8-1-2009

The NEBLINE, August 2009

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Landscape Water Saving Methods

Don Janssen
UNL Extension Educator

It is estimated that nearly 50 percent of the water used by the average householder goes for the outdoor landscape and turfgrass areas. Any improvements that homeowners make to conserve water in the home landscape can result in significant savings.

Water conserving landscapes don’t have to look any different or cost any more than water wasting ones. A well thought-out design, along with soil improvement, careful watering, use of mulches and proper selection of plants can make a big difference in your water use.

Plan for Water Conservation

Plans can be simple or elaborate, but every plan should take into consideration the factors that affect water use. First start with a soil test. Soil tests tell you the nutrient level of your soil as well as soil type, organic matter content and soil pH. When the soil testing laboratory knows the intended use of the soil they can give recommendations appropriate for your needs.

Identify the primary source of water (municipal, well, surface) and investigate alternative ways of obtaining water irrigation plants. Alternative sources of water may be rainwater harvesting and storage or collecting air-conditioner condensate. Make lists of plants you want to plant in your landscape based on their water and light needs. The concept of “right plant–right place” allows you to match water needs with similar water and light needs in the landscape you will reduce the amount of water applied to areas with plants having low water needs.

Proper Planting to Reduce Water

When planting container plants, plant the container at least one day before planting. Supplemental watering to soil. And last but not least, water again pockets as you fill the planting hole with soil. And last but not least, water again after planting. Supplemental watering to these new plants is needed to establish a good root system during the first and possibly second growing season.

Proper Watering

Irrigate from midnight to 6 a.m. to conserve moisture and to reduce evaporation. Under-watering stress by preventing over watering and system that helps the plant tolerate dry periods. Look for moisture stress symptoms before irrigating. An abnormal gray-green color or obvious wilting are good indicators of moisture stress. Irrigate from midnight to 6 a.m. to conserve moisture and to reduce evaporative losses of water. Watering during this period helps reduce water related diseases.

Managing the Landscapes Water Needs

Water plants only when they require it. This results in a deep, strong root system that helps the plant tolerate dry periods. Look for moisture stress symptoms before irrigating. An abnormal gray-green color or obvious wilting are good indicators of moisture stress. Irrigate from midnight to 6 a.m. to conserve moisture and to reduce evaporative losses of water. Watering during this period helps reduce water related diseases.

Mulch helps conserve moisture and it maintains a uniform soil temperature. Mulch also reduces weeds that compete for light, water and nutrients. The roots of established trees and shrubs extend two to three times their canopy spread therefore apply mulch to as large an area as possible.

4-H results, photos & videos will be posted at http://lancaster.unl.edu

The concept of “right plant–right place” allows you to match water needs with irrigation and reduce the water applied to areas with plants having low water needs.
The use of our limited groundwater-fed pond are, “Is this a sustainable owner considering a groundwater to fill initially as a family of four than doubles, (194,000 gallons). through September 30, the total 3/4-inch per week from May 1 (0.23 acre) lawn an average of per day (91,250 gallons per year) use about 250 gallons of water in the presence of a catalyst contribute any significant portion of the water needed to fill the pond or keep it full. Eventually, the acreage owner is surprised by the amount of water it takes. Let’s crunch some numbers for a square pound 150 feet by 3 feet. A side pond would have a surface area of just over half an acre. If the depth in the middle of the pond is 10 feet and the sides have a 1.3-slope (one foot vertical drop for each three feet horizontal run), the volume of the pond would be 153,000 cubic feet or a little over 1.1 million gallons.

Domestic pumps usually deliver between 8–12 gallons per minute (gpm) but let’s assume the well driller can find a 20 gpm pump. Assuming the full 20 gpm flow goes only to the pond (not split between domestic use and irrigation), it would take between 40–60 days of continuous operation to fill the pond, incidentally depending on initial seepage losses. If we assume 30 inches of diameter on the 0.23 acre pond, but no appreciable run-off into the pond, the evaporation and seepage losses will average about by rainfall will average about 1/4-inch per day, round day. A 1/4-inch per day gpm is about 20 gpm per acre is equal to 3,400 gallons of water per day. This would require a 20 gpm pump about 1,000 hours a year to keep the pond full. Each acre-foot requires about 1.1 million gallons of water to fill initially and about 1.2 million gallons of pumped water a year to keep full. By way of comparison, a family of four will use about 390 gallons of water per day (63,000 gallons per year) for domestic uses. If the family also irrigates a 10,000 square foot (7,230 square feet) lawn an average of 3/4-inch per week from May 1 through September 30, the total water used for the acre more than doubles, (194,000 gallons). A half-acre pond, therefore, “consumes” about as much water to fill initially as a family of four would have used for the house and lawn for the entire year. It will then require as much water each year to keep full as the family would have used in 6 months. A question I always ask an acreage owner considering a groundwater pond are, “Is this a sustainable use of our limited groundwater resource in eastern Nebraska?

Some plants “make their own nitrogen.” If a legume (i.e., clover, soybeans, alfalfa) is colonized by certain strains of Rhizobium bacteria, nodules will form on the plant roots where the bacteria live and reproduce. Within these nodules, a symbiotic relationship develops between the bacteria and the host plant. Once nodules form, the plant actually receives all of the nitrogen necessary for plant growth from that “fixed” by the bacteria. When planting a legume crop, UNL recommends inoculating the seed with the appropriate strain of Rhizobium bacteria unless the same legume crop has been planted in the field within the last three years. Given the small expense for inoculant, especially as compared to making a nitrogen fertilizer application in the absence of sufficient nodules to supply the needs of the crop, many folks will “play it safe” and inoculate every time they plant a legume.

Other crops, including all legumes (i.e., corn, sorghum, wheat, forage grasses, etc.) and non-legumes such as broadleaf crops (e.g., sunflowers, potatoes, sugar beets, cotton, etc.) are not colonized by Rhizobium bacteria. Legumes and many other non-legume crops require plant residues for plant growth. Repeated applications of manure and/or biosolids also increase soil organic matter levels over time and improve water infiltration and cation exchange capacity in the soil.

Composted plant residues, legume crops, such as red clover or vetch are plowed under as green manure and animal wastes are used as a source of nitrogen by organic crop producers. A small amount of organic matter (a few pounds per acre per year) is also contributed by rainfall in the microbiological processes, which when dissolved in the water in the soil disassociates into hydrogen and oxygen ions. The nitric acid is formed when nitrogen and oxygen gases are combined with rain water by the intense heat of a lightening bolt during a thunderstorm.

The air we breathe is about 78% nitrogen in the form of N2, 21% oxygen in the form of O2. In one year, the remaining one percent of the atmosphere is a combination of all the other gases, including carbon dioxide which is the source of carbon used by green plants. Even though there are 33,000 tons of nitrogen in the atmosphere over every acre on earth, the nitrogen gas is so chemically stable, plants cannot directly use it as a nutrient. Plants readily take up and use two forms of soil nitrogen, ammonia (NH₃), and nitrate (NO₃⁻). Other forms of nitrogen that are used are combinations of these two compounds by natural or artificial means before they are used. Plants get these directly as a source of nitrogen for plant growth.

Ammonia

Ammonia (NH₃) is produced commercially by reacting nitrogen gas (N₂) from combining nitrogen in the presence of a catalyst with steam and with methane (natural gas, CH₄). The tonnage of anhydrous ammonia used in agriculture is greater than any other form of nitrogen fertilizer due to its lower cost per pound of nitrogen and its relative nutrient density (82% nitrogen by weight) which keeps the transportation cost per pound of nitrogen as low as possible.

