Frequent droughts have caused severe water shortages in some areas. Droughts can be especially stressful for the rural homeowners who depend on private wells for their water supply. These individual wells tap groundwater aquifers which cannot easily be seen or monitored. The invisible nature of groundwater leads to an uneasy feeling among homeowners relying on wells that their water supply could dry up without warning during a drought.

Changes have occurred to the landscape in many rural areas. Increasing development and rural population growth will likely continue in the future. Existing rural residents often worry these changes may create competition for groundwater that might increase the susceptibility of their well to drought. It is unlikely small numbers of new homes will cause significant changes in groundwater levels. However, more dramatic changes in land use that result in large amounts of groundwater or prevent recharge from occurring over a wide area could make existing wells more susceptible to drought.

Groundwater Level

Annual Cycle

Given this natural cycle of groundwater, most problems with wells tend to occur in late summer or early fall when groundwater levels naturally reach their lowest levels. The natural fluctuation of groundwater levels tends to be most pronounced in shallow wells. As a result, shallow wells are usually more susceptible to drought than deep wells. Although deeper wells may be slower to suffer from drought conditions, they may also take longer to recover after a drought has occurred.

The water level in a groundwater well will fluctuate naturally during the year. Groundwater levels tend to be highest during March and April in response to winter snowmelt and spring rainfall. The movement of rain and snowmelt into groundwater is known as “recharge.” Groundwater levels usually begin to fall in May and continue to decline during the summer. Groundwater recharge is limited during late spring and summer because trees and other plants use the available water to grow. Natural groundwater levels usually reach their lowest point in late September or October. Groundwater levels during winter may be stable or fall slightly until spring snowmelt and rainstains start the annual cycle again.

Determining Your Groundwater Level

Direct determination of the groundwater level in your well is difficult and usually requires the use of a water level meter. These meters are comprised of an electrical probe attached to the end of a measuring tape. If the probe is lowered to the water level, the pump will not take water as the existing one. Existing residents of rural Lancaster County have lost their water supply and had to drill new wells and others have noticed a lower water quality in their existing well. Now may be a good time to evaluate your water usage and initiate some water conservation practices. Even if the drought ended today, it will take time to bring water levels back to pre-existing levels.

Conserve Water!

Water conservation measures become critical during times of drought. Homeowners relying on private wells should begin to conserve water as soon as drought conditions occur. Water use within the home can be significantly reduced through changes in habits and by installing water-saving devices. In emergency situations, changes in water use habits can provide quick reductions in water use. Examples might include flushing the toilet less often, see Private Well Management on page 3.

Groundwater-level Changes in Nebraska – Drought from Spring 2000 to Spring 2006

Spurred by increasing irrigation use and a statewide drought going into its eighth year, parts of Nebraska are experiencing groundwater declines of up to 30 feet, according to annual monitoring by the University of Nebraska-Lincoln. Researchers with the ULN School of Natural Resources Conservation and Survey Division, along with personnel from cooperating agencies, measured spring water levels in more than 5,600 irrigation, domestic, observation and monitoring wells in all of Nebraska’s 23 Natural Resources Districts. Because of strong interest in the effects of the current drought on groundwater levels, a map from Spring 2000 to Spring 2006 was produced.

Some Wells in Lancaster County Have Dried Up

No one will tell you when to turn on or off your irrigation system when pumping water from your own well. No one will tell you how to use the water in your home. These decisions are up to you. What should be guiding your decisions and water usage is your desire to maintain your current water supply and not have to drill and pay for a new well. In many areas of Lancaster County, the new well may not have as high quality water as the existing one.

Many residents of rural Lancaster County have lost their water supply and had to drill new wells and others have noticed a lower water quality in their existing well. Now may be a good time to evaluate your water usage and initiate some water conservation practices. Even if the drought ended today, it will take time to bring water levels back to pre-existing levels.

In nearby wells that would allow them to document the existing groundwater level. Similar discussions with neighbors that have had new pumps installed or had new wells drilled may provide valuable information about the groundwater level. Given this natural cycle of groundwater levels naturally reach their lowest levels. The natural fluctuation of groundwater levels tends to be most pronounced in shallow wells. As a result, shallow wells are usually more susceptible to drought than deep wells. Although deeper wells may be slower to suffer from drought conditions, they may also take longer to recover after a drought has occurred.

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Computerized Farm Financial Recordkeeping Workshop, March 19

Over the years, Computerized Farm Financial Recordkeeping workshops have been one of the most popular in-depth programs offered by the University of Nebraska at the Lancaster Extension Center. This Spring, the workshop will be presented at six locations in southeast Nebraska.

It will be held in Lincoln on Monday, March 19 from 9 a.m.–4:30 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road. Please pre-register before March 15.

A hands-on workshop with workshop locations and registration form is available online at http://lancaster.unl.edu. To register or call 441-7180.

All workshops will be presented in a hands-on teaching style with participants sitting at computers performing the tasks being demonstrated. One extension educator will lead the discussion and the image from the instructor’s computer will be projected on a screen. Other educators will be available to update and give individual help as needed.

In addition to seeing the actions projected on the screen, the key steps of each computerized recordkeeping process will be demonstrated. Each workshop will be taught hands-on using Quicken® 2007 Basic in the classroom.

Reference materials, lunch and refreshments are all included in the registration fee. The registration fee for each workshop is $50. A second person sharing the same computer and sharing a single set of handouts can attend for an additional $10 to cover the cost of the handouts.

Registration will be limited to space and computer availability on a first-come, first-served basis. Pre-registration must be received in order to hold a place in the workshop. These handouts are intended as a guide in the classroom and as references as participants set up their records at home.

Computerized Farm Financial Recordkeeping Workshop, March 19

Private Pesticide Applicator Trainings

Federal and state law states a private pesticide applicator must be certified and licensed to buy, use or supply a restricted-use pesticide to produce an agricultural commodity on property they own or rent on or off their employer’s property if the applicator is an employee of a farmer. No pesticide license is needed if one will only be using general use pesticides on their farm.

Applicants whose certification is due to expire on April 15, 2007 will receive a letter from the Nebraska Department of Agriculture (NDA).

There are two certification options for private pesticide applicators: attend a UNL Extension training session or take a self-study book and test. If you are re-certifying, bring the notification letter and registration form you received from the NDA.

Extension forwards all application forms to the NDA which will certify the private applicator. A $25 license fee will be charged by the NDA and be due within three weeks for the application to be processed and the certification to be mailed to the applicant. This deadline is good for three years, expiring on April 15, 2010 for those who certify this spring.

Private Pesticide Applicator Training Sessions will be offered this Spring at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. No pre-registration needed.

There is a $15 extension training fee.

• Tuesday, Jan. 30, 8:30–11:30 a.m. and repeated 1:30–4:30 p.m.

• Thursday, Feb. 8, 6:30–9:30 p.m.

• Saturday, Feb. 10, 8:30–11:30 a.m.

