
Crop Science**	June 10–13
Culinary Arts and Food Science	June 10–15
Education**	June 10–15
Entrepreneurship	June 10–15
Environment	June 10–15
Fiber Arts	June 10–15
Filmmaking	June 10–15
Unicameral Youth Legislature*	June 10–13
Veterinary Science	June 10–15

* Open to grades 9–12; ** New camp for 2012.