Ammonia fertilizer is a good source of nitrogen. If a legume crop or break crop (e.g., corn, sorghum, wheat, forage grasses, etc.) is colonized, nodules will form on the plant roots where the bacteria live and reproduce. Within these nodules, a symbiotic relationship develops between the bacteria and the host plant. Once nodules form, the plant actually receives all of the nitrogen necessary for plant growth from that “fixed” by the bacteria. When planting a legume crop, UNL recommends inoculating the seed with the appropriate strain of Rhizobium bacteria unless the same legume crop has been planted in the field within the last three years. Given the small expense for inoculant, especially as compared to making a nitrogen fertilizer application in the absence of sufficient nodules to supply the needs of the crop, many folks will “play it safe” and inoculate every time they plant a legume.

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Canning Fruits and Vegetables

Julie A. Albrecht
UNL Extension Food and Nutrition Specialist

Canning can be a safe and economical way to preserve quality food at home. Home-preserved foods can help provide a variety of nutritious meals for your family all year long.

How Canning Preserves Foods

The highest water content of most fresh foods makes them very perishable. Foods with a high water content spoil or lose their quality for several reasons:

• growth of undesirable micro-organisms—bacteria, molds and yeasts
• activity of food enzymes
• moisture loss

Micro-organisms live and multiply quickly on the surfaces of fresh food and on the inside of bruised, insect-damaged and diseased food. Oxygen and enzymes are present throughout fresh food tissues. Proper canning practices remove oxygen, destroy enzymes, prevent the growth of undesirable bacteria, yeast, molds and help form a high vacuum in jars. Good vacuums form tight seals which keep liquid in and air out.

Ensuring Safely-Canned Foods

Growth of the bacterium Clostridium botulinum in home canned food may cause botulism—a deadly form of food poisoning. These bacteria either as spores or as vegetative cells. The spores, which are comparable to plant seeds, can survive in the soil and spoilage for many years. When ideal conditions exist for growth, the spores produce vegetative cells which multiply rapidly and may produce a deadly toxin within three to four days in an environment consisting of:

• a moist, low-acid food
• a temperature between 40 degrees F and 120 degrees F; or
• less than 2 percent oxygen.

Botulinum spores are on most fresh food surfaces. Because they grow only in the absence of air, they are harmless on fresh foods. Most bacteria, yeasts and molds are difficult to remove from food surfaces. Washing fresh foods reduces their numbers only slightly. Peeling root crops, underground stem crops and tomatoes greatly reduces their numbers. Blanching also helps, but it’s vital to make sure recommended processing procedures and times are used.

Processing Methods

Whether food should be processed in a pressure canner or boiling water canner to control botulism bacteria depends on the acidity in the food. Acidity of foods is measured by pH. Low-acid foods contain too little acidity to prevent the growth of botulinum bacteria. Low-acid foods have pH values higher than 4.6. They include red meats, seafoods, poultry milk and all fresh vegetables except most tomatoes. Most food mixtures have pH values above 4.6 but unless they include enough lemon juice, citrus acid or vinegar to make them aci.

Butterum spores are very hard to destroy at boiling-water temperatures. Therefore, process all low-acid foods using 10–15 pounds of pressure to attain temperatures of 240 degrees F to 250 degrees F. To assure micro-organisms in low-acid foods are destroyed, use the correct time and pressure specified for your altitude.

Acid foods contain enough acidity to inhibit botulism spores and vegetative cells growth or destroy them more rapidly when heated. The pH value of acid foods is 4.6 or lower. Acid foods include fruits, pickles, sauerkraut, jams, jellies, marmalades and fruit butters. Tomatoes are usually considered an acid food, although some varieties are known to have pH values slightly above 4.6. If tomatoes are to be canned as acid foods, these products must be acidified to a pH of 4.6 to 4.4 with vinegar, lemon juice or citric acid. To destroy micro-organisms in acid foods processed in a boiling-water canner, you must process jars for the correct number of minutes.

FOR MORE INFORMATION

The following University of Nebraska-Lincoln publications are available at the Extension office and online at http://www.isnpn.unl.edu/serdf/foods:

• Let’s Preserve: Canning Basics (EC434)
• Let’s Preserve: Vegetable and Vegetable Products (EC445)
• Let’s Preserve: Fruit and Fruit Products (EC436)

Commercial Nitrogen

continued from page 2

Urea fertilizer broadcast to the soil surface is quickly lost due to mechanical incorporation can volatilize losses exceeding 75%. On the other hand, surface-applied urea followed by sufficient irrigation, either by overhead or by subsurface, can be easily hydrolyzed the urea and to incorporate the resulting ammonium into the soil (one-half inch is usually sufficient) will suffer very little volatilization loss.

Phosphorus / Nitrogen Sources

Some fertilizers applied primarily as sources of phosphorus also contain significant levels of nitrogen. Diammmonium phosphate (DAP) contains 18% N and 46% P2O5 by weight (18-46-0). Monosornium phosphate (MAP) is usually formulated as 11-52-0. Other common phosphorus sources that contain nitrogen include 10-34-0 and 11-37-0. If any of these compounds are applied as a source of phosphorus, one should credit the nitrogen contained in these compounds when computing total nitrogen fertilizer to apply.

Fall Prairie Seeding Site Preparation

Steve Lekwa
Story County, Iowa Conservation Director

Fall is a wonderful time to plant a new prairie. It’s less hurried since seeding can occur right up to freezing. Forbs, flowering prairie plants, do particular well when seeded in the fall after soil temperatures are cool enough to prevent germination, usually after mid October. Site preparation needs to begin in late summer in order to be ready in time. The goal in any prairie seeding is to start with a firm, weed-free seedbed. Soybean stubble is a nearly perfect seedbed with little additional work. A light disk or dragging may be desirable if the rows are too rough. Corn stubble is more difficult to prepare and has a higher probability of damaging cereal cover. Conversion of turf grass to prairie requires suppression of the perennial cool-season turf prior to seeding prairie. This can be accomplished with a chemical like Roundup® applied at labeled rates, and by conventional tillage. Direct seeding into dead soil is possible if a no-till planter is available. If not, the soil must be broken up and form the firm seed bed. It will likely take multiple passes with conventional farm equipment (plow, disk, drag), but a large rototiller can break it up fast. Rototilled soil tends to be too fluffy for good prairie seeding, so a firming pass or two with a roller may be needed before and after seeding.

Landscape Water

continued from page 1

before applying irrigation. This actually causes the grass plant to explore deeper soil depths for moisture and heat. It is best not to irrigate based on a schedule. Irrigate based on plant need. When properly managed, turfgrass is more tolerant of drought conditions than soybeans.

Cultural practices like aeration, mowing and fertilizing are critical. The correct amount and time of aeration is tough to determine. Fall aeration is not recommended to avoid soil compaction.
Tired of not having a chance to relax and enjoy your lunch? If you answered YES to these questions we have an easy solution for you. For the math, you'll discover you can save around $800 in one year by just packing your lunch instead of eating out.

1. Save Money
Save some of your hard earned money by packing your own lunch. On average, packing your lunch will cost you anywhere from $2 to $3. Going out to lunch at a fast food restaurant, on the other hand, usually costs at least $5. If you do the math, you'll discover you can save around $800 in one year by just packing your lunch instead of eating out.

2. Health Benefits
With meals often fall short on providing you with food from each of the 5 food groups (grains, vegetables, fruits, milk, meat & beans). Not to mention most fast food meals are high in fat and low in important nutrients like vitamins and minerals. By packing your own lunch you can ensure you eat healthy by including something from each of the food groups, especially those juicy fruits and crisp veggies, along with eating foods lower in calories and fat.