The Self Study Method

Applicants who choose this option must complete the study required to pass a written examination in the general standards category and one or more additional categories. A commercial applicator, one must pass a written examination. However, a commercial applicator may pass in any of the following categories with respective examinations: Animal Pest Control, Aquaculture Pest Control (subcategory), Forestry Pest Control, Food Pest Control - Animal, Forestry Pest Control, Forest Pest Control, Fumigation, General Pest Control - Animal, General Pest Control - Plant, Horticulture Pest Control, Horticulture Pest Control - Ornamentals, Marine Pest Control, Ornamental Pest Control - Plant (subcategory), Pest Control - Animal, Pest Control - Ornamentals, Pest Control - Plant, Public Health Pest Control - Rodent, Public Health Pest Control - Termite, Public Health Pest Control - Vector, School Pest Control, Seed Treatment, Turf Pest Control, Wildlife Damage Control, Seed Treatment, Wildlife Damage Control, Seed Treatment, Wildlife Damage Control - Rodent, Wildlife Damage Control - Termite, Wildlife Damage Control - Vector, Wildlife Damage Control - Waterfowl, Wildlife Damage Control - Bird, Wildlife Damage Control - Mole, Wildlife Damage Control - Insect, Wildlife Damage Control - Fish.

All self-study materials must be purchased from the pesticide education office 101 Natural Resources Hall on East Campus, 472-1632 or materials can be accessed on the UNL Pesticide Education Web site at http://pested.unl.edu/pat/

Initial Certification Training Sessions will be offered on Thursday, Feb. 8 and Thursday, March 14 at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. The general standards session will begin at 9 a.m. and other categories at 1 p.m. or 3 p.m.

It is highly recommended that you obtain and review written study materials prior to attending the training sessions.

The unifying theme in all the training system, remember to close roof hatches to prevent rain and snow from getting into the grain mass. Cold air moving in is not running to prevent problems caused by the chimney effect that can develop in moist air at the bottom of the bin and up through the grain.

Manage Stored Grain

Temperature with Aeration

Tom Dorn
UNL Extension Educator

Hopefully, you were able to get your stored grain down to safe storage moisture content over the past few weeks. Freezing temperatures set in last fall. You should not forget moisture content is not the only consideration for determining a grain’s storage temperature. The temperature of the stored grain is important as well.

When grain is stored at significantly warmer than the ambient air temperature, convection currents can occur in a grain bin. Air will slowly cool in the cooler grain near the bin wall and rise through the warmer grain in the center of the bin. Warm air moving up through the center carries moisture with it. When the warm/moist air contacts cold grain at the top surface, some of the moisture can condense and re-wet the grain. Crusted, moldy grain, sometimes with active storage insect activity can result if this condition is not discovered early and corrected by breaking up the crust and running aeration fans in the grain temperature throughout the bin.

To reduce convection currents in the grain, you need to maintain uniform grain temperatures throughout the bin. Temperature is controlled with aeration. If you have stored grain and have not run the aeration fan since the first of the year, it would be wise to watch the grain temperature closely for the first few hours to catch any signs of warm/cool spots in your stored grain. When average daily temperatures are predicted to be in the 60s and run the fan.

The hours to push a temperature front through a bin can be estimated by dividing the bin’s volume by the aeration rate. Most storage bins have small aeration fans with an output of 1/10 or 2/10 of a cubic foot per minute per bushel (cfm/bu). Using the rule of thumb, about 150 hours is needed with an airflow of 0.1 cfm/bu and about 5 hours is needed for 0.2 cfm/bu. If you have a bin equipped with a drying fan with an output of 0.2 cfm/bu and the aeration front through the bin would only be 15 hours. Check grain temperature at multiple locations when the cooling front has been pushed completely through the grain.

Due to the warmer spring and summer months, it should be re-warmed in early spring to avoid convection currents that move the opposite direction through the grain but have the same detrimental effect. As the air temperature warms in the spring, the grain next to the bin walls will be warmed but the grain in the middle of the bin is insulated from the ambient temperature outside and stays cold. Air will rise through the warmer grain near the wall and will be replaced with warm, moist springtime air sinking into the grain at the top center of the bin. The moisture in the center of the bin will condense and form condensation on the bin surface. This condensation will then wash back down into the grain and result in active storage insect activity.

Grain held into May should be warmed to about 50 degrees F. Grain held into the summer months should be warmed to 60 degrees F. When not running the aeration system, remember to close roof hatches to prevent rain and snow from getting into the grain mass. Cold air moving in is not running to prevent problems caused by the chimney effect that can develop in moist air at the bottom of the bin and up through the grain.

Manage Stored Grain
If you are building a new house in a rural area, having an adequate water supply from a private water well is critical to your plans. Planning should be done prior to having a well drilled to ensure an adequate supply of water will be available.

This article offers ways to estimate water needs and calculate how much water must be delivered from a private water supply to meet your needs. These planning assumptions are based on long-term averages for various water uses. Your individual demand periods may significantly differ from these averages.

In general, we use 50 to 100 gallons per person per day in our homes (200 to 400 gallons per day for a family of four). The household water use estimates given below (Table 1) can be used to determine more specific daily water use values for your home.

For the purposes of planning and designing systems, the total daily water use is less important than the peak daily water use or the peak demand period. In reality, most of the water used in the home occurs over a very short time period, usually in the morning or evening. As a result, for planning purposes it is sufficient to check a water system to supply all of the day’s projected water use in a 2-hour period. If you must estimate your home water use will be 400 gallons per day, the water system should be sized to provide this much water in a 2-hour period.

So, how much water can be delivered from your well in a given period of time? This is referred to as the well yield. The yield for a well is considered the maximum rate in gallons per minute (GPM) a well can provide without causing the water level in the borehole below the pump intake.

For most single family homes, a minimum flow of 6 GPM is suggested from a well. This flow would provide 360 gallons of water each hour, which would be sufficient to meet most home water peak demands. Higher flow rates may be necessary for larger homes with more fixtures, appliances and residents which may all be using water at the same time.

Ideally, the yield from the well will exceed the recommended minimum flow rates. If not, you may need to rely on water storage to meet peak demand periods. For a drilled well, the borehole can provide a significant amount of water storage. A typical 6-inch diameter well will store about 1.5 gallons of water for every foot of standing water in the borehole and a 10-inch well stores about 4 gallons of water per foot. Therefore, a 6-inch diameter well with about 100 feet of standing water in the borehole would contain about 1000 gallons of stored water.

An approximate estimate of the amount of water needed before a well is developed can be added.

Planning for water supply needs is generally much more important for farms because much larger amounts of water, an intermediate storage system can be added.

For wells that yield extremely low amounts of water, an intermediate storage system can be added.

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For wells that yield extremely low amounts of water, an intermediate storage system can be added.

The required water source flow rate does not necessarily need to equal the yield from the well. If water availability is projected to be insufficient for the calculated peak water demand, additional sources must be developed or additional storage must be used.

