8-2009

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 household 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 irrigating 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 needs (low, medium or high) and plant in your landscape based on their soil pH. When the soil testing laboratory knows the intended use of the soil they can give recommendations appropriate for your needs.

Proper Planting to Reduce Water

Incorporating organic amendments to the soil improves its physical and chemical properties. Amendments help the soil hold water and nutrients and they improve water movement through the soil. Adding soil amendments results in a healthier plant environment, allowing easier root development and fewer soil related problems. Incorporating 3 inches of compost to a depth of 8 inches will improve the drought tolerance of landscape plants. As a matter of fact, for every 1% increase in organic matter content, an acre of soil can hold as much as 16,500 gallons of water.

Place plants with low water needs at high elevations and plants with high water needs in flat areas or at lower elevations.

Irrigate from midnight to 6 a.m. to allow the grass to dry and become stressed. 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.

Regardless of drought conditions, allow the grass to dry and become stressed. They release nutrients slowly over an extended period of time resulting in more uniform growth rates and more water-efficient plants. Excess nitrogen causes rapid growth and increases a plant’s demand for water. Continue to mulch. Add one to three inches of additional mulch each year. Maintaining a uniform layer of mulch over plant roots is one of the best water conservation practices for your landscape.

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.

Mulch helps conserve moisture and it maintains a uniform soil temperature.

It is best not to irrigate based on a schedule. Irrigate based on plant need.


### Natural Sources of Nitrogen for Plant Growth

**Tom Dorn**
UNL Extension Educator

Some plants “make their own nitrogen.” If a legume (i.e., clover, soybean, 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 nodule formation occurs, the plant usually requires 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 alfalfa, clover (e.g., crimson clover, sorghum, wheat, forage grasses, etc.) and non-legume plants such as broadleaf crops (e.g., sunflowers, potatoes, sugar beets, cotton, etc.) are not consistently inoculated with these Rhizobium bacteria and must obtain the nitrogen they need from the soil.

In addition to nitrogen fixed by Rhizobium bacteria, other natural sources are used as a source of nitrogen. These sources include: mineralization of organic matter, which releases nitrogen that can be utilized by plants and nitrogen released as plant residues broken down in the soil.

Animal waste is a good source of natural nitrogen as well. Barnyard or poultry manure and other animal wastes (e.g., bat guano) were used as a source of nitrogen for centuries before inorganic nitrogen fertilizer came into popular use. A byproduct of the sewage treatment process, ammonia is utilized by many farmers in Lancaster County. Manure and biosolids supply nitrogen, phosphorus and many other nutrients required 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.

**Organic Sources of Nitrogen**
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 nitrogen (less than 1 pound per acre per year) is also contributed by rainfall in the microbiological processes in the soil, which when dissolved in the water in the soil disassociates into hydrogen and nitrogen 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.

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**TABLE 1. Total Crop Removal, lb/acre of Essential Nutrients by a 150 bushel corn crop.**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Total Crop Removal, lb/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>200</td>
</tr>
<tr>
<td>Phosphorus (P)</td>
<td>85</td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>154</td>
</tr>
<tr>
<td>Calcium (Ca)</td>
<td>42</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>44</td>
</tr>
<tr>
<td>Sulfur (S)</td>
<td>25</td>
</tr>
<tr>
<td>Iron (Fe)</td>
<td>0.10</td>
</tr>
<tr>
<td>Mn (Manganese)</td>
<td>0.06</td>
</tr>
<tr>
<td>Cu (Copper)</td>
<td>0.03</td>
</tr>
<tr>
<td>Zn (Zinc)</td>
<td>0.06</td>
</tr>
<tr>
<td>B (Boron)</td>
<td>0.06</td>
</tr>
<tr>
<td>Mo (Molybdenum)</td>
<td>0.03</td>
</tr>
<tr>
<td>Cl (Chlorine)</td>
<td>unknown</td>
</tr>
</tbody>
</table>

The air we breathe is about 78% nitrogen in the form of N₂ gas. The air contains about 21% oxygen in the form of O₂ gas. 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, ammonium (NH₄⁺) and nitrate (NO₃⁻). Other forms of nitrogen that are important to one of these compounds by natural or artificial means before they can be used directly as a source of plant growth.

**Anhydrous Ammonia**
Anhydrous ammonia (NH₃) is produced commercially by reacting nitrogen gas (N₂) from the atmosphere 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 fertilizing fertilizer due to its lower cost per pound of nitrogen and its relatively nutrient density (82% nitrogen by weight) which keeps the transportation cost per pound of nitrogen as low as possible.

Anhydrous ammonia is a gas that has temperatures and atmospheric pressure, but converts to the liquid state when sufficiently pressurized. The need for pressurized containers and additional personal safety precautions reduces some of the advantages for anhydrous ammonia over more easily handled forms of nitrogen. All other forms of inorganic commercial nitrogen fertilizers are derived from anhydrous ammonia. They are more expensive per pound of nitrogen because of the additional processing steps involved in the gaseous nature and greater transportation costs because they have lower nutrient density (82% nitrogen per pound of product) than anhydrous ammonia. These forms of nitrogen fertilizer have advantages in terms of personal safety and ease of storage and handling, and application which make them attractive to many farmers in spite of the higher cost per pound of nitrogen.