3. It's Easy
One of the easiest ways to make your lunch is by packing your leftovers from dinner. Make sure to cook an extra serving at dinner and then you'll have your lunch for the next day ready to go. This is a great way to save money and not waste food. If you don't take leftovers, make sure to plan for your lunches when you do PACKING LUNCH on page 5 for the other perishable foods to be used later in the vacation. Limit the time the cooler is opened. Open and close the lid quickly. Now, follow these food safety tips:

**When Camping**
Remember to keep the cooler in a shady spot. Keep it covered with a blanket, tarp or poncho, preferably one light in color to reflect heat. Bring along bottled water or other canned or bottled drinks. Always assume streams and rivers are not safe for drinking. When camping in a remote area, bring along water purification tablets or equipment. These are available at camping supply stores.

Keep hot foods hot, and cold foods cool for at least 2 hours (1 hour when temperatures are above 90 degrees F.). Food should never sit out for more than 1 hour.

When Boating...

1. Bring along disposable moisture towelettes for cleaning hands.
2. Bring along reusable coolers — one for the day's perishable food, place it in a cooler. Pack Safely...
Pack perishable foods directly from the refrigerator or freezer into the cooler. Meat and poultry may be packed while it is still frozen, it stays colder longer. Also, a full cooler will maintain its cold temperature longer than one partially filled. Be sure to keep raw meat and poultry wrapped separately from baked goods, or foods meant to be eaten raw such as fruits.

When Boating...
If you take perishable foods along (for example, meat, poultry, eggs and salads) for eating on the road or to cook at your vacation spot, plan to keep everything on ice in your cooler.
Credit can be a successful financial management tool. Using credit allows you flexibility in managing your budget to purchase goods and services when they are needed the most, not when you have the cash on hand to pay for them. You are offered credit because people trust you to repay them. You are offered credit because you are able to pay for things in the future when you have the money. Credit can be a successful financial management tool.

Financial Security: Consumer Credit

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Running Out of Time for Bagworm Control

Bagworms have been feeding on landscape plant material for several weeks now. If you have an infestation, the bags and damage should be very noticeable at this time. Insecticide applications applied now in late summer when bagworms are larger, will be less effective in controlling them. Bifenthrin will work in early August. Use the higher dosage rates when temperatures are still warm. It causes bagworms to move around, exposing them further to the insecticide.

By mid to late August, chemical control is no longer effective, since most bagworms will have stopped feeding and pupated in their bags.

Becky Seth  
Naturalist, Pioneers Park Nature Center

Preserving the bounty of summer provides a lift to the spirit in the gray days of winter. The tastes and smells of herbs can be a special gift on a cold day.

Maximum harvesting times depend on the individual herb and the part of the plant involved. If you are harvesting for culinary purposes it is best to harvest before the plant blooms and in the morning as soon as the dew is dried, since the essential oils are at their peak then. Most herbs benefit from being harvested often since cutting encourages new growth and delays flowering. You can harvest as much as the top half of herbs such as mint, tarragon, basil, sage, oregano and thyme. Harvest the outer leaves of herbs like parsley and sorrel that grow from a central point. Cut chives about one inch from the ground. Trim the branch tips of woody perennials such as rosemary, making sure there is green growth below. Herbs such as dill, fennel and coriander can be grown for both the leaves and seeds. If growing for seed, you can harvest a few lower leaves, but then allow the seed head to turn brown before snipping it off.

To clean your herbs, swish them gently through water and pat dry. Your harvest can then be dried on screens, in the oven at the very lowest setting, or in a dry place where there is air circulation. If dust is a problem put them on a rubber band and hang them upside down on wire clothes hangers. Place them in a warm, dry place where there is air circulation. If dust is a problem you can place the bunches in paper bags. Punch holes in the bags to increase circulation. Scented geranium leaves can be dried in a similar way. Collect rose petals in full bloom and screen dry.

A Morning with Herbs

Saturday, Aug. 15 • 9:30–11:45 a.m.  
Pioneers Park Nature Center Prairie Building  
$10/person • Register by Aug. 10

Join us for two workshops highlighting the versatility of herbs.

9:30 a.m. workshop: Clean with Green (Cleaners, that is) with Cynthia Conner  
Demonstrations, "secret ingredients" and a sample to take home (please bring a small container with lid) should pique your gentler nature.

10:45 a.m. workshop: Sizzling Sauces with Janet Buck and Becky Seth

Explore herbal sauces from several ethnic cuisines that will add new flavors to your cooking. Demonstrations, recipes and samples.

Harvesting and Preserving Herbs

Herbs for potpourri or decorative uses such as lavender, artemisia and yarrow are harvested when flowering but before the blooms are fully open. Cut them with enough stem so that you can strip the lower leaves from the stem and gather them into small bunches. Tie the bunches with string or a rubber band and hang them upside down on wire clothes hangers. Place them in a warm, dry place where there is air circulation. If dust is a problem you can place the bunches in paper bags. Punch holes in the bags to increase circulation. Scented geranium leaves can be dried in a similar way. Collect rose petals in full bloom and screen dry.

The Louise Evans Doole Herb Garden at Pioneers Park Nature Center has over 175 kinds of herbs, many of them labeled. Visitors can enjoy the garden from 8:30 a.m. to 5:00 p.m. Monday through Saturday and noon to 5:00 p.m. on Sunday.

For more information, call (402) 441-7000 or send email to linda.lawrence@lancaster.unl.edu.
Get Ag-cited!

Lancaster County Fair
August 5–9

Lancaster Event Center
84th & Havelock, Lincoln
www.superfair.org
(402) 441-6545

2009

Gate admission tickets will be required!
Get gate admission tickets FREE at these locations July–Aug. 9

FREE Entertainment Tent
16 convenient locations in Lincoln
Pick up tickets at the radio station (4343 0 St.) or listen for live remote locations

Lincoln Convention & Visitors Bureau,
Inc.

Get gate admission tickets FREE at these locations July–Aug. 9

New this year

Super Fair
LANCASTER COUNTY
AUGUST 6–15, 2010

LANCASTER EVENT CENTER
84th & Havelock, Lincoln
www.superfair.org
(402) 441-6545

LANCASTER COUNTY FAIR
AUGUST 5–9

Get Ag-cited!

SCHEDULE
& MAP

Fairground Rules
• No smoking inside the buildings.
• No bicycles, scooters, ATV’s or golf carts allowed on the grounds.
• No dogs allowed in any buildings except as required for special needs or for dog shows.
• Lancaster County Sheriff will be patrolling fairgrounds.
• Parking will be allowed in designated parking areas only. NO PARKING IN THE FIRE LANES.

Chris Cagle in Concert
Saturday, Aug. 8 at 7:30 p.m.
General admission tickets are $13 before July 6 / $25 after July 6.
Purchase tickets at Fort Western, Lancaster Event Center or by phone at 402-441-6545.

Chris Cagle in Concert

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• No dogs allowed in any buildings except as required for special needs or for dog shows.
• Lancaster County Sheriff will be patrolling fairgrounds.
• Parking will be allowed in designated parking areas only. NO PARKING IN THE FIRE LANES.

Chris Cagle in Concert
Saturday, Aug. 8 at 7:30 p.m.
General admission tickets are $13 before July 6 / $25 after July 6.
Purchase tickets at Fort Western, Lancaster Event Center or by phone at 402-441-6545.

Chris Cagle in Concert
PRE-FAIR SCHEDULE

Saturday, August 4 —
Open Class Dairy Goat Show (Pavilion 1 - West Arena). 8 a.m. - 9 p.m. 
Caprine Connoisseur Classic — Saturday is a double show, the first one is sponsored by the Lancaster County Dairy Goat Breeders. The show will be held in conjunction with the Nebraska Dairy Goat Breeders’ Classic. Exhibitors of all ages show their dairy goats and compete for championship honors.

Open Class Horse Dressage Show (Pavilion 3 - Arena). 7:30 a.m. Exhibitors of all ages compete in Open Dressage Show. This show is recognized Nebraska Dressage Association schooling show.