### Table 1: Typical water use for various appliances and fixtures in the home

<table>
<thead>
<tr>
<th>Description</th>
<th>GPM per load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothes washer (top-loading)</td>
<td>3.2 – 5.0</td>
</tr>
<tr>
<td>Clothes washer (front-loading)</td>
<td>2.7 gallons per load</td>
</tr>
<tr>
<td>Dishwasher (standard)</td>
<td>2 to 14 gallons per load</td>
</tr>
<tr>
<td>Dishwasher (efficient)</td>
<td>4.5 – 10 gallons per load</td>
</tr>
<tr>
<td>Garbage disposal</td>
<td>4 gallons per day</td>
</tr>
<tr>
<td>Kitchen sink</td>
<td>2 to 3 gallons per minute of use</td>
</tr>
<tr>
<td>Bathtub sink</td>
<td>2 gallons per minute of use</td>
</tr>
<tr>
<td>Shower or tub</td>
<td>2 to 3 gallons per minute of use</td>
</tr>
<tr>
<td>Toilet (low-flush)</td>
<td>1.6 gallons per flush</td>
</tr>
<tr>
<td>Toilet (standard)</td>
<td>5 to 6 gallons per flush</td>
</tr>
<tr>
<td>Outside hose (1/2-inch)</td>
<td>5 gallons per minute of use</td>
</tr>
<tr>
<td>Water softener regeneration</td>
<td>10 to 30 gallons per cycle</td>
</tr>
</tbody>
</table>

### Table 2: Suggested minimum flow rates for various numbers of bathrooms and bedrooms in a home

<table>
<thead>
<tr>
<th>Number of bathrooms in home</th>
<th>1.5</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 GPM</td>
<td>8 GPM</td>
<td>10 GPM</td>
<td></td>
</tr>
<tr>
<td>8 GPM</td>
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<td></td>
</tr>
<tr>
<td>15 GPM</td>
<td>17 GPM</td>
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<td></td>
</tr>
</tbody>
</table>

### Table 3: Estimated daily water use in gallons for various farm animals

<table>
<thead>
<tr>
<th>Animal Water Use</th>
<th>Gallons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making cows</td>
<td>20</td>
</tr>
<tr>
<td>Sprinkler cooling for animals</td>
<td>12</td>
</tr>
<tr>
<td>Dry cow, beef cattle, or steers</td>
<td>2</td>
</tr>
<tr>
<td>Calves</td>
<td>1.5 to 2.0</td>
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<tr>
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<td>2.0</td>
</tr>
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<td>3.5</td>
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<tr>
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<tr>
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<tr>
<td>15 to 18 months old</td>
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<td>18 to 24 months old</td>
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</tr>
<tr>
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<td>2</td>
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<tr>
<td>Horses or ponies</td>
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</tr>
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<td>Chickens (per 100 head)</td>
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</table>

### Private Well Management

**continued from page 1**

Taking shorter showers, only wash the dishes that need washing, and collecting water from roof gutters for outside use.

**When Wells Dry Up**

There are a number of reasons why a well may quit producing water. The most frequent cause is a malfunction or worn-out submersible pump. Other electrical problems, such as a malfunctioning automatic switch at the pressure tank, may also cause a loss of water. Pressure tanks need to be replaced from time to time. Water quality problems, like iron bacteria and sedimentation, may also clog the well and severely restrict water flow. A well driller or competent plumber should be consulted to determine the exact cause of the problem.

Under persistent dry weather conditions, the water level in your well may drop below actual water use, possibly causing a loss of water. In some cases, the water level may only temporarily drop below the pump when water is being frequently pumped from the water storage systems. Under these conditions, you may be able to continue using the water storage systems by initiating emergency water conservation measures and using water only for essential purposes.

If the water level always drops below the submersible pump, it may be possible to lower the submersible pump within the existing well. In most cases this can only provide a short-term solution to the problem. More permanent solutions require either deepening of the existing well or drilling of a new well. Be aware that deepening an existing well will not increase the well yield and could produce water of different quality characteristics, which you should consult with a local well driller or a professional hydrogeologist to determine the best solution for your situation.

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University of Nebraska–Lincoln Extension presents a series of programs, entitled Acreage Insights–Rural Living Clinics, targeting acreage owners and specifically designed to provide knowledge and skills to better manage a rural living environment. The following clinics will be held in Lincoln at the Lancaster Extension Education Center, 444 Cherry Creek Road, from 7–9 p.m. For more information, contact Sarah Browning at (402) 727-2775.

**CLINICS ARE $10/PERSON ADVANCED REGISTRATION; $15/PERSON AT THE DOOR**

**Pre-registration deadline is 3 working days before the clinic.**

**Tuesday, Feb. 20**

**Landscape Design Basics**

Quality acreage landscapes are created by integrating proper access and utility locations, comfortable and attractively designed outdoor living spaces, natural area protection and enhancement, and sustainable plantings. This seminar will outline a basic design process/approach to help ensure quality acreage design as well as highlight what to look for when shopping for an acreage home with high landscape quality potential.

**Tuesday, March 20**

**Farming for Farmers Markets and Other Direct Markets**

Farmers markets and direct marketing of locally produced produce is stretching the ability of the existing producers to meet the expanding needs. Additional producers are needed to meet this increased demand. Topics will include the selection of vegetable and fruit species, the growing of the produce, and finally tips on marketing these products.

**Tuesday, April 17**

**Management of Small Ponds**

Is your pond troubled after a rain? Is your pond covered with a green algae scum in the summer months? Do stocked pond weeds and/or shoreline vegetation reduce angling access and recreation on the pond? If you answered yes to any of the questions or have questions pertaining to pond management then you will want to attend. This seminar is designed for those who have a 1/2 acresized pond or larger.

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**Registration Form**

**Please check which clinic(s) you are registering for**

<table>
<thead>
<tr>
<th>Landscape Design Basics</th>
<th>Farming for Direct Markets</th>
<th>Management of Small Ponds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln–Feb. 20</td>
<td>Lincoln–Mar. 20</td>
<td>Lincoln–Apr. 17</td>
</tr>
</tbody>
</table>

**Address**

City: _____________________________ State: __________ Zip: __________

Phone: ___________________________

**Number attending __________________**

Amount enclosed $ ____________

Mail completed registration form and check (payable to UNL Extension) to:

UNL Extension in Dodge County
Acreage Insights
1206 W. 23rd St.
 Fremont, NE 68025
The following recipe is very delicious and versatile cereal. The Triple Play serving suggestions at the bottom take into many different directions. Though the recipe was created so kids could cook it, it tastes good and is good for people of all ages! Walnuts are high in antioxidants and are the only nut to contain a significant amount of omega-3's.

### Triple Play Walnut Crunch

**Servings: 12 • Prep Time: 5 minutes**

- 3 cups old-fashioned oats
- 1-1/2 cups California walnut pieces
- 1/2 cup brown sugar
- 3 tablespoons canola oil
- 3 tablespoons honey
- 1-2 teaspoons cinnamon
- 1/2 cup shredded sweetened coconut

Preheat oven to 350 degrees F. Spread oats and walnuts on a baking sheet that has a low rim, or use a roasting pan. Bake 8-10 minutes, stirring after 5 minutes, until the walnuts and oats smell toasted and start to brown. While oats and walnuts are toasting, combine brown sugar, oil, honey and cinnamon in a large bowl. Add a grown-up to help with this step. Pour hot oats and walnuts from the pan into the sugar mixture. Stir all the ingredients together until evenly coated with the sugar. Mixture will look dry.

(Allice's note: I was out of coconut and left it out—the recipe still tasted great!)

Line the baking pan with a piece of aluminum foil so it extends over the ends of the pan. Spray foil with cooking spray. Spread oat-walnut mixture onto foil. Bake 5 minutes. Remove from even and stir. Bake additional 5 minutes until toasted and golden brown. Remove from oven and stir again. Cool completely on pan. Break crunch into chunks. Lift edges of foil and pour crunch into an airtight container or plastic bag. (Allice's note: Check crunch about halfway during the last 5 minutes to assure you don't over-bake it.)

TIP: Measure the honey in the spoon you used for the oil—the honey will slip right off the spoon!

