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The NEBLINE, May 2006

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The Crime Scene

Small reddish-brown insects crawl out of hiding places near the bed for a 10-minute, midnight feeding frenzy. It’s not just a snack. After becoming engorged, these night feeders slip back into their hiding places. The sleeping victim never feels the bite. The human victim wakes to find bites on upper body, arms or neck. This scenario takes place night after night and finally, the small insects are seen. These insects are bed bugs. We are starting to see increased numbers of bed bug infestations here in Lincoln. In a month’s time, I had three phone calls from people living in different neighborhoods who had bed bug infestations. Compare this with my first 10 years in extension when I saw only one bed bug case. Are there isolated incidents? Probably not. Entomologist and pest management professionals (PMPs) across the U.S. are seeing bed bug infestations in surprising numbers.

Background

Bed bugs are an old pest. Before WWII, bed bugs were pretty common in hotels, boarding houses and homes. With the advent of DDT and other insecticides after WWII, bed bugs seemed to disappear. Because bed bugs have been so rare, there has been a lack of industry-supported research on what currently available products work best. Another problem is that many PMPs don’t have much experience treating for bed bugs. One seasoned PMP told me, “I’ve been doing this for 20 years, and I’ve never even seen a bed bug infestation before.” Clearly, all of us are on a steep learning curve.

Investigations

Treating a bedroom for bed bugs is dicey because this is where people spend a lot of time. Treatments include vacuuming, cleaning, and treating hiding places. But, where do bed bugs hide? In the last 18 months, I’ve looked for bed bugs in three infested dwellings. Before my inspections, I knew that:

1. Bed bugs like to live in groups in tight places.
2. Most bed bugs will be found near their sleeping food source.
3. Classic telltale signs of bed bugs are dark fecal spots or smeared

CASE 1. A newer apartment building had two infested units which shared a common wall. The fellow in one unit slept on a futon. This unit had many more bed bugs than the other and was probably the source of the infestation. Before we arrived, residents had discarded the futon mattress, but there were many signs of bed bugs near cracks of the futon frame (Figure 1), the area where carpet touches the baseboard and near electrical receptacles. Some bed bugs were found on hanging clothes in the closet. Where did the bed bugs come from? The fellow who slept in this bedroom moved in about five months earlier. While it can’t be proven, I suspected he brought the bed bugs with him.

Residents were asked to vacuum floors, beds and foundations thoroughly and repeatedly to get rid of clutter in the bedrooms. In the second bedroom, I recommended encasing both the mattress and foundation in zipperpered mattress covers, to encase and starve any bed bugs inside.

A pest management company treated cracks and crevices, baseboards and carpeting using professional-use insecticides and insect growth regulators. Sticky traps were used to monitor the infestation. After reports of bites two months later in nearby units, all the units in the building were treated, repeated for a couple of months. A year later, there have been no reports of bed bugs in this apartment building.

CASE 2. In February 2006, a family brought bed bugs to the extension office for identification and said everyone in the four-bedroom home was getting bitten at night. During my inspection, I flipped mattresses, but found no bed bugs, although one mattress did have bed bug spots on it (Figure 2). I turned over foundations (box springs) and removed the dust cover. Turning back the fabric where it was stapled to the wood frame, I found many bed bugs and fecal spots (Figure 3). Most were found near the head of the bed, especially in void areas and cracks in the wood. Where did this infestation come from? About six months before they started noticing the bugs, a grown daughter moved back home with some furniture.

Figure 1. Bed bug fecal spots near cracks of futon frame.

Figure 2. Bed bug fecal spots and smeared on a mattress.

Figure 3. Fecal spots under the fabric stapled to the framing of box springs.

Figure 4. Bed bugs in seam of sofa.

Figure 5. Bed bugs under dust cover of sofa where fabric was stapled to the wood frame.

Observations

1. Most of the time, bed bugs aren’t noticed for several months after brought into the home. An infestation probably begins with only a few bed bugs. It takes time for populations to build so people are getting bitten every night and all bedrooms are infested. I did some calculating. If one egg-laying female lays three eggs per day (which I have observed), even with 90

Prevention is Tough, but There are Some Things You Can Do

• When you travel, inspect your hotel room carefully. Concentrate on the head of the bed, but also inspect the area where you place your luggage. One researcher has found luggage racks infested with bed bugs, presumably brought into the hotel room with infested luggage. Launder clothing immediately when you return home.

• Inspect used furniture before bringing it into the home. Look for bed bug spots and stains.

• At the first sign of bites, inspect the area around your bed. Early detection means early control.
Ornamental Grasses for the Landscape

Cannas in the Garden

Cannas are quick growing, vigorous ornamental plants with heavy foliage and large flowers. Flower colors range from dark red to light green. Leaf colors can be red–-dish-purple, bronze or yellow. They are used most effectively for bedding plants, mass plantings, and border hedges where they can be planted in the fall. Mass plantings are viewed from a distance. Their vigor and size make them less desirable for planting in restricted areas.

Cannas require a warm, sunny location and under such conditions are capable of giving a subtropical effect, if used in quantity with ricinus or castor bean, caladium or elephant’s ear or other appropriate plants. They thrive best under conditions suitable for corn, that is, a warm, well drained soil, enriched with decayed manure. The tubers should be planted after all danger of frost is past. A portion of an old tuber containing several strong buds is best. The old tuber may be divided into singles, but the weak eyes are likely to make weak plants. If very strong clumps are wanted, a whole tuber may be used. When separated to single eyes they are best started in 4 to 6 inch pots covered with glass. The tubers should be planted

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Source: Donald Stenger and John Jansen.

2006 Perennial Plant of the Year

The Perennial Plant Association has selected ‘Firewitch Cheddar Pink’, Dianthus gratianopolitanus, as the 2006 Perennial Plant of the Year. This cheddar pink has brilliant, hot pink flowers in a dainty, neat notched petal. The common name pink isn’t derived from the color of the flowers. Instead, it refers to the notched petal edges, which resemble notched coral. ‘Firewitch Cheddar Pink’ blooms for several weeks in the spring. It occasionally blooms again in summer and early fall depending on the size of the varieties used and the effect desired. In dry weather a thorough soaking of the plants once a week will insure a stronger growth.

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Can People Treat for Bed Bugs Themselves?

Theoretically, people should be able to do their own treatment, but pest control professionals have access to different products than those available at hardware and discount stores. They also have equipment designed to deliver treatments in cracks and crevices where bed bugs live and have been trained in safe application techniques. I think a pest control service will probably solve the problem more quickly and at a lower cost. Ask for a quote from any pest control company before you hire them.