Open Class Horse Performance and Speed Events (Multiple-purpose Arena). 8 a.m. - 9 a.m. Exhibitors of all ages compete. Speed Events include Pole, Sox Race, Keyhole, Flag Drop Race and Barrels. Performers events include English Equitation, English Pleasure, Walk Trot, Western Pleasure, Western Horsemanship and Racing.

Sunday, August 5 —
Open Class Dairy Goat Show (Pavilion 1 - West Arena). 8 a.m. - 9 a.m. 
Caprine Connoisseur Classic — this show is sponsored by the Nebraska Dairy Goat Association and sanctioned by the American Dairy Goat Association (ADGA). Exhibitors of all ages show their dairy goats and compete for championship honors.

Monday, August 6 —
Static Exhibit Check-in — 4-H & Open Class (Lincoln Room). 4:45 p.m. - 6 p.m. 
Open Class categories are open to anyone. For complete information on how to enter exhibits in the Lancaster County Fair, pick up a 2009 Lancaster County Fair Open Class, 4-H & FFA Fair Back. Fair Backs are available at the Lancaster Event Center or online at www.4h.org

Tuesday, August 7 —
4-H Horse Dressage Show (Pavilion 3 - Arena). 8 a.m. - 9 a.m. 
Dressage is the performance of a specific pattern of movements — horse and rider are judged on presentation, accuracy and showmanship of the horse. English attire and tack are used.

4-H Horse Hunter Hack Jumper Show (Any Countryman Arena). 9 a.m. - 10 a.m. 
Immediately following 4-H Horse Dressage Show. Hunter Hunter Hacks showcase a combination of skills — jumping, horse movement & attitude, and exhibitor horsemanship (skill at riding horses). Uses hunter-type horses. English attire and tack are used.

4-H Horse Hunter Show — Hunter/Equitation (Any Countryman Arena). 10 a.m. - 11 a.m. 
Immediately following 4-H Horse Hunter/Hack Jumper Show.

New this year! Hunter is the term used for the controlled, balanced, rhythmic manner in which the horse completes the course of jumps. The hunter maid is judged on the horse’s ability to complete the course of jumps which vary in distance and difficulty. Hunter Equitation is judged on the rider’s position in the tack and accuracy of the course ridden.

Wednesday, August 5 —
Capital City Kiwanis Breakfast (Concession Stand Between Pavilions 1 and 9). 7:15 a.m. - 11 a.m. 
New this year at the Lancaster County Fair!

4-H English Horse Show — English Showmanship/English Pleasure/English Equitation (Any Countryman Arena). 8 a.m. - 9 a.m. 
These classes showcase horse manners, movement & attitude and exhibitor horsemanship (skill at riding horses). Uses hunter-type horses. English attire and tack are used.

Static Exhibits on Display (Lincoln Room). 9 a.m. - 9 p.m. 
Come see the very best Lancaster County has to showcase! Rides feature exhibits of your talents and earn ribbons! Open Class Categories of Horticulture, Foods, Textiles and Fine Arts are open to anyone. 4-H youth enter exhibits in more than 100 4-H project areas. FFA youth exhibit projects in FFA's Ag Mechanics.

Antique Tractors on Display (North of Buildings). 9 a.m. - 9 a.m. 
New this year, the University of Nebraska-Lincoln Larson Tractor Museum is coordinating an antique tractor display (9 a.m. - 9 a.m.) and parade at the Lancaster County Fair! See more than 75 tractors illustrating advancements in agricultural technology. The Larson Tractor Museum will bring significant tractors such as the 100-year-old Minneapolis Forst tractor which started Nebraska’s Tractor Testing.

Petting Zoo and Pony Rides (Pavilion 1). 9 a.m. - 9 a.m. 
This year’s FREE petting zoo includes a wide variety of form and exotic animals! Pony and donkey rides — times to be announced. Proceeds from pony rides go toward Lancaster County Fair funds.

Lancaster County Arts & Crafts Sale (Pavilion 4). 9 a.m. - 9 a.m. NEW this year at the Lancaster County Fair! Quality arts and crafts for sale direct from local artists.

Army Climbing Wall (Family Fun Court). 9 a.m. - 9 a.m. 
New this year! This 20 foot climbing wall will be open only if you feel like it. What to take to the top. Must be age 8 or above. FREE!

Open Class Dairy Show (Pavilion 1 - Walkway). 9 a.m. 
Exhibitors of all ages show their large-flock, bantams, feather-legged, ducks, bantam ducks, pigeons, turkeys and guinea fowl to compete for championship honors.

4-H Household Pets Show/Quiz Bowl (Lancaster Room between Pav. 1 & 4). 9 a.m. - 9 a.m. 
4-H members exhibit a wide variety of household pets, including gaga pig, hamsters and cage birds. Judges interview exhibitors on overall care and knowledge of their little critters. Quiz bowl follows.

Rainforest Encounters Exhibit (Between Pavilions 1 & 2). 9 a.m. - 9 a.m. 
NEW this year at the Lancaster County Fair! Families are able to get up close and personal with over 20 species of rainforest animals on display! FREE!

4-H Poultry Show (Pavilion 1 - West Arena & Walkway). 9 a.m. - 9 a.m. 
4-H'ers show their poultry projects in the categories of large fowl, bantams, ducks, geese, turkeys, guinea fowl and pet class.

Rainforest Experience LIVE (Between Pavilions 1 & 2). 3 p.m. - 5 p.m. & 7 p.m. - 9 p.m. 
NEW this year at the Lancaster County Fair! The Rainforest Experience is a 15-minute, fun, educational show which explores the tropical rainforest. Special appearances by 20 rainforest animal friends such as Tansie the singing toco, Archie the two-toed sloth and Plaida a Ring-Tailed Lemur. Audience participation gives kids an opportunity to interact with the animals! Air-conditioned tent seats 500.

Racing Pigs (Family Fun Court). 9 a.m. - 9 a.m. 4 p.m. & 6 p.m. & 8 p.m. 
A ground-breaking new competition is the Day 1 Racing Pigs. Who will guess which pig will finish first. Fun, FREE event to watch!

Antique Tractors on Parade (Around the Fairgrounds). 4 p.m. - 5 p.m. 
NEW this year, the University of Nebraska-Lincoln Larson Tractor Museum is coordinating an antique tractor display (9 a.m. - 9 a.m.) and parade at the Lancaster County Fair! See more than 75 tractors illustrating advancements in agricultural technology. These classes showcase horse manners, movement & attitude and exhibitor horsemanship (skill at riding horses). Uses hunter-type horses. English attire and tack are used.

Carnival

Navy (Between Pavilions 1 & 2). 5 p.m. - Midnight 
The Lancaster County Fair is featuring an ALL NEW carnival from Heart of America Shows with over 25 thrill-filled rides, games and concessions! Rides include the Gravitron, Tsunami, Kirm's Racer, Gravity Roller Coaster, Merry-Go-Round, Ferris Wheel and a whole lot more. Lineup is subject to weather and time (as listed below) and may change. Rides will be operating only during the time of the fair. Rides are subject to weather and time. Please call the fair office for information on when the rides are operating.

Dunk Tank (Family Fun Court). 3 p.m. - 10 p.m. 
Family fun, family price! Marry a friend, test your aim and raise money for Lancaster County Fair education programs.

4-H Horse Show—Horsemanship Purse/Pleasure Drill Teams (Multiple-purpose Arena). 5 p.m. 
In Horsemanship, two riders must ride a pattern in unison. Riders are judged on their control of their horse through various obstacles and who is the best overall pair. Judges look for accuracy, style, creativity and accessories.