Urea and Urea - Ammonium Nitrate
Urea (CO(NH₂)) is produced by combining anhydrous ammonia (NH₃) with carbon dioxide (CO₂). Carbon dioxide (CO₂), is a byproduct of the anhydrous ammonia production process. It is produced by combining oxygen from the air (O₂) with the carbon atom that combined with stripping the hydrogen from the methane molecule). Fertilizers which contain more nitrogen can be produced using ammonium nitrate (UAN) solution are the most widely used nitrogen fertilizers in Nebraska after anhydrous ammonia. Dry pellets of urea is popular as a nitrogen fertilizer compared to other forms because of its relatively high nitrogen content (46% of the total weight is nitrogen), good storage and handling properties and widespread availability.

Urea-ammonium nitrate (UAN) is made by dissolving urea and ammonium nitrate in water. This results in an aqueous solution usually sold as over 28% nitrogen by weight (a more concentrated product containing 32% is also available in some locales). Liquid UAN solution is popular because of the versatility of formulations for use as a source of nitrogen, as well as widespread availability. The urea form of nitrogen cannot be utilized directly by plants. It must first be converted to the ammonium form by chemical processes in the soil.

Ammonium, in turn, may be directly used by the plant or converted to the nitrate form by microorganisms in the soil. The conversion of urea (CO(NH₂)) to ammonia (NH₃) occurs in a two-step process. When the urea combines with an acid, carbonic acid forms ammonium carbonate ((NH₄)₂CO₃). Ammonium carbonate is unstable and decomposes to form ammonia gas (NH₃) and carbon dioxide (CO₂).

The ammonia gas produced is chemically identical to anhydrous ammonia. If the ammonia gas is in physical contact with water, it reacts to form the ammonium ion (NH₄⁺). If the ammonium ion is in contact with the soil, it is attracted to the negatively charged clay and organic matter particles and is held in the cation exchange complex.

Broadcasting urea-based fertilizers without incorporating them with tillage carries the risk of nitrogen loss to the atmosphere by ammonia emission. If just enough moisture is present to hydrolyze the urea but not enough to convert it to ammonium and carry it to the soil, the urea is hydrolyzed by microbial processes in the soil. Volatilization is favored by high soil pH, warm temperatures, wet soils under drying conditions and crop residues that insulate the urea from the soil.

Under extremely unfavorable conditions, urea reacts with water to form ammonium nitrate and volatilizes. In addition, ammonium nitrate (NH₄NO₃) is formed by the reaction of ammonium nitrate with nitric acid (HNO₃)
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-processed foods can help provide a variety of nutritious meals for your family all year long.

How Canning Preserves Foods

The high water content of most fresh foods provides an ideal environment for microorganisms to grow and spoil or lose their quality for several reasons:

• growth of undesirable micro-organisms—bacteria, molds and yeasts
• activity of food enzymes
• reactions with oxygen
• 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 tissue.

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 compatible to plant seeds, can survive in the soil and sprout into harmful bacteria 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
• temperature between 40 degrees F and 120 degrees F;
• 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 food reduces their numbers only slightly. Peeling root crops, under- ground stem crops and tomatoes greatly reduces their numbers. Blanching also helps, but it’s vital to make sure recom- mended processing procedures and times are used.

Processing Methods

Whether food should be processed in a pressure cooker or boiling water bath depends on whether the bacterium botulinum 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 botu- linum bacteria. Low-acid foods have pH values higher than 4.6. They include red meats, seafood, poultry milk and all fresh vegetables except most tomatoes. Most food mixtures have pH values above 4.6 unless they include enough lemon juice, citric acid or vinegar to make them acid foods.

Botulinum spores are very hard to destroy at boiling-water temperatures. Therefore, process all low-acid foods using the 10–15–10 principle of processing—240 degrees F for 10 minutes or 250 degrees F for 5 minutes.

Acid foods contain enough acidity to inhibit botulinum spores and vegetative cell 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 consid- ered 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 by the addition of vinegar, lemon juice or citric acid. To destroy micro- organisms in acid foods processed in a boiling water bath, 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.unebraska. edu/serdft/foods:

• Let’s Preserve: Canning Basics (EC434)
• Let’s Preserve: Vegetable and Vegetable Produce (EC435)
• Let’s Preserve: Fruit and Fruit Products (EC456)

Heating With Wood

Scott DeVaul, UNL District Extension Forrester;
Scott Josiah, Nebraska Forest Service District Forester;
Becky Erdkamp, UNL Publications Assistant

Our forefathers heated their homes with wood because it was the only energy source available. They heated their home with electricity or natural gas, today, most people heat their home with wood because it was the only energy source available. To today, most people heat wood because it was the only energy source available.

Heating with wood is also environ- mentally friendly. Some fertilizers

Commercial Nitrogen

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Commercial Nitrogen

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Urea fertilizer broadcast to the soil surface may have losses exceeding 10–15 percent. On the other hand, surface-applied urea followed by sufficient irrigation to move the nitrogen into the soil will greatly decrease the 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). Monosodiummonophosphate (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 phos- phorus, 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 District

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. Soilborne seedbank 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. Overgrowth 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 sod is possible if a no-till planter is available. If not, the soil must be broken up after cutting to form the firm seed bed. It will likely take multiple passes with conventional farm equipment to break the sod. However, a roller can break it up faster. 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 oxygen. It is best not to irrigate based on a schedule. Irrigate based on plant need. When properly managed, turfgrass is more tolerant of drought condi- tions than you think.

