The NEBLINE, September 2003

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Food Safety Q & A
Is This Food Still Safe to Eat?

Alice Henneman
UNL Lancaster County Extension Educator

Joyce Jensen
Lincoln-Lancaster County Health Department
Environmental Health Specialist

September is National Food Safety Education Month.

A typical food safety question is “Is this food still safe to eat?” Here are answers to questions about four frequently encountered situations. Always remember the standard food safety advice is “When in doubt, throw it out.” Follow that advice.

Q: Is it safe to refreeze raw meat and poultry that has thawed?

A: The U.S. Department of Agriculture (USDA) advises “Meat and poultry defrosted in the refrigerator may be refrozen before or after cooking. If thawed by other methods, cook before refreezing.

Meat/poultry that refrozes my suffer some quality loss as moisture may be lost during thawing.

Safety will depend on whether the raw product was handled properly before it was frozen, refrozen shortly after it was thawed, cooked to a safe temperature when it is eaten and handled safely if there are any leftovers.

The standard food safety advice is “When in doubt, throw it out.”

Q: Is there any way I can tell from the egg carton how old the eggs are? Are there some guidelines for how long eggs are safe to eat?

A: According to USDA “Many eggs reach stores only a few days after the hen lays them. Egg cartons with the USDA grade shield indicate which plant they came from, when the eggs were packed and sell by date.

Egg cartons with the USDA grade shield indicate which plant they came from, when the eggs were packed and sell by date.

Starting with Jan. 1 as 001 and ending with Dec. 31 as 365,” To access a “Julian Date Converter” to calculate the day/month pack date from the Julian Date, go to: www.ams.usda.gov/poultry/consumer/InterpretPackDate.htm

Though not required, egg cartons also may show a “sell by” date beyond which they should not be sold. In USDA-inspected plants (indicated by the USDA shield on the package), eggs can’t exceed 30 days beyond the pack date. Plants not under USDA inspection are governed by laws of their states.

Always purchase eggs before their “sell by” date. According to the American Egg Board “Refrigerated raw shell eggs will keep without significant quality loss for about four to five weeks beyond the pack date or about three weeks after you bring them home.”

If the eggs were right at their sell-by-date when purchased, you might have only about a week of storage time before there was quality loss. Plan to use your eggs accordingly. Eggs are a source of complete protein and are nutrient dense, containing only 75 calories while providing several essential nutrients. Two carotenoids, lutein and zeaxanthin, are both abundant in egg yolks.

Recent research has shown an egg a day will not increase the risk of heart disease or stroke for healthy individuals.

“By about 10 days after you have had an egg you have removed from the carton and no longer know when it was packed or purchased, it may be difficult to determine its freshness according to Martha Greenblum, MS, RD, Associate Director, Education Outreach, Nutrition and Food Safety, Egg Nutrition Center. “The test of freshness that involves seeing if an egg floats in a glass of (salt)-water is not a reliable test. In fact, this test has no relationship to the freshness of shell eggs. While eggs do take in air as they age, the size of the air cell varies from egg to egg when they are laid. Therefore, a freshly laid egg and an older egg might react very similarly.”

When unsure about the safety of your eggs, as with all foods, when in doubt, toss them out.

Cooking. If a food is heavily freezer burned, it may be desirable to discard it for quality reasons.

Q: If I reheat food that was forgotten on the counter overnight or was left out all day, will it be safe to eat?

To help preserve the quality of your eggs, store them in their carton in the coldest part of the refrigerator, not on the open door. Open storage on the door increases the chance of cracks with repeated opening and closing of the door. Temperature fluctuations may decrease storage time. Run your refrigeration at 40°F or lower.

Proper cooking as well as proper storage is important for egg safety. Cook eggs thoroughly so both yolks and whites are firm, not runny. Do not eat raw or undercooked eggs.

A: Two hours is the maximum time perishable foods should be at room temperature. This includes the time they’re on the table during your meal. Just one bacterium, doubling every 20 minutes, can grow to over 2,097,152 bacteria in seven hours!

Perishable foods include:

• meat, poultry, seafood and tofu
dairy products
• cooked pasta, rice and vegetables
• fresh, peeled and/or cut fruits and vegetables.

Reheating food may not make it safe. If food is left out too long, some bacteria, such as staphylococcus aureus (staph), can form a heat-resistant toxin that cooking can’t destroy.

One of the most common sources of staph bacteria is the human body. Even healthy people carry staph — according to the U.S. Food and Drug Administration—’s “Bad Bug Book,” staph bacteria are present in the nasal passages and throats and on the hair and skin of 50 percent or more of healthy individuals. Staph bacteria is found in facial blemishes, cuts and lesions.

Most likely, the only way you’ll know if a food contained staph bacteria is when someone gets sick.

Web Resources
For more help with food safety questions, go to UNL Lancaster County Extension’s “Food Safety for Home Cooking” Web site at lancaster.unl.edu/food/foodsafety.htm

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Planting Under Established Trees

Establishing and maintaining healthy herbaceous plantings under trees can be difficult. Mature trees produce large quantities of surface roots, especially when grown in a landscape that receives frequent, shallow watering from sprinklers. These fibrous roots compete for nutrients and water with under-plantings.

Some homeowners try to escape the problem of bare soil underneath mature trees by installing raised planting beds, however, this practice is strongly discouraged for several reasons. First, adding soil on top of a tree’s root system reduces the amount of oxygen in the underlying soil, oxygen essential for root health and growth. Often trees will begin a gradual decline, after the installation of a raised planter that does not become noticeable for 2 to 3 years. Homeowners also are often frustrated when these beds quickly fill with dense, fibrous tree roots. Studies have shown many trees have a majority of their feeder or surface roots within the top 2 to 3 inches of the soil. They will quickly fill in a raised bed area as they take up additional water, nutrients and oxygen exchange. Because of this root competition, it is often difficult to plant large shrubs under mature trees. Dramatically raising the soil level under trees can cause other problems as well, including bark decay when soil is piled against the trunk. In addition, too much disturbance to the roots of sensitive trees may damage or kill them. To avoid problems, plant small, understory trees and shrubs in ground beds, in the open, root-free zones between trees. If you must plant within the root zone of established trees, start with small plants that do not require a large planting and take care not to damage the bark of mature tree roots when you dig. (MJF)

Seasonal Needle Drop on Evergreens

Evergreens do not keep their needles indefinitely. Older, inner needles, discolor and drop off after one to five years, depending on the evergreen in question. Sometimes the drop occurs slowly. On other occasions, many needles may turn yellow all at once in late summer or fall. Because weather triggers the condition, many evergreens are likely to show symptoms in the fall. If you are not familiar with this natural process, it could cause you a great deal of concern. Each species of evergreen usually keeps its needles for a definite length of time. White pines are the most dramatically affected. They usually keep three years of needles in summer and two in winter. The three-year old white pine needles turn yellow throughout the tree in the fall. The tree will appear particularly unhealthy when these yellow needles outnumber the green ones. Austrian and Scotch pine keep their needles for three years and Norwegian pine keep theirs for four years.

Needles on arborvitae, usually turn brown rather than yellow when they age. They often remain attached much longer than mature pine needles. Japanese yew needles turn yellow and drop in late spring or early summer of their third year. Spruce and fir needles are yellow and drop with age. These evergreens retain needles for several years, so you may not see needle drop unless you look closely on inner branches. These needle drop patterns vary from tree to tree and from year to year. (MJF)

Drying Gourds

Harvest gourds when the vine and stem dries and begins to turn brown. Be sure to complete your harvest before the first hard frost. Immature gourds will not cure correctly, so only harvest mature fruit. After harvest, wash the fruit in a mild bleach solution and dry off with a soft cloth. Discard any bruised, diseased or damaged fruit. To dry, place gourds on slatted trays or chicken wire fencing. Make sure they do not touch each other and are spaced out in a warm, dry, well-ventilated location. Curing can take one to six months, depending on the type of gourd. The outer skin hardens in one or two weeks, while the internal drying takes at least an additional month. Poke a small hole in the blossom end of the gourd to quicken internal drying. Occasionally turn the fruits, checking for uneven drying or soft spots. When you shake the gourd and hear the seeds rattling, it is cured and ready for a coat of paint or varnish, if desired. (MJF)
Is it Really a “Sweat Bee”?