4-H Rabbit Breed Identification Contest/Quiz (Pavilion 1 - Walkway). 6:30 p.m. 
In the Direct Identification contest, exhibitors must correctly identify 10 breeds, including variety and color. 4-H members test their rabbit knowledge.

4-H Style Revue (Exhibit Hall). 7 p.m. - 9 p.m. 
4-H members model their clothing projects with pride and style. Judges look for selection, fit, creativity and accessories.

Dance on the Midway (Around the Fairgrounds). 7 p.m. - 9 p.m. 
Free entertainment! Ziv is a solo male singer, songwriter and recording artist, fitting into the rock/alternative/pop genre. His sound has the feel of a U2 meets Coldplay and Seal.

Ziv in Concert (East of Any Countryman Arena). 7 p.m. - 9 p.m. 
Who doesn’t enjoy a race? And better yet — a race with lots of crashes! Figure 8 is a demolition derby and a real thrill. Any vehicle circles the track, which is a half-mile long, (16 laps per race). Everyone is welcome to park with their vehicle and ride or watch. Proceeds from the race go toward Lancaster County Fair funds.

4-H Horse Show—Horsepersons Purse/Recreational Drill Teams (Multiple-purpose Arena). 5 p.m. - 8 p.m. 
In Horsepersons Purse, two riders must ride a pattern in unison. Riders are judged on their control of their horse through various obstacles and who is the best overall pair. Judges look for accuracy, style, creativity and accessories.

Figure-8-Races (East of Any Countryman Arena). 7 p.m. - 9 p.m. 
Who doesn’t enjoy a race? And better yet — a race with lots of crashes! Figure 8 is a demolition derby and a real thrill. Any vehicle circles the track, which is a half-mile long, (16 laps per race). Everyone is welcome to park with their vehicle and ride or watch. Proceeds from the race go toward Lancaster County Fair funds.

Ziv in Concert (Lancaster Room between Pavilions 1 & 2). 7 p.m. - 9 p.m. 
FREE entertainment! Ziv is a solo male singer, songwriter and recording artist, fitting into the rock/alternative/pop genre. His sound has the feel of a U2 meets Coldplay and Seal.

He has written, arranged and produced every song on his albums. He plays the piano/keyboard in every show, and played about 85% of the guitars. He has self-produced two albums, “Fearless” (winner of album of the year for independent artists) and “Paper and Sound.”
**FRIDAY, AUGUST 7**

**Capital City Kiwanis Breakfast**  
(Concession Stand Between Pavilions 1 and 4)  
7:30 a.m.  
Free entry into the Fair for all members and volunteers who are invited to a FREE breakfast.  
PRESENTED BY CAPITAL CITY Kiwanis BREAKFAST

**4-H/FFA Dairy Show**  
(Pavilion 1 - West Arena)  
8:30 a.m.  
4-H and FFA members compete for championship honors with their marrows of cattle.  
This is an exciting event that any visitor can enjoy.  
4-H Rabbit Market Show (Pavilion 1 - East Arena)  
8:30 a.m.  
Market class includes purebred or commercial rabbits.  
Rabbits are first judged for type,  
then market class is held.  
4-H Rabbit Showmanship (Pavilion 1 - East Arena)  
9:30 a.m.  
New this year at the Lancaster County Fair!  
This contest is free to enter.  
Youth ages 8-17 of age are eligible to enter.  
Rabbits are judged on presentation,  
Correct handling,  
and interaction with the judge.  
4-H Dog Obstacle Course (Pavilion 1 - Walkway)  
10 a.m.  
Inventions and dogs and exhibitors are judged on their teaching.  
4-H Western Horse Show - Bareback Equitation/Western Pleasure  
(Pavilion 1 - West Arena)  
3 p.m.  
New this year at the Lancaster County Fair!  
Families are able to get up close and personal with 20 species of animals on display!  
Dog Agility Show (Exhibit Hall)  
1 p.m.  
This is what you see on TV with dogs maneuvering through obstacles, jumps and tunnels.  
4-H Horse Judging (Pavilion 1 - East Arena)  
3 p.m.  
4-H'ers try their hand at judging horses — this event emphasizes how much they know about horses.  
Racing Pigs (Family Fun Court)  
10 a.m., 2 p.m., 4 p.m., & 8 p.m.  
A long-time favorite with fair-goers is Darryl's Racing Pigs.  
Youth and adults are invited to enjoy these fun animals.  
Rainforest Experience LIVE (Between Pavilions 1 & 2)  
3 p.m. & 7 p.m.  
New this year at the Lancaster County Fair!  
See numerous tractors illustrating advancements in agricultural technology!  
Antique Tractors on Display (Pavilion 1 - East Arena)  
9 a.m.  
Exhibitors of all ages show their dashing pigs and compete for championship honors.  
Racing Tractors (Pavilion 1 - East Arena)  
5 a.m. – 9 p.m.  
Presentation of the 2015 Tractor of the Year.  
4-H/FFA Dairy Cattle Show  
(Pavilion 1 - East Arena)  
9 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.  
Antique Tractors on Display (North of Buildings)  
9 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.

**SATURDAY, AUGUST 8**

**Capital City Kiwanis Breakfast**  
(Concession Stand Between Pavilions 1 and 4)  
7:11 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.  

**Capital City Kiwanis Breakfast**  
(Concession Stand Between Pavilions 1 and 4)  
7:11 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.

**4-H Rabbit Market Show**  
(Pavilion 1 - East Arena)  
9 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.

**4-H Rabbit Showmanship**  
(Pavilion 1 - Walkway)  
10 a.m.  
This event is free to enter.  
Youth ages 8-17 of age are eligible to enter.  
Rabbits are judged on presentation,  
correct handling,  
and interaction with the judge.

**4-H Horse Judging**  
(Pavilion 1 - East Arena)  
3 p.m.  
4-H'ers try their hand at judging horses — this event emphasizes how much they know about horses.

**4-H/FFA Dairy Cattle Show**  
(Pavilion 1 - East Arena)  
9 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.

**4-H Rabbit Market Show**  
(Pavilion 1 - East Arena)  
9 a.m.  
New this year at the Lancaster County Fair!  
Test your claiming ability — if you see it, you must take it.  
This is an opportunity for 4-H and FFA members to learn and/or review the basics and essentials of properly presenting their dairy animals and project to the judge.  
Pit passes are available for $20.  
Concessions and beer available.
SATURDAY, AUGUST 8

Capital City Kiwanis Breakfast (Concession Stand Between Pavilions 1 and 4) — 7:11 a.m. — 7:11 a.m.

Open Class Rabbit Show (Exhibit Hall, South End) — 8 a.m. — 8 a.m.

Mini Horse Show (Pavilion 3 - Arena) — 8:30 a.m. — 8:30 a.m.

SUNDAY, AUGUST 9

Capital City Kiwanis Breakfast (Concession Stand Between Pavilions 1 and 4) — 7 a.m. — 7 a.m.

Display of Exhibits on Lincoln Room — 9 a.m. — Noon

Open Class Miniature Horse Show — 9 a.m. — 9:30 a.m.

Mini-tractor Pull (Exhibit Hall, North End) — 9 a.m. — 9 a.m.

Open Class Dog Obedience Show — 10 a.m. — 10 a.m.

Open Class Dog Agility Show — 11 a.m. — 11 a.m.

Open Class Dairy Goat Show — 1 p.m. — 1 p.m.

Open Class Goat Show — 2 p.m. — 2 p.m.

Open Class Sheep Show — 3 p.m. — 3 p.m.

Open Class Calf Show — 4 p.m. — 4 p.m.

Open Class Beef Show — 5 p.m. — 5 p.m.

Open Class Dairy Show — 6 p.m. — 6 p.m.

Open Class Horse Show — 7 a.m. — 7 a.m.