### SERVING SUGGESTIONS

**Grand Slam Berry Crisp:** Put fresh or frozen berries in a small bowl and top with Triple Play Walnut Crunch. Micro-wave 1 minute or just until warm. Serve with vanilla yogurt or ice cream.

**Honeymoon Breakfast Cereal:** Add fresh or dried fruit to a bowlful of Triple Play Walnut Crunch. Top with yogurt or milk.

**It's-A-Steal Energy Mix:** Add a serving of Trail Mix instead of raisins. Pack in a bag for a take-along energy snack.

- 1/3 cup brown sugar
- 3 tablespoons honey
- 1-1/2 teaspoons cinnamon
- 1/2 cup shredded sweetened coconut

Pack healthy lunches can be a challenge. You want a lunch that is filling, but not leaving you tired or sluggish. Lunches can be loaded with unhealthy fats and/or saturated fats from processed snacks, baked goodies and higher fat forms of meats and cheeses. Six tips for power-packed lunches follow:

1. Pack whole grain versions of favorite grains—these have fiber which may help you fill up on less: whole wheat breads and crackers; whole wheat oatmeal; whole rice.
2. Trail mix made with whole grains. To identify whole grains, look at the ingredient listing in which the first flour listed is a whole grain. Example ingredient listing in which the first flour listed is a whole grain:

   - Whole grain oat flour, corn flour, whole wheat flour, rice flour, salt, calcium carbonate, disodium phosphate, reduced iron, niacinamide*, zinc oxide, BHT (a preservative), yellow 5, yellow 6, thiamin mononitrate*, pyridoxine hydrochloride*, riboflavin*, folic acid*.

   *One of the B vitamins

### Pack Power Lunc hes

- **Helping limited-resource families learn to prepare nutritious and safe foods while stretching their food dollar.**

Sarah Pankoke
UNL Extension Assistant

Pack hearty lunches can be a challenge. You want a lunch that is filling, but not leaving you tired or sluggish. Lunches can be loaded with unhealthy fats and/or saturated fats from processed snacks, baked goodies and higher fat forms of meats and cheeses. Six tips for power-packed lunches follow:

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### Close up and color with your favorite fruits and veggies

- Try a "rabbit bag"—a bag of fresh cut veggies—carrots, celery, cauliflower, broccoli, etc.
- Add lettuce, onion, tomato, radish, cucumber, green pepper, etc. to sandwiches
- Rinse and prepare (cut up) the head of broccoli right away when you get home from the store so it is ready when you are
- No fresh veggies? Transfer a can of vegetables or a portion of frozen vegetables to a microwaveable dish for a quick side to your lunch.

### Fruit Salad, dried fruit, 100 calories

3. Get more calcium with yogurt and low-fat cheese—8 ounces of yogurt and 2 ounces of sliced cheese have comparable amounts of calcium to 8 ounces of milk. Select low-fat yogurt to cut back on added sugar and look for low-fat cheese made with 2 percent milk.
4. Pack protein. Opt for lean deli meats instead of fatty cold cuts or pastrami. Alternate your protein sources—try a peanut butter and fruit sandwich or a tuna sandwich made with lite mayo. Add cooked dried beans and/or nuts to your salad.
5. For your sweet tooth, make baked goods with whole wheat flour and/or oatmeal. Make your own trail mix with dried fruit, nuts, cereals and something sweet. Enjoy a piece of fruit that is naturally sweet. You can still enjoy treats, just be aware of appropriate portion sizes.
6. Be sure to keep perishable foods cold so lunches are safe as well as satisfying.

### Candy Placement May Determine How Much You Eat

As Valentine’s day is the perfect time to enjoy sweets, consider how much you may eat may be determined by where it is located. When candy is less visible and out of reach, people may engage in less “mindless” eating according to Brian Wansink, Ph.D., professor of marketing, applied economics and nutritional science at Cornell University. Wansink gave 40 female faculty and staff 30 Hershey Kisses and varied whether they were in clear or opaque containers and whether they were on the women’s desks or six feet away. The number eaten was counted daily after the women left at night and the jars were refilled. Wansink’s research team found participants ate less when the candy was invisible and the jars were farther away. They also discovered people were more accurate in recounting how many candies they had eaten when they had to move to get them. Here’s how the average number of candies eaten daily changed with the different treatment conditions:

- Clear container on the desk:
  - 7.7 candies
- Opal Container on the desk:
  - 4.6 candies
- Clear container, six feet away:
  - 5.9 candies
- Opal Container, six feet away:
  - 3.1 candies

Wansink’s conclusion: It wasn’t inconvenience restricting their consumption but rather having to travel six feet to obtain a candy gave them a chance to eat more mindfully and ask themselves if they were really hungry. With easy access to candy, it was much easier to overeat without realizing it. While this may seem simple, consider that eating just 100 calories more daily than needed can lead to a weight gain of 10 pounds a year!
FAMILY & COMMUNITY EDUCATION (FCE) CLUBS

President’s Notes — Alice’s Analysis

Alice Doane
FCE Council Chair

Where oh where did 2006 go? When I look at the calendar for 2007, it is full. I wonder if I’ll be saying the same thing when we get to the end of 2007. I’m glad we just had snow on the last day of 2006 and not all the ice in the central part of the state. I looked out the window, which is against a plastic rail around it and saw snow stacking up about eight inches. This is how it was in Kabul, Afghanistan, where the snow would come straight down due to no wind in the area. It has been 40 years ago. In the afternoon, the snow would be gone due to the sun and high elevation. My husband Ted is back teaching the Jr. and Sr. High Training Program at the University of Nebraska-Lincoln. There are seven men and one woman in this group. This is the 40th year for the program. The program lasts three months.

We are underway for another year of FCE. We are having our first Council meeting on Jan. 12, 12:30 p.m., at the Panareth Restaurant, 5500 S. 56th Street (just north of Highway 2). This year we have seven clubs and 66 members. Yearbooks with the various committee members and community projects will be discussed. All presidents should bring a letter and agenda earlier this month. Wishing everyone a Happy New Year.

Starting the New Year right with winter cleaning tips. Here are some easy-to-follow cleaning resolutions to get everything under control.

Restock
• Take inventory of your cleaning supplies. Store most frequently used items in a container — easy to carry from room to room.
• In spring, invest in duplicate sets of cleaning supplies so you can indulge in spring or summer mood — no matter where you are.
• Keep disinfectant wipes next to the kitchen, bathroom and laundry sinks for quick and easy cleanups.

Refresh
• Free up the fridge by discarding leftovers.
• Use fabric refiners to help remove odors from carpets, upholstery and curtains.
• Apply wrinkle-releasing spray to help make slipcovers and curtains look crisp and new.
• Spray in a sweeping motion until the item is slightly damp. Then gently tug and smooth the wrinkles away.

Review
• Small changes can make a big difference.
• Add a coat rack or door hooks for an easy place to hang jackets and scarves.
• Confine snacks to certain areas of the house to cut down on clutter and eliminate wayward wardrobe items.

Sorting mail next to the trash or eating at least one meal together with important family events or when changing jobs, etc. Teenagers may not like the way you do this! You start by telling them they are very young. No matter what age, we all need to be told we love them. Have family meetings to see everyone’s point of view; discuss important events or items; sit down at the table and eat at least one meal together everyday, go to special events as a family.