Cultural practices like aeration, mowing and fertil- izing are typically done on a more schedule. Irrigation systems are designed to be engineered to meet the needs of the irrigation schedule. Watering directly on the turf will not raise the root zone. It will only increase the water runoff rate.

Even when water is available, reducing water use is a good idea. It lessens the demand on rural and municipal water supplies and reduces the cost of water treatment.

Nitrogen losses can affect the root system of the turfgrass, leading to problems with aeration, mowing and fertil- izer application. Turfgrass plants are not the same as plant need. When properly managed, turfgrass is more tolerant of drought condi- tions than you think. It actually causes the grass plant to explore deeper soil depths for moisture and oxygen. It is best not to irrigate based on a schedule. Irrigate based on plant need. When properly managed, turfgrass is more tolerant of drought condi- tions than you think.

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Handling Food Safely on the Road

V-A-C-A-T-I-O-N-O! Oh, how we long for the eight letter word every summer, when millions of us eagerly get away from school and work. We take to the road in cars, motorcycles or recreational vehicles; live on boats; relax in beach or mountain vacation homes, tents and camp.

No matter where we go or what we do, there is a common denominator—food. This food, which runs through all of our summer travels and relaxation—it’s called food.

The “road” to food safety, however, can either be a bumpy one or smooth—depending on what precautions are taken handling meals as we travel this summer.

The U.S. Department of Agriculture’s nationwide, toll-free Meat and Poultry Hotline reminds everyone some simple, common-sense food safety rules can save a vacation from disaster. Following this advice could make the difference between a vacation to remember and one that is remembered because people got sick from improperly handled food.

First, some general rules, while traveling this summer:

1. Plan Ahead... If you are traveling with perishable foods (meat, poultry, eggs, salads) for a day or more, pack safely...

Plan to keep everything on ice in your all-important cooler. Never sit out for more than 2 hours (1 hour if temperatures are above 90 degrees F).

2. 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.

3. When Boating... If boating on vacation, or out for the day, make sure the all-important cooler is along. Don’t let perishable food sit out while swimming or fishing. Remember, food sitting out for more than 2 hours is not safe to eat. The time frame is reduced to just 1 hour if the outside temperature is above 90 degrees F.

Now, about that “catch” of seafood—again the big one did not get away. For fin fish: scale, gut and clean the fish as soon as they are caught. Wrap wild-caught fish in water-tight plastic and store in a bushel box until cooked. Store in a refrigerator or freezer.

Crabs, lobsters and other shellfish must be kept alive until cooked. Store in a bucket or laundry basket under wet burlap. Crabs and lobsters are best eaten on the day they are caught. Live oysters can keep 7–10 days; mussels and clams, 4–5 days.

Caution: Be aware of the potential dangers of eating raw shellfish. This is especially true for persons with liver disorders or weakened immune systems. However, no one should eat raw shellfish.

When at the Beach... Plan Ahead. Take along only the amount of food to be eaten without leftovers. If grilling, make sure local ordinances allow it.

Bring the cooler! Partially bury it in the sand, cover with blankets and shade with a beach umbrella.

Bring along disposable moist towelettes for cleaning hands.

If dining along the boardwalk, make sure the food stands frequented look clean, and have equipment sterilized and cold foods cold. Don’t eat anything that has been sitting out for more than 2 hours (1 hour if the temperature is above 90 degrees). If any food is used for a while, check the refrig-

erator. If unplugged from last year, thoroughly clean it before using. Make sure the refrigerator is not used for more than a few hours.

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When in the Vacation Home or the Recreational Vehicle... If a vacation home or recreational vehicle has not been used for a while, check leftover canned food from last year. The Meat and Poultry Hotline recommends canned foods which have been exposed to freezing and thawing temperatures over the winter be discarded.

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Financial Security: Consumer Credit

Credit can be a successful financial management tool. Using credit allows you flex-

dibility 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. It is Important to Remember:

- Budget your credit spending carefully.
- Shop around for the lowest total finance charges.
- You should establish a debt limit and stick to it.
- Credit contracts should be read carefully and questions answered before you sign.
- Do not depend heavily on credit to pay for day-to-day living expenses.
- Pay your bills on time to ensure you can continue to use credit.
- Credit is best used for items where their value will outlast the actual cost or finance charges paid for the use of credit.

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To stop a credit reporting agency from reporting incorrect information on your credit report, use the form provided by the credit reporting agency.

If you have recently been denied credit, employment, insurance or rental housing based on information contained in your credit report, you may be entitled to a copy free of charge from the company that issued the report on which the credit denial is based. In particular, you should obtain a copy of your credit report before making large purchases where you plan to use credit, such as a car loan or a mortgage. In many cases credit reports have minor inaccuracies that need to be corrected. Sometimes there are errors that might result in your being turned down for a loan or the need to correct an incorrect credit report, use the form provided by the credit reporting agency.

Credit Reporting Agencies:
- Equifax: 1-800-685-111
- Experian: 1-888-397-3742
- Trans Union: 1-800-916-8800.