Open Class Beef Cattle Show — 8 a.m. — 8 a.m.

Open Class Dairy Cattle Show — 9 a.m. — 9 a.m.

Open Class Pork Show — 10 a.m. — 10 a.m.

Commercial Livestock — 11 a.m. — 11 a.m.

Commercial Livestock Auction — 12 p.m. — 12 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 1 p.m. — 1 p.m.

Open Class Budweiser Oreo Experience (Exhibit Hall) — 2 p.m. — 2 p.m.

Open Class WFL Spring Poultry Show (Pavilion 1 - West Arena) — 3 p.m. — 3 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 4 p.m. — 4 p.m.

Open Class Willard's Tractor Show (Pavilion 1 - West Arena) — 5 p.m. — 5 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 6 p.m. — 6 p.m.

Open Class WFL Spring Poultry Show (Pavilion 1 - West Arena) — 7 p.m. — 7 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 8 p.m. — 8 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 9 p.m. — 9 p.m.

Rainforest Experience LIVE (Between Pavilions 1 & 2) — 10 p.m. — 10 p.m.
Summertime Bug Bites

Barb Ogg
UNL Extension Educator

The extension office has recently had a rash of phone calls about bug bites. Summertime brings people into more contact with outdoor insects that bite and sting. This article will give tips to help determine what could be the source of the bite.

Before you treat, be sure you know what the pest is. This is the first rule of managing pests. A woman hired a pest control company to treat her house and yard for fleas. After the treatment, she called the extension office because she was concerned about the insects used inside their home.

After asking several questions, I was fairly sure this family didn’t have fleas at all but were getting bitten by chiggers when doing yard work. Chigs which helped me decide the bites were from chiggers were:

• She and her husband were both getting bitten, but never saw anything. Fleas are small, but can be seen, especially when they are biting.
• Second, the location of the bite suggested these were chigger bites. Both were getting bites on ankles, under socks and underwear elastic.
• Third, the signs and symptoms were similar to chigger bites. Both were usually caused by outdoor activities, the chigger stage of a mite, which results in a bite, which is often painfully itchy and lasts for days and sometimes weeks.

Chiggers

Chiggers are the larval stage of a velvet red mite (Trombicula alfredensis) that lives in the soil. It is so tiny humans can’t see it with the unaided eye. The chigger stage is the only parasitic stage of this mite. It attacks rodents, birds, poultry, rabbits, livestock, snails, toads, as well as humans. The chigger crawls onto feet or legs and moves about until it reaches a place where it is confined, particularly around ankles, under socks, behind knees, under the belt-line and elastic bands of underwear. More infrequently, chiggers move to the upper torso and attack the armpits. Chiggers become inactive through the end of summer. Chiggers do not burrow under the skin. Instead they crawl into a hair follicle and pierce the skin. During its feeding activities, the chigger injects anti-clotting substances, which results in a bite, which is often painfully itchy and lasts for days and sometimes weeks.

Many years ago, a mother brought her baby into the extension office to have an insect identified she found in her baby’s hair. The insect was a cat flea. The baby normally slept on a blanket placed on a carpeted floor. With the baby’s feet in contact, the cat flea male crawled under the blanket and fed at night. Bites are usually localized on the ankles, which are usually closest to the carpet or soil, but they will feed on any convenient location.

Mosquitoes

Mosquitoes are associated with outdoor activities in the summertime. Abundant rainfall brings out mosquito larvae. Mosquito repellents do a good job of preventing mosquito bites. Repellents should be used; however, some people, especially small children, may be sensitive to repellents. The Centers for Disease Control (CDC) recommends two “conventional” repellents (DEET; picaridin) and two “biopesticide” repellents (oil of lemon eucalyptus; JR3535). For more information about active ingredients in these repellents go to http://www.cdc.gov/nicidds/dhdd/westnile/repellentupdates.htm. Follow label directions before using any repellent.

Bed Bugs

Some recent phone calls have been from people who have gotten bitten and worried the bites could be from bed bugs. Dr. Annette Bredthauer, Health and Human Services System conducted a survey of pest control companies. In the last five years, in Nebraska, there has been a 12-fold increase in number of bed bug treatments. These infestations disproportionately impact people who live in high-density housing, apartments, hotels and motels. Only about 20 percent of last year’s treatments were in single-family homes.

Bed bugs hide during the day in cracks and crevices near the bed and feed at night. Bites are found on the arms, shoulders, torso and legs. Bites are not often seen on the face. Because people have variable reactions to bed bug bites, it is difficult, if not impossible, to identify bed bugs from bites alone. Bed bug adults are 1/4-inch long, but immatures are smaller. Small infestations may be hard to find. Eventually, bed bug populations will increase and will be easier to find.

Taking Insect Photos at Spring Creek Prairie

On Saturday, June 27, Spring Creek Prairie Audubon Center was the location for the second annual Insect Photography Workshop presented by University of Nebraska–Lincoln Extension. This is an excellent facility for an educational program and the prairie served as a great location to practice what we had learned. The weather cooperated too — it was cloudy, but bright, just perfect for taking photos.

Jim Kalisch, who is a masterful photographer, presented information useful for beginners and more advanced photographers and served as resource during the six hours we spent there. Spring Creek Prairie, three miles south of Denton, is an NPS-CA tallgrass prairie. Visitors can enjoy miles of walking trails, nearly 650 acres of native (or restored) tallgrass prairie, ponds and wetlands, wildflowers and grasses, a diverse assortment of birds and other wildlife, historic 19th century wagon ruts, peaceful surroundings and beautiful scenic vistas. Volunteer opportunities are available and education programs for all ages are offered year-round. Spring Creek Prairie is open seven days a week, Monday–Friday, 9 a.m.–5 p.m. and Saturday and Sunday 1–5 p.m., except major holidays. A small fee is charged to defray operating costs, but Tuesdays are free. I was also told if you come before they open, you don’t have to pay. It is okay to wander the prairie, even if the education center is closed. This also means there is no shelter and no rest rooms. They charge $5 to rent the education room for five hours. For more information, go to www.springcreekprairie.org or call 797-2301.

To see more photos from the Insect Workshop, go to http://lancaster.unl.edu/pest.
Ak-Sar-Ben 4-H Youth Expo

The 82nd Ak-Sar-Ben 4-H Youth Livestock Exposition will be held Sept. 22–27 at the Qwest Center in Omaha. Categories of this 4-H only competition are dairy, feeder calf & breeding beef, horse, market beef, market broilers, meat goats, market lamb, market swine and breeding swine. Livestock exhibitors must be at least 10 years of age as of January 1. Entry fees range from $3-43. Participants must have completed at least one 4-H year to be eligible. For more information, contact: Zane Speckman, Extension Educational Specialist, at 441-2941.

Entries Due Aug. 9

Entries from Lancaster County 4-H’ers are due to exten- sion staff no later than Sunday, Aug. 9 (may give to them at the Lancaster County Fair). Please make sure to include all entry fees, clinic fees, parking fees. Ak-Sar-Ben will require 15-day health certificates for livestock and horses! Note: Horses do not require an IIA (equis) test. Please call 441-7180 if you have questions.

Lancaster County 4-H Council Scholarships Available for Volunteer Forum Oct. 1–4

The North Central Region 4-H Volunteer Forum is a confer- ence to enhance 4-H volunteer education and to promote adult- youth partnership in the 4-H program. The forum will be held June 10, 1-4 in Lincoln. Educational sessions will focus on activities which can be used in clubs. There will be keynote speakers, tours, networking and extension representatives. Lancaster County 4-H Council will pay the $200 registration fee (as a scholarship) for the first 11 Lancaster County 4-H volunteers to register for this forum. Early bird deadline is Aug. 11. Contact Tracey for more information. For a schedule, go to http://th.unl.edu/volunteers/forum.htm

4-H’ers Test Family and Consumer Sciences Skills at Life Challenge

The state Life Challenge contest was held July 11 and Mary Dowd was awarded the Grand Champion rosette.