Soní Cochran
Extension Associate

“Don’t worry about those. They’re just sweet bees. They won’t sting you once. Just ignore them and eat your hamburger.” How many parents have said that to their children at the picnic table for a fall outing? My parents did and it worked (even though my siblings and I knew what those yellow and black critters really were). As a result, my six brothers and sisters and I learned to ignore the pesky “sweet bees” crawling across our paper plates, just shooed them out of our drink cups and avoided them at the trash cans in the park. It wasn’t until much later in life that I learned those “sweet bees” weren’t really that all— especially during late summer and fall. Your fruit salad, yellowjackets who join us known for their aggressive they were yellowjackets. How “bees” weren’t really that at all — be shooed them out of our drink across our paper plates, just black critters really were). As a though I’m sure my parents picnic table for a fall outing? My that to children gathered at the They’re just sweat bees. They 174 human cases and eight deaths from West Nile virus. Avoid working outdoors time from infection to onset of disease symptoms) for severe infection (West Nile encephalitis or meningitis) of the body and swollen lymph glands. The symptoms of 20 percent of the people who become infected will develop infection? West Nile Virus Q &A A. Most people who are infected with the West Nile virus will not have any type of illness. It is estimated that 20 percent of the people who become infected will develop West Nile fever: mild symptoms, including fever, headache and body aches, occasionally with a skin rash on the trunk of the body and swelling lymph glands. The symptoms of severe infection (West Nile encephalitis or meningitis) include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness and paralysis. It is estimated that one in 150 persons infected with the West Nile virus will develop a more severe form of the disease. Q. What is the incubation period in humans (i.e., time between infection to onset of disease symptoms) for West Nile encephalitis? A. Usually 3 to 4 days. Q. How long do symptoms last? A. Symptoms of mild disease will generally last a few days. Symptoms of severe disease may last several weeks, although neurological effects may be permanent. Nebraska must con- West Nile Virus Alert! Mantis females usually deposit their eggs in a foamy mass which hardens into a foam- Odd Insects Found in Late Summer Wheel Bug Mole Crickets West Nile Virus Q &A The NeBLINE Web site: lancaster.unl.edu September 2003 2003 Edition
Fall Livestock and Grain Price Outlook Meeting Scheduled

A Fall Livestock and Grain Price Outlook meeting will be held on Sept. 24, from 1:30 to 4 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln.

During the 2-1/2 hour meeting, partici- pants will discuss fall outlook and pro- jected supply and demand conditions that are expected to affect corn, soybean and wheat prices.

For more information contact Barb Smith, Center. Call 402-441-7180 and register by Sept. 20. (TD)

Preparing Bins to Maintain Grain Quality, Value

Learn about Biosolids at an Educational Workshop

Tuesday, Sept. 30
3:30–8:30 p.m.

In the fall just before harvest, have you been thinking about ways to improve produc- tion and cut costs? You can reduce your out- of-pocket fertilizer costs, improve poor soil and increase yields by using Lincoln’s municipal biosolids. This material is high in organic matter and contains all the nutrients needed by crops to grow. Most cooperators see a yield benefit for three to four cropping years after just one application.

You are invited to come to a workshop on Tuesday, Sept. 30 at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. First, we will travel to an up-to-date bio-solids composting facility for a tour to see how biosolids are processed to make them safe to use. The tour will be followed by an educational program back at the Lancaster Extension Education Center. Call 402-441-7180 and register by Sept. 29. For more information, contact Barb Ogg or Dave Smith. (BPO)

Fall is a good time to control several species of perennial weeds in pastures and waste areas. Perennial plants such as field bindweed, Canada thistle and leafy spurge translocate food from the upper plant parts into the root system in the fall. For this reason, these plants should be controlled at that time.

If the plant dies, the weed will probably re-emerge the following spring. If cutting is followed by a herbicide application at that time, weeds can be controlled for a longer period of time. (TD)

Fall is also the best time to control musk thistle and related species. Musk thistle is a biennial weed that produces a rosette (cluster of leaves) during its first year (winter annual), that spreads by seeds. Young plants will have a rosette form (a round cluster of leaves) that grows nearly flat on the soil. They overwin- ter in the rosette form and with sufficient growth they shoot up (bolt), form blossoms and go to seed in June, July and August. After producing seed, the plants do not die and are a good time to control Musk thistle is because the newly germinated plants are small and, therefore, easily killed by musk thistle. As with the perennial plants, plants not killed outright go into winter in a weakened condition and are more susceptible to winter kill.

In addition to obtaining excellent treatment results, musk thistle is a good time to control problem weeds. Fall is an excellent time to control problem weeds. For recommendations on specific weeds in crops, pastures and non- crop areas, consult the “2003 Guide for Weed Management in Nebraska” (EC 03-130-D), available for $3 when picked up at the extension office or downloaded for free at www.ionr.unl.edu/pubs/fieldcrops/ec03-130.pdf. (TD)

With harvest quickly approaching, it’s time to prepare your grain bins and equipment to limit insect prob- lems and potential loss of crop value. In Nebraska the most common stored grain insect is the Indian meal moth. If you find evidence of insects in your stored grain, follow the procedures below to clean the bin and kill any insects that may be present.

1. Remove all traces of old grain from the bin or in contaminated equipment such as combines and grain augers.
2. First be sure to store sound, clean, dry grain. It may be advisable to screen out broken, trash, grain and fines to increase the quality of the final storage product.
3. Cleaning and preparing bins now can help to prevent insect infestation in the future.

Since stored grain insects can invade your bin from infestations in harvesting and handling equipment (combines, augers, etc.), it’s essential equipment be well cleaned. Carefully remove all traces of old grain from combines, truck beds, grain carts, augers and any other equipment used for harvesting, transporting and handling grain. Even small amounts of moldy or insect-infested grain left in equipment can contaminate new grain. Clean grain bins thor- oughly, disposing of spilled, cracked and broken grain and grain flour, along with the insects feeding on such material. A simple broom and a vacuum cleaner are essential pieces of equipment in cleaning grain bins.

Around the bins be sure to remove old equipment, junk and clutter to reduce attractiveness to insects and rodents. Make sure the bin is insect- and rodent-proofed by plugging holes, sealing bins, caulkling and making general repairs. Grain spilled near the bin attracts insects and draws mice and rats. Clean up and dispose of any spilled grain several weeks before harvest. Grain that has been tunnelled under foundations, use baits or traps to reduce or eliminate them.

Fall weed control should also be considered and provide cover for rodents. Move around the bin site to reduce the potential for insect and rodent infesta- tion. If necessary, re-surface the site so water readily drains away from bin foundations. One method is to wait for the soil to dry before loading or unloading grain from bin sites. Make certain there’s gravel on the bin site or gravel to be the weight of heavy trucks and grain carts.

Preparing should be maintained well away from grain storage facili- ties. Leave a four-foot wide strip of bare gravel around the perimeter of storage bins. If you buy old crop grain for storage with newly harvested grain, be sure to watch for insects in the incoming grain. If the incoming grain is purchased for livestock feed, store it away from the new crop and feed it as soon as possible. Young grain stocks may be rotated or moved and a grain protector applied.