Source: eXtension.org

Sizzling Summer Sampler

The Family & Community Education (FCE) Sizzling Summer Sampler held on July 9 was a success with 120 FCE members and friends in attendance.

Fair begins Aug. 5 and runs thru the 9. Lots of things are happening this year at the beautiful Lancaster Event Center. Take your children out and show them what 4-H is all about. 4-H is a great organization to get them involved. While learning new things they will have fun and make new friends.

Summer Sizzler in July was a great event, Craig enjoyed it. A big thanks for all the help to make it a success.

Participants will get ideas on how to make their dollars go further by using what they have around the home, recycling items, being a wise shopper. Bring your ideas. If you are not an FCE member and would like to attend call Pam at 441-7180 so informational packets can be prepared.

September Council Meeting

The next FCE Council meeting will be September 26, 7 p.m. at the Lancaster Extension Education Center. The business meeting will prepare the program on Estate Planning including election of officers and officially open the FCE year.

Congratulations to Stacie Green demonstrated “Asian Cloth Wrapping Techniques”.

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- Pay your bills on time to ensure you can continue to use credit.
- Credit is best used for items where their value will outlast the actual cost or finance charges paid for the use of credit.

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- Shorten the term of debt.
- Reduce interest and finance charges paid for the use of credit.
- Periodically, get a copy of your credit report and check it for accuracy and completeness. It is especially important before making large purchases where you plan to use credit, such as a car loan or a mortgage. In many cases credit reports have minor inaccuracies that need to be corrected. Sometimes there are errors that might result in your being turned down for a loan or the need to correct an incorrect credit report, use the form provided by the credit reporting agency.

If you have recently been denied credit, employment, insurance or rental housing based on information contained in your credit report, you may be entitled to a copy free of charge from the company that issued the report on which the credit denial is based. In particular, you should obtain a copy of your credit report before making large purchases where you plan to use credit, such as a car loan or a mortgage. In many cases credit reports have minor inaccuracies that need to be corrected. Sometimes there are errors that might result in your being turned down for a loan or the need to correct an incorrect credit report, use the form provided by the credit reporting agency.

Credit Reporting Agencies:
- Equifax: 1-800-685-111
- Experian: 1-888-397-3742
- Trans Union: 1-800-916-8800.

Source: eXtension.org

Credit is best used for items where their value will outlast the actual cost or finance charges paid for the use of credit.
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 rate. Bifenthrin is also an irritant. August. Use the higher dosage of the insecticide.

Optimum 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 low temperature, or in a food dehydrator. I prefer to freeze or process them. Mince the herbs and place them loosely in a jar or bag to freeze. You can also cover minced herbs with water or whirl them in the blender with water and put them in ice cube trays, yielding little nuggets of flavor to add to soups and stews.

Harvesting and Preserving Herbs

Becky Seth

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.

Herb flavors can also be preserved in oil or vinegar. Simply tear or bruise the leaves and fill a jar with them. Cover with olive or vegetable oil or wine-based vinegar and store for about two weeks in a warm dark place. Strain the oil or vinegar, put in decorative bottles and add fresh decorative sprigs of herbs. Oils and vinegars can be made from a single herb or a combination.

Making pesto is another great way to preserve the taste of herbs for later use. Although basil pesto is most common, try making pesto from other herbs as well, particularly cilantro, tarragon, oregano and sage.

Pesto freezes well. Herbs for potpourri or decorative uses such as lavender, artemesias 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.

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.

For more information and to register, visit http://extensionhorticulture.unl.edu.
**Lancaster County Fair**

August 5—9

**Lancaster Event Center**

84th & Havelock, Lincoln

www.superfair.org

(402) 441-6545

Get Ag-cited!

**New this year**

Gate admission tickets will be required!

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

**FREE Entertainment Tent**

U-Stop Convenience Shops

6 locations in Lincoln

Pick up tickets at the radio station (4343 0 St.) or listen for live remote locations

5601 South 56th St., Alamo #4

**Schedule & Map**

**Fairground Rules**

- No smoking inside the buildings.
- No bicycles, scooters, ATVs 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.

**Sponsors**

Advance Auto
AGP Grain Cooperative
Awards Unlimited
Bob’s Mobile Flashing Signs
Campbell’s Nurseries & Garden Centers, Inc.
Capital Animal Clinic
Cash Mart
Cash-Minis Distributing
Celanese Electric Motor Service
Cook's Hardware
Couple Insurance Agency Inc.
Design Associates
Double Eagle Beverage
Eagle Services
Pelt & Betsy Egan
Earl May Nursery & Garden Center
Erickson & Soderstrom Law Office
Farmers Cooperative of Dordt
Fort Western
Froggy 98
Graham Tire Company of Lincoln
Greater Lincoln Osteopathy Club
Hamiltion Equipment
Hamiltion Service Company
Hancock Fabrics
Hilckard
IKON Office Solutions, Inc.
Jennie & Sons Refuse Service K & Z Distribution - Miller Brewhing
Kawasaki Motors Corp.
Lancaster County Farm Bureau, Inc.
Lincoln Convention & Visitors Bureau
Lincoln Needldworker’s Guild
Midwest Sound & Lighting
Midwest Tents & Events
Misty’s Restaurant & Lounge
Monsanto
NAPA Auto Parts
Nebraska Tire & Energy
New Belgium
Orca Auto Parts
Orscheln Farm & Home
Parrent-McGowan Linen & Uniform Rental
Pawz
Plains Power & Equipment, Inc
Roca Berry Farms
Roos’ PowerSports
Rotella’s Bakery
Russ’s Market
Sam’s Club
Sapp Brothers Petroleum of Lincoln
Scheirman Construction, Inc
Sew Creative
Sherman-Williams Co
State Farm Insurance - Agent
Stewarts & Sons Gravel and Sand
T.O. Haas Tire
Tracy’s Body Shop
Travelodge
Weather Cooperative
Wolfe Ace Hardware
Wolfe Brothers
U-Stop Convenience Shops