5. Residents can help with control efforts. Bed bugs live in cracks and crevices of your home. This is the best time to attack bed bugs. Eggs are sticky and glue to fabric (even clothing and bedding). Eggs cannot be removed from porcelain, tile, or other smooth surfaces. It would be unwise to glue to pillows, which are not washed very often. Bed bugs can hide in unboxed furniture, luggage and boxes. It is impossible to give a complete list of all the places they can hide. Business travelers and vacationers can bring bed bugs home in their suitcases or clothing and even 查看全部内容


Nitrogen Management on Grasslands

Apply nitrogen (N) fertilizer yearly to grass pastures and hay lands to maximize production. Nitrogen improves both grass yield and protein content. It also improves the vigor of grass plants, which can thicken stands and reduce weed invasion. When adequate soil moisture is present, economical rates of nitrogen can more than double forage production, with minimal carryover effect on the next growing season.

Note fertilization with nitrogen is most economical when weeds have been controlled and additional grass growth is needed for livestock. If additional forage can be purchased or pasture rented at a lower cost than fertilizer, these alternatives may be better choices than applying fertilizer to the pasture. Naturally, if one fertilizes to increase production but does not need the extra forage, fertilization will not be an economically sound practice.

Nitrogen fertilizer applied just prior to the period of most rapid grass growth assures the applied nitrogen is available to the plants.

Fertilizing Cool-Season Grasses

For cool-season grasses, such as smooth bromegrass on cool-season grasses in late August and September if soil moisture is adequate and temperatures are favorable. Fall growth is a small portion of the total growth for the entire growing season.

Nitrogen can be applied in either fall or spring on cool-season grasses. The risk of leaching or run-off if fertilizer is applied in early spring. Therefore, spring applications are preferred. Some people will apply two applications of nitrogen; this practice is known as split application of nitrogen. Split applications of nitrogen for production of cool-season grasses under dryland conditions are useful only when more than 189 pounds of nitrogen per acre are to be applied during the growing season and good growing conditions are anticipated during September and October.

Fertilizing Warm-Season Grasses

Apply fertilizer in mid- to late-May to pastures and hay lands containing warm-season grasses, such as Switch grass, Indiangrass, Big bluestem and Little bluestem. Do not fertilizer warm-season grasses in early spring. Early spring application increases the risk of leaching nitrogen fertilizer below the root zone and it will stimulate growth of cool-season species that compete with the warm-season grass species. Begin fertilizer application in mid-May in southern Nebraska and delay until late-May in the northern portion of the state.

Fertilizing Mixes of Grass Pastures

Some pastures and hay lands contain a mixture of both cool- and warm-season grasses. Fertilizing these pastures with nitrogen in early spring stimulates the cool-season grasses which crowd out any warm-season grasses present. To maintain warm-season grasses in such a pasture, fertilizer must be applied in late-May. It also may be necessary to apply herbicides or control prescribed burns to suppress the cool-season grasses.

Liquid and dry forms of nitrogen fertilizer are equally effective for increasing pasture production when certain precautions are taken. Do not apply urea nitrogen to pasture or hay lands on high pH calcareous soils when air temperatures are above 85 degrees F. Nitrogen losses from ammonia volatilization can be high under these conditions. Since urea supplies more than half the nitrogen in 28 percent liquid N (urea ammonium nitrate), be aware of the potential for volatilization losses from this nitrogen source as well.

Pasture production is highly dependent on rainfall, so nitrogen recommendations are adjusted accordingly. Suggested application rates for nitrogen are shown in Table 1. The lower rates listed are the minimum amounts recommended for average conditions and management situations. Even in years when summer rainfall is below normal, the use of 40 pounds of fertilizer per acre will usually increase production economically on pastures and hay lands in Nebraska and southwestern Nebraska. Applications of nitrogen fertilizer also is needed on many pastures in Nebraska. Research in eastern and northeastern Nebraska shows the combination of nitrogen and phosphorus frequently produces higher yields than the application of either nutrient alone.

Phosphorus recommendations are based on the availability of phosphorus in the soil as measured by a soil test. Phosphorus recommendations for grass lands are listed in Table II. If legumes make up one-fourth or more of the stand, apply 50 percent more phosphate than for grass alone. Phosphate fertilizers can be applied with the nitrogen in either spring or fall. Slow-release applications of phosphate fertilizers may increase the level of available phosphorus in the soil. When soil phosphorus levels are in the high range, phosphate application can be eliminated until soil test levels fall below the high range. When grasslands are used as hay lands, sample soil more frequently. Phosphorus may need to be applied more often, since removal of nutrients will be greater than on grazed land.

Other Nutrients

Results of studies conducted throughout eastern and northeastern Nebraska indicate applying potash, sul- fur and zinc does not improve pasture production. There is a small possibility some pastures and grasslands on sandy soils may require sulfur. This need for sulfur, however, has not yet been demonstrated in research trials.

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**Fertilizing Grass Pastures and Hay Lands**

**TABLE I. NITROGEN RECOMMENDATIONS FOR PASTURES AND HAY LANDS IN NEBRASKA**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Pasture</th>
<th>Hay land</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>80–120</td>
<td>100–150</td>
</tr>
<tr>
<td>II</td>
<td>50–80</td>
<td>60–90</td>
</tr>
</tbody>
</table>

Note fertilization with nitrogen is most economical when weeds have been controlled and additional grass growth is needed for livestock. If additional forage can be purchased or pasture rented at a lower cost than fertilizer, these alternatives may be better choices than applying fertilizer to the pasture. Naturally, if one fertilizes to increase production but does not need the extra forage, fertilization will not be an economically sound practice.

**TABLE II. PHOSPHORUS RECOMMENDATIONS FOR GRASSLANDS IN NEBRASKA**

<table>
<thead>
<tr>
<th>Relative Index Value</th>
<th>Soil Test Levels</th>
<th>Phosphorus Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Broy &amp; Kurtz #1</td>
<td>Olsen P (Na HCO$_3$)</td>
</tr>
<tr>
<td>Very Low</td>
<td>0–5</td>
<td>0–3</td>
</tr>
<tr>
<td>Low</td>
<td>6–15</td>
<td>4–7</td>
</tr>
<tr>
<td>Medium</td>
<td>16–25</td>
<td>8–14</td>
</tr>
<tr>
<td>High</td>
<td>25+</td>
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**What is an Acre?**

The unit of land area in the United States is the acre. An acre contains 43,560 square feet. Have you ever wondered why an acre is 43,560 square feet? To plow 80 furrows an eighth of a mile long. An eighth of a mile became a standard unit of land area we call an acre.

**CONVERSIONS**

To convert from hectares to acres, multiply hect- ares by 2.47. To convert from acres to hectares multiply acres by 0.4047.