Stored grain insects cannot live on extremely dry grain (less than 10 percent moisture), however, it is impractical to reduce grain moisture much below minimum moisture levels necessary for long-term storage. Insect activity and reproduction are favored, however, by high grain moisture (14 percent or more), especially when condensation and moisture occur and fermentation raises temperature in the grain mass. A bin of 19 percent moisture corn with a starting temperature of 75°F can lose a full market grade in about five days if the aeration system shuts down, which allows the heat to heat and deteriorate. Electrical system mainte- nance before harvest can prevent costly downtime. Spillage and internal heat allow insects to remain active even in winter. By properly managing grain aeration the grain temperature can be manipulated. Grain cooling can be particularly important in reducing insect reproduction. Other fumigation materials can be manipulated. 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Burning Wood Safely in a Stove or Fireplace

When wood burns, the fire goes through three stages. In the first stage (up to around 500 degrees), the heat of the fire simply dries the wood. In the second stage (500 to 1,100 degrees), sometimes referred to as pyrolysis, the wood breaks down chemically, emitting flammable gases that contain more than half of the heat energy of the wood. In the third stage (over about 1,100 degrees), the gases and remaining charcoal burn.

Just for fun, if you watch a log burn in an open fireplace, you might catch a glimpse of a jet of hot gases blowing out the end of a log. You may actually see that the gases are escaping from the log, but not igniting until the jet of gas is a measurable distance away from the surface of the wood.

Problems develop when the flammable gases enter the chimney or vent pipe before they have burned. As the gases cool below 250 degrees, they condense as acids on the inside of the chimney. If they dry and coagulate, the acids thicken into a highly flammable, tar-like substance called creosote.

Because the creosote formation is caused by cooling the unburned gases, anything that leads to incomplete combustion or cool chimney temperatures will increase the problem.

Water users may decide to test their water supply, but it may be costly to test for all potential contaminants because there are so many. However, the act doesn’t apply to one unit vertical. It may also be necessary to place a diversion terrace around the bottom of the lagoon to keep surface water from entering into it. Lagoons must be at least 50 feet from any property line and 200 feet from neighboring residences. Therefore, the minimum lot area for lagoon construction is three acres. Lagoons must be enclosed with a four foot high fence having a locking gate, and signs stating: NO TRESPASSING — WASTE LAGOON.

Chimney fires are a real and dangerous possibility when heating with wood. A 1982 study by the U.S. Consumer Product Safety Commission reported that wood-burning appliance fires accounted for 20 percent of all residential fires and five percent of all fire deaths. While most chimney fires are confined to the chimney itself, the intense heat sometimes ignites surrounding building materials and furnishings.

Ashes must be stored in a metal container with a tight lid. The closed container should be placed on a non-combustible floor or on the ground well away from all combustible materials. Wood ashes do contain small amounts of phosphorus and potassium, essential plant nutrients. However, wood ashes are also alkaline. Adding large amounts of ashes to the soil can raise pH to undesirable levels and cause plant growth problems. Before you add ashes to your garden, test your soil. If the pH is above 7.5, don’t add ashes. If you do add ashes, spread them uniformly at no more than 15 pounds per 1,000 square feet. It is not safe to use ashes on your garden; it would be best to not use them.

Careful operation and maintenance can help minimize the risk of accidental chimney fires.

If a chimney fire does happen, take these steps:

1. Call the fire department and evacuate the house.
2. Close all air inlets and dampers to smother the fire.
3. Discharge a fire extinguisher into the stove, or use a chimney fire extinguisher stick.
4. Wet the roof and watch for outside fires caused by sparks.
5. Have your chimney inspected before putting it back into service.

Baking soda can be used to help suffocate a fire in the absence of a fire extinguisher. Check with your local fire department for the availability of fire extinguisher sticks.

These devices emit large amounts of smoke to help smother a fire.

Water Quality Standards Apply To Public, Not Private Drinking Water

Drinking water may be unsafe to drink in some parts of the world, but in the United States, public drinking water is regulated for quality and safety. (G89-907-A) available at the extension office or online at www.ianr.unl.edu/pubs/water/g1441.htm. (DJ)
Curried Pasta with Chicken and Fruit

1 pound Elbow Macaroni, Medium Shells or other medium pasta shape, uncooked
12 ounces cooked chicken or turkey, cut into 1/2-inch pieces
3 cups seedless red grapes
1 20-ounce can pineapple chunks packed in water, drained
1/2 cup non-fat mayonnaise
2 tablespoons lemon juice
1/4 cup frozen orange juice concentrate, thawed
1 tablespoon curry powder
1 bunch scallions, sliced

Prepare pasta according to package directions. While pasta is cooking, toss chicken, grapes and pineapple together in a large bowl.

In a medium bowl, stir together mayonnaise, lemon juice, orange juice concentrate and curry powder. When pasta is cooked, drain well and add to fruit mixture. Stir dressing into pasta and fruit mix well. Sprinkle scallions over pasta and serve.

For more pasta recipes, check www.ilovenpasta.org.

September marks the ninth annual National Food Safety Education Month. This year’s theme is “Store It, Don’t Ignore It!”

Here’s some food storage information adapted from materials provided by the USDA Food Safety and Inspection Service and the FDA Center for Food Safety and Applied Nutrition.

- Purchase the product before “sell-by” or expiration dates.
- Follow handling recommendations on product.
- Keep meat and poultry in its package until just before using.
- If freezing meat and poultry in its original package longer than two months, overwrite these packages with airtight heavy-duty foil, plastic wrap, or freezer paper, or place the package inside a plastic bag.

FREE “Healthy Cooking for 1 or 2” Class Nov. 4

Learn how to put some fun into cooking for just you or for two. Alice Henneman, Lancaster Extension registered dietitian and extension educator will help you learn how to prepare quick, delicious and nutritious meals for one or two people on Tuesday, Nov. 4, 7–8 p.m. in cooperation with BryanLGH Medical Center. The class will be held at the Plaza Conference Center, BryanLGH Medical Center East, 1600 S. 48 Street.

Food Resources of the Month

September is National Food Safety Education Month®. Download FREE posters and table tents you can use to promote food safety at work and community sites at lancaster.unl.edu/food/foodsafety.htm.
Composting is a mixture of partially decomposed plant material and other organic wastes. It is used in the garden to amend soil and fertilize plants. The chief advantage of compost is its ability to improve soil structure. Good garden soil is loose and has a high water-holding capacity with adequate drainage. Adding compost to heavy clay soil improves drainage by improving soil structure. Compost also absorbs water and improves the water-holding capacity of sandy soils. To conserve moisture it is essential to have soil with good water-retention.

In addition to improving soil structure, compost is used to slowly release plant nutrients. Compost will not provide all the nitrogen that highly productive crops require. Organic gardeners can supplement compost applications with manure to produce good yields without the addition of other fertilizers.

And last but not least, making and using compost allows the gardener to recycle garden waste and reduce the burdens of organic trash on our landfills.

**Composting Materials**

Almost all organic materials will decompose, but not all organic materials belong in the compost pile. Yard wastes, such as leaves, grass clippings, straw and non-woody plant trimmings can be composted. The predominant organic waste in most backyard compost piles is leaves. Grass clippings can be composted; however, with proper lawn management, clippings do not need to be removed from the lawn. If clippings are used for compost, it is advisable to mix them with other yard wastes. Branches, logs and twigs greater than 1/4 inch in diameter should be put through a shredder/chipper or cut up prior to placement in the compost pile. Kitchen wastes such as vegetable scraps, coffee grounds and eggshells may also be added. Sawdust can be decomposed by a large variety of organic materials to suppress plant disease. Nursery growers have found that use of fungicides can decrease when compost is a component of the growing medium. Success with disease suppression is observed to be greatest when all of the factors involved in compost production are defined and controlled. The greatest disease suppressive capacity is obtained from specific feedstock materials, matured to a condition/maturity conducive to disease suppression. Use of composted organic materials to suppress plant disease has been demonstrated by Dr. Harry Holman and researchers at Ohio State University who have studied this trait for a number of years. The Clean Washington Center has been studying the effects of adding inoculants to composts to suppress specific disease organisms. Nursery growers have found that use of fungicides can decrease when compost is a component of the growing medium.