**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.**

**Get Ag-cited!**

**Chris Cagle in concert**

Saturday, Aug. 8 at 7:30 p.m.

COMING NEXT YEAR!

**Super Fair**

**Lancaster County**

August 6–15, 2010
**NEW!**

**PRE-FAR SE SCHEDULE**

**Saturday, August 1 — Open Class Dairy Goat Show (Pavilion 1 - West Arena)** — 8 a.m. Caprine Connoisseur Classic — Saturday is a double show the first one is sponsored by the Lancaster County Fair. The second one is sponsored by the Nebraska Dairy Goat Association. 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 a recognized Nebraska Dressage Association schooling show.

**Open Class Horse Performance and Speed Events (Multipurpose Arena)** — 9 a.m. Exhibitors of all ages compete. Speed Events include Polo, Solo Race, Keynote, Flag Drop Race and Barrels. Performance events include English Equitation, English Pleasure, Walk Trot, Western Pleasure, Western Horsemanship and Racing.

**Sunday, August 2 — Open Class Dairy Goat Show (Pavilion 1 - West Arena)** — 8 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 dairy goats and compete for championship honors.

**Monday, August 3 — Static Exhibit Check-in — 4-H & Open Class (Lincoln Room)** — 4-8 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 Fair Book at www.supercalfair.org.

**Tuesday, August 4 — 4-H Horse Dressage Show (Pavilion 3 - Arena)** — 8:00 a.m. Dressage is the performance of a specific pattern of movements — horse and rider are judged on presentation, accuracy and obedience of the horse. English attire and tack are used.

**4-H Horse Hunter Hack Jumper Show (Any Countryman Area)** — immediately following 4-H Horse Dressage Show

**Hunter Hack Jumper Show — Hunter Hack Jumper Show (Any Countyman Area)** — immediately following 4-H Horse Hunter Hack Jumper Show

**4-H Horse Hunter Show — Hunter/Equitation (Any Countryman Area)** — 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 mold is judged on the horse’s ability to jump and the rider’s ability to control the horse and navigate the course. 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)** — 7-11 a.m.

**4-H English Horse Show — English Showmanship/English Pleasure / English Equitation (Any Countryman Area)** — 8 a.m.

**Static Exhibits on Display (Lincoln Room)** — 9 a.m.-9 p.m.

**Antique Tractors on Display (North of Buildings)** — 9 a.m.-9 p.m.

**Carnival — Live annoucements**

**NEW!**

** petting Zoo and Pony Rides (Pavilion 1)** — 9 a.m.-9 p.m.

**NEW!**

**Rainforest Experience (Pavilion 2)** — 7 a.m.-9 p.m.

**NEW!**

**4-H Household Pets Show/Quiz Bowl (Lincoln Room)** — Noon 4-H members exhibit a wide variety of household pets, including guinea pigs, hamsters and caged birds. Judges interview exhibitors on overall care and knowledge of their little critters. Quiz bowl follows.

**Rainforest Encounters Exhibit (Between Pavilions 1 & 2)** — Noon-8 p.m.

**NEW!**

**4-H Poultry Show (Pavilion 1 - West Arena & Walkway)** — 12:30 p.m.

**NEW!**

**4-H Friesian Horse Show — Hunter/Jumper Show (East of Amy Countryman Arena)** — 4:00 p.m.

**NEW!**

**4-H Horse Show — Horsmanship/Pairs/Freestyle Drill Teams (Multipurpose Arena)** — 5 p.m.

**NEW!**

**6-H Rabbit Breed Identification Contest/Quiz (Pavilion 3 - Walkway)** — 6:30 p.m.

**NEW!**

**Rainbow Express (Exhibit Hall)** — 7 p.m.

**NEW!**

**4-Hers model their clothing projects with pride and style. Judges look for selection, fit, creativity and family involvement.**

**NEW!**

**Viz in Concert (Nebraska Lottery Entertainment Tent)** — 9 p.m.

**NEW!**

**FREE entertainment! Viz is a solo male singer-songwriter and recording artist, fitting into the new rage of emo-singer-songwriters. He has a sound the best of a U2 meets Coldplay and Coldplay. He has written, arranged and produced every song on his albums. He plays the piano keyboards in ever-changing soundscapes and played about 80% of the guitars. He has self-released two albums, ‘Fearless’ (winner of album of the year for independent artists) and ‘Paper and Sound.’”