Clearing Out and Cleaning Up

The following FCE and community leader training sessions will be presented at the Lancaster Extension Education Center or by University of Nebraska-Lincoln Extension Education.

Participants will learn what’s in your credit record, who’s looking at it and how can your credit record affect you? Why should you be concerned with your credit score? With this education program, find out answers to these questions and other helpful insights into managing your credit reputation.

Thursday, Feb. 22 at 1 p.m. — Easy Energy Tips for Conserving will be present by Lorene Bartos, extension educator on This lesson will give ideas on going easier on the energy use and the budget by using simple energy conservation ideas. New products are available and product efficiency has increased! Participants will be able to identify five of ten energy saving measures and apply them to their own home.

Keeping Comforters Clean and Cozy

Here are some easy-to-follow instructions for any special require and their care. For comforters. Pretreat heavily-soiled areas with a prewash soil and stain remover. Set washer to high water level, partially fill it with warm wash, and stop the washer. Put the comforter into the washer, then quash it down to water level. Dry washer back on, continue filling with water and complete the wash cycle. Check occasionally to be sure the comforter is still completely submerged. Tumble dry. Tow a few dry, clean towels in with your comforter to keep it from clumping. Periodically rearrange it so it dries evenly. Launder monthly or more often if you are sensitive to dust mites.

Clearing Out and Cleaning Up

Start the New Year right with winter cleaning tips. Here are some easy-to-follow cleaning resolutions to get everything under control.

How do you build a strong family? One of the very first things in life that everyone know you love them. How do you do this? You start by telling them you love them from the time they are very young. No matter what age, we all need to be told we love them. Have family meetings to see everyone’s point of view; discuss important events or items; sit down at the table and eat at least one meal together everyday, go to special events as a family.

Involves the whole family in large decisions such as moving to a new place when changing jobs, etc. Teenagers may not like the change, however it will help the transition if you involve them in the decision.

Even when you are frustrated or disgusted with their actions let your children know you love them. Wish them a good day as you send them off to school or play. Teenagers need to hear this even more than younger children. Children need to realize what you provide for them—a home, food, clothing, family support with an opportunity to get an education and the privilege to live in a “free” country. These ideas for starters:

• Take a walk outside, enjoy the air, trees, birds, sky, etc.
• Write a note to tell each member how much you appreciate them and what they do.
• Prepare each member their favorite meal. It’s just another way to say “I Love You.”

When moving with children, if you have a choice of schools let them help make the decision.

• Always hear all sides of the story in a discussion.
• Be the parent, not always the friend.
• Pick one night a week when everyone is home to have a “family night” (play games, watch a movie together, talk, laugh, look into the future and dream together).
• Take time to be a family and enjoy!

Adapted from: UNL Extension Educator Gay Gardner

STRENGTHENING FAMILY TREASURES

Daughter/Mother Camp

Give the greatest gift to your daughter — your time! This camp is 2 days and 1 night of fun, educational and confidence-building approaches. As middle school approaches, this is an opportunity to:

• Enhance effective communication including expressing emotions
• Discuss self-responsibility and self-esteem
• Explore techniques to deal with peer pressure and stress
• Learn more about sexuality
• Discuss the importance of individual family values

Cost includes meals, lodging, snacks at Carol Cosper by the Joy Holling Center and the book, “Family Treasures, Creating Strong Families,” by University of Nebraska—Lincoln Extension. Fee is $120 per pair. For more information or a registration form, go to http://lancaster.unl.edu/famil/RU/FE.err.html or call Extension Educator Maureen Burson at 441-7180.

Building a Strong Family

We are having our first Council meeting on Jan. 12, 12:30 p.m., at the Panareth Restaurant, 5500 S. 56th Street (just north of Highway 2).
2007 All-America Rose Selections

Three exceptional roses have been selected to be the All-America Winners for 2007. If you are planting roses this year, you may consider choosing one for your garden.

**Moondance**
As celestial and lovely as its name implies, Moondance is a floribunda characterized by large trusses of creamy white, beautifully formed flowers contrasted by very glossy dark green foliage. Unusual and well branched, it is an extremely vigorous and tall plant with stems that are typically 14 to 18 inches long. Rose buds are pointed and oval-shaped in form leading to high-centered flowers, which open flat to about 3-inches in diameter and consist of approximately 25 petals each. Moondance has an exceptionally delightful spicy fragrance for a white floribunda. In addition, its impressive long stems can also be arranged into an elegant bouquet for displaying in the home. Moondance is highly resistant to black spot, mildew and rust.

**Rainbow Knock Out**
Rainbow Knock Out is a bushy and compact landscape shrub rose with short stems bearing glossy, dark green leaves. Its blooms are single-form flowers that start out as pointed buds and appear abundantly throughout the growing season. The delicate five-petaled flowers are two inches in diameter and are a deep coral-pink color with a yellow center finishing nicely to light coral. Rainbow Knock Out will have a nice display of blooms late into the season for a lovely fall bloom and while it does not exhibit a strong fragrance, the petals emit a delicate sweetbriar scent. Suitable for container growing in small spaces, this rose is the prefect accent to any garden. It is also winter hardy to zone 4 and is fully resistant to black spot, mildew and rust.

**Strike It Rich**
A modern version of the classic 1950 AARS award-winner Sutter’s Gold, Strike It Rich resembles its famous ancestor with strong spicy fragrance and elegant buds of deep golden-yellow swirled with red. Yet this contemporary cousin is much easier to grow because of its great disease-resistance and strong natural vigor. This true grandiflora bears loads of long-stemmed blooms offset by very dark green leaves and unusual deep red stems. A medium-tall upright bush, Strike It Rich bears clusters of double and informal flowers that are up to 5-inches in diameter with approximately 30 petals each. The flowers are long-lived and retain their blend of gold, orange and red tones to the very end. The blooms are stunning in a bouquet or in the landscape.

Beware of Misleading Tree Advertisements

Late winter often prompts the common malady, the spring planting itch, in homeowners. Attempting to break the winter monotony and satisfy the “itch,” they thumb through spring nursery catalogs for garden seeds, flowers, trees and shrubs. However, homeowners need to be on their guard for advertisements with lofty promises. Seasonal magazines and newspapers are filled with advertisements for shade and ornamental trees. Beware of those that proclaim “super trees,” which usually have faults that need to be investigated before purchase. Unsuspecting buyers are often lured by vivid descriptions of amazing growth and beauty.

Generally, these advertisements refer to the tree by its scientific name only or an unfamiliar species. Almost every year brings a new version of the “super tree.” The advertisements often feature exaggerated claims such as, “the tree soars into a magnificent tree in just one single year.” Prices are exorbitant for the size and species of tree being promoted.

Two examples of such “super trees” advertised in the past are the Ulmus pumila and Royal Paulownia. It is true that both trees grow rapidly; however, Ulmus pumila is the scientific name for the common Siberian elm, which is non-native, short-lived, susceptible to heavy elm leaf beetle infestations and has brittle branches that break easily in storms. Royal Paulownia, or Empress Tree, is not adapted to Nebraska’s climate. It grows rapidly, but usually dies to the ground during each Nebraska winter.

To avoid falling into the “super tree” trap, learn the characteristics of trees before purchasing them to ensure they match the intended objectives. Contact a reputable nursery or local extension office before making a purchase.