**New Uses For Compost**

Compost is already known to many in the green industries and agriculture as an excellent soil amendment that improves plant growth. Research and innovative thinking are revealing new uses and benefits through compost. A few of these are described below:

**Storm Water Runoff**

Use of compost to control storm water runoff utilizes a mature, low nutrient compost as a filter, which is placed in a catch basin for storm water runoff to pass through it. After passing through the compost filter, runoff water has been demonstrated to be lower in sediments, total suspended solids, oil and grease, heavy metals, herbicides, pesticides and fuel from accidental spills. When the absorptive capacity of the compost becomes spent, it is replaced with new compost. Generally, disposal of the spent compost would, at most, require placement in a solid waste landfill.

**Disease Suppression**

Use of composted organic materials to suppress plant disease has been demonstrated by Dr. Harry Holman and researchers at Ohio State University who have studied this trait for a number of years. The Clean Washington Center has been studying the effects of adding inoculants to composts to suppress specific disease organisms. Nursery growers have found that use of fungicides can decrease when compost is a component of the growing medium. Success with disease suppression is observed to be greatest when all of the factors involved in compost production are defined and controlled. The greatest disease suppressive capacity is obtained from specific feedstock materials, matured to a specific point where the biological mix is most conducive to disease suppression is present.

**Wetlands Restoration**

Compost has been used successfully as a medium for rebuilding the muck layer in wetland soils strata. This is effective for both rehabilitation and artificial construction of wetlands.

**Using Wood Chips for Mulch Has Multiple Benefits**

Wood chip mulch is made from the chipping of tree and landscape prunings. Rather than taking up landfill space, these once discarded products (including Christmas trees) are now providing a better growing environment for new plants in landscapes and gardens.

Mulch is material placed on the soil surface for the purpose of protecting the soil and plant roots. Not only do organic mulches add a decorative natural appearance to the landscape, they also provide many landscape benefits:

- Helps retain soil moisture.
- Mulch helps retain moisture and reduces water evaporation caused by wind and hot sun. Under its insulating blanket, soil remains moist longer after bare areas become dry and require irrigation.
- Reduces soil temperature extremes.
- Mulch can be decomposed by a large variety of organisms. It decomposes faster than leaves: its decomposing matter becomes a nutrient-rich additive to the soil. It is easily decomposed by a large variety of microorganisms.
- Mulch can be recycled.
- Mulch reduces weed growth.
- Mulch reduces weed growth. It can be mixed with soil to improve its water-holding capacity and composting ability.
- Mulch reduces weed growth. It can be mixed with soil to improve its water-holding capacity and composting ability.
- Mulch reduces weed growth. It can be mixed with soil to improve its water-holding capacity and composting ability.
- Mulch reduces weed growth. It can be mixed with soil to improve its water-holding capacity and composting ability.
may be added in moderate amounts if additional nitrogen is added. Approximately one pound of actual nitrogen (six cups of liquid or granular nitrogen) is required for 100 pounds of dry sawdust. Certain organic materials should not be used to make compost because they may contain hazardous or noxious substances. Do not add pet feces since they can transmit disease. Meat, bones, grease, eggs and dairy products should not be added because they can attract rodents. Most plant disease organisms and weed seeds are destroyed during the composting process when temperatures in the center of the pile reach 140° to 150° F. However, if the compost piles are not mixed, it is impossible to mix efficiently enough to bring all wastes to the center. Consequently, large amounts of weeds with seeds or diseased plants may create problems.

Carbon-to-Nitrogen Ratios
All living organisms are made of large amount of carbon (C) due to the fact that there is significantly more carbon (C:N). This ratio is an important factor determining how easily bacteria can decompose organic material. The microorganisms in compost use carbon for energy and nitrogen for protein synthesis. The microorganisms are very slow-moving, and the ratio is affected by the ratio used by the bacteria averages about 30 parts carbon to one part nitrogen. Given a steady temperature, 20 days at 90° F may be sufficient. Another factor to consider is the moisture content of the organic material. The microorganisms can only use organic material (leaves or garden waste) with a moisture content of 40–60 percent provides adequate water for maximum moisture. Since yard and garden wastes will be added continuously, the stage of decomposition will vary from the top to the bottom of each compost pile. Generally, the more finished compost will be near the bottom of a pile and partially decomposed materials near the top. Once the compost at the bottom of a pile is finished, it can be removed and used. Turning units are typically a series of bins used for building and turning active compost piles. A turning unit allows wastes to be conveniently mixed for aeration on a regular basis. This speeds composting by providing bacteria with the oxygen they need to break down materials. Turning systems require frequent maintenance and preparation of the space to keep these materials, you’ll eventually be rewarded with compost.

Making a Compost Bin
To save space, hasten decomposition and keep the yard looking neat, contain the compost pile in some sort of structure. Composting structures can be made from a variety of materials. They can be as simple or complex as desired. Yard wastes can be composted either in simple holding units, where they will sit undisturbed for slow decomposition, or in turning bins, which produce finished compost in six to eight weeks. Holding units that contain compost should be used to store garden waste in an organized way until these materials break down. A holding unit with a carbon ratio of approximately 30:1 should only be used in bins that can be used with one-half grass clippings (20:1 ratio) to make a pile with the ideal 30:1 ratio. This will work best if the pile is larger than the ratio used on a regular basis. Mixing materials of different sizes and textures also helps to provide a well-drained and well-aerated compost pile. A pile that is too high in carbon will stay cool and compost slowly. A pile too high in nitrogen will dry out very fast and smell like ammonia gas. In both instances, the decomposition process is working. If you have the time to wait and

How Organic Materials Prevent Erosion

Next, a third to a four inch layer of low carbon organic material such as garden waste. This mixture should be added when the compost pile is added to the top of the slope. On top of this, a four to six inch layer of high carbon material (carbon to nitrogen ratio of 30:1 or garden waste) which should also be added. On top of this, add a one-inch layer of top soil or finished compost. This layer will introduce the microorganisms needed to break down the organic matter. Composting in these layers of organic matter, low carbon organic matter, and soil before adding another layer to the pile. This will ensure a speedy and even composting process. Repeat the “layering” process until the composting bin is filled.

Using Compost
Finished compost is dark brown, crumbly, and earth-smelling. Small pieces of leaves or other ingredients may be visible. If the compost contains many materials which are not broken down, it is only partly decomposed. Allow partly decomposed compost particles to break down further when mixing it in to soil. Use compost to slow the growth of weeds with seeds or diseased plants. It is typically mixed with other ingredients such as peat moss, shredded newspaper, straw, or manure when used as an outdoor planting mix. Mixing ratios vary; but 10 percent compost, 30 percent carbon, 30 percent nitrogen, and 30 percent maximum in planting shrubs and trees. There are two main reasons filter berm is placed. On steep slopes, berms hold and keep the compost in place with minimal chance of being blown away. On gentle slopes, berms help the blanket of organic materials.

Organic materials are more flexible, lighter and absorb more water than soils in general, so they aid in helping water infiltrate into the soil underneath. For vegetables and earthworms, this is crucial to new seedling germination.

Mixing Ratios:
- 10 percent compost
- 30 percent carbon
- 30 percent nitrogen
- 30 percent maximum

Mix the layers of high carbon organic material into the soil at a rate of one cubic yard per hundred square feet. After composting by providing bacteria with the oxygen they need to break down materials. Turning systems require frequent maintenance and preparation of the composting bin is filled.