**NEW!**

**Open Class and 4-H Animal Shows** — 12:00 p.m.

**NEW!**

**Antique Tractor on Display and on Parade** — See more than 75 tractors illustrating advancements in agricultural technology. The Lankenau Tractor Museum will bring significant tractors such as the 100-year-old Minneapolis Farm tractor which started Nebraska’s Tractor Testing.
SATURDAY, AUGUST 8

**Capital City Kiwanis Breakfast (Concession Stand Between Pavilions 1 and 4)**
- 7 a.m.–11 a.m.
- NEW this year at the Lancaster County Fair!

**Open Class Rabbit Show**
- 9 a.m.–9 p.m.
- This is the very best Lancaster County has to showcase! Residents exhibit their talents and earn ribbons! Open Class categories of Horticulture, Foods, Textiles and Fine Arts are open to anyone. 4-H youth exhibit projects in FFA Ag Mechanics.

**Antique Tractors on Parade (North of Buildings)**
- 9 a.m.–9 p.m.
- Touch up the appearance of your tractor! Find many of the state’s most colorful antique tractors lined up for this event. Many new antique tractors will be on display. There is no need to bring food as food will be available at the Lancaster County Fair.

**4-H Horse Special Needs Show**
- 9 a.m.–9 p.m.
- This year’s 4-H Horse Special Needs Show is an event that provides an opportunity for special youth to demonstrate their abilities. Exhibitors of all ages can succeed in this show. Open to special needs youth. **Tent**

**Rainforest Encounters Exhibit**
- 9 a.m.–9 p.m.
- Contact to open all youth ages 3–6 Fun, Free event to watch! Objective is to raise on environment. The Lancaster County Fair is featuring an ALL NEW rainforest exhibit that explores the tropical rainforest. Special appearances by 20 rainforest animal friends such as Treetop the singing toucan, Archie the two-banded sheld and Robby the Ring-Tailed Lemur. Audience participation gives kids an opportunity to interact with the anima! Air-conditioned tent seats 500.

**4-H Pedal Tractor Pull Contest (Exhibit Hall)**
- 9 a.m.–9 p.m.
- Contact to open all ages 4 up Fun, Free event to watch! Objective is pedal tractor traction is to a special weight traser class - sled has a weight box and weights are added for the different age classes. Long pull is in each age class. Mini-tractor will be provided. Registration open on Fri, Sat and Sun. Food, Taxidermy and Rescue will be available.

**Antique Tractors on Parade (Around the Fairgrounds)**
- 9 a.m.–9 p.m.
- NEW this year the University of Nebraska-Lincoln Laruen Tractor Museum in the North of Buildings. Contact to open all ages 4 up Fun, Free event to watch! Objective is pedal tractor traction is to a special weight traser class - sled has a weight box and weights are added for the different age classes. Long pull is in each age class. Mini-tractor will be provided. Registration open on Fri, Sat and Sun. Food, Taxidermy and Rescue will be available.

**Rainforest Education Court**
- 9 a.m.–9 p.m.
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**Open Class Sheep Show**
- 9 a.m.–9 p.m.
- Exhibitors of all ages show their sheep in breeding (raised for their wool) and market and feeder class.

**Open Class Goats**
- 9 a.m.–9 p.m.
- Exhibitors of all ages compete for championship honors with their market hogs.

**Open Class Chickens**
- 9 a.m.–9 p.m.
- Exhibitors of all ages show their sheep in breeding (raised for their wool) and market and feeder class.

**Open Class Poultry**
- 9 a.m.–9 p.m.
- Exhibitors of all ages show their sheep in breeding (raised for their wool) and market and feeder class.

**Open Class Turkeys**
- 9 a.m.–9 p.m.
- Exhibitors of all ages show their sheep in breeding (raised for their wool) and market and feeder class.

**Open Class Swine Show**
- 9 a.m.–9 p.m.
- Exhibitors of all ages compete for championship honors with their market hogs.

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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 insectsicides 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.

• The chigger bites showed up in the morning so they thought they were getting bitten in bed. In fact, chigger bites don’t usually appear until a day after the actual exposure. This couple spent $200 to treat fleas, and treated both indoors and outdoors. The indoor treatment was a waste of money and unnecessarily exposed the inhabitants to chemicals. I question whether the outdoor flea treatment had much effect on chiggers.

Chiggers

A chigger is the larval stage of a velvet red mite (Trombicula alfreddugesi) 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, snakes, 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 from the time of hatching until 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 a week or two, or longer. Insect repellents may prevent bites.

Fleas

Fleas are more active in warmer months. They are almost always associated with pet or wild animals and can be “dropped off” by animals wandering through the yard. Fleas prefer pets or wild animals, but will also jump and feed on people. Fleas prefer warm and, even though they are small (pinhead size), fleas are visible so the person getting bitten should be able to see the flea biting him. The most common place for flea bites is on the legs and ankles, which are usually closer to the carpet or soil, but they will feed on any convenient location.

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 addition of the baby’s diaper area, her body was completely covered with flea bits. This family did not have a pet.