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**TABLE III. CONVERSIONS**

<table>
<thead>
<tr>
<th>Hectare (ha)</th>
<th>Acres (ac)</th>
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<tbody>
<tr>
<td>1</td>
<td>2.47</td>
</tr>
<tr>
<td>0.4047</td>
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**TABLE IV. Fertilizer Rates**

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Control of Perennial Weedy Grasses

Landscape trees and shrubs may be used to provide food for the larvae of some caterpillars. Recommended plants include birch, cherry, Eastern redbud, oak, persimmon, sweet mockorange, viburnum and willow. Other good food sources for caterpillars include such perennials as clover, Kentucky bluegrass, little bluestem, violas, asters, aster and hollyhock. For adult butterflies, plant several species to make nectar available throughout spring, summer and fall. Butterflies are especially attracted to red, purple, orange, yellow or red flowers. Recommended annual flowers include black-eyed Susan, butterfly bush, candytuft, columbine, gladiolus, peony, phlox, purple coneflower, sedum, stiff goldenrod, violas, and yellow marigolds. Some herbs are attractive to butterflies. Dill, lavender, lemon balm, marjoram, parsley, peppermint, thyme, sage and thyme are good selections. Even some weeds, such as dandelions, milkweed and Queen Anne’s lace will attract butterflies.

Perennials, such as quackgrass and nimbiewell, are some of the most difficult to control weeds in the lawn. Control is difficult because there is no herbicide that will selectively destroy these weeds. Also, pulling or digging these perennial grasses is often unsuccessful. The best way to control quackgrass, nimbiewell and other undesirable, perennial grasses in the lawn is to spot treat the weed-infested areas with glyphosate (Roundup, Kleenup, etc.). Glyphosate is a systemic, non-selective herbicide. Glyphosate is absorbed through the leaves and is then translocated to all plant parts. It kills nearly all plants that are directly sprayed. Visible symptoms usually develop in 7 to 10 days of application. Death occurs in 2 to 4 weeks.

Efforts to control undesirable perennial grasses in the lawn should begin in mid-summer. This allows adequate time to kill the weedy grasses and prepare the areas for seeding or sodding in late summer. Complete destruction of the weeds is necessary to prevent their reemergence. If the treated areas are not dead in 2 to 4 weeks, a second application is necessary. Treated areas can be seeded or sodded 7 days after application.

If you cut a lawn, it’s not necessary to dig up the destroyed areas. Vigorously raking these areas will oftentimes cause the treated perennial grasses to die and the tallow leaf to lightly raking the area and keep the soil moist with frequent, light applications of water. The best time to seed bare spots is mid-August through September. If you plan to sod, remove the dead debris before laying the soil. The establishment of thick, healthy lawn and its proper maintenance will help prevent future weed infestations.

Cultural practices (mulching, watering, fertilizing and pruning) play an important role in maintaining and managing healthy birch trees. Mulching and proper watering are the most important techniques that can be used to control the growth of woody plants. By mulching the base of a tree, you can reduce the amount of water that the tree needs to grow and survive. By applying a 3 to 4 inch layer of organic material around the base of a tree, you can help reduce weed growth. By applying, for example, a mixture of composted tree materials and straw, you can help improve the soil structure around the base of a tree.

Watering—Watering is a critical factor in maintaining a healthy birch tree. Watering is particularly important during periods of drought. During the growing season, a typical birch tree requires about 1 inch of water per week. This amount can vary depending on the soil type, climatic conditions, and the age and health of the tree. During periods of drought, birch trees may be affected by stress and disease. By ensuring that the soil around the base of a tree is well-fertilized, you can help ensure that the tree gets the nutrients it needs to grow and survive.

Pruning—Pruning is essential for maintaining the health and longevity of a birch tree. Pruning can help remove dead or damaged branches, promote healthy new growth, prevent the spread of disease, and improve the overall appearance of the tree. It is important to prune birch trees properly and avoid over-pruning. Over-pruning can damage the tree and reduce its ability to withstand stress. In general, pruning should be done during the dormant season, when the tree is not actively growing. By pruning the tree during this time, you can help reduce the risk of disease and injury to the tree. Pruning also helps to maintain the tree’s shape and structure, and can help improve the overall health and appearance of the tree.
Saucy Pasta & Veggie Frittata

- cooking spray
- 1 package (16 oz) frozen pasta and vegetables in sauce
- water
- 4 eggs
- 1/4 cup skim milk
- sliced cherry tomatoes, optional

Nutritional information per serving of 1/4 recipe: calories 233, fat 9 gm, 9% of total calories; carbohydrates 25 gm, 8% of total calories; protein 13 gm, 23% of total calories.

Evenly coat a 10-inch omelet pan or skillet with spray. Add pasta and vegetables to the omelet pan. Evenly coat a 10-inch omelet pan or skillet with spray. Add pasta and vegetables to the omelet pan. Evenly coat a 10-inch omelet pan or skillet with spray. Add pasta and vegetables to the omelet pan. 

Ingredients:
- 1/4 cup skim milk
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Stir well. Add eggs and a little more water to make almost a soupy mixture. Reduce heat to low. Cook, stirring occasionally, until pasta is tender, about 5 minutes. In a medium bowl, beat together eggs and milk until blended. Pour over pasta/vegetable mixture. Add tomatoes, if desired. Cook. Cook over medium heat until eggs are almost set, about 5 to 6 minutes. Remove from heat. Let stand, covered, until eggs are completely set in center and no visible liquid egg remains, about 2 to 3 minutes. Cut into wedges and serve from pan.

Physical Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Calories Expended (as estimated)</th>
</tr>
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<tbody>
<tr>
<td>Hiking</td>
<td>370</td>
</tr>
<tr>
<td>Light gardening/yard work</td>
<td>330</td>
</tr>
<tr>
<td>Dancing</td>
<td>330</td>
</tr>
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<td>330</td>
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<td>Bicycling (less than 10 miles per hour)</td>
<td>290</td>
</tr>
<tr>
<td>Walking (3½ miles per hour)</td>
<td>280</td>
</tr>
<tr>
<td>Weight training (general light workout)</td>
<td>220</td>
</tr>
<tr>
<td>Stretching</td>
<td>180</td>
</tr>
<tr>
<td>Running/jogging (5 miles per hour)</td>
<td>590</td>
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<td>320</td>
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<tr>
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<td>480</td>
</tr>
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<td>Walking (4½ miles per hour)</td>
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<tr>
<td>Heavy yard work (chopping wood)</td>
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</tr>
<tr>
<td>Weight lifting (vigorous effort)</td>
<td>440</td>
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Sauces and vegetables into a mouth watering frittata with this recipe for a quick-and-easy meal solution. Turn a package of frozen pasta into a virtual tour of our state. View eye-catching scenery. Discover interesting facts. Read monthly newsletters for additional information.

We have all asked, “Where does the money go?”. Where do those nickels, dimes, quarters and dollars disappear? Answer these questions to discover ways you can manage your food dollars wisely.

1. Does our family limit spending on the “little things”?

Do we routinely buy a soda, cup of coffee or snack from the vending machine or the convenience store? Do we routinely eat out? Do we have extra items that make money disappear?