The county junior Life Challenge contest was held May 30. Jamie Stephenson was awarded the Grand Champion rosette.

The state Life Challenge contest for seniors was held at UNL East Campus June 29 and 30. Three Lancaster County Teams participated. Team 1 partici- pants were Anne Greff, Antonio Hoover, Charles Dowd and Molly Noel. Team 2 participants were Angelica Hoover, Helen Dowd, Jamie Stephenson and Jessica Stephenson. They received 1st place out of 6 teams in the Wardrobe Challenge. Team 3 participants were Ceirra Austin, Dylan Hoover and Maddie Gabel.

4-H Bicycle Safety Contest

The 2009 4-H Bicycle Safety Contest was held on June 27 at the Lancaster Extension Education Center. Part of the Lancaster County Fair, the contest consists of a bike inspection, bicycle riding skills and a written quiz. Top winners were Jamie Stephenson (senior champion), Anne Greff (senior reserve champion), Joshua Hoover (junior champion) and Michaela Hoover (junior reserve champion).

County Fair Horse Exhibitor Dress Code

Western Attire:
Shirts and blouses must be all white, including button, thread, etc., with convertible collar (one that is meant to be folded at the seam) and long sleeves. Tuxedo, turtleneck or other stand-up collars are not permitted. No national, county or club emblems, medals, etc., permitted. Shear, see-through or form- fitting blouses are inappropriate and not permitted. The bottom line — the tradi- tional “pearl snap” western shirt or a white cotton old-ford-shirt style shirt are permitted. Plain, dark-blue denim jeans must be worn. No fringe is allowed nor are jeans that button down the side. A Western hat or a safety helmet must be worn. Hats and helmets are optional in the speed events. A belt, tie, 4-H armband (left arm above the elbow) and riding boots must be worn. Boots with waffle-type tread greater than or equal to 1/8” will not be allowed in riding classes. The judging event requires a long-sleeved white shirt with 4-H armband or the short-sleeved white 4-H T-shirt, blue jeans, belt and boots. A tie must be worn with the long-sleeved shirt.

English Attire:
1. Helmet — ASTM approved helmet required in all jumping classes. 2. White or light colored shirt with stand up collar — can be long or short sleeves or sleeveless. If the weather is extremely hot, the judge may waive the jacket. In which case, white or light colored shirt or a short sleeved polo shirt in any color is acceptable. 3. Armband — left arm above the elbow — must be worn with long or short sleeves or sleeveless. 4. Breeches or pin for collar 5. Jacket 6. Breeches 7. Belt if breeches have loops 8. Long boots or half chaps with a paddock boot or garter straps with paddock boots are acceptable!
Lancaster County Fair
August 5–9
Lancaster Event Center • 84th & Havelock • Lincoln
The Lancaster County Fair Book has complete information about entering exhibits or participating in contests. Fair Books are available at the extension office and online at http://lancaster.unl.edu/4h-Fair.
Most of the following information is compiled from the Fair Book.

New this year, gate admission tickets will be required at the Lancaster County Fair. The extension office has gate admission tickets FREE, available through Aug. 9. For other locations to pick up gate admission tickets FREE, go to www.superfair.org

Volunteers Needed
Adults and youth are needed to help during the Lancaster County Fair. If you can help, please contact the extension office at 441-7180. Help is especially needed in the following areas:

- **Static exhibit set-up days** on Thursday, July 30 at 6:30 p.m. (pizza will be served) and Saturday, Aug. 1 at 8 a.m. (doughnuts will be served) in the Lincoln Room
- **During judging of static exhibits** on Tuesday, Aug. 4 in Lancaster County Fair
- **Teen tour guides are needed for Fair Fun Day** for child care groups on Friday, Aug. 7 at 9:30 a.m. and 1 p.m.
- **Lil’ Green mascot and escorts** on Friday, Aug. 7 for 1 or 2 hours shifts between 5:30–9 p.m. To be inside, should be age 14+, 5’3”–6’3” and waiste line 38” or less.

Clover Kids Show & Tell, Aug. 8
All Clover Kids, youth age 5-7 by January 1, 2009, are invited to show & tell their 4-H exhibits at the Lancaster County Fair. If you can help, please contact the extension office at 441-7180. For more information, call Robin Ambroz-Hollman at 540-2276. All food booth volunteers are STRONGLY ENCOURAGED to attend the training on Thursday, July 30, 6–7 p.m. at the Lancaster Event Center, Exhibit Hall. Learn about food safety, customer service and volunteer responsibilities.

Entomology
4-H Entomology should have included in the Fair Book. A Fair Book Entomology Addition is available at http://lancaster.unl.edu/4h-Fair and the extension office.

Photography Forms Online
4-H County Fair photography data forms parts A & B are now available as a fill-in PDFs online at http://lancaster.unl.edu/4h-Fair

Livestock Changes
There have been several changes to the fair book for Livestock exhibitors. Here are some of the changes, please check your fair books for more details.

**All Species:** All animals must be stalled in the barn. Beef are allowed to stall outside in designated cattle tieout area.

**Beef:** No feeding animals in show arena. Beef are not allowed in the show arena any time Friday morning before the dairy show.

**Blow and Go Rule:** All beef exhibitors will be allowed only to wash, blowout and comb their animals. Any use of adhesives is prohibited.

**Exhibitors:** All exhibitors will be allowed only to use coat dressings, conditioners and shavers, creams only. No use of products containing color additives or color transfer allowed.

Changes for Horticulture Exhibits
Changes have been made in the Horticulture area. Please keep these changes in mind when you are preparing your exhibit for the Lancaster County Fair.

1. **Containers for flower exhibits will not be** provided. Exhibitor must provide own container. Please have containers be the appropriate size for your flower exhibit. Make sure the container will not tip over when the flowers are put inside. The container will not be physically checked in during Static Exhibit Check-in.

2. **Paper plates for vegetables and fruit exhibits will** not be provided. Exhibitor must provide sturdy, washable paper plates.

3. **Exhibits need to be ready to enter when you arrive at** the fair. There will not be a preparation area to prepare your exhibits.

4. **Entry cards must be completely filled out before** arriving at the fair.

Entomology
4-H Entomology should have included in the Fair Book. A Fair Book Entomology Addition is available at http://lancaster.unl.edu/4h-Fair and the extension office.

Photography Forms Online
4-H County Fair photography data forms parts A & B are now available as a fill-in PDFs online at http://lancaster.unl.edu/4h-Fair

Food Booth Training, July 30
The 4-H food booth at the county fair is the primary fundraiser for Lancaster County 4-H Council. New this year, 4-H Clover Kitchen will be located in the Exhibit Hall (see back page). 4-H Co-op clubs will help by staffing a 3–4 hour shift at the Clover Kitchen. At any given time, 3–5 youth (age 9 & up) are needed with 2 adults supervising. You can practice with a bowl of ice cream and a box of cake mix. For more information, call Robin Ambroz-Hollman at 540-2276. All food booth volunteers are STRONGLY ENCOURAGED to attend the training on Thursday, July 30, 6–7 p.m. at the Lancaster Event Center, Exhibit Hall. Learn about food safety, customer service and volunteer responsibilities.

Static Exhibit Check-In
Monday, Aug. 3, 4–8 p.m.
Static exhibits do not preregister, but must be physically checked in during Static Exhibit Check-in on Monday, Aug. 3 between 4–8 p.m. at the Lancaster Event Center, Lincoln Room. An adult — club leader or parent(s) — should assist 4-H members in entering exhibits. All entry tags, additional information, recipe cards, data tags, etc. MUST be attached at this time.