Mosquitoes

Mosquitoes are associated with outdoor activities in the summertime. Abundant rainfall brings more mosquitoes. 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, picardin) and two “biostatic” repellents (oil of lemon eucalyptus; JR355). For more information about active ingredients in these repellents go to http://www.cdc.gov/nicidds/dhb/dvwestnile/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 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

Barb Ogg
UNL Extension Educator

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 were there. Spring Creek Prairie, three miles south of Denton, is an 808-acre tallgrass prairie. Visitors can enjoy miles of walking trails, nearly 650 acres of native (non-cultivated) 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 $50 to rent the education room for five hours. For more information, go to www.springcreekprairie.org or call 797-2381.

To see more photos from the Insect Workshop, go to http://lancaster.unl.edu/pest.
For a schedule, go to http://4h.unl.edu/volunteers/forum.htm
Early bird deadline is Aug. 11. Contact Tracy for more information.

Entries Due Aug. 9

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

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

The North Central Region 4-H Volunteer Forum is a conference to enhance 4-H volunteer education and to promote adult-youth partnership in the 4-H program. The forum will be held Oct. 1-4 in Lincoln. Educational sessions will focus on activities which can be used in clubs. There will also be keynote speakers, tours, networking and exhibits. 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 Tracy for more information. For a schedule, go to http://th.unl.edu/volunteers/forum.htm

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.

Deb Badeer

Lancaster County 4-H is proud to announce Deb Badeer as winner of August’s “Heart of 4-H Award” in recognition of outstanding volunteer service.

Deb has been a 4-H volunteer for 20 years and has helped judge the Home School Express club (which had nearly 150 members) and Clover Buds club, and is currently leader of the High Flyers Club. When Nebraska 4-H started the Public Service Announcement (PSA) Contest, Deb wrote introductory materials and for many years coached youth on PSAs and speeches at workshops and club meetings. In 1995, Deb wrote and produced a promotional video for 4-H Clover Buds (now called Clover Kids). As part of the Citizenship – Public Adventures 4-H project, she takes youth to the State Capitol to meet Senators, learn the legisla
tive process, learn to speak on issues/lobby and observe legislative debate. She has also volunteered in several 4-H areas at the Lancaster County Fair.

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

The 4-H Life Challenge contest focuses on Family and Consumer Science project areas. Youth answer written questions and give an oral presentation applying what they have learned in their 4-H project to a real-life situation. The county junior Life Challenge contest was held May 30. Jaime Stephenson was awarded the Grand Champion rosette.

The county junior Life Challenge contest was held July 11 and Mary Dowd 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 participants were Anne Greff, Antonio Hoover, Charles Dowd and Molly Noel. Team 2 participants were Angelica Hoover, Helen Dowd, Jaime Stephenson and Jessica Stephenson. They received 1st place out of 28 teams in the Wardrobe Challenge. Team 3 participants were Ceirra Austin, Dylan Hoover and Maddie Gabel.

4-H’s Test Animal Science Skills at PASE

Lancaster County 4-H livestock judging teams competed in various events at this year’s Premier Animal Science Events (PASE) on June 29 & 30 at UNL East Campus. Lancaster County had one intermediate livestock judging team competing in the state contest. Team members were: Chandler Kramer, Trevor Spath, Matthew Grimes and Rachel Johnson. The team finished 3rd overall. Individual horses went to Rachel Johnson, 4th place individual overall, Trevor-Spath, 3rd place Sheep, and Chandler Kramer, 5th place Oral Reasons. All four individuals did a great job. Congratulations to the 3rd place Intermediate Livestock Judging Team. Lancaster County had two Senior Livestock Judging Teams. Team members were:

Erica Peterson, Grant Schrick, Ryan Nelson, Emilia Wispell, Cody DeWald and Taylor Johnson. All did a great job.

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 Jaime Stephenson (senior champion), Anne Greff (senior reserve champion), Joshua Hoover (junior champion) and Michaela Hoover (junior reserve champion).

County Fair Horse Exhibitor Dress Code

Shirt and blouses must be all white, including button, thread, etc., with convertible collars (one that is meant to be folded at the seam) and long sleeved. Tuxedo, turtleneck or other stand-up collar are not permitted. No national, county or club emblems, medals, etc., permitted. Shear, see-through or form
ing blouses are inappropriate and not permitted. The bottom line — the tradi
tional “pearl snap” western shirt or a white “Cowboy Oxford” 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 safety-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, the white or light colored shirt or a short sleeved polo shirt in any color is acceptable. 3. Arm band — 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 padlock boot or garter straps with padlock boots are acceptable!

Western Attire:

Shirt sleeves must be all white, including button, thread, etc., with convertible collars (one that is meant to be folded at the seam) and long sleeved. Tuxedo, turtleneck or other stand-up collar are not permitted. No national, county or club emblems, medals, etc., permitted. Shear, see-through or form
ing blouses are inappropriate and not permitted. The bottom line — the tradi
tional “pearl snap” western shirt or a white “Cowboy Oxford” 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 safety-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.

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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

For same-day exit and re-entry, you can get a hand stamp from the gate attendant.

**Shoveling 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.
- **Bee:** 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 or/comb their animals. Any use of adhesives is prohibited. Exhibitors will be allowed to use coat dressings, conditioners and shaving creams only. No use of products containing color additives or color transfer allowed.
- **Swine:** No feeding allowed in wash rack area to help eliminate clogging of the drain.
- **Babe Contest:** There has been a new class added this year's Swine show. Please see page 61 of the fair book for more information.