Building the Compost Pile
A compost pile should be large enough to hold heat and small enough to admit air to its center. As a rule of thumb, the minimum dimensions of a compost pile should be three feet by three feet by three feet (one cubic yard) to hold heat. The average compost pile is 6 to 10 feet in diameter to allow air to the center of the pile is five feet tall by five feet wide and as long as you wish. Microorganisms can only use organic molecules dissolved in water. A moisture content of 40-60 percent provides adequate water for maximum moisture. Since yard and garden wastes will be added continuously, the stage of decomposition will vary from the top to the bottom of each compost pile. Generally, the more finished compost will be near the bottom of a pile and partially decomposed materials near the top. Once the compost at the bottom of a pile is finished, it can be removed and used. Turning units are typically a series of bins used for building and turning active compost piles. A turning unit allows wastes to be conveniently mixed for aeration on a regular basis. This speeds composting by providing bacteria with the oxygen they need to break down materials. Turning systems require frequent maintenance and preparation of the composting bin is filled.

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**What is “Grasscycling”?**

Grasscycling, or grass mulching, is the natural practice of leaving clippings on the lawn as you mow. It is obvious how this practice can save resources like landfill space, but there are additional benefits as well. The clipping quickly decompose, returning nutrients to the soil. Grasscycling, in conjunction with the right mowing technique and fertilizer inputs, can reduce mowing time in addition to disposal costs.

Grasscycling can be practiced on any healthy lawn as long as responsible turf management guidelines are followed.

**Grasscycling Saves Lawn Care Costs**

- **Fertilizer** — Grass clippings can supply up to one-third of a lawn’s nitrogen fertilizer needs.
- **Time** — Recent trials confirmed leaving grass clippings on the lawn saves one-third of the mowing time.
- **Water use** — Clippings shade grass roots, cool the soil, return moisture, add moisture holding organic matter, and thereby reduce watering needs.
- **Soil health** — Clippings decompose rapidly, feeding soil organisms that keep soil healthy and help prevent turf diseases.
- **Thatch** — Studies prove clippings do not cause thatch buildup.

Everyone wants to do something good for the environment, and the new breed of yard equipment that allows you to recycle debris right in your own back yard makes it easy. If your refuse hauler doesn’t accept lawn clippings or leaves anymore without an extra charge, there are new tools that will help. The idea behind recycling yard waste is that your lawn clippings and leaves are not debris at all, but a valuable organic resource that should be put back into the soil to help build a healthy lawn and garden.

The most popular piece of lawn-care equipment there is is called a mulching mower. More than 85 percent are now labeled as “mulching mowers” to respond to the public's environmental concerns. Mulching mowers — like food processors for your lawn — use a special blade and enclosed deck to slice up your grass clippings (and dried leaves) numerous times before depositing them back deep into the turf, where they decompose in a few days. The result, if conditions are right and the mower is designed well, is a clean, vacuumed appearance without any unsightly clumps or hedgerows of grass. And don’t worry about creating thatch. Thatch is not built up out of good grass blades left on the lawn, but excess surface roots caused by over watering and not mowing enough.

Using a mulching mower saves in several ways. It saves time, since you don’t have to repeatedly stop the mower to empty and recharge it. It saves money, since the nitrogen in the clippings fertilizes the lawn, reducing the amount of supplemental fertilizer you have to apply. And it leaves more room in the local landfill for real garbage.

Here are a few things to look for in a quality mulching mower:

**Convertible** — Can you easily convert the mulching mower to a bagging mower or a side-discharge mower? This is important, since it’s sometimes difficult for the mower to cope with thick, lush, rapidly growing grass. You may want to temporarily switch to a side-discharge mode to avoid clogs and prevent stalling out the mower. A bagging mower would be useful in the fall, when you may want to collect your leaves for use mulch for your vegetable garden or flower beds.

**Engine type and horsepower** — A mulching mower should have at least five horsepower, preferably six. Low-cost mowers with 3.5-horsepower engines may not have sufficient power to chop up clippings thoroughly. Automatic design overhead-valve engines on premium mowers are powerful, efficient and tend to have larger and quieter mufflers. For mowing over hilly terrain, you may want to consider a mower with a two-cycle engine, since they are constantly injected with lubricating oil and don’t have the problem of oil starvation that standard, splash-lubricated fourcycle engines do.

**Electric/cordless models** — In recent years, major manufacturers have introduced innovative electric corded and cordless mowers, some with mulching capability.

**Mulching technology** — If you take a look at some competitive mowers, you’ll see some distinct differences in how they solve the problem of chopping up grass fines enough that it decomposes. Most manufacturers design the mower’s deck and blade so that the clippings will be stirred up and cut several times before being blown back into the grass. Some manufacturers add baffles or fans to the inside of the deck to enhance the process.

**Mulching Mowers**

- **Mow when the grass is dry,** to avoid clumping.
- **Raise cutting height to 2 to 2-1/2 inches to hide clippings better and make a healthier lawn.**
- **Remove only one-third of grass length,** or one inch maximum, per year.
- **If the grass is overgrown, mow twice:** first at a high setting, then lower.
- **Mow every five to seven days in the spring.** (Every two weeks may be enough in the summer.)
- **Water and fertilize less.** Grasscycling holds moisture better and also recycles fertilizer to your lawn.
- **Sharpen mower blades at least once a month to increase mower efficiency.

**Mulching Tree Leaves into Lawns**

The state regulation that prohibits sending yard wastes to landfills created a problem for grounds managers and homeowners who need to dispose of turf/tree leaves. The alternative is to compost the leaves, either on the premises or by localizing to a compost center. The latter requires the expense of collection, chipping and a means of transport to a compost center. The former requires part of the landscape to be devoted to the composting. When there are many trees on the grounds, leaf clean-up and composting can be a time-consuming chore.

Another means of disposal is simply mowing the turf/tree leaves with a rotary mower often enough to pulverize the leaves so they fall into the turf.

It appears returning the leaves to the turf is not harmful to the grass. If the mulching/mowing is done at appropriate times. When oak leaves are predominant, it will be a dry time to mulch them into the turf later in the fall because they are held on the trees longer than most other leaves. For best results, leave the mower set at the same height as you have been mowing the turf. It is important to use a rotary mower that pulverizes the leaves well and that the leaves are dry when they are mowed. Sharpening the blades is important and a slow movement of the mower will help to grind the leaves finer. It may be necessary to make as many as three or four passes over the area to grind the leaves fine enough. The finer the leaf particles, the more easily they fall into the turf, leaving grass leaves exposed to the sunlight.

The pulverized leaves will settle into the turf within a day or two, particularly if followed by rain. Take care that the pulverized leaves do not cover the grass blades entirely. It is best if the tree leaves are “mowed” regularly, not allowing them to lie on the turf more than three or four days.

Fall is a very important time for the turf to photosynthesize and store carbohydrate, particularly under trees where the turf receives limited sunlight during the summer. It is the time when the nitrogen in the turf is a maximum, and grass requires nitrogen per 1,000 square feet in addition to the normal fall nitrogen fertilizer to enhance the decomposition of the tree leaves.

Mulching leaves into the turf is a reasonable means of disposing of the leaves. (DJ)
Checklist for Subscribing to Special Yard Waste Collection

If you subscribed to the separate yard waste and leaf collection through your local hauler, you will automatically be subscribed when leaf collection begins. Here’s a checklist to make sure you are prepared:

- Secure proper container for grass and leaves. Remember, any waste you provide should not be larger than 32 gallons and have a tight fitting lid. Your refuse hauler may provide you with a 32-gallon, 90-gallon cart for a small fee. No plastic bags can be used for grass and leaves.
- Make sure that your yard waste container is clean. Any household waste contaminates the compost and causes problems at the compost facility. Haulers can be fined up to $50 if contaminants are found in the yard waste. This cost may be passed on to the customer.
- Bundle brush in four to five foot lengths. If you are new in the neighborhood or are unsure if you have subscribed to the special yard waste collection, contact your refuse hauler.

Frequently Asked Questions

Q: What is yard waste?
A: Yard waste is defined as grass and leaves only. This includes crab grass and pine needles. Yard waste is free of any other waste, debris and contaminants because these items seriously affect the quality of the LinGro compost product. Other vegetative wastes may be mixed with yard waste and sent to the city’s composting site.