Interview Judging, Aug. 4
Interview judging is Tuesday, Aug. 4 starting at 9 a.m. in the Lincoln Room. 4-H’ers have the opportunity to talk to judges about their fair exhibits and share their trials and lessons they learned. 4-H’ers also learn what the judge looks for and how to improve skills. 4-H’ers may interview judge ONE exhibit from each project area. Refer to page 37 of the Fair Book for project areas which have interview judging. Members, parents or leaders can call the extension office at 441-7180 to sign up members for a five-minute time slot — preregister between July 6 and 31. If slots are still available, may sign up during Static Exhibit Check-in on Monday, Aug. 3, 4–8 p.m.

State Fair Gate Passes
State Fair gate passes may be purchased and picked up at the extension office AFTER County Fair. These passes are for 4-H members and their immediate family only.

Volunteer at the 2009 Nebraska State Fair!
Hundreds of people volunteer their time and energy in making the 4-H section at the Nebraska State Fair incredibly successful. Along with the opportunity to participate in this great event, meet new people and provide assistance to fairgoers, each volunteer will receive a free parking pass and gate entrance pass to the State Fair for the day(s) they volunteer.

A schedule of events and volunteer times, as well as a volunteer interest form are online at http://4h.unl.edu/programs/statefair. For more information, contact Doug Swanson at 472-2805.
Energy Vampires: Are Electrical Appliances Sucking Energy From Your Home?

As I turn off the lights to go to sleep, my room is filled with an eerie blue-green glow. Cell phone charger and standby lights flicker, while the whir of everything adds dull white noise to the scene. These sights and sounds are the calling cards of energy vampires. These devices are always ready to operate or receive a signal, they constantly pull energy, even when turned "off." Like vampires, they silently suck energy from your home, wasting energy and adding to your electric bill.

According to the EPA, an average American household spends about $100 per year on this wasted energy. Sometimes called "phantom" or "standby" energy loss, this energy waste represents a small percentage of a household's electrical use, but nationwide, the effect of energy vampires is adding up.

The EPA estimates in the United States, phantom energy loss results in 100 billion kilowatt-hours of energy waste annually. This waste costs consumers more than $10 billion and releases over 70 million metric tons of carbon dioxide into the atmosphere annually.

The major energy wasting culprits in most homes are chargers for electronic devices which contain rechargeable batteries; things like cell phones, digital cameras, MP3 players and laptops. Most of these chargers pull the same amount of energy at all times—even when the device is not being charged. Other places to look for energy wasters would be the home entertainment system, the computer desk and the night stand. Any electronic device with a standby or an energy saving mode is an energy vampire.

There is only one way to kill a vampire — unplug it. The simplest solution to phantom energy loss is to unplug all chargers and electronic devices. To save yourself the trouble of crawling under your desk and behind your entertainment system every day, simply plug all energy vampires into a surge suppressor power strip that has an on/off switch. Flip the switch before you go to work or before you go get coffee. When you unplug your vampire, your house will be vampire free.

Eliminating energy wasters in your home is one small step towards energy conservation. It is a simple way to both prevent energy waste and save money.

Michael McKinney
UNL Partners in Pollution Prevention (P3) Intern
Planning Department Seeks Input
Expanded Rural Business in Lancaster County?

Working with the Lancaster County Planning Department, the Lincoln/ Lancaster County Planning Department is looking at expanding the language in the current Lancaster Zoning Resolution for home occupations. There has been discussion of making more accommodation for home-based businesses in the agricultural areas to allow employees and expand what could be done with an expanded home occupation. This would give home owners flexibility in carrying on a business.

A report on “Expanding Home-Based Business in Rural Lancaster County” has been prepared by the Department and is available at http://www.lincoln.ne.gov/city/plan/study/ruralbus/

Currently a home-based business or “home occupation” is limited to family members only, residing at the residence. No more than 20 percent of the total square footage of all buildings can be used for the business. Some residents have requested this be expanded to allow the hiring of employees, allow a larger area and allow more business uses. Currently such a change would require a change of zone to Business Zoning.

The Department has met with the County Board, Planning Commission, county agencies and many towns to define what might be desirable and what problems might arise. It appears there is a desire in the county to allow a more intense home based business if it is limited, has conditions and buffers and there is a public hearing and notification of neighbors. The Department is currently developing a draft change to the Zoning Code. The Lincoln/Lancaster County Planning Department is very interested in comments and suggestions on how this might be crafted and issues to be addressed or avoided. If you have some ideas on this, please contact the department via the link on the web site above and use the “comments” page, or contact: Michael DeKalb Lincoln/Lancaster County Planning Dept Lincoln, NE 68508 (402) 441-6370.

Food Entrepreneur Assistance Program Seminar, Aug. 15

The University of Nebraska-Lincoln Food Processing Center is offering a one-day seminar for all individuals interested in exploring the idea of starting a food manufacturing business. The “From Recipe to Reality” seminar will be offered on Saturday, Aug. 15. Pre-registration is required and space is limited. Registration deadline is Aug. 3. Contact Jill Gifford at 472-2819 or jgifford1@unl.edu for an information packet.

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Town Hall Meeting

Thursday, Aug. 6 • 6:30–8 p.m.
Lancaster Event Center, Lancaster Room

The Lancaster delegation of State Senators will hold a Senators’ Town Hall meeting at the Lancaster County Fair. The meeting will offer residents an opportunity to express their views and learn about issues currently impacting our state.

Household Hazardous Waste Collections

No latex paint will be accepted at these household hazardous waste collections. These collections are for household only, not for businesses. Only residents of Lancaster and Lincoln County can bring items to collections. For more information, call the Lincoln-Lancaster County Health Department at 441-8040.

Saturday, Aug. 29
9 a.m. – 1 p.m.
Lincoln Industries, 600 W. E St.
Saturday, Sept. 19
9 a.m. – 1 p.m.
Voyance Tech, 4021 N. 56 St.
Saturday, Oct. 24
9 a.m. – 1 p.m.
Woods Park (31 & J St.)

Free Subscription

Subscriptions to The Nebline 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.

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The Nebline is published monthly (except December) and mailed to more than 11,000 households in Lancaster County.

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4-H Clover College is Hands-On Learning & Fun

Held each June, 4-H Clover College is a four-day series of hands-on workshops for youth presented by University of Nebraska-Lincoln Extension in Lancaster County. Emphasis is on developing life skills through learning-by-doing. This year’s Clover College, held June 16–19 featured 49 workshops and 726 total registrations! A special thank you to the 72 instructors and assistants! More photos are online at http://lancaster.unl.edu/4h

Can You Guess It?

Did you guess it? Find out at http://lancaster.unl.edu
Did you guess it from the July NeblInE? Mosquito Larvae

U.S. Drought Monitor Map

As of July 7, Lancaster County was not in drought conditions

For the most recent map, visit http://www.drought.unl.edu/dm
Source: National Drought Mitigation Center, University of Nebraska-Lincoln

Clover Kitchen

4-H Council’s concession stand at Lancaster County Fair

The 4-H Clover Kitchen concession stand at the county fair is Lancaster County 4-H Council’s primary fundraiser. A non-profit organization, 4-H Council financially supports several 4-H youth programs and activities such as:
• Achievement Night
• 4-H Kick Off
• Support for state and national contest registrations
• 4-H promotional activities
• College and camp scholarships

New name! New location!

$1 OFF any purchase of $5 or more

Valuable Coupon

$1 OFF any purchase of $5 or more

Clover Kitchen in the Exhibit Hall
2009 Lancaster County Fair
August 5–9 • Lancaster Event Center

Can you guess it? Find it on the July NeblInE? Mosquito Larvae