**Changes for Horticulture Exhibits**

Changes have been made in the Horticulture area. Please keep these changes in mind when you are preparing your exhibits 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 judged.
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 been 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 tags forms parts A & B are now available as a fill-in PDFs online at http://lancaster.unl.edu/4h/Fair

**Furnishings on a Shoestring**

The former Furnishings on a Shoestring project classes can now be found under Design Decisions:

- **(2257015)** Recycled or remade piece of furniture for the home, made or finished by using common object or material in a creative way. Could be made from reused or recycled products.
- **(2257015)** Remade or recycled piece of furniture for the home, made or finished by using common object or material in a creative way. Could be made from reused or recycled products.

**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 Clover 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. Youth gain practical experience handling food safely and counting change. They also gain life skills, such as responsibility, critical thinking and social skills. For more information, call Robin Ambroz-Hollman at 540-2376. 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. 4-8 p.m. at the Lancaster Event Center, Exhibit Hall. All exhibits will be released on Monday, August 3. 4-8 p.m.

**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.

**Static Exhibit Release Time**

Sunday, Aug. 9, Noon—2 p.m.

All static exhibits will be released on Sunday, Aug. 9 between Noon–2 p.m. This includes 4-H and Open Class exhibits.

**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.

- **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 the Lincoln Room**
  - **Teen tour guides are needed for Fair Fun Day for child care groups on Friday, Aug. 7 at 9-10 a.m., and 1 p.m.**
  - **Lil’ Green mascot and escort 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 waistline 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, Saturday, Aug. 8, starting at 1 p.m.

Clover Kids Show & Tell is held in the Lincoln Room at the Lancaster Event Center. Adults are also encouraged to stop in and enjoy the event at this time. See page 33 of the Fair Book for more information. To register, call 441-7180 by July 31, or sign up at the static exhibit area Monday, Aug. 3, 4-8 p.m.

**Clover Kids County Fair Photography**

Adolescent skaters on Friday, August 7. There are also an adult and child 4-H’er opportunity to photograph at the fair. If you can help, please contact the extension office at 441-7180.

- **Furnishings on a Shoestring**
  - **(2257015)** Recycled or remade piece of furniture for the home, made or finished by using common object or material in a creative way. Could be made from reused or recycled products.

**Visit the 4-H State Fair**

- **Nebraska State Fair in Grand Island**
  - **4-H & FFA animal exhibitors will receive premium payouts and as they exit at the fair.**
  - **Participants in 4-H contests held DURING the county fair will receive their premium payout at the contest.**
  - **Premium payouts for all static exhibits and 4-H contests held PRIOR to the fair (such as Speech or Bicycle Safety) must be picked up on Sunday, Aug. 9, Noon-4 p.m. in the Fair Board Office. Premiums will not be paid out after 4 p.m. on Sunday, Aug. 9.**
  - **With proper identification, parents, guardians, 4-H club leaders, FFA chapter advisors will also be permitted to help fill out and sign for exhibitor premiums. No checks will be issued! No changes or corrections will be made on premium amounts after 14 days.**
Energy Vampires: Are Electrical Appliances Sucking Energy From Your Home?

Michael McKinney UNL Partners in Pollution Prevention (P3) Intern

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 coolers adds a dulcet noise to the scene. These sights and sounds are the calling cards of energy vampires.

Energy vampires are electrical devices that use energy even when not in use. Because 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 $108 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 astounding.

The EPA estimates in the United States, phantom energy loss results in $10 billion in 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.

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 cornering 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 to bed and your home will be vampire free.

Eliminating energy vampires in your home is one small step towards energy conservation. It is a simple way to both prevent energy waste and save money.
Planning Department Seeks Input on Expanded Rural Business in Lancaster County?

Working with the Lancaster County Board and the Lincoln/Lancaster County Planning Commission, 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 more 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.lancaster.ne.gov/city/plaz/study/ruralbus/

Currently a home based business or “home occupation” is limited to family members only, residing at the residence. 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 472-2419 or jgifford@unl.edu for an information packet.

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 in Lancaster County
444 Cherry Creek Road, Suite A
Lincoln, NE 68528-1507
(402) 441-7180
http://lancaster.unl.edu
E-mail: lancaster@unl.edu • Fax: 441-7148
Join us on YouTube, Twitter and Facebook http://lancaster.unl.edu/media

Lancaster Extension Education Center Conference Facilities
444 Cherryrreek Road, Lincoln

Extension Educator & Unit Leader
Gary C. Bergman

Extension Educators
Lorene Bartos
Maureen Burson
Tom Dorn
Alice Henneman
Don Janssen
Bark Ogg
Karen Wobil
Mary Abbott
Sonja Cochran
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Extension Technologists
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Support Staff
Pam Bronson
Kay Caffey
Deanna Cavault
Virginia Pennington
Chris Rosenbahl
Karen Wedding

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 Lincoln and Lancaster 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.
Voyage Tech, 4021 N. 56 St.

Saturday, Oct. 24
9 a.m. – 1 p.m.
Woods Park (31 & J St.)

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

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Address
City, State, Zip
Phone

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

For more information on 4-H, call (402) 441-7148 or visit the 4-H Web site at http://4h.unl.edu.
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.