2. Does our family have a “spending plan”?

How much can your family spend for food each month? Part of that budget may also include paper and cleaning products, which add to the cost. If your family shops once a week, divide the monthly budget by the number of years so your family can stay within the budget. The more trips we make to the store, the more we spend on both groceries and gas.

3. Does our family make a weekly menu plan?

There are many good reasons to make a menu plan, especially for the main meal of the day. Most important, your family also stays healthier by eating a greater variety of foods and saves you money.

4. Do we use a shopping list?

We are always purchasing groceries, canned foods and convenience foods. In fact, 90 percent or more of the cost of a food item may be for the package. Minimize packaging costs by purchasing more foods in bulk and fresh produce. Limit individual serving sizes.

5. Are we paying for the food, not the package?

We pay a lot for packaging of advertised brands, individually packaged foods, canned foods and convenience foods. How much do you throw away in advertised brands, individual packaging and where do you really save money?

6. Are we paying for the food, not the package?

Limit purchasing more foods in bulk and fresh produce. Limit individual serving sizes.

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Calories Expended in Common Physical Activities

The new MyPyramid recommends we include at least 30 minutes of moderate to vigorous activity a day, 10 minutes or more at a time. Physical activity simply means movement of the body that uses energy. Walking, gardening, briskly pushing a baby stroller, climbing the stairs, playing soccer or dancing the night away are all good examples of being active.

How many calories does physical activity use? A 154-pound man (5’10”) will use up to 950 calories a day for normal body functioning.

APPRECIATE CALORIE USES BY A 154 POUND MAN

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Hardscapes for a Sustainable Landscape

By Ann Marie VanDerZanden
Iowa State University

Most residential landscapes include a combination of hardscapes (patios, decks, walkways and driveways) and ornamental plants. As you think about the design, construction and maintenance of your overall landscape, consider how you could make each component more sustainable.

The principles of sustainability: reduce, reuse and recycle, apply to the hardscapes used in landscaping. Reduce the amount of virgin materials used in the landscape. Reuse existing materials when possible or select recycled products. A number of new recycled landscape products are available. Many of them are made from recycled plastics combined with wood by-products. These materials require no maintenance and have a longer life span than wood, can be used for decks, fences, benches and planters and come in a variety of textures and colors.

It is often easier to evaluate the initial cost of construction materials than it is their long-term maintenance costs. However, the long-term maintenance costs of some building materials can be significant. Before you choose a product, research the initial and long-term costs as well as recommended uses.

The hardscape options listed below vary in their sustainability and short and long-term costs. For specific information on these materials, consult a landscape construction reference or a landscape contractor.

**Porous (permeable) pavement allows rain to permeate the soil and gravel layers below.**

**Concrete Slabs:** The set up for pouring a concrete slab can be labor intensive but the actual cost of the concrete is relatively inexpensive. However, the slabs are susceptible to cracking and are expensive to repair. For most homeowners, concrete pavers are a viable alternative to a concrete slab.

**Wood:** Decay-resistant species such as Redwood are in short supply, generally harvested from ecologically-sensitive forests and often expensive. Using redwood salvaged from other uses is a sustainable choice. Treated lawn and need for pesticides. It allows for water infiltration while providing a solid surface that can handle human and vehicular traffic. These pavers are durable, easy to install and allow for water infiltration. They come in a wide range of colors and shapes and can be used for drives, walks, patios and even sunroom or porch floors. Because they come in uniform sizes and shapes, they are relatively easy for a homeowner to install.

**Composite Pavers:** These pavers are relatively new for homeowners, but have been available commercially for more than 15 years. A number of manufacturers make these products, which results in variability in their composition. In general, they all resist rot and insects and can substitute for preservative treated wood. They can be used for decks, fences and even some outdoor structures such as a gazebo. If using this product for a structure, be sure to check that it is rated for such a use.

Good lawn care practices — such as proper mowing and fertilization — reduce the need for additional water. Taller mowing and proper fertilization result in a deep and efficient root system which reduces the need for additional water.

**Core AERATING** — Manure lawn stress factors such as thatch, shade and soil compaction. Core aeration on a regular basis is an excellent practice to consider, in particular for sodded lawns over clay soils. Spring and fall are good times to aerate. Topdressing the turf with screened compost after aerating will further help relieve these stress factors.

Occasionally, problems will still come up requiring special management. Start by identifying the problem, then look at control options — both cultural and chemical. When using pesticides read, understand and follow all label directions.
Tips to Reduce Yard Waste

Yard waste can account for 20 percent of the total waste stream. Nebraska regulations prohibit sending grass and leaves to landfills during the growing season, from April 1 to November 30. By reducing or removing this waste source, the Lancaster County landfill life will be extended by 3 to 5 years. Homeowners and ground managers can reduce yard waste with these good landscape practices.

Take the “Waste” Out of Yard Waste

Routine lawn and yard maintenance is usually on every homeowner’s to-do list. Keeping the lawn neat and green can become a neighborhood goal, with everyone competing for the title of “best-kept lawn.” Reducing resources and minimizing waste in a landscape should be another worthy goal.

Reducing yard “waste” is the route toward more organic waste reduction. Many useful resources are contributed to the landscape while finding more satisfaction in routine yard care at the same time. Here’s how you can reduce “waste” and transform it into yard “wealth.”

Use Organic Mulches — Recycle leaves, wood chips, grass clippings, and other yard trimmings as mulch to retain soil moisture, reduce weed growth, moderate daily and seasonal soil temperatures, and reduce soil erosion.

Plant Ground Covers — Reduce impractical lawn areas (deep slopes, shady areas, low spots) and keep tree roots moist and cool. Lawn means fewer grass clippings. It also can reduce the amount of pesticide and fertilizer use.

Direct Down Spouts into Planting Beds or Lawns — Reduce runoff from down spouts directed onto paved surfaces which can contribute pollutants to lakes and streams. Redirect this precious natural resource to your yard rather than the pavement.

Try Management — Naturalize at least a portion of your yard to reduce maintenance, grass clippings, pesticides, and fertilizer use. Enjoy the attractive alternatives as your property contributes to a richer ecosystem.

Landscape the Border of Your Yard — Perimeter plantings provide a convenient place to recycle tree trimmings, leaves and garden debris. Decomposition is speeded up by cutting twigs and other materials into smaller pieces.

Select Plants for Proper Size and Vigor — Reduce trimmings by selecting dwarf varieties and always plan for the natural height of trees and shrubs before planting. Pest-resistant varieties reduce both chemical usage and the dead wood from diseased plants. Match plants to proper climate, soil, light conditions and topography.

Manage Lawn Areas Wisely — Proper care keeps lawns growing vigorously, which greatly reduces disease and pesticide use. Fertilize Conservatively and Carefully — Test the soil and reduce fertilizer use to avoid excessive plant growth which contributes to potential yard waste. Reuse fertilizer spilled on paved surfaces which will otherwise pollute lakes and streams via runoff water.