Source: All-America Rose Selections, www.rose.org

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**Garden Guide**

**THINGS TO DO THIS MONTH**

**By Mary Jane Propps, UNL Extension Associate**

Prune fruit trees and grapes in late February or early March after the worst of the winter cold has passed but before spring growth begins. Check any vegetables you have in storage. Dispose of any that show signs of shriveling or rotting.

Late February is a good time to air-layer house plants such as dracaena, dieffenbachia and rubber plant, especially if they have grown too tall and leggy.

Order perennial plants and bulbs now for cut flowers this summer. Particularly good choices are phlox, daisies, coreopsis, asters and lilies.

Check stored bulbs, tubers and corms. Discard any that are soft or diseased.

Order gleditsia corns now for planting later in the spring after all danger of frost has passed. Locate in full sun in well-drained soil.

Branches of forsythia, pussy willow, quince, spirea and dogwood can be forced for indoor bloom. Make long, slanted cuts when collecting the branches and place the stems in a vase of water. Change the water every four days. They should bloom in about 3 weeks.

This year plan to grow at least one new vegetable you have never grown before; it may be better than what you are already growing. The new dwarf varieties for the market which use less space while producing more food per square foot may be just what you are looking for.

Send off seed orders early this month to take advantage of seasonal discounts. Some companies offer bonus seeds of new varieties to early buyers. Do not start your vegetable transplants indoors too early. Six weeks ahead of the expected planting date is early enough for the fast-growth species such as tomatoes. Eight weeks is enough time for the slower-growing types such as peppers.

Check all five growing factors if your house plants are not growing well. Light, temperature, nutrients, moisture and humidity must be favorable to provide good growth. Repair and paint window boxes, lawn furniture, tools and other items in preparation for outdoor gardening and recreational use.

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**Sign up for Free E-mail Horticulture Newsletter**

HortUpdate is a free e-mail newsletter from the University of Nebraska-Lincoln Extension which provides timely information to the lawn and landscape industry. This e-mail includes current lawn and landscape recommendations and a seasonal ‘To Do’ list. To subscribe, go to http://extensionhorticulture.unl.edu and submit request.
Attract More Birds by Offering a Variety of Seeds, Feeding Locations

Birds often see windows as an open habitat, so placing a bird feeder next to a window when taking off from the ground or, if they should strike the window, can prevent them from flying close to windows. Fairly close to windows can prevent injuries because the birds can see the trees and windows can prevent injuries because the birds can see the trees. As classroom escorts, bus drivers can bring birds out and close where they are to feed them. To enjoy observing such great diversity when feeding birds, it is important to offer a variety of food sources in a safe, versatile location.

Birds can range from seeds and fruit to insects or nectar. But regardless of these preferences, your feeder will attract more birds if the food is in place before the first cold spell. In fact, when severe weather strikes for several days in a row, supplemental food can increase survival rates, mostly because natural food sources are covered in snow and ice or just not available. Extreme weather conditions create a need for protection against the wind as well. An ideal location for feeders is in an open area sheltered from strong winds and within 10 feet of cover. Not only does this provide protection from the weather but a place for quick escape from predators as well.

It is a good idea to keep feeders a safe distance from windows to help decrease the occurrence of window collisions. Alternatively, placing feeders fairly far away from windows can prevent injuries because the birds can see the trees and windows. It is possible that the birds will strike the window when taking off from the feeder, they won’t be flying very fast. Birds often see windows as an open flight path for landing from feeders.

Feeder are sold commercially or made at home. A good feeder should protect the seed from the rain and snow, dispense feed gradually to reduce waste and keep birds raked to prevent the growth of mold. Different kinds can be used. Some feeders are made at home. A good feeder is commonly found in stores specializing in feeding birds.

Grit and suet are two optional supplements increasing the likelihood of birds visiting a feeder. Grit is used in the gizzard of birds to grind down feed and also serves as a source of calcium. Sand, fine poultry or canary grit, eggshells or crushed limestone can be mixed with the seed or placed in a tray or on the ground.

Suet or hard beef fat is available in commercial no-melt packages or directly from the butcher or grocery store. Suet cake can be made at home. This mixture of animal fat mixed with other ingredients like seeds or nutmeats are an excellent source of energy for birds over the winter months. Suet can be fed in onion or orange sacks and in suet feeders or on near trees and wooded posts. Keep suet high and out of the sun to prevent melting.

Overall, it is fun and educational to experiment with different food in various locations to determine what suits the area and interest level.

Remember to keep bird feeders clean and disinfect them on a regular basis. Disease is more likely to spread in areas where a large number of birds congregate. Remove wet feed and keep spilled seed and hulls raked to prevent the growth of mold.

Wild Bird Seed Mix Recipe
You can make your own mix. It may cost you a little more initially, but you’ll have far less waste, so you’ll end up saving money. Try this blend:

- 25 pounds of black-oil sunflower seed
- 10 pounds of white proso millet
- 10 pounds of cracked corn

Pour the seeds into a rodent-proof, unheated garage. Check the seed frequently for signs of pests. Avoid feeding birds while seeds are moldy. Remove wet food and keep under the roof to prevent pantry pest infestations.

This female cardinal is one of many common year-round and migratory birds that visit backyard bird feeders each winter.

American goldfinch

Honey bees have five eyes—two compound eyes and three simple eyes. Drones have bigger compound eyes than either workers or the queen, probably an advantage in evading the queen during the nuptial flight.

Honey bees see colors, but not all the same ones we see. Humans see all colors of the rainbow, white, yellow, green, blue, indigo, violet. Honey bee cannot see the red end of the spectrum. To a bee, red looks black. But, bees can also see in the ultraviolet range, which is invisible to humans. They also can see polarized light.

Honey bees have been producing honey for at least 150 million years. Prehistoric humans robbed feral hives for honey, but actual beekeeping began about 4000 BC. Advanced beekeeping existed in Egypt, during the time of pharaohs and honey is mentioned repeatedly in the Bible.

The area now comprising Israel and the Palestinian autonomous region was referred to as “the land of milk and honey” (Exodus 3:8).

German peasants were required to give their feudal lords a payment of honey and beeswax.

Europeans brought the European honey bee to America in 1638. Native Americans referred to the honey bee as the “white man’s flies”.

Most early beekeepers were members of the clergy. They kept bees for the beeswax, used for church candles.

80 percent of the pollination of the nuts, vegetables and seed crops in the U.S. is accomplished by honey bees.

A queen is the largest bee in the hive. She can lay up to 3,000 eggs per day.

Drones have no stinger and no other purpose than to mate with an unmated queen. In the fall, they are uncharitably driven out of the hive to die.

To make one pound of honey, honey bees must fly 55,000 miles and visit approximately two million flowers.

One average worker bee will make only 1/12 teaspoon of honey in their lifetime.

Honey bees will visit between 50-100 flowers during one collection trip.

Sources:
- Soni Cochran, UNL Extension in Lancaster County
- University of Nebraska-Lincoln Extension Nebraska 4-H Bulletin G1427, “Backyard Wildlife Bird Houses and Shelters” available at the extension office or online at http://www.ioncubs.unl.edu/sendit/ g1427.pdf
- The Bible

For more information:
- University of Nebraska-Lincoln Extension Beekeeping Needs Volunteers

\[\text{Volunteers are needed for a series of events on in February. As classroom escorts, bus drivers can bring birds out and close where they are to feed them. To enjoy observing such great diversity when feeding birds, it is important to offer a variety of food sources in a safe, versatile location.} \]

Beekeeping Workshop, Feb. 17 & April 7

A two-day workshop, “Beginning Beekeeping—Everything You Need To Know” will be held at UNL’s Research and Development Center near Mead, NE on Saturday, February 17, 9 a.m.–5 p.m. and Saturday, April 7, 10 a.m.–2 p.m.