Q: Why are grass and leaves banned from landfill disposal?
A: The City of Lincoln bans grass and leaf disposal to save valuable landfill space and to create a recycled product which has a beneficial use. Over 14,000 tons of grass and leaves are diverted from the landfill each year.

Q: When is yard waste banned from the landfill?
A: Grass and leaves cannot be disposed of in the sanitary landfill from April 1 through Nov. 30.

Q: Why can’t I use plastic bags for grass clippings and leaves?
- Yard waste is taken to the City’s composting facility. Since plastic does not decompose, only biodegradable paper bags are accepted at this facility. There would be a considerable amount of plastic if the City or haulers had to remove yard waste from plastic bags.

Q: What kind of container should I use for yard waste?
A: Use paper lawn bags. Many local stores will stock biodegradable, paper lawn bags. Or you could try a 32-gallon refuse container with a tight fitting lid. If you have your waste hauler pick up your yard waste, they may provide a 90-gallon, two wheel cart for you. (GH)

City’s Composting Operation Saves Landfill Space

The City of Lincoln maintains a 16-acre yard waste compost facility next to the Bluff Road Sanitary landfill (at Highway 77 and Bluff Road). The site has a windrows composting system that can stockpile about 20,000 tons of grass, leaves and brush each year. This is equivalent to about 2,000 garbage trucks during an eight month period.

Grass is mixed with leaves and wood chips to form windrows roughly six feet high and 12 feet wide. It takes about 9–12 months to complete the composting process. The material is screened to remove any debris and wood chips and placed in a curing pile for another three months. This finished material is then available to the public.

Since the program began in October 1992, the city has composted an estimated 156,600 tons of grass and leaves and wood chipped 197,450 tons of tree debris. For an average year the compost facility grinds about 5,000 tons of brush and tree debris.

The City of Lincoln’s compost is not known to present health risks to people or animals," said Scott Holmes, Environmental Health Division Manager for the Lincoln County Health Department.

In the last two years, clopyralid has been discovered in compost operations in several states. Gene Hanlon, Recycling Coordinator for the City of Lincoln said a survey of lawn companies last year indicated that the herbicide was being used locally to kill broadleaf weeds such as dandelions, clover and thistle. The City tested LinGro samples and found levels of clopyralid ranging from 13 parts per billion (ppb) to 23 ppb. Levels of clopyralid of 10 ppb or less can damage some plants. Plants that can be harmed by clopyralid include:

- Legumes (peas, beans, lentils, clover)
- Solanaceous (tomatoes, potatoes, peppers)
- Composites (asters, sunflowers, daisies, petunias)
- Other sensitive plants (carrots, lettuce, lupine)

Bio-assays using Lincoln’s compost conducted by the University of Nebraska indicated that it is unlikely that damage will occur to sensitive plants in the compost.

Do you use a lawn service that applies fertilizers or chemical treatments to your lawn? Do you purchase weed and feed fertilizer purchased from local retailers on your lawn? If you do, you may be inadvertently contaminating the City’s LinGro compost with a herbicide called clopyralid (pronounced clo-pee-ral-uh-dih). This herbicide is used to kill dandelions, clover and ground ivy and can damage sensitive garden plants if compost containing it is misapplied to gardens.

City officials urge residents to check to see if the products used on their lawn contain this active ingredient. If it does, the City recommends that residents mulch their grass clippings rather than collecting them and sending them to the compost facility.

Dow AgSciences, the company that held the initial patent on clopyralid has changed their product label indicating that the product should not be used on residential lawns. Other companies that manufacture products with the same active ingredient have not modified their labels and their products are available to lawn services and local residents.

“Clopyralid levels found in the finished material is screened to remove any debris and to create a recycled product which has a beneficial use. Over 14,000 tons of grass and leaves are diverted from the landfill each year. The City of Lincoln has limited quantities of organic compost, called LinGro, available to the public each spring at the N. 48th Street Transfer Station located at 5101 N. 48th Street. This material must be self-loaded and is available at no cost, on a first-come, first-served basis.

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When Times are Tough: How Can Family and Friends Support Me?

For whatever reason, when times are tough, it is easy to become isolated from family and friends. Some people simply don’t want to talk about difficulties they experience. Maybe it’s because they feel it is no one else’s business, or maybe it’s because they are embarrassed. But when times are tough, a supportive network is needed to help you process through the difficulties, problems, concerns and struggles. Research shows family and friends, the informal support network, are those most often approached when support is needed. When you talk with someone you trust, the burdens seem lighter and the problems seem less of a concern. Your family and friends cannot help fix the problems, nor should they even if they could. But they can offer support to you in various ways such as emotionally, informationally and physically. They can let you know you are loved and cared for, you can rely on them for information and advice, and they’ll be there when you’re in a pinch for a few extra dollars, or help with chores, a meal or child care. A big part of the solution when times are tough, is allowing others to help you when they can. You need to be willing to allow others to help you in a variety of ways. Of course, with primary relationships with family and friends, there will be reciprocal behavior and exchange of help most of the time. However, if you are “down and out” or simply need a helping hand, accept the help when needed. (LB)

importance of friendships

Friends are the heart of our relationship and are a key aspect of life. Humans are social beings and need interaction with others. Friendship is a social connection that allows people to share who they are with another one. In hard times, people often need to withstand much more with the support of friends and loved ones than they would alone. In good times, friendships enrich our everyday lives.

Friendship consists of eight elements: enjoyment of each other, confiding in each other, trust, respect, mutual assistance, acceptance, understanding and spontaneity.

In friendships, people listen, help and care for each other and provide a support system in times of difficulty. Without friends, people can feel isolated and lonely. Children with positive views of themselves are more open to meeting and interacting with new people. Parents play an important role in socializing children. If parents reflect happiness to children, they will reflect it back.

See FRIENDSHIPS on page 11
Swine Show Superintendent of 20 Years Hangs Up His Hat

One October evening in the early 1980’s, Ron Snover decided to sign his son, Jason, up for 4-H in Dodge County. Together as a family they went to a 4-H club meeting — Jason left as a new 4-H member in Dodge County and Ron left somehow as the new club leader of the livestock club. From there it is all history.

When Ron became the 4-H leader he felt it was important to be involved, so he joined the Dodge County 4-H Council. He served his term on the Council for one year and then resigned to move to Lincoln.

Once Ron and Donna moved to Lincoln, they joined a 4-H club as soon as possible to keep involved. They joined, Gordon and Ellen Chapelle’s 4-H club. Their club was an active 4-H club for many years in this county. They had a lot of fun and they learned a lot from the club experience.

While his children, Jason and Jessie, were growing up Ron became more and more involved in the 4-H program. He was the swine leader for the 4-H club, represented swine on the Production Livestock Booster club, served on the 4-H Council and event chaired the food booth committee for three years.

As most people know Ron has always been an LFIFA Swine Show Superintendent for the past 20 years. This year Ron decided to hang up his hat to spend more time with his family and to leave while he was still having fun. He said when he started he brought in fresh, new ideas. He hopes someone will take over and enhance what he has started. It is always good to keep things fresh.

Ron is excited to see what ideas the new superintendent will bring.

Ron really enjoys watching all the 4-H kids grow up responsible, successful adults. It is neat to see the kids become active adults in their communities. He is so proud of all the kids and what they have become. The greatest rewards he received were all the smiles and simple thank you’s. He said a kid saying thank you goes a long way.

Ron ran the show in a fun and positive manner. His goal was to make sure everyone was treated equally. He always stressed to kids, it did not matter if you had one hog on your farm or 100 you can have as much fun at the fair. He also stressed to kids, you don’t have to spend a lot of money on hogs to become active and have fun in 4-H.