Use Leaves as a Resource — Small amounts of leaves, when shred- ded with a lawn mower, can be recycled as an organic nutrient source if left on the lawn. This reduces the frequency of raking. Leaves can be reused to mulch perimeter plantings or as an ingredient in compost.

Plan and Evaluate Your Yard — Reconsidering your routines may require a little time and discipline — as opposed to proceeding as usual. But good, environmentally-friendly ideas should emerge. The key is to lessen the waste problem in some way by first rethinking, then reduce, reuse and recycle.

Yard Waste Disposal Options

Garden waste, weeds, brush and tree trimmings over 1-inch in diameter can be disposed of in the regular trash throughout the year. The following procedures are applicable to Lincoln residents for grass and leaf materials.

48TH STREET TRANSFER STATION — For a fee, residents may dispose of grass and leaves at the 48th Street Transfer Station located approximately 0.5 mile north of 48th & Superior Streets. Grass and leaves must be free of garbage, litter and tree trimmings over 1-inch in diameter. Grass and leaves must be removed from plastic bags at the transfer station. Call 441-2734 for more information.

HIRING A LAWN CARE SERVICE — Include yard waste management in your lawn care package.

HIRING A PRIVATE HAULER — Lincoln refuse haulers offer a service weekly pick up yard waste to be taken to a city-operated compost site for a fee. Contact your hauler for more information. Use approved paper lawn bags available from retailers, a cart provided by the hauler, or a clean, 32-gallon trash can with a lid. Grass and leaves in plastic bags are NOT allowed at the city’s compost site (plastic will not decompose in the compost mixture).

Grasscycling Has Multiple Benefits

Grasscycling, or grass mulching, is the natural practice of leaving clippings on the lawn when mowing. It is obvious how this practice can save resources such as landfill space, but there are additional benefits as well. The clippings quickly decompose, returning nutrients to the soil. Grasscycling, in conjunction with the practice of reducing water 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. Proper mowing, watering, and fertilizing practices result in more moderate turf growth yet still produce a healthy, green lawn.

The nitrogen contained in grass clippings is a valuable resource. One ton of grass clippings equals the recommended application rate for healthy turf (about five pounds of nitrogen per year per 1,000 square feet). While some of this nitrogen is lost through the decomposition of the clippings, leaving the clippings on the lawn by grasscycling can have the overall impact of reducing fertilizer requirements by 15–25% or more. Similar savings on water use are possible. Returning clippings to the lawn usually means mowing more than once a week during the few weeks of rapid growth in spring and early summer. Grass clippings should be less than one inch, or no more than one-third of the total plant height, to ensure rapid decomposition. Mowing more frequently is not as much extra work as you might think, because lawns mowed at the proper height cut more grass and grow more grass than ever.

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 lawn watering needs.
• Soil health — Clippings decompose rapidly, feeding soil organisms that keep soil healthy and help prevent turf diseases.
• Thatch — Studies prove grass clip- pings do not cause thatch build-up.

Yard Smart Resources

City of Lincoln Recycling Office
Phone: 441-8215
Web site: www.lincoln.ne.gov
— keyword “compost”

UNL Extension in Lancaster County
Web site: lancaster.unl.edu
Educational resources on backyard composting, grasscycling, lawn chemical use, and much more.

Lincoln-Lancaster County Health Department
Phone: 441-8040
Diaper, Lawn Chemicals, Complaints on Backyard Composting

Lincoln Solid Waste Management Association
Phone: 475-8376
Yard Waste Collection

Nebraska Department of Agriculture
Phone: 471-2394
Information on certification for private and commercial pesticide applicators

The Water Center
472-3305 Water Conservation

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Composting Turns Yard “Waste” Into Useful Material

Compost is a mixture of partially decomposed plant material and other organic wastes. It is used in the garden to amend soil and fertilize plants. Making and using compost recycles yard wastes and reduces the burden of organic trash on our landfills.

The City’s Composting Operation

The City of Lincoln maintains a 16-acre yard waste compost facility next to the Bluff Road Sanitary landfill (at Bluff Road and Tall Bluff Road). This site receives about 20,000 tons of grass, leaves and brush each year. This is equivalent to about 2,000 garbage trucks driving 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 12 months to completely compost the process. The material is screened to remove any debris and wood chips are placed in a curing pile. This finished material is then made available to the public as LinGro Compost.

Since the program began in October 1994, the city has composted an estimated 183,260 tons of grass and leaves and wood chipped 18,000 tons of tree debris.

The diversion of grass, leaves and about 2,000 tons of yard waste to a sanitary landfill would close in about 2030.

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Almost all organic materials will decompose if left to natural processes by creating conditions conducive to decomposition.

Composting Materials

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 (see article on opposite page). 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.

Certain organic materials should not be used to make compost because they may pose a health hazard or create a nuisance. Do not add pet feces since they may transmit disease. Meat, bones, grease, whole eggs and dairy products they may transmit disease. Meat, bones, grease, whole eggs and dairy products should not be added because they can attract rodents. Large amounts of weeds with seeds or diseased plants may create problems.

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 maximum diameter of a pile should be three feet by three feet (one cubic yard) to hold heat. The maximum to allow air to the center of the pile is five feet tall by five feet wide and as long as you wish.

The compost pile can initially be prepared in layers. This will facilitate decomposition by insuring proper mixing. To build a compost pile, start with a four to six inch layer of chopped brush or other coarse material set on top of the soil. This will let air circulate under the base of the pile.

Next, add a three to four inch layer of low carbon organic material such as grass clippings. This material should be damp when added to the pile. On top of this, add a four to six inch layer of high carbon organic material (leaves or garden waste) which should also be damp. On top of this, add a one-inch layer of garden soil or finished compost. This layer will introduce the microorganisms needed to break down the organic matter.

Mix the layers of high carbon organic matter, low carbon organic matter, and soil before adding another layer to the pile. This will ensure a speedy and even composting of the organic matter. Repeat the “layering” process until the composting bin is filled.

Microorganisms can only use organic molecules dissolved in water. A moisture content of 40–60 percent provides adequate water without limiting aeration. The “squeeze” test is an easy way to gauge the moisture content of composting materials. The material should feel damp to the touch, with just a drop or two of liquid being released when the material is tightly squeezed in the hand.

Making a Composting 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. Yard wastes can be composted either in simple holding units, where they will sit undisturbed for slow decomposition, or in turning bins which speeds up decomposition.

HOLDING UNITS — Holding units are simple containers used to store garden waste in an organized way until these materials break down. It only requires placing wastes into a pile or bin as they are generated. Decomposition can take from six months to two years. 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 found near the bottom of a pile and partially decomposed materials near the top.

TURNING UNITS — 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. Turning systems require frequent maintenance and preparation of the wastes to be composted. Composting in these units is most efficiently done in batches. Materials should be stockpiled until there is enough to fill the bin. These bins should be monitored and turned after temperatures have peaked (90°–140° F) and begun to fall. This occurs four to seven days after pile construction. Turn a second time when the temperature peaks again, four to seven days later. Compost processed this way will be ready in six to eight weeks.