The workshop is a hands-on session for participants. Registration is not required for those who wish to participate in the workshop. Honey bees have five eyes—two compound eyes and three simple eyes. Drones have bigger compound eyes than either workers or the queen, probably an advantage in evading the queen during the nuptial flight.

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Meet the 2007 Lancaster County 4-H Council

Lancaster County 4-H Council represents the interests of youth, parents and leaders. 4-H Council is responsible for planning long- and short-term programs and policy for Lancaster County 4-H. They also raise funds by staffing a snack booth at the Lancaster County Fair. These funds help support 4-H programs, activities and scholarships. The following are members of this year’s 4-H Council:

- Becky McHenry
- Dennis Muehling
- Jean Pedersen
- Paula Peterson (Treasurer)
- Marianne Hanigan (Secretary)
- Vicky Austin
- Britta Dueschot
- Stephanie Dueschot
- Kirk Gunnerson

Speech & PSA Contest Dates

The 4-H Speech and Public Service Announcement (PSA) workshop has been scheduled for Thurs.,

Friday, Feb. 9; 9:30 a.m.–3 p.m. at the University of Nebraska–Lincoln Northeast Research and Extension Center in Norfolk.

There will also be a shooting sports overview. In addition, Aaron Davis will present a motivational session stressing the importance of working with youth. Please sign up for the program by contacting Tracy by Feb. 9 at 441–7180.

Nominate Your Favorite 4-H Volunteer!

A “Heart of 4-H Award” is awarded to a Lancaster County 4-H volunteer each month!

Nominate your favorite 4-H volunteer or leader by submitting the following form (also available online at lancaster.unl.edu). Nominations of co-volunteers accepted.

I, ____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
Please explain why you are nominating person(s) ________________________________

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The 4-H Speech and Public Service Announcement (PSA) workshop has been scheduled for Thurs.,

Friday, Feb. 9; 9:30 a.m.–3 p.m. at the University of Nebraska–Lincoln Northeast Research and Extension Center in Norfolk.

There will also be a shooting sports overview. In addition, Aaron Davis will present a motivational session stressing the importance of working with youth. Please sign up for the program by contacting Tracy by Feb. 9 at 441–7180.

Nominate Your Favorite 4-H Volunteer!

A “Heart of 4-H Award” is awarded to a Lancaster County 4-H volunteer each month!

Nominate your favorite 4-H volunteer or leader by submitting the following form (also available online at lancaster.unl.edu). Nominations of co-volunteers accepted.

I, _______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________
Please explain why you are nominating person(s) ________________________________

Lancaster County 4-H Council represents the interests of youth, parents and leaders. 4-H Council is responsible for planning long- and short-term programs and policy for Lancaster County 4-H. They also raise funds by staffing a snack booth at the Lancaster County Fair. These funds help support 4-H programs, activities and scholarships. The following are members of this year’s 4-H Council:

- Becky McHenry
- Dennis Muehling
- Jean Pedersen
- Paula Peterson (Treasurer)
- Marianne Hanigan (Secretary)
- Vicky Austin
- Britta Dueschot
- Stephanie Dueschot
- Kirk Gunnerson

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Please explain why you are nominating person(s) ________________________________
Lancaster County 4-H and 4-H Council invite 4-H’ers and their families to
Achievement Night
Tuesday, Feb. 6
6 p.m. Early Tours of UNL College of Journalism and Mass Communications
6:30–8 p.m. 4-H Award Presentations, Refreshments
*Tour includes newsroom, broadcast booth and radio station — if you want to skip early tour, you may arrive at 6:30 p.m.
Please call 441-7180 to RSVP by Feb. 2 (indicate if you wish to join an early tour)

University of Nebraska—Lincoln City Campus
Andersen Hall, 15th & R Streets
Directions and parking:
From 16th and Q Streets, follow Q one-way west to parking lot east of Andersen Hall (signage will indicate as University parking)(no cost for 4-H families to park during event)
4-H members, 4-H clubs and 4-H leaders will be recognized for their 2006 achievements. Lancaster County 4-H congratulates all 4-H youth who work throughout the year on their 4-H projects and commit themselves to excellence!
We also thank the 4-H leaders who volunteer their time and talents to youth!

Art Projects Update
The new 4-H project manuals, "Sketchbook Cross-roads — Drawing, Fiber and Sculpture" and "Portfolios Pathways — Painting, Printing and Graphic Design" are now available and will replace "Celebrate Art" and "Art in Your Future." New 4-H fair entries reflecting these manuals will be added to the Home Environment area in the 2007 Lancaster County Fair Book. The "Celebrate Art" and "Art in Your Future" fair entries will be the same as last year, but "Portfolio Pathways Painting, Printing and Graphic Design" are now available. The new 4-H fair entries reflecting these manuals will be added to the Home Environment area in the 2007 Lancaster County Fair Book. The "Celebrate Art" and "Art in Your Future" fair entries will be the same as last year, but "Portfolio Pathways Painting, Printing and Graphic Design" are now available. The new 4-H fair entries reflecting these manuals will be added to the Home Environment area in the 2007 Lancaster County Fair Book. The "Celebrate Art" and "Art in Your Future" fair entries will be the same as last year, but "Portfolio Pathways Painting, Printing and Graphic Design" are now available. The new 4-H fair entries reflecting these manuals will be added to the Home Environment area in the 2007 Lancaster County Fair Book. The "Celebrate Art" and "Art in Your Future" fair entries will be the same as last year, but "Portfolio Pathways Painting, Printing and Graphic Design" are now available.

4-H Photography Nebraska Themes
The 4-H Photography Nebraska Theme Exhibit Print themes have been announced. Exhibit print must portray Nebraska. May be taken with digital camera.
• Unit II "What I Want to be When I Grow Up" — people, places or concepts representing careers.
• Unit III "To Infinity and Beyond" — the exploration of science and technology or "It's not your Grandfather's Ag" — new trends in agriculture.

Clover College Instructors and Volunteers Needed
The 2007 4-H Clover College will be Tuesday, June 19–Friday, June 22 at the Lancaster Extension Education Center. Clover College is four days of fun-filled, hands-on workshops for youth ages 6 and up. If you have workshop topic ideas, or if you would like to teach a workshop or volunteer to help, please contact Tracy at 441-7180. All help is very much appreciated!

4-H Rabbit Show, March 31
The Spring Rabbit Show will be held on Saturday, March 31 at the Lancaster Event Center, 84th & Havelock, Lincoln. Registration is from 7:30 to 9 a.m. and show starts at 9:30 a.m. Trophies and ribbons will be awarded. Classes for youth ages 8-19 include fancy rabbits, commercial rabbits and pet class—small registration fee per class. All rabbits must be tattooed in the left ear and brought in solid bottom cages.