Ron would like to thank everyone, especially his family for all the years of support! The staff at the Lancaster County 4-H office wants to thank Ron for all his dedicated support to this county. (DK)
Monroe Wins Regional and International Cat Show Awards!

Bailey Monroe, a Lancaster County 4-H'er, received First Best in the Senior Division of Junior Showmanship at the Cat Fanciers’ Association (CFA) Midwest Regional Show held in May in St. Louis. She showed her cat DeEar, a smoked oriental short-hair. This award earned $300. CFA is the world’s largest registry of pedigreed cats. CFA’s Midwest region includes North and South Dakota, Kansas, Nebraska, Minnesota, Illinois, Iowa and parts of Canada.

Last year, Bailey won the same regional award with her Arizona blue balsam. This award earned her a trip to the CFA International Show.”

Bailey Monroe discussed cat care with Clover Campers at last year’s Clover College (above). Bailey showed DeEar at the 2001 County Fair Cat Show.

She is also the youngest CFA clerk in the nation. Clerks keep score for the judges. In 1995, as a beginning 4-H member, Bailey liked showing cats and meeting other kids who loved their pets. “I was really nervous about getting up in front of a big group of people, but I did it and it turned out OK,” said Bailey. “Now, showmanship is my favorite part of a cat show.”

Through 4-H, Bailey has learned to take care of her cats and participate in competitions. Now as a senior at Southeast High School, she is concentrating on learning about new breeds and how to judge a cat show. In fact, Bailey has judged several cat shows this year. “I wouldn’t have been able to do any of this without 4-H,” she has added. “It has helped me a lot. 4-H has encouraged me to continue working with cats and learning as much as I can about them. I encourage anyone interested in 4-H to join the Cat Club. It intensifies your self-confidence and makes you capable of anything,” said Bailey.

When asked what her future plans are, Bailey responded, “I want to continue to work with cats. Maybe as a CFA judge or maybe I’ll go to veterinary school.”

Nominate Your Favorite 4-H Volunteer!

A “Heart of 4-H Award” is awarded to a Lancaster County 4-H volunteer each month! Last year, your favorite 4-H volunteer or leader by submitting the following form (also available online at lancaster.unl.edu/4h). Nominations of co-volunteers accepted.

I, , nominate , for a “Heart of 4-H Award” because

I can be reached at (phone) or (e-mail) .

Mail to: UNL Lancaster County Extension, 444 Cherry Creek Rd, Ste. A, Lincoln, NE 68528.

Shooting Sports Reorganizational Meeting Sept. 23

Mark your calendars for a reorganizational meeting on Tuesday, Sept. 23, 7 p.m. at the Lancaster Extension Education Center, 444 Cherry Creek Rd, for the entire Lancaster County Shooting Sports 4-H club. Both current members and those interested in joining are invited to attend. There will be a short presentation by each discipline leader including BB/Air Rifle, Small Bore and Trap. Pizza and soda will be served. Total registration fee to join 4-H Shooting Sports 4-H club is $8, insurance included. (TK)

Fair’s Over, Now What? — Parent and Leader Training

Leaders, parents and interested volunteers are invited to attend this 4-H training. Discuss how to finish the current 4-H year and how to prepare for the next 4-H year. Awards, project completion/selection and club reorganization will be covered. See you Tuesday, Sept. 30, 9-3 a.m. or 7 p.m. You must call 441-7180 to RSVP by Friday, Sept. 26. (TK)

2004 4-H Unicameral Day Set

4-H Foundation’s 2004 Unicameral Day is Tuesday, Feb. 17. 4-H’ers from across the state will have the opportunity to visit the state capitol for the day to learn more about the legislative process, discuss current events and maybe interact with their state senator at a luncheon. Two youth age 12 to 19 will be chosen from each legislative district. Applications are available at the extension office or online at 4h.unl.edu/programs/citizenship/civic_caree. 4-H Council will provide scholarships for the $20 registration fee.

Paula Peterson

Lancaster County 4-H and 4-H Council are proud to announce Paula Peterson as winner of September’s “Heart of 4-H Award” in recognition of outstanding volunteer service.

Paula began volunteering seven years ago when her oldest daughter, Amanda, joined 4-H. She is now club leader of Rock Creek Ranchers, a member of 4-H Council and the 4-H Bucket Calf superintendent at County Fair.

Paula’s husband, Tom, is a farmer and their younger daughter, Erica, is also a 4-H’er. The Petersons live in Waverly. Shayna Truax, a member of Rock Creek Ranchers, and her mother Cheri nominated Paula and said, “Paula is one of the most caring and helpful people we know. She is a tremendous person with tremendous heart and is always there to volunteer for anything with a smile.”

Paula said she likes being a 4-H volunteer because it allows her to be a positive part of her children’s lives, as well as the lives of the other youth she interacts with through her club and the Bucket Calf program. “My favorite experiences volunteering at the County Fair come from watching my ‘4-H kids’ do well in their shows, whether it is swine, cattle, rabbits or dairy,” she said.

She also enjoys her club’s photo day in which, with the help of 4-H volunteer Pat Heather, club members go wild with their cameras and imaginations.

An employee at Crete Carrier Corporation, Paula has spent her last seven vacations at the Lancaster County Fair.

Paula says it might surprise people to know as active as she is in 4-H, she was not in 4-H as a youth. She was, however, involved in UNL Collegiate 4-H during college.

In addition to her 4-H volunteer duties, Paula also volunteers as a Sunday school teacher at Bethlehem Covenant Church.

Congratulations to Paula. Volunteers like her are indeed the heart of 4-H!
October is National Indoor Air Quality Action and Awareness Month. Being aware of potential indoor air pollutants can help prevent health problems. It is important to take action to improve indoor air quality.

Recent research has shown indoor air pollution may pose even greater health risks than outdoor air pollution. This is because indoor concentrations of some pollutants may be many times higher than their levels outdoors and people spend most of their time indoors (about 90 percent).

Indoor air can harbor many potentially hazardous materials. These materials can cause a variety of health problems — spontaneity, common, very serious — that don't associate with poor household air quality.

Some of the more recognizable indoor air pollutants — because they can be seen or smelled — include cigarette smoke, asbestos, formaldehyde, carpet fumes, mold and mildew.

Easy to remember are carbon monoxide, lead and radon. A variety of household products can also degrade air quality if used improperly.

Many homes are built and remodeled with features that can cause air pollution, but considering the factors that assure fresh and healthy indoor air. A primary reason for health problems, though, is we are using furnishings, combustion appliances and household products that can compromise the quality of the air.

Some products, like lead-based paint, can produce serious health problems. Lead, which has been banned in gasoline and household paint but still persists in the environment, causes delayed learning, development problems, hyperactivity and other problems in children who ingest small amounts, but regular amounts. Combustion by-products from wood stoves, fireplaces, unvented space heaters, gas ovens and stoves can damage the respiratory tract and irritate the eyes, nose and throat. One of the components of combustion carbon dioxide, carbon monoxide, can kill, and in small amounts, cause flu and allergy symptoms.

Excessive amounts of formaldehyde, used as a preservative and adhesive in building materials and furnishings, can trigger asthma attacks and damage the liver, kidneys and the central nervous system. In lower amounts, it can irritate the eyes, nose, throat and cause coughing, fatigue, skin rashes and headaches.

Even relatively common household products can cause undesirable health effects if they are not used properly. These products include paints, strippers, solvents, wood preservatives, aerosol sprays, cleaners, moth repellents, automotive products, hobby supplies and pesticides.

Molds, mildew, fungi, bacteria and other biological pollutants are also a source of common health problems such as headaches, watery eyes, runny nose, nasal congestion, coughing, fatigue and breathing difficulties.