Location

The compost pile should be located close to where it will be used and yet not offend neighbors. The pile will be located where it is protected from drying winds.

Screening Compost

Composting may not break down all the larger materials, such as corn cobs or wood chips, in the first batch of compost that you make. When you screen your compost before use, any material larger than your screens can be removed. These materials are called “overs” which can go back into the next compost pile you build. The overs provide bulk for aeration and microbes attached to these pieces will help jumpstart the new composting process.

Kitchen Waste Composting

Food scraps contain nutrients that can be used to improve garden soils. Waste fruit and vegetables, peelings, coffee grounds, egg shells, bakery products and many other leftovers can be safely composted using proper methods. These food scraps can be composted with grass clippings and leaves to produce a rich soil additive.

Trench Composting

This is an anaerobic composting method that relies primarily on the activity of worms and other larger organisms to break down organic material. This can be an excellent way to increase worm populations in your garden.

All you need is a patch of bare soil and follow these steps:

1. Dig a long trench to a depth of around 12 inches within the vegetable garden or any part of the garden you want to improve.
2. Fill the trench with kitchen scraps and soft garden clippings.
3. Sprinkle with a little fertilizer like blood meal mixed in a bucket of water.
4. Cover the food wastes in the trench with the original soil and water again.
5. You need to wait at least six weeks or more before planting. Legumes such as peas or beans and leafy vegetables are best.
Using Compost and Wood Chips

In addition, to the multiple benefits to using compost and wood chips, doing so recycles yard wastes and reduces the burden of organic trash on our landfills.

Adding Compost into Soil

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, decomposing compost and slowly release plant nutrients. Compost will not provide all the nitrogen that rises about 33 feet in a horizon. Compost can be blended into soil mixes and is suitable for most outdoor planting projects. It is typically mixed with other ingredients such as pot moss, shredded bark, sand, or loamy top soil when used as an outdoor planting mix. Mixing ratios vary; but 10 percent compost is considered to be a minimum, 30 percent optimum and 50 percent maximum in planting shrubs and trees.

Compost has its greatest value when rototilled directly into the soil. One cubic yard of compost covers 108 square feet at three inches, 216 at two inches, and 144 at one inch. The rule of thumb is to spread compost no more than one-third the depth of the rototiller. A one-inch layer of compost should be tilled in six inches. Making two or more passes with the tiller helps blend the compost with the topsoil and break up any clumps of material.

Wood Chips as Mulch

Wood chip mulch is made from the chipping of tree and landscape material. Mulches. Mulch is mate- rial 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 land- scaping benefits:

• Helps retain soil moisture. Mulch helps soil moisture retention and reduces water evaporation caused by wind and hot sun.

• Reduces soil temperature extremes. An application of mulch acts as an insulating blanket to help avoid extreme temperature fluctuations.

• Reduces weed growth. Where the site has been properly prepared, mulching reduces weed growth.

• Saves time in landscape maintenance. Place mulch under and between plants in tree and shrub beds, border plantings, hedges, rose beds and fruit and vegetable beds. By replacing grass with mulch, mowing and watering time is cut dramatically.

The following area firms have LinGro compost available for a fee:

• The City of Lincoln's Premium Organic Compost

• Individuals may also self-load wood chips at no charge at the Recycling Drop-off Site (1/2 mile north of Superior Street on North 48th Street).

• Delivery of wood chips within a 50-mile radius of the Bluff Road Landfill is available for a fee. Call the Lincoln Recycling Office at 441-8215 for more information.

Wood Chips from City of Lincoln

The City of Lincoln has limited quantities of wood chip mulch on a first-come, first-served basis. Contact the Lincoln Recycling Office at 441-8215 for more information.

A recent study demonstrated the most effective approach to reduce storm water runoff and sediment erosion on slopes is to use a compost blanket approxi mately two inches thick. From April, 2004 through June, 2005, the City of Lincoln and the University of Nebraska-Lincoln (UNL) conducted an erosion study comparing compost to traditional approaches of straw blankets and silt fences.

About the Study

Six test plots were constructed on a slope of 3 to 1. This is a fairly steep slope that rises about 33 feet in a horizontal distance of one hundred feet. The amount of rainfall during the study was tracked as well as the amount of run-off from each test plot during the period of the study.

Each test plot was seeded with a fescue-blend grass seed typically used by seed contractors. The thirteenth and ninth plots of the established turf was greater in the compost amended plots than those with straw mats. The organic material in compost amended turf was almost five times more than it was for straw mat plots. This healthier turf is able to filter storm water and pollutants and hold soil better preventing sediment erosion.

The Results

This study demonstrated the use of compost as an effective approach to minimize soil erosion and stormwater run-off. In fact, the study showed ap- plying a two-inch blanket of compost would reduce soil loss by 98.8% com- pared to bare soil. When compared to the traditional erosion control practice of using a straw mat and silt fence, the compost blanket decreased the amount of sediment runoff by 81% of the test plot by 81%. Use of the compost blanket increased water infiltration by up to 99.3% compared to a straw mat. In other words, only one percent of the rainfall ran off the compost blanket as opposed to 24% for the straw mat.

Compost can also be incorporated into the soil. However, it is recog- nized that filter berm be established at the base of any slope to minimize erosion prior to grass seed germination. A silt fence can be used if incorporating the compost into the soil. To produce the healthiest soil possible, soil tests can be conducted to determine the optimum application of compost.

How Compost Blankets Work

When raindrops hit soil with the vegetation removed, they dislodge and detach soil particles. This is called “splash erosion.” If there is more rainfall than the ground can absorb, the result is run-off carries the detached soil particles away. The compost blanket buffers the un-vegetated soil to help it receive moisture, increases water infiltration into the soil and prevents the run-off velocities that carry sediment away. After vegetation growth, the compost provides both nutrients and additional organic matter to hold moisture in the soil. An economic analysis conducted by UNL suggests a compost blanket would cost about five percent more than the traditional approach of using straw mats and silt fences. The cost analysis does not include additional seeding likely to be required in subsequent years for non-compost amended soils.

For More Information

To obtain more information on the use of compost for erosion control projects, contact the Lower Platte South Natural Resources District, 479-7279; the City of Lincoln Watershed Management Division, 441-4959 or Solid Waste Operations, 441-7043.
Cleaning Can Be Fun

One of the biggest complaints parents have is their children don’t clean their rooms. It seems like kids and clean rooms are like oil and water—they just don’t mix. To get children to clean up their rooms, make it fun.

FCE News & Events

FCE Scholarship Applications Due May 1

A $300 scholarship provided by the Lancaster County FCE Council is available for a graduate of a high school in Lancaster County or a permanent resident of Lancaster County majoring in Family and Consumer Science or a health occupation. This is open to full-time students beginning their sophomore, junior or senior year of college in the fall of 2006 or who have completed one year of study in a vocational school. Applications are due May 1.