All Riding Skills Level Tests Must be Done in Group Testings
Attention all Lancaster County 4-H horse riders: all riding skills level tests must be done in group testings! The dates and locations for the 2007 Advancement Level Testing are as follows:
• April 24 6:30 p.m. Lancaster Event Center Warm-Up Arena
• May 8 6:30 p.m. Lancaster Event Center Warm-Up Arena
• June 9 9:00 a.m. Location TBA
• June 26 6:30 p.m. Lancaster Event Center Warm-Up Arena
• July 2 6:30 p.m. Lancaster Event Center Warm-Up Arena
• Sept. 29 9:00 a.m. Location TBA
Please RSVP at least one week in advance of the test date to Marty at mcruickshank2@unl.edu or 441-7180. Riders wishing to complete their level IV in 2007 should contact Marty as soon as possible. Riders must be 12 years of age and have a level II in order to compete at the state 4-H Show in Grand Island. District and State entries are due May 11. Anyone wishing to complete their levels II and III in order to compete at the state show must get their testing done before the May 11 date.

HORSE BITS
Stampede Entries Due Jan. 24
Reminder—the annual 4-H Horse Stampede will be held Saturday, March 10. Stampede entry forms along with the T-shirt order are due to the UNL Extension in Lancaster County office by Jan. 24. Forms are available online at lancaster.unl.edu/4h/news.htm or can be picked up at the office. For more information about each individual contest, call Marty at 441-7180 or go to http://animalscience.unl.edu/horse/stampede.htm

Event Center Open Arena Winter Riding
Twice a month in February and March, 4-H members who are a part of the Lancaster County Horse Program are welcome to ride at the Lancaster Event Center in the indoor warm up arena (not the MPA). Reservations must be made at least one day in advance. Use of the arena is free, however, care and respect for the facility is mandatory. Open arena dates and times are from 6-9 p.m. on:
• Monday, Feb. 5
• Tuesday, Feb. 20
• Tuesday, March 6
• Monday, March 19
If you would like to ride, make your reservation with 4-H Intern Jessie Bauman at jess_bauman@hotmail.com or 441-7180. If there are no reservations, we won’t unlock the building. So make sure you let us know!

All 4-H Rabbit Show kids are invited to join the 4-H Rabbit VIPS Committee and Rabbits ‘R’ Us 4-H club.

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The Show is sponsored by 4-H Rabbit VIPS Committee and Rabbits ‘R’ Us 4-H club. For more information, call Marty at 441-7180.

Goat Trophy Sponsors Needed
Sponsors are needed for 4-H goat trophies at Lancaster County Fair. If you would like to sponsor one ($15 each) or more trophies ($150 would cover all trophies), please contact Deanna Karmazin at 441-7180.
“It all started with two blokes coming into a bar with a ten thousand dollars—we’ve come a long way from there,” said Brito Mutunayagam, who was the community leader in Panama. “We had a lot of meetings, and we convinced the community that we needed more money to build a new community center. We approached the Voice News to see if they would cover the story. The Voice News agreed, and we started a fundraising campaign.”

The community center was finally built in Panama, and it has become a hub for the community. “We used the funds to build a community center, and it has been a great success,” said Brito. “It has become a place where people can come together and socialize.”

The community center has also been used for community studies in Bennet and the southeast part of the county in the future. “We want to use the community center to do community studies and to teach people about the importance of community studies,” said Brito. “We want to make sure that people understand the importance of community studies.”

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There are few planning careers where this won’t be a key skill to obtain and where such interaction will be asked of a planner. “Though the UNL students will move on from the project, Brito, along with UNL Extension Educators Phyllis Schoenholtz and Dennis Kahl, will continue to partner with Panama on the computer/fire barn project. Brito considers the presence of the two educators as invaluable mentors and resources to the students. They were also instrumental in getting the project started in the first place. Brito originally made contact with Brito and his students through Schoenholtz and Kahl, who were doing community studies in Bennet and Firth over the past year.

It is now largely up to the community of Panama to take the plan created by the students and make it a reality. With the incorporation of the Panama Community Foundation, a core group of leaders is established. “Lancaster County has good strong communities in the four corners of the county,” said Bryant. “The community of Panama is one of the incorporators of the community foundation. “Businesses are at a crossroads. They must decide whether or not to invest in the community and raise funds to finance community activities. ‘My personal opinion is that the construction of this one building will begin the resurgence of the Village of Panama,’ Brito said. Brito is one of the incorporators of the community foundation. “Businesses are at a crossroads. They must decide whether or not to invest in the community and raise funds to finance community activities. ‘My personal opinion is that the construction of this one building will begin the resurgence of the Village of Panama,’ Brito said. 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The 14th annual Horsin’ Around will be held Feb. 17 and 18 in the RB Warren Arena in the Animal Science building on UNL East Campus, Lincoln. Featured clinician this year is Andy Moorman, an AQHA Professional Horseman who has coached some of the county’s most successful riders.

Cost, if you pre-register, is $25 for both days or $15/day for adults. Youth $15 for both days or $10/day. Pre-registration closes Feb. 9. Cost at the door (if available) is adult $35 both days or $20/day. Youth $25 both days or $15/day.

For more information and registration forms, go to http://animalscience.unl.edu/horse/horsinaround.htm or contact Kathy Anderson at 472-6414.
Explore Career Options at Big Red Academic Camps

The 2007 Big Red Summer Academic Camps are a chance for high school youth to spend time investigating an interest or potential career, explore the UNL campus, meet people from across the state and have lots of fun. Held in June, Big Red Summer Academic Camps features 10 career exploration camps hosted by Nebraska 4-H and UNL faculty members. The camps are residence camps held on the University of Nebraska–Lincoln campus. Housing and food are provided.

After spending several fun-filled days exploring a specific topic such as movie-making or fashion design, youth showcase their work at a special "capstone event" which family members are invited to attend. Brochures and registration forms are available at http://bigredcamps.unl.edu or at the extension office. For more information, call 472-2805. 4-H members are encouraged to apply for a scholarship — application is on the Web site. The three 4-H Camps in Nebraska are currently accepting applications for their 2007 summer staff. All positions provide endless opportunities for growth in a fun, fast-paced outdoor atmosphere.

- **Camp Staff** — Salaried youth ages 18 and older who lead camp programs. Spend mid-May to August working full time to provide day to day leadership of camp activities and teaching groups of all ages. A great summer job for college students with any major. Initial application deadline is Feb. 15.
- **Cabin Mentors** — Youth ages 17 and up who provide cabin supervision and assist in leading camp programs. Mentors receive an honorarium for their service and are scheduled according to their availability. Perfect for high school youth who need a fun getaway from their full time summer job. Mentor for a few days or for the entire summer — the choice is yours! Application deadline is March 15.
- **Camp Counselors** — Youth ages 15-19 who assist with cabin supervision and leading of camp programs. Join over 150 volunteer teens in providing valuable leadership to a group of campers by day and assist with cabin supervision at night. Camp counselors are scheduled according to their availability and counseling is a fantastic leadership experience for any young person. Application deadline is March 15.

More information and applications are online at http://4h.unl.edu/camp/staff/. Need not be in 4-H to apply.

FREE Handwashing Poster!

Download a copy of this FREE handwashing poster with directions in English and Spanish at http://lancaster.unl.edu/food/wash-your-hands.shtml.

The poster is a joint project of the Lincoln-Lancaster County Health Department and University of Nebraska-Lincoln Extension in Lancaster County.

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