Don't let your home make you ill. Now is the time to check your home for air pollutants and improve the environment. (LB)
**FRIENDSHIPS continued from page 7**

In later life, especially after retirement, meeting new people can be difficult. Retirement homes, clubs, religious groups or other special interest groups help people remain active and make new friendships. Although friendships often are lost over time, they almost always can be renewed. People don’t forget friendships and usually are happy to revive them. Friends must be reinforced on a regular basis to be maintained. (LB)

**55 ALIVE DRIVER Safety Course Sept. 16 & 17**

UNL Cooperative Extension in Lancaster County is co-sponsoring a 55 Alive Driver Safety Course scheduled for Tuesday, Sept. 16 and Wednesday, Sept. 17, 12:30–4:30 p.m. The AARP Driver Safety Program is taught in two, four-hour sessions spanning two days. The course helps drivers refine existing skills and develop safe, defensive driving techniques. Cost is $10 payable at the first class. Call 447-7180 to register for this training. (LB)

Reduce, Reuse and Recycle Training on Sept. 30

A train-the-trainer lesson on the 3 R’s (Reduce, Reuse and Recycle) will be given Tuesday, Sept. 30, 1 p.m. Following the 3R’s in our daily lives will help lower the amount of trash going to the landfill. This training will give participants information on recycling, Shop S.M.A.R.T. (Save Money And Reduce Trash) and ideas on how to make treasures from trash. Call Pam at 447-7180 to register for this training. (LB)

**Make It Yourself With Wool Contest**

This contest is to promote the understanding of the variety of wool fabric and yarn and to encourage personal creations and skills in sewing, knitting, crocheting, spinning and weaving of wool fabric and yarn. This year, they are promoting the category of “made for others” at the district and state levels.

If you are in need of any further information, please feel free to contact the Nebraska State Director, Alice Doane, 17705 Bluff Road, Waverly, NE 68462; phone: (402) 786-5555. You may enter any district contest. Dates and locations are as follows:

- District I — Oct. 18 in Scottsbluff. Entry deadline, Oct. 4
- District II — Oct. 11 in Lexington. Entry deadline, Sept. 27
- District III — Nov. 1 in Lincoln. Entry deadline, Oct. 25

Application forms are available at the Lancaster Extension Office, 444 Cherrycreek Road, Suite A, Lincoln, NE 68526-1507. For more information, call Lorene at 447-7180. (LB)

**EXTENSION CALENDAR**

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

### SEPTEMBER

- **14** Dine Out for 4-H Citizen Washington Focus (CWF), Don & Milie’s, 5200 S. 56th Street, 11 a.m.–4 p.m.
- **14** 4-H Teen Council Meeting
- **15** 55 ALIVE Driver Safety Course 12:30–4:30 P.M.
- **16** 4-H Kick Off, Lancaster Event Center, 6–7:30 p.m.
- **17** 55 ALIVE Driver Safety Course 12:30–4:30 P.M.
- **20** Composting Demonstration, City Yard Waste Composting Demonstration Site at 50th & Colby, Lincoln, 8:30 a.m.
- **20–28** AkSarBen 4-H Livestock Exposition, Omaha Convention Center and Arena
- **22** Family Community Education (FCE) Council Meeting 7 p.m.
- **23** 4-H Shooting Sports Reinforcement Meeting 7 p.m.
- **24** Livestock and Grain Price Outlook Meeting 1:30–4 p.m.
- **30** 4-H Leader and Parent Training 9:30 a.m. & 7 p.m.
- **30** Family Community Education (FCE) and Community Leader Training

### OCTOBER

- **5–11** National 4-H Week 7 p.m.
- **9** 4-H Rabbit VIPS Committee Meeting, Lancaster Event Center 7 p.m.
- **10** Lancaster Extension Board Meeting 6 a.m.
- **10–12** 4-H Horse Trail Ride, Halsey
- **12** Dine Out for 4-H Citizen Washington Focus (CWF), Don & Milie’s, 5200 S. 56th Street, 11 a.m.–4 p.m.
- **12** 4-H Teen Council Meeting 3 p.m.
- **13** 4-H Horse VIPS Committee Meeting, Lancaster Event Center 7 p.m.
- **14** 4-H Citizen Washington Focus (CWF) Meeting 7 p.m.
- **14** Family Community Education (FCE) Achievement Night 8:30 P.M.

**EXCEPTION CALENDAR**

- **8** Kids are Back in School and so are Headlice
- **11** 4-H Rabbit VIPS Committee Meeting, Lancaster Event Center 7 p.m.
- **11** 4-H Council Meeting
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- **11** 4-H Council Meeting
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Access Lancaster County Extension 24 Hours a Day/Seven Days a Week

Do you have access to the Internet? If so... put it to use by logging on to lancaster.unl.edu to see how knowledge can work for you! You’ll find an array of Cooperative Extension resources on topics that effect your life including:

- 4-H and Youth
- Agriculture and Acreage
- Environment and Natural Resources
- Family Living
- Food Safety and Nutrition
- Gardening/Horticulture
- Home Environment
- Insect, Spiders, Mice and More
- Lancaster County Nutrition Education Program
- the NEBLINE newsletter—current and past issues
- and much more!

Latest U.S. Drought Monitor Map

As of Sept. 2, Lancaster County is in severe drought conditions bordering on extreme drought conditions.

For the most recent map, visit www.drought.unl.edu/dm

Source: National Drought Mitigation Center, University of Nebraska

If you are unable to attend but would like to find out more about 4-H

Name ___________________________________ Age ___________

Gender: o Male  o Female

Parent/Guardian(s) _________________________________________________________

Address __________________________________________________________________

City________________________________State ___________ Zip _________________

Phone (day) _________________ Phone (evening) ________________________________

Grade ____________ School _______________________________________________

Interests __________________________________________________________________

Return to UNL Cooperative Extension in Lancaster County, 444 Cherrycreek Rd, Suite A, Lincoln, NE 68528-1507

Lancaster Event Center, 84th & Havelock Exhibit Building

Tuesday, Sept. 16

6–7:30 pm

Lancaster County 4-H kicks off the 4-H year with an opportunity for youth and their families to discover 4-H.

Rhode Packing Co. is providing Fairbury hotdogs!

Learn about 4-H

Prizes!

4-H is open to youth ages 5-19

4-H is a learn-by-doing program with more than 150 projects to choose from. 4-H develops life skills such as thinking critically, solving problems, respecting self and communicating.

In some 4-H clubs, members complete several projects a year. Some 4-H clubs focus on one particular area, such as small pets, rabbits or chess. Each club is led by a club leader (often a club member’s parent). Parents are welcome to attend meetings.

Discover all the exciting opportunities 4-H can offer you!

If you are unable to attend but would like to find out more about 4-H

Name ___________________________________ Age ___________

Gender: o Male  o Female

Parent/Guardian(s) _________________________________________________________

Address __________________________________________________________________

City________________________________State ___________ Zip _________________

Phone (day) _________________ Phone (evening) ________________________________

Grade ____________ School _______________________________________________

Interests __________________________________________________________________

Rhoode Packing Co. is providing Fairbury hotdogs!

odds insectS

continued from page 3

They immediately begin feeding on organic material and other small organisms including insects.

In the southeastern U.S., mole crickets feed on grass roots causing the thinning of turf and eventually a bare area of soil. They don’t seem to cause nearly as much damage to turf in Nebraska. They are an oddity, but not much of a problem.

At the extension office, we identify insects at no cost to you. We especially enjoy seeing the unusual. If you find an insect/spider that worries you or you are curious about, we’d love to see it! Because many folks leave their insect and spider specimens, we have amassed a nice collection.

Office hours are from 8 a.m.–4:30 p.m., weekdays.

Discover all the exciting opportunities 4-H can offer you!

If you are unable to attend but would like to find out more about 4-H

Name ___________________________________ Age ___________

Gender: o Male  o Female

Parent/Guardian(s) _________________________________________________________

Address __________________________________________________________________

City________________________________State ___________ Zip _________________

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Interests __________________________________________________________________

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or fill out form online at www.lancaster.unl.edu/4H

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