FCE Council Meeting, June 26

The next FCE Council meeting will be Monday, June 26, evening. Helpful Home-makers and Home Service are responsible for the program. Entries for the Heritage Skills Contest should be brought to this meeting. All FCE members are invited to attend.

Sizzling Summer Sampler, July 11

Mark July 11, 6 p.m., on your calendar for the Sizzling Summer Sampler. Learnshops will follow a light meal. Invite your friends to join you for this fun evening. Everyone is welcome.

Home & Family Living

Tips for Organizing Your Home Files

- Find a home for every piece of paper.
- Label files so you can find what you need the next time.
- Keep most used files in a convenient place.
- Put tabs in front on hanging files for easy viewing.
- When a file is an inch thick, start a new one.
- Hold papers together with a staple rather than a paper clip.
- Each time a file is used check to see if you can throw anything away.

Remember Mom — Mother’s Day, May 14

One day a year we set aside a day to honor Mothers. That’s pretty special but...how about some ideas to make Mother remembered and special throughout the year.

- Instead of a dozen roses, how about giving one every month of the year?
- Perhaps she’d like a series of tickets to plays or a coupon booklet for a local store.
- IOUs for occasional “grown up only” lunch dates may be appreciated.
- For the mother with young children, make a promise to babysit one night a month and keep it!
- Promise to bring dinner in one night a month.
- This can be a homemade promise cooked by Dad or he can bring home some “take out” food.
- Plan a family outing each month to the zoo, museums, etc.
- Be creative and show caring. That’s what is really important.

These ideas can be shared from adult children to parent, husband to wife, child to parent. It is the thought that counts!

Rules for Setting Rules

The first rule for setting rules is to see a child as part of the total family. Giving up everything for your child is probably not a wise idea. As parents you have needs which also must be met. It has been suggested every child needs to have people “who are really crazy about him — people who love him with all of their hearts.” Parents are especially good at this kind of loving and it may be the most important life-long contribution they can make for their child’s growth and development.

Present rules in impersonal terms. Then, if your child feels any conflict it will be between themselves and-the rules; not between you and your child. Instead of saying, “Don’t you eat in the living room,” remind them, “The rule is, food and drinks in the kitchen only, please.”

Rules need to be rules or consequences you can live with. Make the rules brief and clear. The more you repeat the same rule, the more your child will tune you out. As your child starts outside for playtime, you need to say only one word: “Coat!”

Set rules before a situation gets out of control. As a parent you need to stay in control. If you don’t approve of something your child does, act before the situation gets out of control — before you become angry, over-react and before your child’s behavior becomes unreasonable. The rule for setting rules is to keep your cool.

Sources: Parenting Your Child Effectively. Nebraska Guide G991; Effective Ways to Guide Children, NEF154

Making Vacation Less Stressful

Vacation time will soon be here. Start planning for a fun and relaxing time with your family. As adults, few of us have the luxury of the leisurely three-month vacation we enjoyed as kids, but most of us manage at least a few days away from work and the routine of daily life. Unfortunately, vacation time is sometimes hectic and worrying than ever before. Here are a few tips to keep in mind when planning this summer’s get-away.

• Discuss your goals ahead of time and plan a vacation keeping them in mind. If your vacation goal is to slow down an normally hectic existence, five cities in three days is not a wise plan.
• Allow everyone who will be involved in the babysitting to say in the planning. Disagreements are less traumatic and more easily solved at home than at the entrance to the amusement park.
• Allow ample "unplanned" time, as well as plenty of travel time. Nothing frays nerves worse than racing the clock, and you get enough of that at home!
• Be prepared to be flexible and creative. Even the best plans can —and usually do— go awry, especially when you’re planning to have a baby in tow. Keep in mind fun is a destination with many routes.
• Leave your work at the office and your worries at home.

What’s vacation is for!
Lancaster Count 4-H is proud to announce Jane Dowd as winner of May’s “Heart of 4-H Award” in recognition of outstanding volunteer service.

Jane has volunteered for 4-H for 11 years. She was leader of the Douglas Woolies sheep club and co-leader of the Launch Pads rocket club with her husband Kevin. Currently, she is organizational leader of the Creative Kids 4-H club. Jane has taught leather craft at Clover College for several years and has helped with the county-level senior Life Challenge contest.

“4-H has a lot to offer,” said Jane. “The projects we work on in 4-H use skills that are useful for a lifetime. I enjoy watching youth build skills and grow in character for adulthood. My favorite experience is every time a 4-H’er grasps the idea or skill we are working on and you can see the light bulb turn on inside them with a big ‘I get it!’ look. This sometimes comes while making the project and sometimes the reward is the huge smile they wear when they see the ribbon earned.”

Jane and Kevin live in Lincoln with their seven children, whom she homeschools. Jane also volunteers as a Sunday School teacher and as a speaker on spinning wool and medieval history lifestyles.

Congratulations to Jane! Volunteers like her are indeed the heart of 4-H!

Nominate your favorite 4-H volunteer by submitting the form online at http://lancaster.unl.edu/4H or available at the extension office. Nominations of co-volunteers welcome.
Firth Town Hall Meeting is First Step in Visioning

Yelena Mitrofanova
UNL Extension Educator

About 20 residents liv- ing in and around the town of Firth attended a Town Hall Meeting on March 27 at the Firth Community Center to learn about Firth’s upcoming visioning process. To help residents understand the process, the group learned how planning and visioning techniques are used in the improvement of communities in Kansas City, Portland and Seattle. Extension Educators Yelena Mitrofanova and Phyllis Schoenholtz explained the steps, commitment and time line in the Visioning process for the community. As the process moves forward, all community members are invited to become involved. Community volunteers are needed to help in the Listening sessions and the Communications committee will plan for upcoming dates, times and places for the Listening Sessions this spring. The Communications committee will help publicize and promote the Listening sessions and Town Hall report. The Research committee will search the town for all assets of the community needed for future planning. People interested in helping with the process or to get more information, contact one of the village board mem- bers or Extension Educators Yelena (411-6753) or Phyllis (402-450-6678).

Community CROPS Offers Weekly Delivery of Fresh Produce

A plot at Sunset Community Farm located on the edge of Lincoln.

Community CROPS: Combining Resources Opportunities & People for Sustain- ability is a grassroots non-profit organization, working with area gardeners and farmers to grow and market agriculture products. Community CROPS will be selling fresh, organically-grown produce through a Community Supported Agriculture (CSA) project. CSA projects are a great way for you to support local farmers and get a variety of very fresh, nu- tritious vegetables throughout the growing season. You know exactly where your vegetables come from and the people who grow them for you.

How does it Work?
Before the season begins, you buy a share in the harvest. Then CROPS farmers grow a variety of vegetables for you and package it weekly for you to pick up. A share costs $375 for 15 weeks (mid-June to end of September). You will be able to pick up your box at a central location in Lincoln. CROPS is looking for shareholders who would like to host a pick-up site for the farm—they also share the bounty from the CSA.

How is it Grown?
All of the crops will be grown at Sunset Community Farm (located just on the edge of Lincoln) by staff and participants of CROPS. CROPS will contract for some of the vegetables from participants who have their own plot at the farm. Other participants will work on a plot specifically for the CSA.

All of the produce is grown using organic methods, such as cover crops, row covers, composting and simply keep- ing a watchful eye on every- thing. CROPS also tries to use as much recycled packaging as possible and the everything in the most environmentally-friendly manner.

What’s Your Part?
As a shareholder of a CSA farm, you can help support lo- cal small farms, boost the local economy, as well as provide your family with healthful, fresh produce. This requires a commitment on your part to be more flexible and adventur- ous with your cooking and eating habits. It’s not like a gro- cery store where you can pick and choose. CROPS provides plenty of the standard vegetables, and then add in some new ones for you to try, complete with recipes and cooking sug- gestions. Shareholders not only share the bounty from the farm—they also share the risks. If there is a crop failure (such as from disease or major freeze), the shareholders agree to take the loss with the farmer. CROPS will schedule a farm tour during the season for shareholders, so you can come out and see where CROPS farmers are growing your food and how they do it.

How do You Sign Up?
Applications will be accepted through mid-June or later. Application forms and additional information is available at http://www.communitycrops.org or by calling Ingrid at 730-2532.
Kiwanis Karnival, April 22

The annual Kiwanis Karnival, a FREE family event is sponsored by the Lincoln Kiwanis. This year, it will be held Saturday, April 22, 7–9 p.m. at Elliott Elementary School, 225 S. 26th Street, Lincoln. The Karnival features carnival type games for the kids, bingo for adults, prizes, snacks, fun and fellowship. Come join the fun!

ABC’s for Good Health, June 1, 8 & 15

A 3-Part Series Which can Change Your Life

UNL Extension Nutrition Education Program (NEP) is presenting “ABC’s for Good Health,” a free series aimed at limited to moderate-income women. Upcoming dates are Thursdays, June 1, 8 and 15. Choose between two time slots, 10 a.m.-12:30 p.m. or 6-8:30 p.m.

Learn that good health is as easy as:
- A) Aim for fitness—Increase your physical activity with a personalized walking program.
- B) Build a healthy base—Use MyPyramid to guide your food choices.
- C) Choose sensibly—Balance the foods you need and enjoy.

Participants receive:
- A pedometer and inspiration to stay fit
- A notebook with practical nutrition information
- New recipes and food preparation ideas
- A cookbook (valued at $15) after completing the series

Sessions are held at the Lancaster Extension Education Center, 444 Cherry Creek Road in Lincoln. Please register by May 24. Call NEP at 441-7180 for more information or to register.

CLOVER COLLEGE REGISTRATION FORM

To register, complete the registration form (one person per form) and return with payment (make check payable to Lancaster County Extension). Registrations must be received by June 12. Registrations are handled on a “first come” basis and will only be accepted upon receipt of fees.

Assume your registration is confirmed unless we contact you about filled classes.

Name __________________________________________ Age __________________________
Parent Name(s) __________________________________________
Address ____________________________________________________________________________
City __________________________ State __________________ Zip __________________________
Daytime Phone __________________________________________ Evening Phone _____________
Special Needs (allergies, etc.) __________________________________________________________
Workshop(s): # 1. Title __________________________ Fee __________________________
                          Title __________________________ Fee __________________________
                          Title __________________________ Fee __________________________
Use additional sheet of paper if needed

I give permission to use my child’s name in photographs in publications, news articles, advertisements or Web sites pertaining to 4-H. __ yes __ no
Parent/Guardian Signature __________________________ Date __________________

Mail or bring registration form and payment to:
UNL Lancaster County Extension, 444 Cherry Creek Rd., Ste. A, Lincoln, NE 68528

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

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The Nebline

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Fifth Graders Learn About Water, Air and Land and Living Resources at earth wellness festival

Nearly 3,000 Lancaster County fifth graders attended earth wellness festival on March 27. Students attended four 25-minute presentations on a variety of topics concerning air, land, water and living resources. Their experience culminated with a special presentation by the World Bird Sanctuary of St. Louis, Missouri. Festival Co-Chair McKenzie Barry said, “In all, it takes about 100 community volunteers, helping before, during and after the festival to make it work. The presenters provide students with great interactive natural resources presentations.”

Classrooms attending the festival received pre-festival learning kits in October. Now in its 12th year, the festival is organized by 10 local agencies, including University of Nebraska–Lincoln Extension in Lancaster County.

Can You Guess It?

Did you guess it? Find out at http://lancaster.unl.edu

Did you guess it from the April NEBLINE? The answer was bed bugs hiding in cracks.

U.S. Drought Monitor Map

As of April 11, Lancaster County was in abnormally dry conditions.

Fifth Graders Learn About Water, Air and Land and Living Resources at earth wellness festival

Fourth Graders Learn About Agriculture at Ag Awareness Festival

More than 400 fourth graders from Lincoln area schools attended the Ag Awareness Festival held on April 4 and 5 at the Lancaster Event Center. Students gained a greater understanding of agriculture and how it impacts their daily lives. Students rotated between 10 interactive stations: Farming Technology, Grain Products, Grain By-Products, Swine, Horse, Dairy Production, Dairy Calves, Ruminant Nutrition, Beef Products, Beef Production and Food Safety.

“Urban youth learned where food comes from and what by-products come from animals,” said Festival organizer Deanna Karmazin. “They also learned the importance of agriculture to Nebraska and the nation.” The Ag Awareness Coalition, led by University of Nebraska-Lincoln Extension, organizes the festival with the help of agriculture businesses, commodity associations and food industry companies.

In the Farming Technology session, students compared farming methods from 100 years ago with current farm equipment.

Students learned basic food safety practices, such as always thaw frozen meat in a refrigerator, not at room temperature.

Students tried their hand at grooming a horse.

Youth learned about dairy calves.

In Ruminant Nutrition, youth observed live microorganisms from a cow’s stomach under a microscope.

Special presentations by the World Bird Sanctuary of St. Louis included raptors, owls, reptiles and a bald eagle.

4-H volunteers Kim and Pat Wiseman presented “Water Jeopardy” as students learned about water.

4-H staff members Deanna Karmazin and Tracy Kulm presented “Water Limbo” as students decided if actions have a negative or positive impact on water quality.

In a session entitled “Scoop on Poop,” Barb Ogg from UNL Extension in Lancaster and Brad Barber from the City of Lincoln Wastewater Operations explained what happens after Lincoln residents flush. Wastewater is treated and discharged into Salt Creek. Biosolids are applied to farm fields as fertilizer for crops.